

**The impact of an Educational Workshop Upon
Attitudes of Staff Supporting Men With
Intellectual Disabilities who Have Committed
Sexual Offences.**


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requirements of the University of South Wales /
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Candidate Declaration

This is to certify that, except where specific reference is made, the work described in this thesis is the result of my own research. Neither this thesis, nor any part of it, has been presented, or is currently submitted, in candidature for any other award at this or any other University.

Signed 

Candidate..... Leanne Watson.....

Date.....20/09/2024.....

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Abstract

Background: Extensive research has examined the impact of staff attitudes on the rehabilitation of men who commit sexual offences. However, investigations of automatic attitudes towards men with IDD detained within forensic mental health services with a history of committing sexual offences are limited. The evaluation of non-automatic attitudes continues to dominate this field, with insufficient consideration given to attitude models in developing staff educational workshops. The Motivation Opportunity Determinants processing (MODE) and Associative-Propositional Evaluation (APE) attitude models formed the theoretical basis for the workshop used in this study. This thesis aimed to examine staff's automatic and non-automatic attitudes and perceptions towards men with IDD who commit sexual offences, and those who commit non-sexual violent offences in order to develop a deeper understanding of attitudes towards complex populations. **Method:** Quantitative analyses evaluated data collected from eight forensic mental health services and a university within South Wales. Automatic and non-automatic attitudes were assessed by those who did or did not participate in an intervention (a three-day workshop). Direct measures included a Brief Knowledge Survey (developed by the author), the Working with Offenders Questionnaire (WOQ), and three validated measures: the Attitudes Towards Prisoners (ATP), Attitudes Towards Sexual Offenders (ATS) and the Community Attitudes Towards Sexual Offenders (CATSO). The indirect measure included a Multi-Dimensional Implicit Association Test (IAT), (computer and pencil and paper named version) developed by the author. Data collection occurred immediately prior to and post-completion and three months after the workshop to investigate the maintenance of any attitude change. **Results:** The direct measures data from all participants demonstrated that non-automatic attitudes towards men who commit sexual offences were more positive than anticipated, and increases were generally maintained over time. Significant differences between the intervention and non-intervention samples for the ATP and ATS were reported. Higher levels of positive attitudes were found for the non-intervention group for the ATS than the intervention sample, although positive increases were demonstrated post-workshop. The indirect measures data indicated automatic attitudes were more positively associated with people who have not committed violent offences when compared to individuals who have. Significant differences were found for the student (non-intervention) sample towards individuals

who have committed sexual offences when compared to individuals who committed violent offences. The opposite outcome for the intervention sample (staff and students) was found. Further evaluation of the intervention sample demonstrated significant differences. The staff demonstrated more positive associations towards those who had committed sexual offences than individuals with violent offences, whereas the student sample demonstrated the opposite direction of bias. Additionally, the intervention sample demonstrated more positive associations towards individuals with IDD when compared to those who had committed sexual offences. In contrast, staff responses were less indicative of an attitude bias. Reliability and validity tests for the computer Md-IAT demonstrated 'good to excellent' levels of internal consistency and test-retest outcomes. However, no significant correlations were found from the construct validity tests. Thus, results from the Md-IAT cannot be interpreted confidently. For the pencil and paper version, levels of internal consistency greatly varied and reflected other research findings. Therefore, caution needs to be applied when interpreting the findings. **Conclusions:** Staff levels of positive attitudes towards people who commit sexual offences were high prior to the workshop and increased further upon completion, possibly indicating an influence of 'contact' and attendance at the workshop. **Contribution to knowledge:** The study adds to the existing body of knowledge by evaluating automatic attitudes within forensic settings using a multiple-target IAT. It helped identify unexpected directions of bias in automatic attitudes, which a single-target IAT would not have. Findings provide a deeper knowledge base of staff attitudes when working with men who commit sexual offences and other complex presentations. A potential benefit of examining automatic attitudes is that it can guide staff support, enhance the rehabilitative environment, and use staff workshops with an attitude model as a theoretical basis. However, this approach requires further investigation, with a standardized method to test validity of the Md-IAT.

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Structure of the Thesis

This thesis represents my submission for the qualification of Doctor of Philosophy (PhD) at the University of South Wales. It comprises of ten chapters in total, organised into three parts: 1) Introduction, 2) Empirical Studies, and 3) General Discussion. These parts are explained below:

Chapter 1 reviews the literature surrounding the prevalence of men convicted or detained for committing sexual offences, with mental health and IDD within forensic settings, and the treatment available. The review includes a discussion of factors that enhance treatment effectiveness and factors that act as barriers.

Chapter 2 uses the review from Chapter 1 to explore stigma and stereotyping of individuals who commit sexual offences, and those with IDD and mental health problems. It explores attitude models, the connections to staff attitudes and behaviour and the influence they have upon treatment effectiveness.

Chapter 3 provides a rationale for the thesis.

Chapter 4 explores the measures used to assess automatic and non-automatic attitudes towards population groups relevant to this thesis. It proceeds to review the flexibility of both non-automatic and automatic attitudes, as a result of staff training and social educational programmes.

Chapter 5 provides information relevant to the methods used in developing the indirect measures, both the computer-based and pencil and paper-based IATs and the development of the educational workshop. It then proceeds to provide information regarding the statistical context of the empirical studies.

Chapter 6 commences the empirical studies section of the thesis. Here, a multi-dimensional/target computer IAT was piloted and evaluated. This measure draws upon limitations highlighted in the evaluation of automatic attitudes towards individuals with a history of sexual crimes within forensic settings.

Chapter 7 evaluates the impact of a staff educational workshop upon both automatic and non-automatic attitudes.

Chapter 8 includes another empirical study. Here, a 'low technology' IAT was developed as an outcome measure for examining automatic attitudes and compared to

the computer IAT. This approach was a result of complications encountered within the forensic environments.

Chapter 9 involves a further empirical study, where the low-technology method pencil and paper IAT were used to assess any changes in staff attitudes after completing the educational workshop.

Chapter 10 provides a summary of the main findings of the research as a whole and is presented alongside recommendations for future research projects. The thesis then closes with an evaluation of its originality and contribution to the existing literature.

Part 1: Introduction

Challenges in the Rehabilitation of Men With Intellectual Disabilities and Other Developmental Disabilities (IDD) who Commit Sexual Offences.

Introduction

This chapter presents an introduction to the thesis. It includes an account of the relevant background to the study area. This chapter considers some key factors that can hinder and help rehabilitation of individuals who commit sexual offences and who have mental health and intellectual disabilities and other Developmental Disabilities (IDD) within forensic settings. The prevalence of individuals with mental health issues and IDD¹ are explored, along with treatment availability and effectiveness. An overview of factors that contribute to treatment effectiveness is provided, including staff attitudes and the role that staff training has in shaping a rehabilitative culture. The aims, objectives and research questions are explained, including the potential contributions the thesis makes to the existing literature.

Background to Research

Sexual crime has significant consequences for the victims. The rehabilitation and reintegration of men convicted of sexual offences back into society triggers many deep and complex emotions (Imhoff, 2015; Jahnke et al., 2015; Lussier et al., 2020). The treatment and return of people who have committed sexual crimes back into society, therefore, remains a sensitive topic (Cohen & Jeglic, 2007; Lussier et al., 2020; Walsh et al., 2020). Research has found that the public holds more punitive attitudes towards men who commit sexual offences compared to other types of offences (Payne & DeMichele, 2008; Klein & Cooper, 2019; Spoo et al., 2018). The media predominantly refer to people who have committed sexual offences in a sensationalised manner, and this, in conjunction with public attitudes, is said to result in punitive measures being utilised to deter people from committing such offences (Harper & Hogue, 2015a; Harper, 2019). This premise is understandable given the nature and effect of such

¹ Please note that within the literature there are interchangeable references to Intellectual Disability (ID) and Intellectual Difficulties. For this thesis, the terms Intellectual Disabilities and Other Developmental Disabilities (IDD) will be used.

offences. However, literature that explores factors said to help prevent such offences highlights how negative attitudes towards rehabilitation acts as a barrier. This in turn, impacts negatively upon risk reduction and risk management (Levenson et al., 2007; Willis et al., 2010). The need for further research into attitudes towards individuals who have committed sexual offences, therefore, remains, as the rate of sexual crimes is considered to be an international public health problem (Association for the Treatment of Sexual Abusers, 2011; Harper & Harris, 2017). To clarify, the purpose of such attitude research is not to invalidate the experience and feelings of the victims and the wider public or supporting staff members. Instead, this is to identify mechanisms that would be more supportive of rehabilitation pathways. This will improve risk reduction and risk management procedures for men who have a history of committing sexual offences or harmful sexual behaviours. Attitude formation, change and measurement will also be reviewed in Chapter 2, as this is a key focus of this thesis.

There are a number of studies that have investigated attitudes towards individuals who commit sexual crimes, and the impact of staff training upon staff attitudes towards men who commit sexual offences (Hogue, 1993; Craig, 2005; Taylor et al., 2003; Kjelsberg & Loos, 2008; Ware et al., 2012). Research involving the review of the attitude literature in attitude formation, measurement and application to forensic clinical settings is, however, relatively sparse. The review presented in this chapter will, therefore, provide a summary of factors important within forensic settings offering rehabilitative environments for men with IDD and mental health problems who show harmful sexual behaviours. Chapter 2 will provide a summary of the underlying theoretical models for attitude formation, and why the inclusion of both direct and indirect measures of attitude change is of importance in such settings.

Prevalence of Mental Health, IDD Within Forensic Settings

The proportion of men and women within custodial settings with mental health issues and IDD remains far greater when compared to the general public. Information from the Prison Reform Trust (2023) claims over two-thirds (67%) of individuals detained in prison included in the inspectors survey between 1 July 2021 and 31 March 2022 reported having mental health problems. The number of women in prison that reported having mental health problems was 76% compared to 51% of men (HM Chief Inspector of Prisons, (2022)). It is estimated that approximately 10% receive treatment for mental illness, and some prisons assessing a considerable percentage of the prison population

(70%) as having some form of mental health need at any one time (House of Commons Justice Committee, 2021). In terms of prison transfers, 1,057 transfers from prison to a secure hospital occurred in 2022. This is the second highest number since records began (MoJ, 2022). Although staff training has been a repeated recommendation for staff to receive mental health awareness training, it was reported that officers had not received sufficient training, when a third of prisons were inspected in 2019–20 (HM Chief Inspector of Prisons, 2020). More than a third (35%) of self-inflicted deaths in 2022, involved people held on remand. This is much greater than the proportion of the prison population they represent (17%), (MoJ, Safety in Custody, 2023).

Identifying people who commit offences with mental health issues remains a concern, as the Prisons and Probation Ombudsman (PPO), (2017) found that just over half of the 70% had mental health issues noted upon their entry to the prison. The PPO's investigation also established that approximately one in five people who commit offences who had been diagnosed with a mental health problem received no care from a mental health professional. A mental health referral should have been made for approximately 29% of self-inflicted deaths, where mental health needs had previously been recognised. Despite the recommendations from the Bradley Report (2009) to increase staff awareness and training regarding mental health, findings from an inspection of 40% of prisons that took place between 2016 and 2017 highlighted that either no training or an inadequate amount of training had been received by prison officers in developing their knowledge and understanding of when to refer someone to mental health services. Since then, a 'joint thematic inspection of the criminal justice journey for individuals with mental health needs and disorders November 2021', reported that not enough progress has been made in the 12 years following the Bradley Report.

This information highlights the large proportion of individuals being received into custody, where staff lack sufficient knowledge to identify and acknowledge their additional needs. A lack of resources to provide staff training has been identified as a key issue. This finding is echoed within forensic mental health settings, in relation to the resources available to support prison staff knowledge and understanding of factors that contribute to people committing sexual offences, and the treatment and rehabilitation needs of service users with IDD who commit sexual offences.

A report by the Royal College of Psychiatrists (2014) highlighted that there are approximately 48 High, 604 Medium and 1,741 Low Secure beds, with an additional 345 forensic rehabilitation beds in England for adults with IDD. The report emphasised how such resources are unevenly distributed and do not account for individuals with learning challenges, as this information is difficult to find. A ‘Statistics for Wales, (2019), report stated there were 87 residents within Welsh hospitals with an IDD, 24 of whom were detained under the MHA. This relates only to NHS beds within Wales and not private healthcare settings. The lack of reliable figures for those detained within the prison population with IDD has been referred to in the Mental Health Act Independent Review Report (2018). The report also refers to the difficulty in ascertaining the nature of treatment available within secure services for individuals with IDD, and there being a paucity of outcome studies available.

The Mental Health Act Independent Review Report (2018) reviewed the procedures for IDD within the Criminal Justice System. The Prison Reform Trust’s response referred to the difficulty highlighted in the Royal College of Psychiatrists’ report (2014) in transferring persons from prison under the Mental Health Act (MHA) due to limited forensic secure resources. The response highlighted how there is no overarching commissioning framework for forensic secure and specialist beds. The response also underlined the ongoing need to improve data collection to assess the prevalence of individuals with IDD, and for this data to be obtained from individuals on remand and those in hospital waiting for assessment. The response reiterated previous recommendations from the Bradley Report (2009) and the review conducted in 2014, plus the No One Knows (2007) report. Within these reports, the key recommendations were for awareness training of IDD to be made mandatory for all personnel who have contact with service users, including social care, frontline health, and justice staff, including judiciary members. These recommendations aimed to improve access to appropriate sentencing routes and interventions once individuals had been sentenced within the Criminal Justice System (CJS) and/or detained under the MHA.

The “Neurodiversity in the criminal justice system: A review of evidence”, report (2021), cites figures taken from the education review, which stated “one-third of prisoners self-identified as having a learning difficulty and/or disability in 2014/15” (Coates, 2016). The Neurodiversity in the CJS review (2021) claims this information seems to be largely congruent with data held by HM Prison and Probation Service

(HMPPS). Whereas data from 2019 NOMIS (the prison National Offender Management Information System) and OASys (the Offender Assessment System for assessing the risks and needs of an offender) records indicated 29% of the population had a learning disability or challenge (36% men and 39% women).²

Treatment Interventions Available for Men Convicted of Sexual Offences

Issues related to people who commit sexual offences or sexually harmful behaviours are complex due to the various type of sexual offences. The Sexual Offences Act (2003) attempts to set these out and includes a range of behaviours towards adults and children that can be defined and classed as a sexual offence. Given the difficulty of a singular definition being too broad, information within the appendices (see Appendix 14) provides an overview and explanation for the different types of sexual offences. Sentencing of sexual offences is complicated, along with the treatment strategies targeting the risk of future crimes of a sexual nature. For those individuals convicted and sentenced within the CJS, a number of accredited rehabilitation interventions are available.

Accredited Treatment Interventions Available in England and Wales Within His Majesty's Prison and Probation Services (HMPPS)

Treatment interventions for men convicted of sexual offences within HMPPS were accredited in 1992 by HM Prison and Probation Services Joint Accreditation Panel. This later became the Correctional Services Accreditation and Advice Panel (CSAAP). The accreditation panel is an independent body of advisers for HMPPS, whose role is to support HMPPS and the Ministry of Justice (MoJ) to produce and employ high-standard interventions. The programmes are evaluated in line with standards that are based upon the 'What Works' (2014) evidence-based literature. These standards include: "having a clear model of change, effective risk management, targeting offending behaviour, employing effective methods, ensuring relevance to individual learning styles, and maintaining the quality and integrity of delivery."

² Please note, the MoJ were contacted under the Freedom of Information Act (FOIA) request for details regarding the prevalence of male prisoners with intellectual disabilities convicted and sentenced for committing sexual offences. The response received stated it would be too costly to complete such a search.

Table 0.1 Currently Accredited Programmes for Delivery in the Community and Custody

Programme Name	Risk Level³ Targeted	Level of Functioning	Programme Focus
Becoming New Me + (BNM +)	High/Very high	Men with IDD	Men convicted of committing sexual offences. Overall aims for all programmes include: develop skills, strengthen prosocial identity, plan for an offence-free life.
Horizon	Medium and above	Men without IDD	Men convicted of committing sexual offences. Aims: As above.
iHorizon	Medium and above	Men without IDD	Men who have committed sexual offences via the internet (possessing, downloading, and distributing indecent images).
New Me Strengths (NMS)	Medium and above	Men with IDD	Men convicted for any offence.
Living as New Me (LNM)	Medium and above	Men with IDD	Men who completed NMS or BNM+, and who need additional support. Promotes skill maintenance.
Accredited for Custody			
Becoming New Me+ (BNM+)	High/Very High	Men with IDD	Men convicted for sexual, Intimate Partner Violence (IPV) or general violent offences.
Democratic Therapeutics Community Model (DTC) Provided by HMPPS/NHS Offender PD Team	Medium, High and Very High	Men without IDD	Men with complex psychological and emotional needs, likely to meet the criteria for a diagnosis of 'personality disorder'. 24/7 therapeutic environment. Most DTC residents have committed violent offences; some may be sexually motivated.
Therapeutic Communities Plus (TC+) Provided by HMPPS/NHS Offender PD Team		Men with IDD	Same focus as for DTC.
Healthy Sex Programme (HSP) Provided by HMPPS Interventions Services	Regardless of risk level	Men with and without IDD	Men with a conviction of a sexual offence or an offence with a sexual element. Delivered 1:1.
Horizon	Medium and above	Men without IDD	Men convicted of committing sexual offences.
Kaizen	High/Very High	Men without IDD	Men convicted for sexual, Intimate Partner Violence

³ Risk assessments previously assessed with the RM2000, replaced with OASys Sexual (proven reoffending) Predictor (OSP) since March 2021. (HM Prison & Probation Service, National Probation Service, 2020).

Living as New Me	Medium and above	Men with IDD	(IPV) or general violent offences. Men who completed NMS or BNM+, and who need additional support. Promotes skill maintenance.
NMS	Medium and above	Men with IDD	Men convicted for any offence.

Adapted from the MoJ, Correctional Services Accreditation and Advice Panel (CSAAP), Currently Accredited Programmes (February 2021; Gov.UK).

The information in Table 1-1 shows the range of interventions available for men with IDD provided by His Majesty's Prison and Probation Service (HMPPS) within community and custody settings. This includes an intervention within a therapeutic community service provided by HMPPS and the National Health Service Offender Personality Disorder (NHS OPD) Team. The CJS has made progress in terms of developing and providing interventions that are more suitable for individuals with IDD, and the effectiveness of these interventions will be discussed later within this Chapter. Considering the prevalence and complexity of individuals who have a history of committing sexual offences, such as prisoners with mental health issues and IDD (26% of women, and 16% of men, Prison Reform Trust, 2019), limitations remain as to who can access interventions. This is both in terms of resources available, and in terms of the programme selection criteria. These include stable mental health and having an IQ level within the range of 60 to 80. As a result, the current criteria may exclude many individuals who could benefit from such interventions.

Treatment Within England and Wales, Forensic Mental Health Settings, Detained Under the Mental Health Act (MHA), (1983; 2007)

Not all individuals known to have committed sexual offences are convicted and sentenced within the CJS. Some individuals are detained under the Mental Health Act (MHA, 1983; 2007), including individuals with a diagnosis of IDD. The Mental Health Act, 2007 amended s. 1(2), to clarify that someone 'with a learning disability is not to be considered as having a mental disorder based solely on the learning disability. Unless it is connected with abnormally aggressive or seriously irresponsible conduct'. Individuals with a diagnosis of IDD and a history of committing sexual offences or sexually inappropriate behaviours are often detained under the MHA within this capacity. The Mental Health Act (1983, as amended, 2007) regulates how a person can be admitted, detained, and treated in hospital against their wishes, and details

safeguards that ensure patients' rights are upheld. Standards and safeguards are set out in the Code of Practice. Compliance is mandatory with all the requirements of the Act and relevant safeguards, including access to formal appeal processes, which are carefully monitored by the Care Quality Commission (England) and Healthcare Inspectorate Wales (Wales). The MHA contains mental disorders which involve any disorder or disability of the mind. These disorders include mental illness, personality disorder, psychopathy, IDD, and also incorporates paedophilia and paraphilias. IDD are only covered under the MHA if the IDD is connected with abnormally aggressive or seriously irresponsible conduct. Alcohol and drug dependence is not considered to be a disorder or disability of mind for the purposes of the MHA. Detention under the MHA should only occur if appropriate medical treatment is available, meaning, appropriate for the particular case, considering the nature and degree of the mental disorder and all other circumstances of that person's case. However, the MHA is currently under review, which in part, relates to the ongoing issues of people with IDD being detained under the MHA inappropriately, or for time periods beyond what is necessary or without appropriate treatment interventions being provided (Department of Health & Social Care, 2021).

Key Personnel Within the Mental Health Act.

An approved clinician (AC) is a registered clinical practitioner approved under the MHA. They can be a consultant psychiatrist, practitioner/registered psychologist, nurse, occupational therapist, or social worker. A responsible clinician (RC) is an AC with overall responsibility for the patient's case. The RC can authorise the initial detention of the individual under the MHA if they are a psychiatrist. A non-medical RC can continue the detention period under the MHA. Section 12 approved medical practitioners are medical doctors approved under section 12 of the MHA. They can be a GP, physician or psychiatrist and can authorise a person's detention under the MHA. An approved mental health professional can be a social worker, nurse, occupational therapist, or psychologist. Their role is to act on behalf of the local authority, and they are responsible for coordinating assessments, ensuring patients' rights are observed and that the nearest relative is informed of the detention. A nearest relative is a legally defined member of the family who has certain rights and responsibilities.

Sections Relevant to People who Commit Offences.

There are numerous sections within the MHA, with a number of them being specifically relevant to individuals with behaviours of a criminal nature. The information listed provides details of relevant mental health sections.

- Section 7: guardianship. This is not a hospital order but grants certain powers to the local authority to require residence at a specified place, attendance at appointments and allow access for assessment. This may be an alternative to prison or hospital for a lesser offence.
- Section 35: remand to hospital for a report on mental condition.
- Section 36: remand to hospital for treatment (28 days). Crown court or magistrates can authorise.
- Section 37: hospital order made by the courts (indefinite). Crown court or magistrates can authorise.
- Section 37/41: hospital order with restrictions (indefinite). Crown court can authorise.
- Section 38: interim hospital order: temporary hospital order if convicted for an imprisonable offence other than murder. Can only be ended by the court.
- Section 47: transfer direction from prison. Cannot be returned to prison under the MHA.
- Section 47/49: transfer direction with restrictions. Can be returned to prison up until release date.
- Section 45A: 'hybrid' hospital order: treated like a transferred prisoner, may be returned to prison to complete sentence component.

Interventions Available Within Forensic Mental Health Settings for Individuals With a History of Committing Sexual Offences

When exploring what interventions are available within forensic mental health settings for these individuals, it becomes clear there is no standardized intervention available. There are, however, numerous settings that provide some form of intervention. Some of these settings have utilised the SOTP delivered within HMPPS, whereas others have adapted the SOTP to meet the needs of their service users with complex issues, such as

mental health and IDD. One intervention incorporated across the NHS and private sector settings is the Sex Offender Treatment Services Collaborative-Intellectual Disability (SOTSEC-ID), which aimed to evaluate and standardise a community-based CBT intervention for men with a history of committing or who are at risk of committing sexual offences (Murphy et al., 2010). However, due to no set standards being in place across the UK, this particular intervention is not implemented within all relevant settings. A brief review of the prevalence of mental health problems and IDD within forensic settings, and the accredited interventions currently available within HMPPS services, has been provided in Table 1-1. Following on from this, a review of the most appropriate treatment models for men with IDD who have committed sexual offences will take place.

Working With Men who Have Committed Sexual Offences and the Need for Training

The number of sexual offences recorded by the police has tripled in recent years. An estimated 2.3% of adults aged 16 to 74 years (1.1 million adults; 798,000 women and 275,000 men) experienced sexual assault (including attempts) in the year ending March 2022. This figure is not significantly different when compared to the year before the global pandemic (Covid 19). However, the police recorded the highest level of sexual offences in England and Wales, in the year ending March 2022 (193,566). Additionally, the number of police recorded incidences has increased over the last decade. Approximately 73,260 child abuse offences were recorded by the police in the year ending March 2019, (Crime Survey for England and Wales, year ending March 2022; released March 2023). Rape relates to 36% of all sexual offences recorded by the police.⁴ Based on these figures, there is a requirement for reliable and effective interventions for this population of people who commit offences. Professionals (registered/qualified practitioners) and paraprofessionals (not registered/qualified but

⁴ CSEW data for the year ending March 2022, is not labelled as 'National Statistics, as they are based on six months data collection, between October 2021 and March 2022. Therefore, caution should be taken due to the reduced data collection period.

trained to assist the professional) who are involved in the processing, supervision, treatment, and general care of people who have committed sexual offences are under increased pressure to help monitor, rehabilitate and risk manage them. The provision of specialist training for these staff groups has been a key recommendation in various reviews, such as the Bradley Report (2009), the review conducted in 2014, the Prison Reform Report (2019), and the MHA Independent Review Report (2018). Information from the 'Neurodiversity in the criminal justice system: A review of evidence' report, (2021) indicates sufficient resources have still not been provided, and that staff reported having little or no training. According to the staff survey conducted, only 24% of those from prisons, and 28% of respondents from police and probation services, said they had received any training about neurodiversity. The outcomes of this review have been considered in the 'Reforming the Mental Health Act', (2021) White Paper and the 'Reforming the Mental Health Act, (Commons Library Research Briefing, 2021). This thesis aimed to evaluate the influence that a staff educational workshop has upon staff members' direct and indirect attitudes towards male service users with a diagnosis of IDD and a history of committing sexual offences.

Section Summary

In summary, problems in identifying individuals with IDD and mental health issues within the CJS remain. This issue continues to present concerns, as individuals do not receive the appropriate treatment and support that is required and may not be placed in the most appropriate or least restrictive environment to meet their needs. Leading on from this, if staff do not have the relevant training, they may lack the necessary knowledge to support the service users' rehabilitation, particularly when working with complexities such as IDD and factors related to sexual offences and mental health problems. A lack of knowledge and understanding of factors relevant to sexual offences often results in misunderstanding and the support of myth-based information. This can lead to more negative and punitive attitudes towards these service users and their rehabilitation (Imhoff, 2015), which will be discussed in more detail in Chapter 2. This issue highlights the need for staff members to receive and regularly engage in appropriate educational programmes to support the service user population they work with, irrespective of whether the setting is a CJS or health setting. Within any staff educational programme, it is important to include information regarding interventions that the service user may be involved in. This point leads to the next section, where

information about the available treatment interventions, best practice and treatment effectiveness will be explored.

Best Practice Treatment Models for Men with IDD who Commit Sexual Offences

Difficulties in identifying people with mental health issues and IDD have been discussed. What is still apparent is that there have been insufficient developments in staff training and knowledge since the Bradley Report's recommendations in 2009. The lack of resources and support for people with disabilities, including IDD has been universally noted by the 'Disability Inclusion Strategy 2018 to 2023', (2018). It is positive to see a strategy aimed to enhance inclusion, yet the impact of this strategy remains unclear for individuals detained within the CJS or under the MHA, and specifically remains unclear regarding individuals who have a history of committing sexual offences. In Table 1-1, the range of accredited interventions suitable for men with IDD, who have a history of sexual offences, was provided. Treatment provisions, although more widespread, remain limited in availability compared to men without IDD. Within this next section, a review of the available treatments and their effectiveness will be provided.

Challenges for Treatment and Case Management

The treatment and case management of individuals with IDD presents challenges. These difficulties are due both to the individual's limited ability to express their needs because of impaired functioning, and various stakeholders who provide support systems for the individual. This often results in communication becoming complex and the individual service user's perspective sometimes being lost (Blasingame, 2016). Several evidence-based guiding principles have, however, been applied to work with men with IDD who have committed sexual offences (Blasingame, 2016; Blasingame et al., 2014).

The Risk, Need, and Responsivity (RNR) model (Bonta & Andrews, 2007) provides a framework for case management and treatment planning and applies to men with IDD who commit sexual offences. The risk principle relates to matching the level of intervention to the level of risk; for example, the maximum concentration of intervention and supervision should be utilised for people who commit offences with the highest levels of risk for future offending. The need principle relates to the treatment and supervision efforts being focused on the fundamental criminogenic issues. Issues

relevant for men with IDD include problems within educational and vocational settings, antisocial thoughts and/or behaviours, antisocial peers, effects of adverse childhood experiences, and relationship skill deficits (Lindsay et al., 2004; Lofthouse et al., 2018; Boer et al., 2004). These factors identified within the risk assessments should be concentrated upon as part of the service user's treatment and case management planning process. Such risk assessments include the Stable-2007, which is a tool that assesses factors that are possibly changeable, but remain for months or years, and so should be reviewed regularly (as per guidelines).

Another assessment is the Assessment of Risk and Manageability of Individuals with Developmental and Intellectual Limitations who Offend-Sexually (ARMIDILO-S), (Boer et al., 2012). This tool is specifically for use with individuals with borderline or mild intellectual impairment, with or without IDD, who have committed sexual offences or who have displayed sexually offensive behaviours. The responsivity principle requires therapy providers and supervisors to adapt their methodology to encourage and increase the motivation of service users and improve the probability that they will participate with the mechanisms available that aim to help address risk factors.

When adapting methodology, it is important to consider the individual's abilities, personality, age, gender, and cultural identity. It is of utmost importance that individuals can cognitively process the information being shared as part of the intervention and supervision plan (Grove et al., 2018). All intervention materials should therefore be written at the service users' level of cognitive abilities, and the interventions should be evidence-based (Bonta & Andrews, 2007).

Most Widely Used Interventions

The therapy most utilised with individuals with IDD is Cognitive Behaviour Therapy (CBT). This therapy is used to concentrate on cognitive deficits and cognitive distortions (Taylor et al., 2008). CBT requires the individual to actively engage in the therapy programme to develop their understanding of their thoughts, feelings, and behaviours. This engagement helps to develop the person's understanding of their risk factors. CBT then focuses upon learning and developing new skills, with the aim to help them manage their risk effectively. This learning is achieved through role-play rehearsals, which then supports the transition process of using these skills every day.

Such skill transition will enable the person to be more effective in living an offence-free lifestyle when reintegrated back into the community.

Treatment Effectiveness and Factors That Enhance the Treatment Experience

When a review of the What Works literature took place (Kemshall et al, 2015), the evidence demonstrated that CBT was the most effective form of intervention for people who commit offences in general and for those who had committed sexual offences. Such interventions often incorporate behaviour rehearsal techniques, such as role-playing with feedback, working through contingency plans to decrease risk, and developing prosocial skills. Examples might include dealing with a problem within a relationship rather than avoiding it, or considering how to respond in high-risk scenarios, such as being near a child when experiencing levels of sexual thoughts and arousal. Blasingame (2005) stated that CBT provided with a humanist style is the most effective form of delivery. A systematic review of literature regarding the efficacy of CBT based interventions for men who commit sexual offences (Rocha & Valença, 2023), focused on literature available over the last decade. The findings suggested CBT has an important effectiveness, and those who engaged with CBT-based treatment, were likely to have lower relapse rates when compared to groups who did not engage with intervention. However, the authors highlighted the lack of studies found and the discrepancies between them, and therefore were not able to confirm the efficacy of CBT as an intervention.

Another support system used during interventions is positive behaviour support (PBS). The Association of PBS defines the system as “a set of evidence-based, applied principles to improve the person’s quality of life and decrease unwanted behaviours” (APBS, 2019). A fundamental principle of PBS is the recognition that some behaviour problems are linked to the person’s living and social environment. Behaviour problems can therefore be lessened by making modifications to the environment, alongside any direct intervention with the service user. Behaviour support plans include methods aimed to encourage engagement in behaviour change. Thus, a person-centred approach is best utilised with the service user and appropriate persons involved in the service user’s life when individual service plans (ISP) and individual programme plans (IPP) are developed. The service user’s sexuality and sexual health are, however, seldomly included (Stoffelen et al., 2017). This omission is a concern, given sexual knowledge and sexual identity are suggested to be factors that contribute to the commission of

sexual offences being committed, such as indicated in the theory of ‘counterfeit deviance (Griffiths et al., 2013). Although the authors clearly state such factors are not to be interpreted as being responsible for all sexual offences that are committed. Additionally, other literature emphasises that sexual naivety and lack of knowledge cannot explain most serious cases of sexual offences committed by men with IDD who commit sexual offences, but that the theory of counterfeit deviancy merits investigation when assessing and working with MCSO-IDD, (Lindsay, 2017).

Treatment Effectiveness of Interventions Aimed to Address Factors Associated With Sexual Offences

Treatment Effectiveness for Individuals Without IDD

Treatment Effectiveness for Individuals without Intellectual Disabilities Lösel and Schmucker (2005) conducted a comprehensive meta-analysis of the effects of treatment intended to address sexual offence related behaviours. The results indicated treatment committed significantly reduced the rates of recidivism; however, the size of the effect was small to moderate. The researchers highlighted that the evidence used within the meta-analysis was from studies that were not methodologically strong, but the outcome based on this evidence found the use of CBT to be promising. The results also indicated that hormone treatment was positive but, unfortunately, there were no controlled evaluations available to demonstrate how useful this treatment method was in terms of its effects on recidivism (Hill et al., 2003). Given the methodological issues with the studies they encountered, Lösel and Schmucker concluded that evaluations of treatment needed to be of a higher quality to derive firm conclusions as to what works for whom and under what conditions. They completed an update of the meta-analysis (Schmucker & Lösel, 2015), where a review of contemporary primary research was conducted. The review was limited to evaluations with comparable treatment and control groups and official measures of recidivism were set as the outcome criteria. It included the appraisal of psychosocial treatments, which were predominantly CBT-based programmes. The results found there were better effects for multi-systemic and CBT programmes, studies with small samples, medium to high-risk people who commit offences, individualised treatment, and treatment with good descriptive validity. Results also showed that treatment received in prison compared to the community did not demonstrate a significant mean effect. Some studies of prison-based treatment, however, showed some positive outcomes.

Mpofu et al. (2018) explored the efficacy of CBT for reducing recidivism rates for Moderate-High-risk males with a history of committing sexual offences. Through a 'scoping systematic review', they found CBT, in a range of styles, to be an effective mode of treatment in preventing recidivism when compared to other modalities of treatment. However, given the range of CBT styles documented, the results of this scoping systematic review are to be interpreted with caution.

An impact study of the prison service's Core 'Sex Offender Treatment Programme' (SOTP) was reviewed by the MoJ and demonstrated some statistically significant findings over an average of an 8.2-year follow-up period. The findings indicated individuals who had committed sexual offences and had received treatment committed at least one sexual reoffence, which was more than the matched untreated individuals (10% to 8%). Additionally, more treated individuals who had committed sexual crimes committed at least one child image-type offence, when compared to the matched untreated people who commit offences (4.4% to 2.9%). As for the other factors, both matched groups had similar reoffending rates across several outcome measures (Mews et al., 2017).

The impact study included 2,562 people convicted of sexual crimes in England and Wales who commenced treatment on the Core SOTP between 2000 and 2012. They were matched to 13,219 comparison people who had committed sexual offences. A total follow-up period of up to 13.9 years occurred, and there were 87 matching factors taken from the SOTP treatment records, Police National Computer (PNC) records, and the Offender Assessment System (OASys) database. The results from this study are of concern, given the serious nature of the offences. Whilst the impact study of the Core SOTP (Mews et al., 2017) was being conducted, two new intervention programmes (Horizon and Kaizen) had already been developed. The Horizon programme was rolled out during 2016 and 2017, and the Kaizen programme was rolled out during 2018 and 2019. However, both of these interventions are yet to be evaluated. When they are evaluated, it will be important to incorporate lessons learned from the methodological issues that have been raised in relation to the impact study (McCartan et al., 2018). One issue included the failure to match participants on sexual deviancy, which is a key variable in programme selection and in predicting recidivism (Walton, 2018). File data was also relied upon as being accurate when developing the matching model and so had a comparison group without consideration of participants' willingness to participate in

the programme (Walton, 2018). This impact study used ‘propensity score matching’ (PSM) to evaluate outcomes, and international meta-analyses that have explored the effects of treatment for men who commit sexual offences. These outcomes have shown great variation in terms of results, with contributing factors being the methodology of research used, and the context.

Limitations of using ‘propensity score matching’ (PSM) was acknowledged within the ‘Impact’ report and emphasis was given to the use of Randomised Control Trials in future research. The need for further investigations to include methodological comparisons was reiterated by Lösel et al. (2020) in their review of treatment effectiveness of Men who Commit Sexual Offences (MCSO), when using two different evaluation designs. Lösel et al. (2020) evaluated German prison treatment programmes for men who commit sexual offences. They compared ‘Propensity Score Matching’ (PSM) with ‘Exact Matching’ (EM) by the Static-99 of 693 people who have committed sexual offences and who were detained in Bavarian prisons. Exact Matching (EM) and Propensity Score Matching (PSM) are statistical techniques, which are often used when randomisation is not feasible. EM involves pairing participants from different groups (Control Group and Treatment Group) for exact covariate values. This method is very effective at eliminating confounding variables. However, due to the requirement of pairing ‘exact’ values, it often results in a significant reduction in sample size. Whereas PSM calculates the probability (propensity score) of an individual receiving treatment based on their covariates. Therefore, rather than matching individuals on every covariate, PSM matches them based on this single score. The benefit of this, is that it simplifies the matching process and usually retains a larger sample size compared to EM. However, this method can introduce new biases, and it can underestimate treatment effects due to mismatches (Lösel et al., 2020; Mews et al., 2017; MoJ., 2015). Results from Lösel et al. (2020), indicated similar outcomes for both matching methods, which, due to the low base rate, were not significant. However, different (non-significant) trends were found for the two methods on some of the variables. Specifically, a treatment effect of $p < 0.05$ on general recidivism in the EM was found, and at $p = 0.06$ on serious reoffending in the PSM. The EM demonstrated a negative trend for sexual recidivism, compared to PSM, which suggested the opposite. Such differences are important to consider, given the different matching methods indicate the same variable to be moving in opposite directions over time, therefore, decreases in

rates of sexual recidivism compared to increases in sexual recidivism. The different directions, albeit non-significant, are of importance given the variable focuses on whether further offences have been committed or not. Therefore, additional evaluations are required to determine the most robust and reliable method of analysis when evaluating such serious treatment outcomes and to ensure quality research is conducted and reported.

Other meta-analyses by Kim et al. (2017) and Gannon et al. (2019) showed more promising results. Kim et al. (2017) found significant recidivism reduction outcomes from the 11 meta-analyses reviewed. The researchers claimed that five of the most recent meta-analyses suggested a 22% reduction in recidivism. They concluded that treatment aimed at addressing sexual offence behaviours was promising. This review also found treatment for adolescents to be more effective than for adults, and chemical castration to be effective, although this treatment method has many ethical issues attached. Gannon et al.'s (2019) meta-analysis reviewed specialised psychological treatments for offence related behaviours and their association with reductions in offence and non-offence specific recidivism. Their findings showed that over an average follow-up period of 76.2 months (SD = 34.2), a significant treatment; with sexual recidivism, being 9.5% for treated and 14.1% for untreated individuals. They also found the most effective treatment in reducing recidivism was when a qualified psychologist was consistently present during treatment and when facilitating staff were in receipt of clinical supervision by a psychologist. Interestingly, the review also suggested that group-based interventions were more effective than those that combined group with individual sessions.

Treatment Effectiveness for Interventions With Men With IDD

When thinking about treatment for men with a history of sexual offences, who have IDD, the effectiveness of treatment for non-IDD individuals is important, as most interventions have been based upon a similar format to the Core SOTP. A study that evaluated the SOTSEC-ID (Murphy et al. 2010) reported statistically significant increases in levels of sexual knowledge and victim empathy. They also stated there were reductions in cognitive distortions. At a six-month follow-up period, they found the changes remained significant in terms of sexual knowledge and cognitive distortions. They stated from the 52 men who engaged in the one-year treatment period (from 13 different groups), during the year treatment group, six cases (four men)

showed non-contact offences. In the six-month follow-up period, five men showed non-contact offences, two of whom also showed sexual touch over clothing offences. They claimed the individuals who committed further offences had autistic spectrum disorders and indicated this to be a predominant contributory factor in further offences being committed. There are a number of cautions that need to be considered when interpreting the outcomes of this study. Firstly, this study did not form part of a systematic review or meta-analysis and the research design was not a Randomised Control Trial (RCT). Therefore, no conclusions of treatment effectiveness can be made. The actual design for this study included limited numbers who committed further offences and the small sample size included in the research, overall. There is also the potential for biases of the researchers, given their involvement in the development of the SOTSEC-ID programme. Therefore, they had personal investment in obtaining significant outcomes. Lastly, there were no randomised control trials included in this this research and there is the need for a longer follow-up period.

Since this time a further follow up study of the same participants was conducted (Heaton & Murphy, 2013). This evaluation included thirty-four men (from seven treatment sites), who had all attended SOTSEC-ID groups. The authors reported the mean length of follow-up, since the end of the treatment group, was 44 months (SD 28.7, range 15–106 months). It was stated that the statistically significant improvements in sexual knowledge, empathy and cognitive distortions seen during treatment were maintained at follow-up. It was also reported that 11 of the 34 (32%) men demonstrated further sexually abusive behaviour, with two men receiving convictions and indicated a diagnosis of autism was associated with a higher likelihood of further sexually abusive behaviour. Heaton and Murphy concluded this study offered some evidence of the longer-term effectiveness of group CBT for men with intellectual disabilities and sexually abusive behaviour. As already stated for the original study, a limitation includes the lack of control trials, as this makes it difficult to ascertain if any outcomes were a result of the intervention. Again, the authors investment with the success of the treatment programme, due to being key members in the development of the treatment intervention may have resulted in researcher bias in terms of influencing participants' engagement in the evaluations and the authors interpretation of the results.

Since this study was carried out, three systematic reviews have been conducted (Cohen & Harvey, 2016; Jones & Chaplin, 2017; Marotta, 2017), including a total of 21 studies.

They predominantly included CBT interventions that were adapted from the mainstream SOTP, and one Mindfulness-based intervention was included (Singh et al., 2011). Cohen and Harvey (2016) found that the programmes tended to incorporate sexual knowledge sessions and that the treatment was taught at a slower pace and over a longer period, with repetition and creativity being utilised. Jones and Chaplin (2020) claimed there may be better treatment outcomes if the intervention is taught for a minimum of two years. Marotta (2017) concluded the overall quality of studies was poor and that they required further development to be able to generate secure conclusions about the effectiveness of interventions with this population.

The first meta-analysis that looked at the Adapted Sex Offender Treatment Programmes (ASOTP) explored the effectiveness of addressing cognitive distortions (Patterson, 2018). Findings from this study indicated significant reductions in the level of cognitive distortions of men with IDD with a history of committing sexual offences, upon completing an ASOTP intervention. These outcomes were found irrespective of IQ level, language ability, offence type, and length of treatment. Conversely, the results from the meta-analysis detected that longer treatment interventions were linked to the most reductions, the most beneficial treatment length being 24 months. The findings need to be interpreted with caution, however, as there is a need for high quality experimental evaluations of the ASOTP, given no RCT's have been completed and due to the current evidence base consisting entirely of case and quasi-experimental studies (none employed control groups).

A more recent meta-analysis conducted by Heppell et al. (2020) is said to differ from Patterson's (2018), as a greater number of studies were included, and a wider range of treatment outcomes examined. Findings from this meta-analysis indicated that cognitive distortions were significantly reduced following this type of treatment. Significant improvements in victim empathy and sexual knowledge were also claimed with large treatment effects found for victim empathy and cognitive distortions, and a moderate effect found for sexual knowledge improvements. In terms of individuals who go on to display further sexually abusive behaviours, a finding of 11.5% was obtained. However, a key limitation of this meta-analysis is that all studies included were of 'within group' designs. No RCT's were included within any of the studies. Therefore, no conclusion of treatment effectiveness can be concluded and so the reliability of these findings is questionable. Additionally, Mann et al., (2010) stated there was insufficient

evidence for the claim that ‘poor victim empathy’ was a risk factor associated with individuals committing sexual offences. Although victim empathy has historically been a fundamental component of most sexual offence related interventions, Hanson and Morton-Bourgon (2005) found it to be unrelated to further sexual offences being committed within the five studies they examined. Therefore, findings need to be interpreted cautiously due to the chance of bias, as it is not possible to determine if changes were the result of the interventions, and the evidence for victim empathy being a reliable outcome measure is weak.

Critical Review of These Studies.

A common limitation of meta-analyses is that they evaluate different types of studies and therefore, may pay no attention to important differences between studies. As can be seen from the studies specifically referred to here, numerous limitations are observed. A fundamental limitation is the absence of any RCT’s being part of any of these particular studies referred to within the meta-analyses referred to in this section. Another limitation is the reviews looked at different interventions across a range of settings. These may have included different components within the programme or given greater attention to some aspect over another, such as victim empathy compared to problem solving for example, which links to the outcome measures used within the range of studies generally being weak. The studies also included an evaluation of interventions based on different core components, such as CBT compared to Mindfulness, which have different therapeutic aims and means of delivery style. There is also little to no consideration of the environments the interventions were delivered in, as they included interventions conducted in the community as well as secure settings. The small samples were raised as an issue, but in addition to the limitations already mentioned – the impact of small sample sizes upon the reliability and generalisability of findings is exacerbated. In addition, little to no consideration was given to the therapist experience, quality, and delivery style. These issues, along with no control trials included within the analyses makes it difficult to assess what was a result of the intervention and what was a result of other variables.

A recent review of the literature associated with the effectiveness of interventions in enhancing empathy in service users with IDD who have committed sexual offences or sexually harmful behaviours (Wormald & Melia, 2021), provides further support for these limitations. A total of 13 papers were included in the final review. The conclusion

was that CBT group treatments adapted from mainstream treatment programmes for people with IDD were widely used and they demonstrated developments in empathy and reductions in sexually abusive behaviour overall. However, the authors acknowledged the studies included were limited by sample sizes. They also lacked the inclusion of control groups (with a large number of the studies being related to the SOTSEC-ID intervention) and found inconsistent definitions of intellectual disabilities and sexually abusive behaviour. Therefore, these issues echo the need for higher quality experimental evaluations of the effectiveness of interventions with men with IDD who have conducted sexually harmful behaviours. In order to address this, services need to reconsider the purpose of Randomised Control Trials (RCT's) and utilise them to effectively evaluate whether the intervention is effective in addressing the issue intended. Therefore, a more coherent and systematic approach needs to be adopted, such as conducting collaborative research across settings, where the same intervention mode and content are strategically evaluated and compared to non-intervention samples. It is important for concerns surrounding the use of RCT's within forensic services to be reviewed and reconsidered, as without doing so, means no conclusions can be made regarding the effectiveness of interventions (non-IDD and IDD specific) aimed to rehabilitate individuals who have committed sexual offences.

Factors That Enhance the Treatment Experience for Service Users With IDD

Rapport Building.

A key aspect to increasing a service user's level of motivation to engage is the ability to build rapport with them. York (2006) claims that therapists with a wide range of communication styles, who take the time to listen and understand the service user's way of thinking and communicating, work effectively with men with IDD. Therapists should interact in a 'warm, respectful, genuine, firm, fair, directive, and empathic manner' (Andrews & Bonta, 2010; Marshall et al., 2011). Being flexible with treatment models is also of benefit, as different models and approaches can assist in supporting the service user's needs at varying points in the treatment process. A humanistic approach can help construct the service user's confidence that the therapist has their best interest in view, whereas a CBT approach is more change focused (Blasingame, 2005).

Positive Psychology Approach.

A positive psychology approach to therapy for men with IDD is also of benefit, and the Old Me-New Me model (Haaven, 2006) is an example of this. As part of the Old Me, the service user considers and identifies characteristics associated with their sexual problems or offending behaviours. Working towards New Me incorporates approach goals, where service users identify what aspects of a crime-free lifestyle they want to live (Haaven, 2006). The service user is encouraged to recognise that there will always be both Old Me and New Me characteristics present, but by making the New Me aspects stronger, the individual will be able to control and manage the Old Me aspects (Haaven, 2006). More attention is given to approach goals, compared to avoidance goals, within a positive psychology model, thereby helping the individual develop more strengths and self-value.

World Perspective.

Another important consideration for interventions for individuals with IDD, is understanding their perspective of the world. Communications that are personalised to the individual's worldview and motivations have a better chance of being effective. For example, an adult with IDD may have a worldview that they are not 'accepted' in the same way as other adults without IDD. They may express feeling judged and a failure when in their company, whereas, when they interact with children, they may not encounter the same reaction and consequently develop the perspective that adults are not friendly, but children are. It is important not to forget that IDD is a categorical term, and so individual service users each have a unique range of strengths and challenges (York, 2006). In addition to this, people with IDD are subjected to high degrees of emotional, physical, and sexual abuse (Blasingame, 2005). Sinason (1998) argued that having IDD is inherently traumatic, which must be considered when delivering treatment, and highlighted the need for specialised psychotherapy to address the unique emotional and psychological needs of individuals with IDD. More recently, the experience of an IDD itself being a significant source of trauma, affecting both the individuals diagnosed and their families has been emphasised. This trauma stems from multiple factors, including societal stigma, internalised negative perceptions and the ongoing challenges in navigating a world not designed for their needs (Sinason & Conway, 2021). Sinason (1992), introduced concepts such as the 'handicapped smile' and the 'secondary handicap', which refers to how people with IDD might display a

forced smile to mask their pain or develop additional disabilities as a coping mechanism. These responses are seen as defences against the trauma of their primary condition and societal reactions to it. Therefore, it is important to provide individuals with IDD with a more supportive environment to process their experiences and trauma (Corbett, 2018). In connection to Sinason's work, 'Trauma Informed Care' (TIC) utilises strengths-based treatment approaches that consider the effect of trauma on an individual (Levenson et al., 2016). Thus, developing a trusting working relationship with the service user is of utmost importance.

Section Summary

The RNR Model (Bonta & Andrews, 2007) is applicable in the risk management and treatment planning for men with IDD who have committed sexual offences. Assessment and risk management tools that specifically account for factors related to IDD should be utilised within their case management process. The service user is to be involved within their risk and case management procedures, along with any appropriate members of their support network. When considering treatment interventions, the use of CBT is said to be an appropriate mode, particularly when delivered in a humanistic style. The consideration of environmental factors is also key, and so the use of PBS plans is of great support. As with treatment for non-IDD men, the therapeutic relationship is of great importance, and rapport building is fundamental in developing trust. The use of positive psychology approaches rather than avoidance approaches help the individual develop more strengths and self-value. Finally, it is important to listen to the individual and take the time to appreciate and understand the service user's perspective of the world and previous abuse, and to work in a trauma informed manner.

Factors That Enhance Treatment Effectiveness

Therapist Style and Support Culture.

Having looked at best treatment models and treatment effectiveness for men with IDD, with a history of committing sexual offences, or sexually harmful behaviours, the literature has found that it is not only the content of programmes that is important in the rehabilitation process, but also the therapist's qualities (Blow et al., 2007; Blagden et al., 2016). Similarly, Gannon et al.'s (2019) findings highlighted the positive impact of delivery or supervision provided by psychologists upon treatment outcomes. A supportive environment is also of importance (Blagden et al., 2016), yet this can be

significantly influenced by automatic and non-automatic attitudes of staff members (Malinen et al., 2014).

The effectiveness of treatment is influenced by the therapist's style, the service user's perception of the therapist, and the therapeutic alliance (Marshall et al., 2003; Watson et al., 2015). A strain within the relationship can lead to ruptures, which is a breakdown of the therapeutic bond (Safran et al., 2014). If this breakdown is not resolved it can potentially lead to non-completion of treatment (Sharf et al., 2010) or weaker treatment outcomes (Holdsworth et al., 2014; Martin et al., 2000). Therapist style and support culture are equally important factors in the rehabilitation of men with IDD who have committed sexual offences (Blasingame, 2005). The product of widespread research has resulted in an extensive catalogue of therapist characteristics that are said to be important in supporting rehabilitation success (Martin et al., 2000), some of which overlap with what has been identified previously in terms of building rapport (Andrews & Bonta, 2010; Marshall et al., 2011). The main features said to enhance successful rehabilitation include empathy, warmth, and genuineness (Keijsers et al., 2000). Warmth is displayed as caring, support and acceptance. These aspects help service users examine their own problems (Safran & Segal, 1990). Genuineness and authenticity are also important features, where the therapist reveals themselves honestly and reliably, are not hostile and are interested in the service user (Egan, 1998). Demonstrating respect shows service users that the therapist understands and values them. Making a clear distinction between the individual and their behaviour is important, as feeling bad about oneself leads to shame, which decreases the likelihood of positive change. Feeling bad about a behaviour, however, leads to guilt, which assists change (Tangney & Dearing, 2002). These qualities are also important for support staff as they are fundamental in the development of a rehabilitative culture.

Therapist abilities and styles that are said to reduce treatment effectiveness include those who have limited skills and low levels of interest in the service user (Lambert, 1983). A confrontational style is said to be harmful to service users at the "pre-contemplation" stage of change, and those individuals with a history of committing sexual offences (Garland & Dougher, 1991) tend to be at this stage. Negative staff attitudes are thought to impact the effectiveness of treatment by way of 'therapeutic climate' (Harper & Hogue, 2015a). Given the complexity of issues related to men with IDD who commit sexual harmful behaviours, the support culture surrounding them is

of great importance (Blagden et al., 2016). This was also reiterated in research conducted by Blagden and Wilson (2020) when looking at factors that are important in the rehabilitation environment.

The context in which treatment occurs is found to be more influential than the intervention procedures (Marshall & Marshall, 2010; Schmucker & Lösel, 2015). In regard to a prison environment, having a good social climate is said to enhance the outcomes found with evidence based “what works” rehabilitative programmes (Harding, 2014). This relates back to Schmucker and Lösel’s (2015) meta-analysis of the effectiveness of treatment. They reported significant effects for community and forensic hospitals, but not prisons. They claimed this to be due to “contamination effects” in the prison sub-culture. This links to the interactions experienced within a prison environment, where the prisoner interaction with staff is said to be key. A positive prison climate will promote and facilitate other opportunities to change outside of programmes (Day et al., 2011). This in addition to interactions with peers and having peer support has been found to improve desistance-based narrative and contribute to self-determination and “active citizenship” (Perrin & Blagden, 2014). Blagden et al., (2016) explored the experiences of prisoners detained in an establishment where the prison population had changed from being mixed to detaining a whole prison population serving a sentence for a sexual offence. Responses indicated a key difference from feeling fearful and intimidated and predominantly focusing upon survival when in a mixed establishment, to feeling safe and being able to relax. Being able to relax seemed to correlate with being able to have the ‘headspace’ to reflect and consider change. In connection to this, not having to hide, not being shouted at by other prisoners (those who have not committed sexual offences) and being able to create space and distance from the label ‘sex offender’ and the stigmatisation that label brings, is said to aid in the rehabilitation process (Ievins & Crewe, 2015).

These findings highlight the importance of feeling safe and relaxed in order to consider rehabilitation and make changes (Blagden et al., 2016; Blagden and Wilson. 2020; Ricciardelli & Moir, 2013; Woessner & Schwedler, 2014). When prisoners feel safe, they are said to be more able to secure meaningful roles whilst imprisoned and are therefore, more likely to participate in treatment interventions and other prosocial activities (Blagden & Perrin, 2016; Perrin & Blagden, 2014). Purposeful activity has been found to help prisoners make positive contributions towards their own

rehabilitation (Blagden et al., 2017). The literature remains limited on the effects of therapist style and rehabilitation for individuals with IDD and a history of committing harmful sexual behaviours. Therefore, this thesis aims to help provide additional knowledge and understanding of these factors.

Support Staff Qualities and Ward Climate.

Factors that impact the treatment of men with intellectual disabilities who have committed sexual offences, and therapist qualities that enhance rehabilitation have been explored. The therapist qualities identified are also important for support staff to have and demonstrate, as this is essential in developing a rehabilitative culture and social climate. Specifically, the importance of culture within prison service settings and its impact on rehabilitation has been reviewed. Nevertheless, reviewing this aspect within Forensic Mental Health (FMH) settings is equally essential, as the current research is within FMH settings, with the primary intervention participants being support staff. Therefore, this next section will examine the importance of rehabilitation culture and social climate within FMH settings in service users' rehabilitation.

Social climate has been seen as a crucial factor in the care services of individuals with mental health issues for a long time (Tonkin et al., 2012). Social climate has several aspects: social, emotional, and material conditions of a social group (Moos, 1974). Studies have indicated that both social climate and a sense of community, have a protective influence on service users' symptomology and level of risk (Darlaston-Jones, 2007; Ros et al., 2013) and can have a positive impact on recovery (Talo et al., 2014), as well as engagement in treatment (Chavis & Wanderman, 1990). Sarason (1974), described a sense of community as being a part of a mutually supportive and balanced group, where the strength of bonding between community members helps reduce feelings of loneliness, isolation and psychological distress. These aspects emphasise the need to improve the social climate within FMH settings.

Several factors important to both service users and support staff, that influence the ward rehabilitation culture, include inconsistency, trust and a caring culture. Inconsistencies and unpredictability in treatment can reinforce the negative life experiences of forensic service users, who often have histories of dysfunctional relationships. Therefore, ensuring staff continuity helps build trust, which is fundamental for effective rehabilitation (Bennett & Hanna, 2021). Individualised care that considers each service

user's unique needs can help promote rehabilitation and the transition back into the community, but this requires balancing empowerment with the structured environment necessary for safety (DH, 2011; NICE, 2021). Continuity of care helps manage service users' risk factors and enhance protective factors, making the transition smoother and reducing the risk of further offences (Leonard et al., 2020). Another important factor is staff training and reflective practice. Regular reflective practice groups can help manage the psychological impact of working with forensic populations and improve their ability to support service users effectively. As reflective practice incorporates dealing with countertransference and the promotion of secure attachments between staff and service users (Henegan et al., 2014).

When considering the environment where service users are cared for, the physical and social environment within forensic settings plays a significant role. Creating a therapeutic community that supports service users in building confidence and self-esteem can enhance rehabilitation outcomes. Positive social networks within the care setting and with external contacts are also fundamental for service users' personal growth and recovery (Shepherd et al., 2016). However, the hierarchical nature of forensic settings can sometimes hinder the empowerment of service users. Therefore, encouraging shared decision-making and reducing power imbalances, can help develop a more supportive and rehabilitative environment. Together, these factors create a complex but essential framework for effective rehabilitation in FMH settings, helping service users and support staff by promoting a safe, consistent, supportive therapeutic environment (Robertson et al., 2011).

Considering the impact environment has upon rehabilitation, highlights the importance of monitoring the social climate and sense of community within FMH settings. This is essential for several reasons. Firstly, it helps build therapeutic relationships, which are fundamental for service user progress. A supportive community promotes confidence, self-esteem, and a sense of belonging among service users, which is key to their recovery and reintegration into society (Puzzo et al., 2023). Secondly, a positive social climate supports recovery-oriented approaches emphasising empowerment, personal responsibility, and developing a non-service user identity. It helps service users develop social skills and relationships that are important for their life beyond their care and detention within services. Therefore, this facilitates a more successful transition back into the community (Robertson et al., 2011). Thirdly, a well-monitored social

climate can help identify and mitigate factors contributing to violence and aggression within forensic settings (Goulet et al., 2022). Ensuring a safe and supportive environment reduces service user stress and tension, decreasing the likelihood of violent incidents. Therefore, regular monitoring of the social climate allows for the early identification of issues such as bullying, exclusion, or the development of negative subcultures. Addressing these issues can prevent them from escalating and disrupting the therapeutic environment (Robinson et al., 2018). This in turn, benefits service users and staff by creating a safer working and living environment.

The social climate within a setting affects service users' and staff's well-being and job satisfaction. Positive interactions and a supportive work environment help reduce burnout and turnover among staff, which is essential for maintaining continuity of care and building long-term therapeutic relationships with service users (Puzzo et al., 2019). When service users feel part of a community and experience positive social interactions, they are more likely to engage in treatment programmes and participate with therapeutic routines. This sense of community enhances the effectiveness of various therapeutic interventions and supports better overall mental health outcomes (Berry & Roberston, 2019).

Measuring the social climate within forensic mental health settings using self-report measures is important for several reasons. They can provide insights into the subjective experiences of service users and staff, offering a comprehensive understanding of the social climate. This reflects how individuals perceive their environment, which can significantly influence their behaviour and engagement in therapeutic activities (Tonkin, 2016). By identifying specific areas of concern or satisfaction within the social climate, self-report measures enable the design and implementation of targeted interventions. If a measure reveals low perceived safety or support for instance, interventions can focus on enhancing these aspects, thereby improving the overall therapeutic environment and outcomes (Bressington et al., 2011).

Regular administration of self-report measures allows for monitoring changes in the social climate over time, which can help assess the impact of interventions and make necessary adjustments to maintain or improve the therapeutic environment (Tonkin, 2016). They can also highlight areas where staff-service user interactions need to be improved. Enhancing these relationships is critical for building trust, which provides

the foundation for effective rehabilitation and service user progress (Doyle et al., 2017).

One measure is the Essential Characteristics of Therapeutic Environments Scale (EssenCES) Self-report. The EssenCES tool, developed by Tonkin et al. (2016), explicitly measures three dimensions of the social climate: therapeutic hold, safety, and service users' cohesion and mutual support. These dimensions are important for understanding the overall quality of the therapeutic environment and guiding improvements that enhance service user outcomes and staff satisfaction (Puzzo et al., 2019). The EssenCES Self-report measure contributes to the evidence base for best practices in forensic mental health settings. Data collected can be used to explore correlations between social climate and rehabilitation outcomes, informing policies and practices that enhance therapeutic environments (Dickens et al., 2022). The EssenCES is relatively simple to conduct, as it utilises brief questions that can be completed by service users, staff, and prisoners. The results are easy to interpret and can be used to guide interventions that improve the atmosphere within services. The EssenCES has been validated across multiple studies and populations, and has been found to reliably assess social climate dimensions, allowing comparisons across different settings and over time. However, there are several limitations of the EssenCES. This tool focuses on three important dimensions of social climate, but it does not evaluate other important factors, such as power dynamics of staff-service user relationships, or the broader organizational culture. Other social climate tools such as the Ward Atmosphere Scale (WAS), (Moos & Houts, 1968) may cover a broader range of dimensions. However, they may be more cumbersome to implement.

Social climate measures, including the EssenCES, often rely on self-reports from staff, service users or prisoners. Responses can therefore be influenced by individual biases, momentary emotions, or external circumstances unrelated to the actual social climate. While the EssenCES has been validated in several countries and contexts, the interpretation of social climate can vary across cultures and settings. For instance, the concept of “safety” may differ between FMH settings and prisons. In prison service settings, power dynamics between staff and prisoners, or between prisoners themselves, may play a more central role than in therapeutic settings, and these dynamics might not be adequately captured by the EssenCES. Other social climate tools, such as the Group Climate Questionnaire (GCQ), (MacKenzie, 1983), may be more sensitive to certain

settings, such as group therapy or community-based interventions. Another limitation of social climate tools such as the EssenCES is that they may capture short-term fluctuations in social climate but not evaluate long-term patterns.

When considering the strengths and limitations of the EssenCES, it is useful to compare the tool to other social climate measures. The Ward Atmosphere Scale (WAS, Moos & Houts, 1968) is a comprehensive measure that assesses ten dimensions of the ward environment, including involvement, personal problem orientation, and order and organization. It provides a more detailed picture than EssenCES but can be more difficult to administer due to its length. The WAS may be better suited to FMH settings with a therapeutic focus, whereas the EssenCES is more generalisable across different types of settings. The Group Climate Questionnaire (GCQ, MacKenzie, 1983) assesses the atmosphere within therapeutic groups and focuses on dimensions such as engagement, avoidance, and conflict. This tool is valuable in group therapy settings, which the EssenCES is not, as it focuses more on the social environment of the entire ward or setting rather than specific group dynamics. The Correctional Institution Environment Scale (CIES, Moos, 1975) was designed for prison service settings. This tool measures aspects such as staff control, prisoner influence, and trust. It addresses some of the power dynamics that are not considered to the same degree within the EssenCES. Therefore, the CIES might be more appropriate for evaluating the specific social environment of prisons.

From considering the strengths and limitations of these social climate measures, it can be seen how important it is to consider the setting, service user relevance and accessibility. Involving service users and staff in the assessment process through self-report measures can empower them by giving them a voice in evaluating their environment. Inclusion can increase their engagement and commitment to creating a positive social climate (Frith & Rodwell, 2023). Overall, social climate measures, including EssenCES, are important in promoting humane, therapeutic, and safe environments in forensic settings. However, their design and application require careful consideration to avoid oversimplification.

Having reviewed some of the social climate measures, it is important to consider the different monitoring requirements in NHS England and NHS Wales for FMH services. NHS England emphasises using standardized tools, such as the EssenCES, and

frameworks to assess and improve the social climate in forensic settings. The Royal College of Psychiatrists Quality Network for Forensic Mental Health Services sets standards and provides a structured framework for monitoring and improving the social climate. This network conducts regular reviews and peer assessments to ensure compliance with best practices and to foster a positive therapeutic environment (Royal College of Psychiatrists, 2013). NHS England follows specific policies and guidelines that mandate the regular assessment of the therapeutic environment as part of its quality assurance processes. Routine evaluations and feedback mechanisms aim to improve the social climate continuously and address any issues promptly (NHS England, 2024). Meanwhile, the Welsh Health Specialised Services Committee (WHSSC) oversees the commissioning of specialised forensic mental health services in Wales. WHSSC aims to ensure providers meet quality standards and are capable of providing a safe, high-quality therapeutic environment (WHSSC, 2024). NHS Wales strongly emphasise integrated care pathways that involve continuous monitoring and improvement of the social climate. This approach focuses on service user recovery and safety through shared input from various stakeholders, including healthcare providers and community forensic services in Wales. Particularly those involving high and medium-secure units, which are required to maintain rigorous standards for the social climate. Detailed guidelines and regular inspections are required to ensure that the therapeutic environment is conducive to service user rehabilitation and staff well-being (WHSSC, 2024). In summary, while NHS England and NHS Wales prioritise monitoring and improving the social climate in forensic mental health settings, NHS England relies more on standardized tools and networks. In contrast, NHS Wales focuses on integrated care pathways and stringent commissioning standards. Both approaches aim to ensure a therapeutic environment that supports service user recovery and staff well-being.

Having explored the purpose and benefits of using standardized measures to monitor social climate changes, consideration of their application to individuals with intellectual disabilities is necessary, as they have several limitations. Primarily, they often fail to account for the unique and diverse needs of individuals with IDD. These service users may have different perceptions and responses to their environment than others without IDD. As a result, the tools may not accurately capture their experiences or the specific challenges they face (Bell et al., 2018). Individuals with IDD may have difficulties

understanding and responding to standardized questionnaires or interview questions, resulting with inaccurate or incomplete data. Therefore, alternative communication methods or support may be necessary, and tools may need to be adapted. However, many standardized tools are developed based on general population norms and may not reflect forensic settings' cultural, contextual, and environmental nuances. This exacerbates the difficulties in assessing the social climate for individuals with IDD, as the data can be misinterpreted, and important aspects of the social climate specific to individuals with IDD can be overlooked (Kooijmans et al., 2022). In addition to this, standardized tools prioritize quantitative over qualitative data, which can miss out on the rich insights qualitative methods provide. For individuals with IDD, understanding their subjective experiences and narratives can be crucial for accurate assessment and intervention (Finlay & Lyons, 2001). As stated, many tools focus on specific dimensions of the social climate, such as safety, cohesion, and therapeutic hold. However, they may neglect other important factors like individual autonomy, dignity, and the quality of interpersonal relationships, which can be particularly significant for individuals with IDD (Chester et al., 2015).

Standardized tools may not be used consistently across different settings or over time, leading to data collection and interpretation variability. Staff administering these tools might inadvertently influence the responses of individuals with IDD, especially if there is a power imbalance or lack of trust, resulting in biased data that does not accurately reflect the actual social climate (Bell et al., 2018). According to Kooijmans et al. (2022) and Bell et al. (2018), tailored tools should include qualitative and quantitative measures to capture a comprehensive view of the social climate to address these limitations. This mixed-methods approach can help mitigate some of the limitations of purely standardized tools by incorporating the nuanced experiences of individuals with IDD. This comprehensive approach can provide a more accurate and meaningful understanding of the social climate in FMH settings.

Adapting standardized measures to monitor the social climate in FMH services for individuals with IDD presents several strengths and limitations. Regarding strengths, tailoring tools to address the specific needs and communication styles of individuals with IDD can lead to more accurate assessments, which help capture these individuals' unique experiences and perceptions, which standardized tools may miss (Chester et al., 2015). When tools are adapted to be more accessible and understandable, service users

are more likely to engage with the assessment process. This increased engagement can lead to more reliable data and a better understanding of the ward's social climate (Bell et al., 2018). With more accurate data, healthcare providers can design interventions better suited to the needs of individuals with IDD, potentially leading to improved outcomes and a more supportive environment (Chester et al., 2015). However, there are several limitations in adapting tools, including the time required, expertise, and funding. This can be a barrier for many services, particularly those with limited budgets (Chester et al., 2015). Adapting tools may lead to inconsistencies in data collection and make it difficult to compare results across different settings or populations. Adaptations may introduce biases, especially if they are not thoroughly tested for validity and reliability, and this can affect the accuracy of the assessments and the conclusions drawn from the data (Bell et al., 2018). Staff need to be adequately trained to use adapted tools effectively, this requires ongoing training and support, which can be challenging to maintain. Overall, while adapting monitoring tools to the needs of individuals with IDD can enhance their relevance and effectiveness, it also requires careful consideration of the associated challenges to ensure accurate, consistent, and unbiased assessments are developed. Therefore, further research and resources are required to investigate and address these limitations. This is essential given the impact the relationships between staff and service users has, and its effects upon ward climate.

Section Summary

A range of studies has evaluated the effectiveness of treatment aimed to address sexual offence related behaviours. The main issue highlighted in each review of treatment effectiveness for men with or without IDD, is the need for high quality studies and evaluations. Results from studies re: non-IDD MCSO were varied, with the findings from some meta-analyses indicating promising results in reducing recidivism, particularly when conducted in the community, rather than in custody, and for Moderate to High-risk males. Results have also indicated treatment to be more effective when a psychologist or supervised facilitator was consistently present during treatment delivery. Other studies, such as the MoJ Impact Study (2017), however, found results that indicated sexual recidivism was increased for those who received treatment, compared to those who did not, although key methodological issues were highlighted for this study.

Interventions developed or adapted for men with IDD who have carried out sexual offences are promising, where research has indicated low rates of further offences and significant reductions in cognitive distortions, as well as significant improvements in sexual knowledge and victim empathy. However, the reliability of the research findings for both interventions for men without IDD, and for those adapted for men with IDD are questioned, as no RCT's have been conducted. Therefore, no conclusions of statistically significant impacts of these interventions can be made. Factors claimed to enhance the effectiveness of treatment include therapist qualities and a supportive environment (Blagden et al., 2016). Exploration of systems used to monitor both social climate and a sense of community are also important in the development of a therapeutic culture. There are however a number of limitations associated with the methods used to monitor ward social climates. One issue relates to the different monitoring methods in England and Wales, as NHS England and NHS Wales have different requirements. The majority of monitoring methods rely upon self-report measures and the reliability of these are impacted upon due to the potential for biases. In regard to evaluating the social climate for individuals with IDD, using methods such as self-report highlights the issue of accessibility, and concerns surrounding adaptation of tools in terms of fully meeting the needs of individuals with IDD. Social climate and a supportive environment are significantly shaped by staff members' automatic and non-automatic attitudes, as they influence their interactions with service users (Malinen et al., 2014). Yet, limited research of such factors and the impact on the rehabilitation of MCSO-IDD is apparent.

Attitudes and Attitude Change Within a Rehabilitation Setting Towards Men who Commit Sexual Offences

Introduction

Interventions available to address the needs of individuals with a history of committing sexual offences and sexually harmful behaviours have been explored for those based within the prison and forensic mental healthcare settings, as well as those appropriate for individuals with IDD and mental health problems. The first section of this chapter reviews the connections between stigma and stereotyping and their influence on professionals' attitudes towards individuals with IDD and a history of committing sexual offences. Stigmas and attitudes towards individuals who commit sexual offences are important to consider when contemplating the influence they have upon the rehabilitative environment.

Stigma and Stereotyping

Stigma and stereotyping form the foundation of how attitudes towards individuals or groups are shaped and maintained. Stigma can be defined as “An adverse reaction to the perception of a negatively evaluated difference” (Susman, 1994, pp. 15-22). Thornicroft et al. (2007) have explained how stigma incorporates three elements: problems of knowledge (ignorance), problems of attitudes (prejudice) and problems of behaviour (discrimination). Stereotyping from a psychological perspective, relates to the cognitive processes that generate a similarity of one person or a group as a whole to another. Stereotyping leads to inferring a person has all the characteristics and abilities that we assume each member of the ‘group’ has. To stereotype a group is to characterize that group as a collective entity. This can lead to social categorisation, which generates prejudiced attitudes and discrimination, as this can result in an ‘us’ and ‘them’ mindset, which generates ‘in-groups and out-groups’ (Beeghly, 2021). Stigma Associated with People who Commit Sexual Offences.

Due to the nature of the offences and the emotional reactions they trigger, stigma becomes assigned to individuals who have committed sexual offences. Research indicates the public's opinion of sexual offences is more negative and punitive due to public beliefs that are influenced by media portrayal that there is a high rate of re-offending and the majority of sexual crimes are committed against children and strangers (Galeste et al., 2012; Harper et al., 2018). Stereotypes can result in members

of the community not wanting to help, as the person is viewed as an outsider, someone that is harmful and should not be trusted (Harper et al., 2017; Imhoff & Jahnke, 2018; Jahnke, 2018; Jahnke, Imhoff, et al., 2015). Additional stereotypes are, that treatment does not work and that a punitive response, such as isolating those who commit sexual offences is paramount (Tabachnick & Klein, 2011; Willis et al., 2013; McCartan et al., 2015; Kemshall & Moulden, 2017). Individuals who have committed sexual offences against children are deemed more morally wrong, mentally unwell, or abnormal, and are generally thought of more negatively than those who have committed offences against adults (Rogers et al., 2011; McCartan et al., 2015; Richards, 2018). In addition to this view, the level of dangerousness and fear associated with individuals with sexual convictions is higher for offences against child victims (Kernsmith et al., 2009; McCartan et al., 2015). Being stigmatised and stereotyped can result in feelings of fear for the individual, and this can stop people from seeking help at an early stage of them developing sexual offence-related interests, as well as the internalising the negative stereotypes (Meyer, 2003).

Labelling Theory.

When considering the stigma and stereotypes attached to sexual offences, given the public's level of fear of people reoffending, it is worthy to look at the impact a label has upon the rehabilitation process that aims to reduce risk (Willis, 2018). The Labelling Theory was developed in the 1960s (Becker, 1963). According to Becker (1963, p. 9): "deviance is not a quality of the act the person commits, but rather the consequence of the application by others of rules and sanctions to an offender." This theory claims that once a person is labelled a deviant, the person will not have access to essential life opportunities due to the stigma associated with such a label, and this could lead to an increased predisposition for the individual to repeat their deviant behaviours (Levenson et al., 2007; Oyserman & Swim, 2001; Pittam & Gallois, 2000; Gordon, 2013). The Labelling Theory postulates that the person stigmatised by a label often finds it easier to act in accordance with the label than to get rid of the label. This reasoning suggests that the effects of being labelled are external, with constraints being put onto the person by society. Such effects are even more pronounced when the offence committed (and convicted) is thought of as an atrocious crime which applies to crimes of a sexual nature.

Imhoff (2015) explored whether the label ‘paedophilia’ mattered in terms of attitudes toward individuals and evaluated if people held punitive attitudes towards individuals with a sexual interest in children, even though no sexual offence was indicated. The study also explored whether any effect was greater if the clinical label ‘paedophilia’ was used. The results showed high levels of punitive attitudes towards sexually deviant men, which were more explicit when the label paedophilia was used.

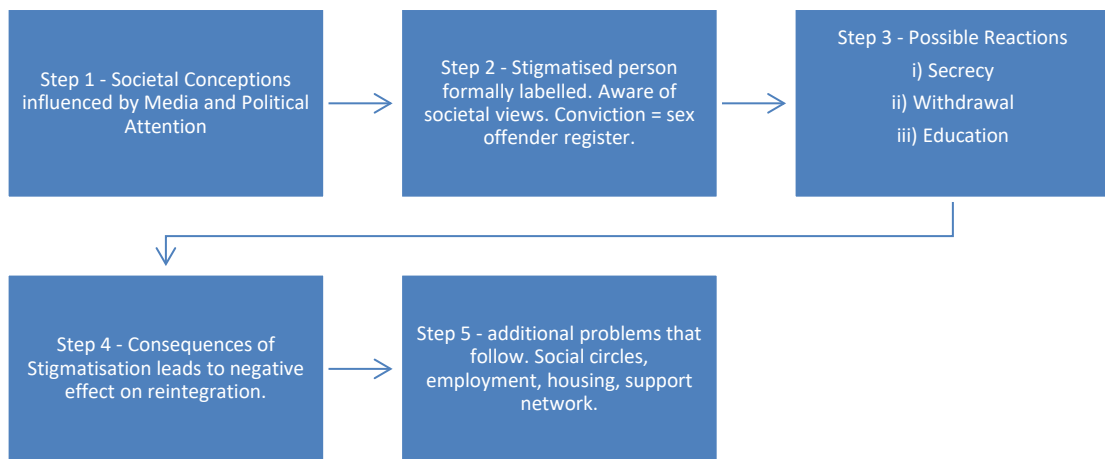


Figure 2-1 Representation of the Stages Within the Modified Labelling Theory (Link et al., 1989)

The Modified Labelling Theory (Link et al., 1989) is slightly different, as it puts forward the idea that irrespective of whether someone experiences direct discrimination based on a label given, their life prospects can still be negatively influenced by stigma. This idea has two important parts: first, the level to which a stigmatised person perceives he will be devalued by society, and second, the level to which they perceive they will be discriminated against. Therefore, the Modified Labelling Theory claims that the constraints resulting from being labelled will be at least partially internal, coming from the individual themselves. To demonstrate the process that leads to this effect, the researchers proposed a five-step process (see Figure 2-1).

Considering the impact of the Labelling (Becker, 1963), and Modified Labelling Theory (Link et al., 1989) is important in this study. First, it is necessary for staff working in forensic services, including forensic mental health services to understand the potential impact of the use of labels used in communication, for example, labelling

a unit or treatment programme as a ‘sex offender unit’ and ‘sex offender treatment’. Although there is a move towards bias-free language, consistency across all domains takes time. Second, when considering the direct and indirect measures being used, it is important to note how measures assessing attitudes towards individuals who have committed sexual offences continue to use labelling language, potentially biasing the outcomes.

Mingus and Burchfield (2012) examined socio-psychological consequences connected with being stigmatised as a person who has committed a sexual crime. They utilised surveys that used the ‘Modified Labelling Theory’ to explore the effects of the individual’s perceptions of devaluation and/or discrimination in their ability to reintegrate back into society successfully after having a conviction for a sexual offence. Results demonstrated that the more an individual feels shame and fears being devalued and/or discriminated against, the more likely they are to avoid activities that could help them in their pathway to social reintegration. This result suggests that the stigmatising label placed on people with convictions of a sexual nature may result in unintended consequences. Research exploring the experiences of individuals convicted for sexual offences and the issues that support or impede their progress towards release is sparse. Henson and Lievesley, (2023), explored the experiences of MCSO who progressed to open conditions and were recalled to closed prison conditions. They conducted semi-structured interviews with ten men who had been recalled to a closed prison. From their Thematic Analysis (TA), two main themes were drawn: ‘Failure was the only option’ and a ‘Different world’. Failure was the only option comprised of participants expressing not knowing what to expect in open conditions, not being prepared and not being supported and having a lack of information given to them. They felt stigmatised and treated differently to other prisoners due to their sexual conviction, compared to those without a conviction of a sexual nature. In terms of a ‘Different world’, participants spoke of having a lack of support in unknown conditions, where they had more freedoms but also restrictions imposed. They expressed feeling overwhelmed and uneasy being in an environment which felt less tolerant of their previous crimes. Other research has found the theoretical elements of a moral panic to be strongly predictive of punitive support and provoke other predictor variables that are normally associated with punitive attitudes toward people who commit sexual offences and the ‘sex offender’ registry (Klein et al., 2020). Tovey et al., (2022), conducted qualitative

research with twelve men previously convicted of a sexual offence, and explored their experiences in seeking employment upon release from prison. Through Interpretative Phenomenological Analysis (IPA), two superordinate themes were identified: ‘Stigma as a barrier to employment’, and ‘Autonomy and control’. Participants expressed the difficulties they faced when disclosure of their sexual offences were made. They spoke of the impact this had upon the ‘enduring stigmatisation’ as a result of the ‘sex offender’ identity. This barrier greatly influenced their ability to successfully obtain employment, which linked to the benefits that come from employment, such as a sense of autonomy and control. Not being able to secure employment resulted in a loss of autonomy, which then led to self-isolating behaviours. The strengths of both these studies is the rich data obtained. However, qualitative research is subjective to the research author’s roles and experiences during the data collection and interpretations. Therefore, it would be beneficial to build upon these findings and utilise both qualitative and quantitative studies.

Given the complex needs and presentations of the service users detained or resided within the services used as research sites for this thesis, it is important to consider the stigma and stereotypical beliefs attached to individuals with IDD, mental health problems, and those with a history of engaging in generalised violent conduct as well as individuals who have committed crimes of a sexual nature. As the different types of behaviours attract different labels and stereotypical beliefs and therefore different prejudices. All of these may bias the attitudes and behaviour of support staff members’ who work with individuals with IDD and a history of committing sexual offences. Ultimately these can impact negatively upon the service users attempts at rehabilitation.

Stigma Associated With Individuals With Intellectual Disabilities and Offending Behaviours, and Those Detained for Committing Sexual Offences.

Individuals with IDD have been one of the most vulnerable and socially excluded groups within our society and, unfortunately, this situation continues (Lindsay & Taylor, 2019). Historical accounts show how people with IDD were referred to in terms that implied immoral and criminal conduct, as indicated in 1858, where an influential figure within the field of IDD and disorders, used the term “Moral Imbecile” (Kerlin, 1858). Literature in the 1990’s reported how the public predominantly held negative views of individuals with IDD and looked for policies that restricted their ability to be integrated into the community (Antonak & Harth, 1994).

Steans and Duff (2018) conducted research alongside the NHS in England, 'Transforming Care Agenda' (2015). This agenda set to discharge inappropriately detained individuals with IDD from secure forensic mental health services. The aim was to reintegrate individuals back into the community, with the provision of tailor-made healthcare services and effective risk management strategies. This agenda links back to information regarding the RNR Model, referred to in Chapter 1, in terms of individuals with IDD not being risk assessed and having their needs assessed correctly. As a result of this, people were either detained inappropriately to begin with or were detained too long and not detained within the least restrictive environment, predominantly because of the stigma attached to IDD and risk averse attitudes. A percentage of the targeted service users within this care agenda were those with a history of sexual offences. As part of Steans and Duff's study, they specifically compared forensic staff and the general public's perceptions of individuals with IDD who have committed sexual offences. They found that forensic staff held more positive attitudes than the general public. These results supported findings from previous research (e.g., Gakhal & Brown, 2011; Higgins & Ireland, 2009; Johnson et al., 2007; Kjelsberg & Loos, 2008). When individuals who had committed sexual offences were presented as having IDD, responses indicated care staff believed they were at risk of a physical assault, but apportioned less blame compared to individuals with a history of committing sexual offences without an IDD. The attribution theory can help deepen our understanding of the type of attitudes expressed towards service users with such complex needs. It was originally put forward by Heider (1958), and proposes we form attributes based on what we witness. Where we might interpret someone's behaviour to be due to the individual's characteristics (internal or dispositional attribution), or due to external causes (situational attribution). Therefore, the attribution theory helps people make sense of the world and people's behaviour by attributing responsibility to them (the person is responsible) or to external variables (the person is not responsible). The theory has been developed further since that time, where a theoretical framework was created. This included a three-stage process: 1) the person must perceive or observe the behaviour, 2) the person must believe the behaviour was done with intention, 3) the person must decide if the person was made to perform the behaviour (the cause is attributed to the situation) or not (the cause is attributed to the other person), (Jones et al., 1972; Weiner, 1974, 1985).

Four factors said to shape the premise of attribution are luck, ability, difficulty of the task and effort (Weiner, 2010; Frieze et al., 1971). These four factors consist of internal and external causal factors of the individuals' motivation and behaviour. Therefore, ability and effort are internal to the person and are deemed controllable factors (ones they could change should they wish to). Whereas task difficulty and luck are external factors, which are deemed outside of the person's control (ones they cannot change if they wanted to). Locus of control; stability and controllability are taken into consideration when classifying attribution (Forsterling, 2013). Therefore, when relating this theory to attitudes towards people who commit sexual offences, people may interpret them to have an internal locus of control and consequently, be held fully responsible for their actions. When trying to understand their traits, people may believe that men who commit sexual offences are the outcome of their individual defective internal attributes. As a result of this, people may then view them as unable to change and treatment to be ineffective.

When applying the attribution theory to men with IDD who commit sexual offences, staff supporting these individuals and members of the public might consider them to be a risk in terms of recidivism. Yet, they may be seen as having less control over their actions when compared to men without IDD. This results in the public and supporting staff to believe MCSO-IDD to be less responsible for their criminal conduct. When considering the criminal justice system in England and Wales and how it is applied to MCSO-IDD, the attribution theory may influence decision making, particularly when linking this to the findings from Steans and Duff's (2018) study. They postulated that such findings could have been biased by participants' perceptions of responsibility attributed to MCSO-IDD. Thus, perceiving individuals to be generally diverted from the CJS, as a result of them being 'less to blame' for their offences compared to individuals without an IDD. Steans and Duff highlighted that if positive attitudes are linked with judging people who commit offences as being lower risk than they are, it could put the public and supporting staff based within forensic settings at risk, as MCSO-IDD may be given more community access or be exposed to risky situations. Interestingly, Steans and Duff's conclusions do not appear to support the principles of the "Transforming Care Agenda" (NHS England, 2015), where the focus is upon community integration, with the provision of tailor-made healthcare services and effective risk management strategies being implemented. When considering the aim of

the current thesis, it is important to impart evidence-based knowledge to the receiving support staff, so they have a balanced view and approach to the treatment and risk management plans.

Stigma Associated With People With Mental Health Problems who Commit Offences.

This thesis does not specifically explore attitudes towards mental health issues. However, the Crown Prosecution Service (CPS) used the term “mentally disordered offender” (MDO), until new guidance was published in October 2019. Since this, the CPS refer to two new sections regarding mental health: Suspects and defendants with mental health conditions or disorders and victims and witnesses with mental health conditions or disorders. The change was intended to use non-technical and non-stigmatising terms, but which still come under the umbrella of ‘Mental Disorder’ in the Mental Health Act 1983. This includes individuals diagnosed with a learning disability; a learning difficulty; autism spectrum disorder; an acquired brain injury; dementia, or other mental health, cognitive or neuro-diverse conditions. (CPS, Legal Guidance, 2019).

Therefore, given the settings in which the current research will be conducted, attitudes towards mental health and individuals with mental health conditions who commit offences will be explored. These attitudes may also be held by staff working with these populations in forensic mental health settings. The MHA in England and Wales is currently under review, therefore, changes to language and terminology may change to overt stigmatisation.

High levels of stigma and discrimination are experienced by individuals with mental health problems (Mezey et al., 2016). The study conducted by Mezey et al. explored differences in reports of stigmatisation experienced by forensic psychiatric patients, and those with mental health problems without an offending history. Results indicated no significant differences between the two groups, with the researchers concluding the longer an individual is detained within forensic settings, the less they may encounter stigmatisation. Given the limited exposure to and contact with members of the public, compared to contact with forensic staff, and principles of perceived responsibility highlighted from the attribution theory, this outcome is not surprising. Yet, in terms of perceived dangerousness, research that has explored the links between mental illness and perceptions of dangerousness and criminality have indicated that individuals with

mental illnesses are seen to be more dangerous than those without. Results have also indicated individuals said to have schizophrenia or substance abuse diagnoses were viewed as even more dangerous (Garcia et al., 2020).

Stigma Associated With People who Commit Violent Offences.

Forensic mental health services provide care, treatment, and risk management for service users with a range of problems and needs. When considering the influence of staff attitudes towards individuals who commit sexual offences, given that service users may also demonstrate violent behaviour, it is important to determine if staff attitudes are different towards the distinct types of offence related behaviours, e.g., generalised violence or sexualised violence. Individuals convicted of non-sexualised offences still experience opposition when released from prison or when discharged from secure services. Whereas those who have committed sexual offences encounter far more opposition upon release (Kubrin & Stewart, 2006; Weir, 2015). Facing this level of stigmatisation is linked with lower levels of self-esteem and life satisfaction, which impacts further on reintegrating into the community successfully (LeBel, 2008; 2012). This makes reintegration into society more difficult due to the number of barriers that individuals have imposed upon them, such as parole and licence conditions (LeBel, 2012) when compared to individuals who have committed non-sexual and non-violent offences (Brown et al., 2007).

A study conducted by Edwards and Mottarella (2015) investigated the desire to have social distance from people who have committed non-violent offences compared with those who have committed violent offences. They explored whether a disclosure of the person's completion of therapy had any impact upon the level of desire for social distance. Results indicated that participants had a higher desire for social distance from people who committed violent offences compared with people who committed non-violent offences. The study also found desire for social distance was less if they were informed that the individual had completed therapy. This result was irrespective of whether they perceived therapy to be effective. The authors of this study highlight the potential impact these results could have on the advancement of treatment and why it would be useful to prepare people who commit offences for release and discharge by informing them of the type of stigma they are likely to encounter when reintegrating back into the community. They also highlight the importance of disclosing any completion of treatment, particularly when trying to develop and maintain a healthy

interpersonal relationship. The outcomes of this study have the potential to positively influence the effectiveness of rehabilitation interventions, and support desistance for people who have previously committed violent offences.

Challenges to Stigma and Stereotypical Beliefs

Contact Theory.

Having previously looked at the attribution theory and its relevance to stigma associated with control and responsibility, the Contact Theory will be examined to see what, if any, influence this has on challenging stigma and stereotypes. The level of contact between people is said to have a significant impact upon attitudes held and shared by the individual towards the 'minority group'. A large body of research has focused on contact effects upon racial prejudice, and the Contact Theory was originally devised for racial and ethnic encounters. A meta-analysis of research on intergroup contact was conducted by Pettigrew and Tropp (2006; 2011). This investigation included 515 studies carried out between the 1940s and 2000, from 38 countries, with over 250,000 participants. Pettigrew and Tropp's (2006) meta-analytic test of intergroup contact theory identified that contact effects hold equally well for groups other than racial and ethnic ones, such as the elderly, physically disabled and individuals with mental health issues. The contact studies referred to use a wide variety of research methods and procedures, including laboratory experiments, surveys, and archival research. The value of Pettigrew and Tropp's review is evident, however, the quality of research since this time has developed and some of the gaps highlighted within the review have been addressed and continues to be an area investigated. The issue of research quality was emphasised in a more recent meta-analysis (Paluck et al., 2021). This included a review of 418 experiments reported from 2007 to 2019. The main findings highlighted how 76% of the studies evaluated 'light touch' interventions (treatments that are easy to implement, under 10 minutes, inexpensive and claimed to have lasting effects), aimed to reduce prejudice. These studies did not include long term evaluations, and so long-term impact remains unclear, and although the studies report positive findings, the issue of publication bias potentially overstates such outcomes. Paluck et al. (2021)'s, review concluded that further theoretical advancement or collaborations with other types of psychological interventions is required. This will assist in providing evidence-based recommendations for reducing prejudice, that are capable of being acted upon.

Allport's (1954) intergroup contact theory stated that contact between groups under optimal conditions could effectively reduce intergroup prejudice. These conditions are marked by four key features: 1) Equal status within the situation (not coming into the situation); 2) Common goals (achieve goal-orientated effort); 3) Intergroup co-operation (must be an interdependent effort without intergroup competition); 4) Institutional support (support of authorities, law or custom). Pettigrew (1998) found that more positive changes occurred in those studies where more of Allport's four criteria were met. Allport's four criteria is relevant to forensic settings, which has been referred to within the literature in Chapter 1 of this thesis, in terms of a power imbalance between staff and service users/prisoners, an 'us and them' environment, and where common goals might not be identified due to stigma and prejudice associated with the crimes committed, which is conveyed by staff, members of the public and the law system. Addressing these four key factors by developing a rehabilitative culture, can enhance the treatment provided in the rehabilitation of men who commit sexual offences. Pettigrew and Tropp (2008) concluded that upon closer examination, the four conditions should be conceptualised as an interrelated bundle rather than as independent factors, and that no one single factor was essential for prejudice reduction.

With the Contact Theory in mind, staff members within forensic mental health settings represent the 'moral majority' and are therefore representative of the majority of the group members. Thus, strong contact effects should be expected within the staff member groups, and these will be considered within this thesis.

However, Farrenkopf (1992) found that therapists who work for any length of time with people who have committed sexual crimes are discouraged about potential change, experience emotional hardening, rising anger and confrontation, suffer frustration with the system and become increasingly suspicious. More recent research with law professionals found similar outcomes and concluded that the exposure to the relevant material led to stress that resulted in symptoms linked with secondary trauma (Denk-Florea et al., 2020). Therefore, contact effects may be diminished when staff experience a lack of support mechanisms such as supervision, staff training and counselling, to help them cope effectively with the offence details they are exposed to. Observing the lack of resources and support available for people who have committed sexual offences whilst detained within forensic settings and during the key phase of being reintegrated back into the community, can lead to staff burnout and secondary

trauma. These issues will be important to consider when evaluating the impact of an educational workshop upon attitudes towards MCSO-IDD.

Narrative Humanisation.

Given the impact ‘contact’ has upon levels of stigma and discrimination, depending on the type of contact encountered, other research has more recently commenced to evaluate the use of narrative humanisation as an attitudinal intervention and its effects on non-automatic and automatic attitudes. Harper et al. (2018) referred to the Moral Disengagement Theory (MDT; Bandura et al., 1996) where punitive attitudes are rationalised by dehumanising an individual through use of language and indirectly removing their status of being a person. They considered its application to men who commit sexual offences, as Viki et al. (2012), found that approval of harsh punishments and social exclusion of MCSO’s was enabled by the dehumanisation of them. They questioned whether presenting humanised information about individuals with a paedophilic interest, or people who commit sexual offences more generally, would result in less stigmatization and punitive attitudes at an automatic and non-automatic level, compared to the expert information only affecting attitudes at a non-automatic level. They used a narrative video, which presented a story of a self-identified paedophile, and an informative video, where a researcher spoke of factors deemed to contribute to paedophilic interests. They also used two written accounts, which were transcripts of the narrative vs expert version of visual information to explore which format had the greatest influence. They found both the informative and narrative condition resulted in a reduction in levels of stigmatization at the non-automatic level. However, the narrative condition resulted in a substantial size effect compared to the informative condition. For the automatic level, they found significant differences in negative and positive response patterns for the narrative condition but not the informative condition.

These results are encouraging to consider for future research and practice. However, there are a number of limitations of this study, that need to be considered. Firstly, the sample consisted of students only, who were predominantly female. This demographic may reflect a bias in the results given their educational backgrounds, social outlook and sex, which has previously been found to have more positive attitudes towards MCSO (Gakhal & Brown, 2011; Harper & Bartels, 2017). There was no follow up study and so it is not possible to know if such changes were maintained. Lastly, the evaluations

only considered cognitive and affective attitude, leaving behaviourally based attitudes unexamined. Therefore, it is not feasible to determine if such attitude change, resulted in behavioural change. A more recent study replicated and extended Harper et al.'s., 2018 study, by using members of the community as a sample and having a follow up study to evaluate change maintenance over time (four month follow up) (Harper et al., 2021). Results found the narrative presentation consistently had positive effects in reducing stigmatisation, but there was no significant difference between the two experimental conditions.

The authors suggested both the narrative and 'expert' presentations were equally effective in reducing stigma related to individuals with a paedophilic interest. The authors highlight several limitations of this study. These included the sample being self-selecting, which potentially limits how representative the sample is. Additionally, there was questionable internal consistency of the deviance subscale, the Stigma and Punitive Attitudes Scale (SPS) (Imhoff, 2015); they compared two stigma interventions without having a "no intervention" control group. Another limitation is that they did not measure automatic attitudes due to omitting the Single Target -Implicit Attitude Test (ST-IAT) they had conducted. This was a result of there being no base measure ST-IAT score and poor construct validity with the non-automatic measures of stigma. Additionally, there was no evaluation of stigmatisation and discrimination expressed at a behavioural level, with the self-reported SPS (Imhoff, 2015) conveying emotional and cognitive aspects of stigmatisation. Finally, no clear rationale was presented for deciding a four month follow up period. These studies indicate the use of narrative humanisation may be of benefit when trying to shape peoples' attitudes towards MCSO to be less stigmatising and discriminatory when considering preventative measures and support as well as rehabilitation efforts. Further research is however required due to the inconsistent findings.

Section Summary

Within this section, a review of stigma and stereotyping of individuals who commit sexual offences, with or without IDD, has been reviewed, along with the stigma attached to individuals with mental health problems and for individuals who conduct violent behaviours. Throughout this review, members of the public often experience fear due to the level of perceived dangerousness. The outcome of these views is often the desire for harsher treatment and restrictions imposed. The Moral Disengagement

Theory (MDT; Bandura et al., 1996) is also appropriate to consider here, as this seems to be applied to individuals who have committed sexual offences or a paedophilic interest, where language is used to strip away an individual's personhood. When considering the labels attached to groups of people, it has been observed that labels can have detrimental consequences upon the individual's rehabilitation and reintegration pathway, which can, in turn, increase any future risk of reoffending. In terms of challenging stigma and stereotyping, the contact theory (Allport, 1954) indicates that having more contact helps challenge the three elements of stigma and stereotyping: knowledge, attitudes, and behaviours (Thornicroft, 2007). In addition to this and in relation to the MDT, the use of narrative humanisation as an attitude intervention may be of benefit in reducing the level of stigmatisation and discrimination of individuals who harm others sexually. A crucial factor that feeds into stereotyping and stigmatising individuals and groups of people is that of attitudes. In the next section of this chapter, a more detailed review of attitude models and the link between the attitude literature and staff attitudes will be provided. Negative attitudes towards the rehabilitation of individuals and groups are linked to poor levels of knowledge. Therefore, a lack of staff training can result in the obstruction of delivery of interventions and make creating a supportive environment more difficult because of labelling and stereotyping; the staff are then unwittingly reinforcing the stereotypes.

Attitude Models, What are Attitudes and why are They Important to Study?

The attitude concept has been defined in numerous ways (Petty et al., 1981; Fazio, 1995; Zanna & Rempel, 1988), with Eagly and Chaiken (1993, p. 1) defining an attitude as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour." An important aspect highlighted within each definition is the emphasis of evaluative judgements of an object: therefore, attitudes differ from perceptions, which draw more parallels with stereotypical views, and contain knowledge-based attributions about a topic or entity (Jussim, 2012).

The study of attitudes has been an important focus within social psychology since the beginning of the 20th century (e.g., Allport, 1935), and the study of attitudes towards people who commit sexual offences has been a prevalent research area, mainly in the study of social views in relation to the CJS (Harper & Bartels, 2017). The majority of research in this area has focused upon non-automatic attitudes, and so the need for evaluation of automatic attitudes is apparent.

Dual-Process Accounts of Cognition and Dual-Learning Models of Attitudes

Several models have been developed with the aim to assist us in our understanding of procedures of information processing and the formation of judgements, and how this affects our decision making and behaviours. Evans' (2008) review of dual-process models found the accounts of cognition from each of the dual-process models reflected a System 1–System 2 opposition (implicit–explicit opposition), and each model opposed automatic to non-automatic mental processes. When considering the implicit–explicit opposition, Evans (2008) claims ‘explicit’ attitudes are said to refer to an individual’s conscious view towards people, objects, or concepts, and being aware of the feelings they hold in a certain context. An example could include a person saying or agreeing to the statement: “I would not want to live next to someone who has a history of committing sexual offences.” ‘Implicit’ attitudes, however, are said to refer to an evaluation that is automatically stimulated by the presence (actual or symbolic) of the attitude object and is said to generally operate without a person’s full awareness or control. Continuing with the same example, someone with an active implicit attitude might experience an unidentified feeling of discomfort when confronted with the possibility of living next door to someone known to have committed sexual offences. Evans (2008) concluded that the generic dual system theories that were reviewed were “oversimplified and misleading” (p. 270). This opinion echoed a point made by the main proponent of the System 1–System 2 process (Kahneman, 2011), who highlighted from the outset the difficulties in oversimplifying complex information when representing the System 1–System 2 account. Evans and Stanovich (2013) put forward a Type 1–Type 2 process, where the processing of information was demonstrated to require central working memory capacities and not two distinct cognitive systems.

Several theories have attempted to address the attitude acquisition question by theorising the presence of an association formation mode (Type 1, automatic) in addition to a propositional or rule-based learning mode (Type 2, non-automatic). Some dominant models include the Associative-Propositional Evaluation (APE) Model (Gawronski & Bodenhausen, 2006, 2011), the Systems of Evaluation Model (SEM, e.g., Rydell & McConnell, 2006; McConnell & Rydell, 2014), and the Meta-Cognitive Model (MCM; e.g., Petty & Briñol, 2006; Petty et al., 2007).

It has been proposed that non-automatic attitudes are a good predictor of behaviour that is deliberate and under conscious control. Automatic attitudes seem, however, to better

predict discriminatory behaviour as they are not influenced by social desirability (Stier & Hinshaw, 2007). Wilson et al. (2000) put forward the idea that non-automatic attitudes can affect intentional, well-considered reactions for which people have the motivation and opportunity to weigh the costs and benefits of various courses of action. In contrast, automatic attitudes affect responses which are more problematic to scrutinise and control, such as nonverbal behaviours, or responses that people do not view as an indication of their attitude, and, therefore, do not try to control.

There are two types of attitude scales: ‘Direct’ measurements for explicit attitudes, and ‘Indirect’ measurements for implicit attitudes” (Maio et al., 2019, p. 11). The direct measure is often based on self-reporting with the use of a Likert scale (Likert, 1932), or a semantic differential scale. The drawbacks to these types of assessments are that the participant is aware of the assessment aims, aware of their explicit attitudes and can control them in line with impression management (Malinen & Johnston, 2013). The benefit of indirect measures for implicit attitudes is that the participant is less likely to produce socially desirable responses, as they are unlikely to guess what is being measured. There are difficulties, however, in terms of how objective the assessment is and ethical considerations as to how the participant is instructed. This will be discussed later in the empirical study sections.

Corneille and Hütter (2020) have questioned the use of ‘implicit’ due to various levels of ‘implicitness’ being referred to within a range of studies, which they stated: “can be misleading and also unnecessary.” They recommended the use of ‘automatic’ terminology to be used, as opposed to the term ‘implicit’. The authors referred to the MODE Model (1990), which they stated: “set the ground for important theoretical and methodological developments while entirely disregarding the ‘implicit’ attitude terminology” (p. 38). Based on the varying levels of implicitness, the term ‘automatic’ will be used for the remainder of this thesis when referring to these types of attitudes, to avoid any confusion.

Motivation Opportunity Determinants Processing (MODE) Model (Fazio, 1990)

This model describes attitude accessibility as being the ease with which an attitude is activated from memory. Fazio et al. (1986) put forward that attitude can be seen as being on a continuum, which spans from automatically accessible to not available. Fazio’s MODE (1990) Model proposes that behavioural decisions may involve

conscious consideration or occur as impulsive reactions to an attitude object or issue. When people have the opportunity (such as adequate time) and motivation to calculate the consequences of different actions, non-automatic attitudes predominantly sway responses as people reflect on the relevant attitudes. When the opportunity or the motivation is not present, automatic attitudes are more influential. Fazio's (1990) MODE Model emphasises mixed processes; this is the interaction between automatic and controlled processes, and it has a different perspective of attitude type and predictability of behaviour. The MODE Model predicts that automatically activated attitudes can influence any attitude-related behaviour, irrelevant of its controllability, when motivation or opportunity to do otherwise is not present. It proposes that indirect measures can be predictors of all types of behaviour on the controllability scale, including reasonably controllable behaviours, such as hiring decisions by employers (e.g., Agerström & Roth, 2011), voting (e.g., Payne et al., 2010), and sexual assault (Widman & Olson, 2012).

The Associative-Propositional Evaluation (APE) Model (Gawronski & Bodenhausen, 2006)

A key model that will be explored and evaluated is the APE model developed by Gawronski and Bodenhausen (2006). This model was considered during the formation, delivery, and evaluation of the staff educational workshop for this thesis. Gawronski and Bodenhausen (2006) provide an integrative review of evidence on automatic and non-automatic attitude change, which is channelled by a distinction between associative and propositional processes. Associative processes are characterised by activation independent of subjective truth or falsity, whereas propositional reasoning is concerned with the validation of evaluations and beliefs. The APE model considers the interplay of the two processes, which implies many systems that result in symmetric or asymmetric changes in automatic and non-automatic attitudes, rather than two distinct pathways as highlighted in the MODE Model (Gawronski et al., 2016).

The APE model was originally developed to provide an integration of seemingly changeable findings in the literature on automatic and non-automatic attitude change (Gawronski and Bodenhausen, 2006). Essential to this model is the argument that associative and propositional processes are influenced in very different ways. The APE model emphasises the value of considering different processes that may contribute to changes in non-automatic and automatic attitudes. It highlights the significance of

exploring not only which of the two processes is affected in the first place, but also how the respective process is prompted by a distinct variable. The APE model highlights the importance of focusing on mediating mechanisms as well as the specific interplay of associative and propositional processes. Therefore, instead of simply evaluating whether a particular variable influences only non-automatic attitudes, only automatic attitudes or both, the recommendation is to explore the mutual relationship between non-automatic and automatic attitude change. The model explores the distinction between automatic and non-automatic responses in both associative and propositional processes and explores the operating principles and conditions in place for both processes.

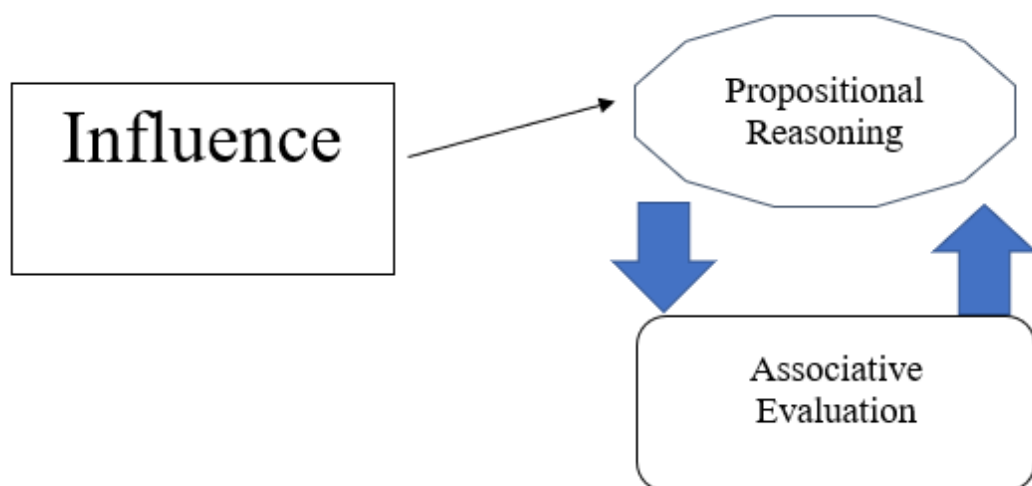


Figure 2-2 The APE Model. Adapted From Gawronski & Bodenhausen (2006)

Operating Principles and Conditions.

Awareness

The awareness criteria are normally defined as introspective access to mental processes or mental contents. Deficiency of introspective access can be observed due to the individual's inability to verbally report a mental process. Indirect measurement procedures are normally performance-based and do not need introspective access for the assessment of an evaluation. The APE model argues that people normally have observed experiences to their affective gut reactions stemming from associative processes, and they often depend on these reactions in making propositional evaluative judgements. People can, however, also discard their affective gut reactions as a basis for an evaluative judgement when these reactions are not consistent with other

fleetingly considered information (Gawronski et al., 2008). The outcomes from the IATs and the ‘Working with Offenders Questionnaire (WOQ)’ (see Chapter 4: section 4.2.1 pages 54 to 61 for details) will be of interest when considering these principles of the APE model.

Intentionality

It is assumed that reactions assessed by indirect measurement techniques are unintentional. With regards to evaluative responses, it is proposed that the activation of evaluative associations and gut reactions that are triggered from these associations occur irrespective of the intention to evaluate an object (e.g., Bargh et al., 1996). Evaluative associations can, however, also be activated intentionally. In connection to this, some studies have demonstrated that directing participants to think about social group members with certain characteristics shapes automatic evaluations of the relevant groups (e.g., Gawronski & Bodenhausen, 2005; Peters & Gawronski, 2011a).

Efficiency

The APE model proposes that associative processes are highly efficient (Peters & Gawronski, 2011a). This suggestion does not denote evaluative associations cannot be triggered in a way that requires effort, as the evaluative associations do not necessitate cognitive effort to become stimulated, but they can become activated through the recovery of evaluative information from memory, and this does rely upon effort.

With regards to propositional processes, the APE model claims that the default process of verifying the validity of activated information is very efficient in that it takes place even when there are limited resources present. This claim is demonstrated as follows: a person reads a news headline on their mobile phone of a TV celebrity accused of committing sexual offences against children. This event can elicit associative processes due to similar aspects of the TV celebrity (attitude object) being present, for example, a previous case involving a well-known TV celebrity, such as the person’s age, type of TV show and the targeted audience. The activated associations correspond with the propositional processing of judging whether the person is innocent or guilty. If the individual is asked whether they think the TV celebrity committed the alleged offences or not, they can provide an efficient evaluation. If asked to provide their reasons for their evaluation, then they will have to retrieve evaluative information from memory,

and this will require effort (Peters & Gawronski, 2011a). The use of direct and indirect attitude measures is, therefore, required.

Controllability

If a process continues despite a person's attempt to terminate it, it can be defined as uncontrollable. Therefore, while the intentionality criterion refers to the aim of starting a process, the controllability criterion refers to the intention of changing or ending a process (Bargh, 1994). The APE model puts forward that the initiation of evaluative associations is controllable to a certain degree. The success of this control, however, depends upon the nature of the adapted control strategy. A major factor for success is whether the adapted control strategy implies a negation of an already activated evaluation or a confirmation of a new evaluation (Gawronski & Bodenhausen, 2014). Given the emotive nature of the educational workshop and the measures used, the outcomes and interplay of the results from the direct and indirect attitude measures will be of interest here. It is anticipated that the educational workshop will help staff to adapt a control strategy that will confirm a new evaluation.

Within the current thesis, both the MODE and APE models will be given consideration when interpreting results from the direct and indirect measures of attitudes. This approach will be beneficial, as participants consist of staff members based within forensic mental health settings, and the attitude objects assessed include those of social importance. The interplay between associative and propositional processes will therefore be explored, given the complexity of attitude groups and the evaluation of automatic and non-automatic changes.

Rehabilitative Environments Surrounding Individuals who Have Committed Sexual Crimes, and the Influence of Staff Attitudes

A predominant focus of treatment (accredited and non-accredited interventions) aimed to address sexual offending behaviour was upon the content of the programmes, which led to further development and advances within both theoretical and practical literature. This focus has helped assist the progression of etiological theories, improvements in risk assessments, clarity about which factors ought to be targeted within treatment and what methods of treatment delivery and assessment are effective. Although this focus is of importance, the delivery style of the treatment intervention and the supporting environment are also of significance. Attitudes towards individuals who commit sexual offences are, therefore, also important. Beech and Hamilton-Giachritsis (2005)

understood the therapeutic climate to affect treatment outcome and stated that staff attitudes and goals have an impact on treatment effectiveness. Ware (2011) emphasized the need to consider the environment in which treatment takes place and the impact this can have upon treatment effectiveness. Following on from this, Blagden et al. (2016) investigated whether forensic professionals believed that the offending behaviour of those who commit sexual crimes can be fixed or changed. Within the analysis, Dweck's (2000), 'Self-Theory' (two implicit theories of intelligence; 'entity' and 'incremental') was used. This is where learners who have an "entity" theory view intelligence as being a fixed internal characteristic and those who have an "incremental" theory believe that their intelligence is malleable and can be improved with determination.

Outcomes indicated a positive association between the Attitude Towards Sexual Offences (ATS) Scale (Hogue, 1993) scores and incremental implicit theories, meaning positive attitudes towards people who commit sexual offences related to the belief that people who commit sexual offences have the capacity to stop engaging in criminal conduct. Another outcome from Blagden et al.'s (2016) study was that those individuals receiving group interventions from facilitators with incremental implicit theories expressed being more comfortable within their groups and were more likely to be engaged in the treatment process.

The concern regarding staff members' attitudes in the development of a rehabilitative culture is not a new one; as Glaser (1969) hypothesised, positive attitudes expressed by supervising officers are essential to successful community rehabilitation. The issue of attitudes, however, continues to be an area for further development, with the importance of 'enabling environments' being highlighted (Haigh et al., 2012). Rehabilitative culture is an essential factor considered across His Majesty's Prison Service (HMPPS). Mann et al. (2018) reviewed the evidence for a rehabilitative culture in reducing further offences and why it is a priority within HMPPS. They claimed that rehabilitative cultures provide a range of benefits, including a more favourable environment for prisoners and staff, where people feel safe and respected. Mann et al. stated that rehabilitative cultures are optimistic and respectful, which can lead to more job satisfaction for staff, and prisoners experience reassurance and help in making decisions to improve their lives. Rehabilitative cultures focus on enabling change, not creating or maintaining stability (Mann, 2019). In order to achieve a rehabilitative culture, additional resources are needed, such as adequate staffing. However, sufficient

staff numbers alone will not result in a rehabilitative culture being developed, but the attitude conveyed by staff in their interactions with prisoners is key (Franke et al., 2010; HMPPS, 2019).

Attitudes of Professional Groups Towards Individuals who Have Committed Sexual Offences

Attitudes toward people who commit sexual offences are said to vary among members of different professional groups (Hogue, 1993; Blagden et al., 2016). Such variation in attitudes seems to relate to the nature of the working relationships between the professional and the service user. Examples include direct involvement in the treatment intervention; processing systems; or working in an environment where men with a history of committing sexual crimes are detained, but without direct involvement with them (Blagden et al., 2016; Gakhal & Brown, 2011; Radley, 2011). The different levels of contact relate to key aspects referred to within the Contact Theory (Allport, 1954), where effects of contact are stronger for majority group members (direct involvement) than for minority group members (no direct involvement) and, therefore, may continue to affect staff attitudes and interactions with the service users and prisoners. Hogue (1993) explored attitudes towards individuals with a history of committing sexual offences with prison officers and law enforcement officers. The Attitude Towards Prisoners (ATP) scale (Melvin, Gramling & Gardener, 1985) was adapted by Hogue (1993) by replacing all references to 'prisoners' with 'sex offenders'. This version then became the ATS scale. Hogue found significant differences in attitudes possessed by prison and law enforcement officers in contrast to staff who facilitated the treatment interventions. Results also indicated that police groups expressed the most negative attitudes, and prison officers who acted as treatment facilitators held significantly more positive attitudes than those who had not received specialist training. When these findings are related to the MODE and APE models of attitude formation and change, as well as the Contact Theory, within the context of the contact being considered, the findings are not surprising. Police and prison officers who are not involved in the delivery of therapy have a different role and experience of 'contact' compared to prison officers and other staff who are directly involved in the delivery of therapeutic interventions. It is also important to note how the police have contact with the victims of sexual offences, whereas therapeutic staff generally do not. This additional

experience of ‘contact’ will likely influence attitudes held towards the target population.

When relating these aspects to the current thesis, the staff members who will take part in the educational workshop are not directly involved in the delivery of therapeutic interventions. Their role goes beyond the ‘therapy’ session, as they support the individual in their daily lives; therefore, their role supports the wider rehabilitation process. Given the importance of the rehabilitation environment, it is important to have a deeper understanding of staff attitudes towards the rehabilitation of service users. This understanding is necessary to provide staff with further support to enhance the rehabilitation environment.

Section Summary

Within this section, a review of attitude models has been conducted, particularly the APE and MODE models and the impact that automatic and non-automatic attitudes have upon behaviour. With regards to the term ‘implicit’, due to concerns highlighted by Corneille and Hötter (2020), the author will refer to automatic rather than implicit attitudes for the remainder of this thesis.

During the review of the APE model, the operating principles and conditions for attitude formation and change have been considered in connection to staff attitudes that can influence the rehabilitative environments for individuals who have committed sexual offences. In addition to this, the context in which contact occurs has been considered, as the staff members who will take part in the empirical studies of this thesis play a key role in supporting the rehabilitation environment rather than direct involvement in delivering a therapeutic programme. This factor will be considered when interpreting the impact of the educational workshop.

The Current Study

Justification for the Study

Initial work for this thesis began in 2010 when the researcher was a part of a multi-disciplinary team, based within a Welsh private sector forensic mental health organisation. This provided care and treatment for adult males with a primary diagnosis of IDD with a history of committing sexual offences across a range of settings (low secure, locked rehabilitation and specialist community group homes). Having previously developed and delivered adapted interventions for men with IDD with a history of committing sexual offences, the author proposed the development and evaluation of a staff educational workshop.

The workshop aimed to support staff development in knowledge and understanding of factors that both contribute to sexual offences being committed and help the rehabilitation of men with a history of committing sexual offences. This would support risk reduction and desistance. The purpose of the evaluation was to assess if the educational workshop assisted staff members with having more positive attitudes (both automatic and non-automatic) towards the rehabilitation of individuals with IDD who have a history of committing sexual offences. The PhD was supported by the Regional Director, Hospital Director, and the Clinical Governance team, who passed the ethics application (Appendix 2). In addition to the internal organisational support, literature was turning its attention to the effect of therapist styles upon rehabilitation outcomes and the environment surrounding service users (Beech & Hamilton-Giachritsis, 2005; Blagden et al., 2016; Ware, 2011). Upon obtaining this permission to conduct the research, hospital and specialist group home managers agreed to release staff in order to attend the workshop.

The current study focuses on the inadequate literature exploring the impact of staff educational workshops on automatic and non-automatic attitudes towards individuals who have committed sexual offences. It also focuses the evaluation upon the complexities of service users within UK forensic mental health settings, by including an evaluation of automatic attitudes towards individuals with IDD.

As will be described in Chapter 6, a quantitative methods research design was selected to respond to the research questions. The evaluation was of staff members' pre-, post- and delayed attitudes using both direct and indirect measures to evaluate automatic and

non-automatic attitudes. The information gathered will therefore be data rather than descriptive information. This approach made quantitative analysis more appropriate than a qualitative evaluation (McLeod, 2019). The present study aimed to address the deficit of research into automatic attitudes held by staff members based in secure forensic mental health settings.

Research Questions

Having reviewed the literature around the prevalence of sexual offences within the UK, the occurrence of sexual crime continues to be a major international public health problem (Association for the Treatment of Sexual Abusers, 2011). Many reviews of the treatment available and the effectiveness of treatment aimed at addressing factors that contribute towards sexual offending have identified the importance of the therapist qualities, and the supporting environment, with staff attitudes towards individuals who have committed sexual offences to be of importance. Several studies have evaluated the impact of staff training programmes (aimed to increase knowledge and understanding of factors that contribute towards sexual crime) upon participant attitudes. The majority of studies have evaluated professionals directly involved within the delivery of interventions and not those within the wider environment who tend to provide the highest level of support. Most studies to date have mainly explored non-automatic attitudes. There is limited research that has evaluated attitude changes through direct and indirect measures within forensic settings. The literature has also demonstrated the limited research conducted in secure settings involving individuals with IDD, mental health issues and a history of sexual crimes. Attitude research is heavily represented within social psychology, yet the application of attitude models is limited in the development of educational workshops for staff working in forensic settings. In addition, the evaluation of attitude changes from field studies is sparse. To address some of these gaps, this thesis aims to answer the following research questions:

1. What influence does an educational workshop framed around an attitude model, have upon staff automatic and non-automatic attitudes towards service users with MCSO-IDD ? In the current thesis, the workshop was framed around the APE Model and attitudes were measured using an IAT.

2. Are any changes in attitude types maintained over time? Research questions 1 and 2 will be measured by changes in outcomes at pre/post and delayed test periods.
3. To what extent are staff members' automatic attitudes influenced by the strength of emotional reaction to the attitude target group, e.g., individuals with a history of violent offences, sexual offences, IDD? This was measured by the strength of associations towards the attitude categories.
4. What is the utility of a multi-dimensional IAT in detecting changes in staff automatic attitudes? In this thesis, staff encountered multiple attitude target groups within the complex forensic environment.

The research questions will be addressed in multiple studies. The order in which these have been presented reflects their relative importance to the overall aims of the thesis.

The first research question addresses the lack of literature surrounding the impact of professional staff training in forensic mental health settings upon automatic attitudes as well as non-automatic attitudes. This was via the use of a Multi-dimensional IAT specifically developed and tested as part of this current study. It also explores the importance of incorporating psychological theories and models from different domains, to improve current and future practices. It will enhance an in-depth understanding of the application of attitude models in forensic settings.

The second research question explores whether any impact from a staff educational workshop is maintained over time. The findings obtained would provide an enhanced understanding of the resources required to develop a rehabilitation environment.

The third research question is concerned with addressing gaps within the automatic attitude literature, as research has mainly evaluated attitude change to low-strength attitude target groups. The findings obtained will provide a clearer view as to the input and support required within forensic services for staff members to hold more positive automatic attitudes to the rehabilitation of individuals with IDD with a history of sexual crime.

The fourth research question is concerned with measuring staff members' automatic attitudes towards multiple attitude object groups, due to the complex nature of forensic

mental health populations. Therefore, this will test if a multi-dimensional IAT is effective in measuring such a range of automatic attitudes.

Research Objectives

The objectives of the research were:

1. To use indirect as well as direct measures of staff members attitude change towards individuals with IDD and a history of sexual offences, within forensic mental health settings.
2. To evaluate any maintenance of change over time.
3. To investigate both automatic and non-automatic attitudes towards target groups to which the staff members will be exposed, e.g., individuals with IDD, a history of committing sexual offences, and a history of generalised violence.
4. To use the APE model as an underlying principle when developing the staff educational workshop, and to refer to the APE model when interpreting results from the investigation.
5. To investigate the effectiveness of a multi-dimensional IAT in measuring staff members automatic attitudes towards several attitude target groups.

Summary

The present research is a unique enquiry of an attitude model in the development of a staff educational workshop. This indicates the development and implementation of an indirect measure to evaluate multiple and single attitude target groups in forensic mental health settings. Integrating indirect measures within forensic settings, to assess the impact of this educational programme, will help promote the resources required to support individuals with IDD in their rehabilitation pathways at a national and international level.

Measuring Attitudes Towards Individuals who Have Committed Sexual Offences

Introduction

The literature reviewed in Chapters 1 and 2 has highlighted the impact of people's attitudes towards people who commit sexual offences and their influence on policy decisions. Their attitudes are found to be more punitive in nature, particularly when the label 'sex offender' is used rather than 'individuals who have committed crimes of a sexual nature' (Harris & Socia, 2016). Such negative attitudes are also seen to have an impact upon people's decisions to take part and engage in interventions aimed to address their behaviours related to offending and their ability to successfully reintegrate into the community (Perrin et al., 2018; Blagden et al., 2012; Levenson & Cotter, 2005). Developing our understanding of how attitudes shift (Albarracin & Shavitt, 2018) could, therefore, help influence supporting staff to hold more positive associations to the rehabilitation of men convicted of sexual offences. Thereby, this could cultivate a more therapeutic environment, which is linked with intention to change behaviour and habit formation. This would lead to more successful outcomes for both rehabilitation and reintegration for these individuals (Howard et al., 2019; Stasch et al., 2018; Willis et al., 2010). Different types of attitudes and attitude models have been reviewed in terms of how they are formed and how they influence the level of responsibility attributed to a person's behaviour. Connections between changes in attitudes and changes to behaviour have also been explored. Next, a review will follow of the attitude measures selected and developed for use within this current research. This will include an explanation and justification of the direct measures of attitudes and perceptions towards people who commit sexual offences, general measures of knowledge and demographics and indirect measures of attitudes used in this thesis.

Measuring Non-Automatic Attitudes and Perceptions Towards Men who Commit Sexual Offences (MCSO)

Measures used to evaluate non-automatic attitudes and perceptions towards MCSO's were reviewed from previous research that evaluated the impact of staff training upon them. The outcome of the review helped inform the measures selected for this thesis. One reason for selecting these measures was because they explore attitudes towards prisoners in general; attitudes towards people who have committed sexual offences; responses to working with people who commit sexual offences and perceptions towards

people who have committed sexual offences based in the community. These measures link well with the sample population for this study, as the staff research sample varies from working in secure settings through to community settings, with some service users being detained under the MHA on a transfer section from HMPPS.

Direct Measures Selected for This Thesis

Demographic Questionnaire.

A demographic questionnaire was developed specifically for this study. Information obtained included age, sex, race, experience (family/friends/self) of being in prison or experiencing trouble with the law. The questionnaire ascertained whether the individual was the victim or perpetrator of a crime, or if they work or have engaged in voluntary work within a forensic environment. It also assessed if the person had any previous training in working with people who commit offences or individuals who had committed sexual offences. It is of interest to see if there are any influences of demographic factors upon attitudes and perceptions of people who commit sexual offences.

Two published studies aimed to overtly investigate this (Shackley et al., 2014; Willis et al., 2013). The Community Attitude Towards Sexual Offenders (CATSO) scale was used in each of these studies, and a demographic factor that was found to have an influence was 'educational attainment'. Both studies found that participants with higher level qualifications conveyed more positive attitudes than those who had fewer qualifications. The findings from these studies were not consistent with other research findings, however, as most studies did not have any correlations between attitudes and demographic factors (Hogue & Peebles, 1997; Kjelsberg & Loos, 2008; Katz-Schiavone et al., 2008). Other studies have found differences in attitudes to be influenced by demographic factors such as age (Craig, 2005; Kjelsberg & Loos, 2008) and sex (Ferguson & Ireland, 2006; Higgins & Ireland, 2009; Radley, 2011; Willis et al., 2013). It is, however, important to note that although differences were found, these were not in a consistent direction. Therefore, the influence of demographic factors upon peoples' attitudes remains unclear, due to inconsistent findings. As such, given the planned research sites for this thesis, the author decided to collect such demographics in order to complete evaluations of them if required.

Measures used in the thesis:

Table 0.1. Direct and Indirect Measures and Their Aims

Direct Assessment Measure	Aim of Measure
Brief Knowledge Survey	To evaluate the level of knowledge re: facts and myths related to sexual offences.
Attitudes Towards Prisoners (ATP) Questionnaire (Melvin et al., 1985)	36 statements aimed to assess attitudes towards prisoners.
Attitudes Towards Sexual Offenders (ATS) Questionnaire (Hogue, 1993)	36 statements adapted from the ATP, aimed to assess attitudes towards individuals who have committed sexual offences.
Working with Offenders Questionnaire (WOQ), (Hogue, 1995)	20 questions, which examine a range of issues related to the provision of treatment groups for people have committed sexual offences.
Community Attitude Towards Sex Offenders (CATSO), (Church et al., 2008)	18 statements concerning people who have committed sexual offences, with more focus given to community settings.
Indirect Measures	
Computer IAT	A computer programme aimed to measure implicit attitudes using response times to interference effects, which may take place when different characteristics of an attitude object are presented.
Pencil and Paper IAT	A pencil and paper manual name IAT replaced the above computer IAT. The aim and content were the same.

Brief Knowledge Survey.

This survey was developed by the author of this study as a basic measure to obtain a brief and quick insight into the knowledge held by staff prior to the educational workshop commencing. This was to obtain a better understanding about whether their knowledge was more in line with factual information or myth regarding sexual offences. This approach was in line with one of the aims of the workshop, which was to help staff members obtain and maintain information more in line with fact-based knowledge. This aim was derived from observations of staff members expressing or demonstrating more punitive attitudes towards service users with a history of committing sexual offences compared to those without such history. These behaviours seemed to be influenced by having myth related beliefs in place (Harper et al., 2017; Katz-Schiavone et al., 2008; Levenson et al., 2007). Although the supporting staff had contact with individuals who had committed sexual offences (in terms of their working relationships), they had little to no prior relevant training that would have increased their factual based knowledge and would inform their practice and interactions. Therefore, the intention of the Brief Knowledge Survey was to identify myths held by staff members and help dispel them. This is because myth related beliefs are associated

with more negative and punitive attitudes towards individuals with a history of sexual offences and the rehabilitation available. The Brief Knowledge Survey consisted of six questions; each required participants to provide a percentage of what they believed the percentage to be. Examples of the questions include: “What percentage of sexual assaults of adults do you believe were committed by strangers?” and “What percentage of convicted persons who have committed sexual offences do you believe will commit another sexual offence?” The questions included related to measurable factors that could be checked. Statistics relevant to each question were available within relevant literature and government statistics, and these sources were referred to when evaluating the participants responses. The development of this brief survey was based on research by Hanson and Bussière (1998), and Levenson et al.’s (2007) findings⁵. Hanson and Bussière found that 13-19% of people who have committed sexual offences were seen to reoffend. These figures were significantly different when compared to findings within Levenson et al.’s paper (2007), where Australian members of the public estimated reoffending rates to be 75%. The author of this thesis wanted an indication of participants’ initial estimations regarding documented myths associated with sexual offences. This would allow assessment of whether attending an evidence informed educational workshop had an impact upon participants’ estimations.

Strengths of this survey include time efficiency, due to its brief nature, and time required to consider ones responses. It provides a swift assessment of where staff members beliefs are orientated:- more in line with factual based information or myth-based information. Repeating this measure post workshop, again provides a quick assessment of whether staff knowledge has changed to be more orientated with factual based information. Changes in knowledge should be reflected in the outcomes of the non-automatic attitude measures. Limitations of this survey include it is not a tool to measure attitudes (it was never intended to be), it is not a validated tool and does not provide an in-depth evaluation of the range of estimations staff hold regarding offending behaviours of a sexual nature. It does not give accurate figures, as staff are asked to indicate which percentage is applicable to the question, e.g., 10, 20, 30, 40, 50% etc. Therefore, caution needs to be applied when interpreting the results regarding

⁵ Please note more detail of the development of the Brief Knowledge Survey can be found in Chapter 5.

the level of knowledge 'change' influenced by the workshop. As it only provides an estimation of where the staff members belief lies – more towards factual based or myth-based information.

The Working With Offenders Questionnaire.

This questionnaire was developed by Hogue (1995). It consists of 20 questions investigating an array of issues related to providing treatment groups for people who have committed sexual offences and staff opinions on working in this area. There are no details available for internal consistency. These questions were proposed to provide a general picture of staff beliefs about providing treatment for individuals who have committed offences of a sexual nature, as it might impact upon the staff themselves. It is important to note that the questions within this questionnaire were not intended to provide an assessment of attitudes. High scores on this scale indicate increased levels of confidence in and knowledge of working with people who have committed sexual offences. This questionnaire was selected for use in this thesis to build on the outcomes from the Brief Knowledge Survey, as it specifically looked at beliefs regarding the provision of interventions for individuals with a problem related to offences of a sexual nature, since the staff educational workshop was developed to support the rehabilitation culture surrounding appropriate interventions. This questionnaire was not used as a tool to measure staff attitudes towards people who have committed sexual offences.

Attitude Towards Prisoners (ATP) Scale.

This scale was developed by Melvin et al. (1985). This measure was selected due to it being found in several studies that evaluated ATPs (Hogue, 1993; Ortet-Fabregat et al., 1993; Kjelsberg et al., 2007) and the reliability and validity levels were good (Kjelsberg et al., 2007). An original study of the ATP scale demonstrated a split-half reliability between 0.84 and 0.92 in five different samples. Test-retest reliability was 0.82 and validity was good, with no evidence of response distortion being present. The purpose of using this measure as part of this thesis was to be able to identify non-automatic attitudes towards people who commit offences in 'general'. This approach would enable comparisons to be made with non-automatic attitudes towards people who commit sexual offences and identify if the educational workshop only influenced attitudes towards those who committed sexual offences.

The ATP scale (Melvin et al., 1985) contains 36 statements of attitudes to prisoners, such as “Prisoners should be under strict, harsh discipline” and “If a person does well in prison, he should be let out on parole.” The participants are asked to rate their agreement via a Likert-type scale, where responses range from Disagree Strongly, Disagree, Undecided, Agree and Agree Strongly. A total of 19 of the items are reverse scored, with each item receiving a score of 1-5. A score of 1 represents the most negative attitude and 5 represents the most positive attitude. A constant of 36 is removed from the sum score, which makes the possible scoring range from 0 to 144. Positive scores indicate that prisoners are capable of positive change. Negative scores indicate that prisoners are viewed as deviant and incapable of positive change. This scale has a unifactorial structure (Ashworth et al., 2018) and provides a measure of global attitudes towards people who have committed general offences. Therefore, it will provide a baseline measure of attitudes, and not a tripartite measure of attitudes.

Attitudes Toward Sexual Offenders (ATS) Scale.

This scale was developed by Hogue (1993) and was adapted from the Attitudes to Prisoners scale (Melvin et al., 1985) by replacing the word ‘prisoners’ with ‘sex offenders’. It is a self-report measure, which consists of 36 statements aimed to collect participants’ evaluative and affective judgements of people who commit sexual offences. The participants rate their level of agreement to each statement using a 5-point Likert-type scale (Strongly Disagree, Disagree, Undecided, Agree, Strongly Agree). The same scoring process is applied for the ATS as for the ATP scale. The lower the score the more negative the attitude towards the offender group. The ATS has demonstrated excellent internal consistency ($\alpha > 0.85$) across several studies (Craig, 2005; Proeve & Howells, 2006; Kjelsberg & Loos, 2008; Higgins & Ireland, 2009; Kleban & Jeglic, 2012). Given the wide use of the ATP and ATS scales and their levels of internal consistencies, these direct attitude measures were selected to assess non-automatic attitudes towards prisoners in general and people who commit offences who had committed sexual offences. This approach would enable the author to evaluate any differences in attitude outcomes for the two groups. An important limitation of the ATS is that Hogue (1993) did not conduct further validation of the ATS when developing the scale from the ATP. The only validation conducted involved administering it to several different groups comparing means (Nelson et al., 2002). In addition to this, as identified with the ATP, the ATS is designed as a measure of global (unidimensional)

attitudes toward individuals who have committed sexual offences (Hogue & Harper, 2019). Yet, when exploring the underlying factor structure, Hogue and Harper (2019) identified three factors, which include 'Trust', 'Intent' and 'Social Distance'. However, the scoring mechanism for the ATS only provides a total score and does not consider the different aspects of attitudes as in tripartite models such as the ABC model advocated by Breckler (1984). Therefore, it will be used as a baseline measure of attitudes. In terms of other studies that have used the ATS, there are questions about the accuracies of the outcomes, as approximately 33% of previous studies that have used this tool have scored it incorrectly (Hogue & Harper, 2019). Therefore, caution needs to be applied when interpreting results of previous studies when making comparisons from this current research to previous findings. The ATS has 36 items, which may impact upon some participants level of engagement, and it uses 'labelling language'; 'sex offender', which may bias the responses given by participants. Therefore, caution will again need to be applied when interpreting the results from this questionnaire and these issues will be referred to within the discussion.

It is important to note, that the review of the ATS and validation of a revised version occurred after this PhD study had commenced. The development of the ATS-21 scale utilised data from three sizeable European community studies. The items within the ATS-21 are all from the original ATS scale. A total of 11 of these items are reverse scored, and the 21 items load equally onto three seven-item factors (the same three underlying factors identified in the original ATS). These are labelled 'Intent', 'Trust', and 'Social Distance'. The ATS-21 has a potential scoring range of 0-84, with higher scores indicating positive attitudes towards people who commit offences who have committed sexual crimes. The ATS-21 scale correlates with the original 36-item ATS scale ($r = 0.98, p < 0.001$), and it has very good internal consistency ($\alpha = 0.94$). In Hogue and Harper's (2019, pg. 24), summary of attitudinal measures, a description of how the ATS, and ATS-21 scales examined each of the three components of attitudes. 'Intent' was described as being a factor that examines cognitive evaluations of people who commit sexual offences and gave an example question: "Sex offenders only think about themselves." The 'Trust' factor was described as representing affect-based judgements about people who commit sexual offences. The example provided was: "I would like associating with some sex offenders". The 'Social Distance' factor was described as acting as a behaviour-related measure of views about people who have committed

sexual offences and gave a statement example: “If sex offenders do well in prison/hospital, they should be let out on parole.” This measure was not selected for the use of this thesis, however, due to the study having commenced with the original ATS scale. The ATS-21 scale was not in preparation and was not validated until midway through data collection for this study. The author, therefore, decided to continue with the original ATS for the remainder of the study to achieve a consistent measure. The original ATS scale is said to provide a full inspection of all three aspects of attitudes, but as previously highlighted, a unidimensional score is produced. Therefore, it will be used as a measure of global (unidimensional) attitudes toward people with a history of committing sexual offences and evaluate generalised feelings about this population. Providing a baseline measure of attitudes. When specifically thinking of the theories of attitude formation and change for this thesis, neither the ATS scale nor the ATS-21 scale account for the APE model in the development process of the attitude measurement tools. Therefore, with this consideration in mind, there is no significant weakness in using the ATS measure for this study.

The CATSO Scale.

The CATSO (Church et al., 2008) scale was designed to examine attitudes, perceptions and stereotypes concerning people who commit sexual crimes. The CATSO is an 18-item self-report measure. The scale requires participants to rate their level of agreement or disagreement with 18 statements concerning people who have committed sexual offences, such as: “With support and therapy, someone who committed a sexual offence can learn to change their behaviour”, and “A sex offence committed against someone the perpetrator knows is less serious than a sex offence committed against a stranger”, using a six-point Likert scale (Strongly Disagree, Disagree, Probably Disagree, Probably Agree, Agree, Strongly Agree). Scores for each of the items are summed and provide a composite score that can range from 18-108, with higher scores indicating more negative views about people who commit offences who have committed sexual crimes. Studies have demonstrated the CATSO has acceptable levels of internal consistency ($\alpha = 0.74$; Church et al., 2008; Conley et al., 2011; Jones, 2013; Malinen et al., 2014; Shackley et al., 2014; Shelton et al., 2013).

From Church et al.’s (2008) initial factor analysis, a four-factor structure was identified, and these were categorised as ‘Capacity to change’, ‘Social isolation/inclusion in a community’, ‘Dangerousness’, and ‘Sexual deviance’. Each factor, except for ‘Sexual

Deviancy’, demonstrated acceptable levels of internal consistency ($\alpha = >0.70$). Some studies have evaluated the validity of the CATSO scale by using new factor analyses. One study (Tewksbury & Mustaine, 2013) found the same underlying factor structure that Church et al. (2008) identified; however, other studies such as Shackley et al. (2014) and Shelton et al. (2013) did not find the same underlying factor structure. Some studies (Conley et al., 2011) only identified two factors within the CATSO (e.g., ‘Social Isolation/Inclusion’ and ‘Capacity for Change’). Based on these inconsistencies, the CATSO total score was evaluated in this thesis.

The lack of structural consistency has resulted in some authors requesting the CATSO be reviewed and altered (Conley et al., 2011; Harper & Hogue, 2015a; Shackley et al., 2014; Shelton et al., 2013). Due to some of the underlying structures identified, it has been put forward that the CATSO, in fact, assesses knowledge-based attributions about persons who have committed crimes of a sexual nature. The CATSO is, therefore, said to be a measure of ‘perceptions and stereotypes of people who commit offences who have committed sexual crimes’, whereas the ATS was developed to measure general attitudes towards this group of people who commit general, non-sexual crimes. The CATSO is said to be ineffective in examining the views of groups of people who work closely with people who have committed sexual crimes, such as prison officers and professionals within the criminal justice system (Tewksbury & Mustaine, 2011; Tewksbury et al., 2012). It is claimed that these professionals may dismiss stereotypes associated with this group of people who commit offences, whereas members of the public may have such stereotypical beliefs. Being mindful that the CATSO scale does not specifically evaluate attitudes, it was selected for this thesis as the research sample included staff members working within forensic mental health settings based in the community. The sample ranged from individuals having little to no training on working with people who commit offences, and, therefore, they may hold similar stereotypical beliefs as do the members of the public. Another limitation to consider relates to the use of labelling language as already highlighted for the ATS. Therefore, outcomes will need to be interpreted with caution due to the potential bias this may have upon participants.

Measuring Attitudes Towards Individuals who Have Committed Sexual Offences

Indirect Measures Selected for This Thesis

Direct measures are used widely within psychological practice, including forensic practice. Participants are not always willing to share their attributes and true attitudes of a particular area, due to concerns that it might affect them in some way, and so respond in a socially desirable manner (Mitchell & Tetlock, 2015). Assessments that attempt to resolve this issue involve the development of indirect attitude measures. These measures are designed to help evaluate the attitudes of participants who are less considered in their answers and provide an automatic response. This approach reduces the social desirability feature associated with direct measures. The other reason for the development of automatic attitude measures, however, is due to a large body of research (Corneille & Stahl, 2019; Gawronski & Bodenhausen, 2006, 2011, 2014; Hu et al., 2017; Hütter & De Houwer, 2017; Hütter & Fiedler, 2016; Hütter & Rothermund, 2020) indicating that non-automatic and automatic attitudes are developed and therefore accessed differently. This was covered in Chapter 2 of this thesis, where the APE model of attitudes was explored. Having an appropriate indirect measure will enable the author to explore the mutual relationship between the associative and propositional (automatic and non-automatic) attitude changes. The next section of this chapter will focus on the IAT used to measure indirect attitudes within this thesis.

Indirect measures began to be developed in the mid-1980s, where sequential priming tasks were taken from cognitive psychology to study stereotypes (Gaertner & McLaughlin, 1983) and the unconscious trigger of attitudes (Fazio et al., 1986). Based on these developments in the 1980s, Greenwald et al. (1998) created the IAT. Since then, there has been a flow of indirect measures developed with new methods and the modification of existing tasks taking place. The most frequently used method for measuring indirect attitudes utilises the measurement of response time to indicate the direction of bias. The IAT, therefore, creates measures resulting from latencies of reactions to the two tasks. These measures are interpreted in terms of associative strengths by assuming that participants respond more promptly when the concept and attribute mapped onto the same response are strongly associated (e.g., flowers and pleasant) than when they are weakly associated (e.g., insects and pleasant). The IAT (Greenwald et al., 1998) will be the main method reviewed within this chapter and is the chosen method for this thesis, as the method of sequential priming generally uses

an image to act as the primer. The target groups referred to within this study are those who have committed sexual offences, violent offences, who have not committed offences, individuals with IDD and non-IDDs, it would have been difficult to have selected images to use as primers for each of these groups. Additionally, it was important to reduce the impact of bias, by avoiding the use of imagery. Furthermore, there would have been ethical concerns, as any imagery linked with these groups may have resulted in harm to the participants, such as triggering trauma. More details of the selection of this measure will be provided.

Response Competition Procedures

Implicit Association Test.

As previously stated, the main method for measuring indirect attitudes uses response time to measure interference effects. These may occur when different characteristics of an attitude object result in different responses. The most common of these procedures is the IAT (Greenwald et al., 1998). The IAT utilises a sorting task, where participants must quickly sort stimuli (usually words or images) into one of four categories. The categories consist of target categories and attribute categories. To assess attitudes towards flowers and insects, the categories used could be ‘flower’, ‘insect’, ‘pleasant’ and ‘unpleasant’. The IAT involves five successive tasks (also referred to as blocks): the discrimination task (task 1); the attribute discrimination task (task 2); the initial combined task (task 3); the reversed target discrimination task (task 4); and the reversed combined task (task 5). The tasks require participants to react by pressing response keys: a ‘left key’ for stimuli belonging to a category on the left side of the screen, and a ‘right key’ for stimuli that fits with the right side of the screen. Considering the flower/insect example, respondents press the ‘left key’ to flower words, and the ‘right key’ for the insect words (task 1); the same process is followed for task 2, except the attribute words are sorted. The first combined task (task 3) requires participants to respond to ‘flower’ and ‘pleasant’ with the ‘left key’, and ‘insect’ and ‘unpleasant’ words with the ‘right key’. The target categories are then reversed, insect words responded with the ‘left key’; ‘flower’ words responded with the ‘right key’ (task 4). The second combined task (task 5) is simply the target categories (flower and insect) reversed; therefore, insect and pleasant words responded with the ‘left key’, flower and unpleasant words responded with the ‘right key’. Participants need to unlearn the

previous key assignment here and learn a new key assignment in the intermediate task (task 4).

The main evaluation (the “IAT-effect”) is computed by deducting the average response time of task 3 (initial combined task) from the average response time for task 5 (second combined task). A positive IAT-effect is translated as a stronger association for the category pairings in the initial combined task, e.g., a bias towards the flower words, as flower words are paired with positive evaluations, and insect words are paired with negative evaluations.

In terms of the strengths of the IAT, it is an accommodating task that can be used to assess most associations between pairs of concepts. The IAT can be used to assess comparative preferences between pairs of objects or categories. It can also be used to assess semantic associations (e.g., stereotypical associations between black and white people, and the attributes of being athletic versus intelligent). The type of target groups can also be accommodated, which may include any pair of objects or categories that can be compared in a meaningful manner (e.g., male vs. female). Research of automatic attitudes using IATs has assessed stereotypes and prejudice, which is key to this thesis (Morrison et al., 2017; Melnikoff & Bailey, 2018; Carnes et al., 2015). Other IATs have been used to evaluate attitudes toward consumer products, self-concept, and self-esteem (Hofmann et al., 2005). The majority of IAT investigations have used single-target IATs, and the need for multi-dimensional IATs will be reviewed. Another strength of the IAT is that it generally demonstrates reliability estimates that are comparable to those obtained using conventional self-report measures (Cronbach’s $\alpha = 0.78$, Cunningham et al., 2001).

In terms of limitations, the IAT might work to assess bias in the aggregate, for a group of people or across repeated testing for the same person, but it cannot predict individual bias. Therefore, it can help identify if the support staff show anti-rehabilitative attitudes or pro-rehabilitative attitudes. Therefore, when considering the aim of the intervention, even small effects can be important, as small effects over time can create big differences at both an individual and societal level (Sukhera et al., 2019).

Multi-dimensional Implicit Association Test (Md-IAT).

The use of single IATs has further limitations, this restricts the research to the examination of one attribute (Gattol et al., 2011) or one attitude concept (Vaughn et al., 2009). Extending the IAT procedure enables a multi-dimensional assessment of attitudes, which is beneficial both economically and in providing a deeper and more detailed account of participants' attitudes (Gattol et al., 2011). For this thesis, when investigating staff attitudes towards service users with a history of committing sexual offences before and after attending an educational workshop, it is important to determine more accurately the direction of attitude bias, given the complexity of service user populations within forensic mental health settings. A multi-dimensional/target IAT will therefore be used.

Another limitation of the IAT is a lack of research into its underlying mechanism, and this is somewhat due to the limitation of the reaction time measure it uses. Research by Yu et al. (2012) utilised a mouse tracking device and found the respondents' motor trajectories demonstrated that they selected the correct response button in most of the trials, but the movement of their mouse was constantly drawn towards the other response button. These results implied that both response representations were moderately and concurrently activated during the process. Additionally, the assessment of velocity profiles indicated that mouse movements towards the correct response button were slower during incompatible trials than during compatible trials, especially for attribute stimuli. The results from this research are, however, not conclusive. Despite increased use of the mouse tracking measures over the past few years, it is still a relatively new research method and understanding of this remains limited and requires further evaluation. For the empirical studies in this thesis, the use of a mouse tracking device was not selected for two reasons: firstly, because of the limited knowledge of their reliability, and, secondly, due to the additional technology required, and the complications this would present within forensic settings. Therefore, the use of keys on a keyboard were selected, as this is the most widely used and evaluated mechanism of the computer IAT to date.

The main method of conducting the IAT is with the use of a computer with a specialist programme. Initially, the use of a computer IAT within this thesis did not present any significant problems. As the study progressed, however, practical issues began to emerge. These issues included difficulty in accessing appropriate equipment within

forensic settings and the amount of equipment required when trying to assess larger participant pools. As a result of these difficulties, low-technology measures were reviewed, developed, and incorporated into the study.

Pencil and Paper Measures.

Compared to the computer IAT, the pencil and paper IAT requires no technology. There are two kinds of low-technological measures. One is the 'manual' adaptation of the computer implicit measure programme, and the second type involves measures that utilise construct or category accessibility. The manual edition of the computer IAT was considered for this thesis. There are two versions. One version has a column of stimuli from attribute and target category words. The respondents must categorise the stimuli by marking circles on either side of the central column to indicate whether they represent target or attribute categories. The dependent measure is the difference in the number of correct stimuli identified within a fixed amount of time (20 seconds in Lemm et al., 2002; 30 seconds in Mast, 2004) between evaluations of congruent and incongruent blocks (the information available does not clarify the difference in fixed times). The second version contains lists of stimuli from both the attribute and target categories, however, rather than marking circles, respondents are required to categorise the stimuli by tapping one knee or the other (Kitayama & Uchida, 2003). The dependent measure for this method is the difference in speed at which the respondents progress through the different lists. The first low-technological method was deemed appropriate for this study, given that more than one participant at a time could be included in the evaluation stage. This would be more efficient timewise, given the time constraints of staff and ward managers in the range of services. The second low-technology method raised concerns that it could result in more errors and lacked practicality as the author needed a measure that could assess multiple participants at the same time.

Lemm et al. (2002) evaluated different versions of the IAT. They conducted two different versions of the IAT on the computer and with a pencil and paper format. One type included names said to be common among black and white people as stimuli, and the other included pictures of black and white faces. The outcome demonstrated that the pencil and paper name version of the IAT produced better test-retest reliability, a larger effect size and higher correlations with the computer IAT, than the pencil and paper picture version of the IAT. This finding is very important for this study, given the difficulty in using images as a primer. The use of words rather than images for this

evaluation is less likely to introduce other biases that pictures can activate, and raises fewer ethical issues, such as trauma that could potentially be triggered by the images used for “violent” or “sexual” offences. The results from this study were very encouraging and influenced the author to utilise the pencil and paper version as a low-technological method in the remainder of the studies.

Bardin et al. (2016) conducted several studies to examine a pencil and paper method, which was modified from a computerised IAT: The Personalised Single Category Implicit Association Test (SC-IAT-P, Bardin et al., 2014). Bardin et al. (2016) state that this method incorporates all the benefits of the Single Category-IAT (SC-IAT, Karpinski & Steinman, 2006), IAT-P (Olson & Fazio, 2004), and the pencil and paper IAT (Lemm et al., 2007). They claim that the SC-IAT-P can measure automatic attitudes towards a single object, that it reduces the impact of extra-personal associations and that it is very easy to conduct. In their review of the range of methods that can be used to measure implicit attitudes, the researchers referred to the IAT as being the most widely recorded (Teige-Mocigemba et al., 2010). Olson and Fazio (2004) stated that the IAT may not solely measure personal attitudes, but the valence of the attitude may be tainted by the “general opinion” (Wiers & de Jong, 2006) about the attitudinal object. Olson and Fazio (2004) attempted to reduce this effect by using a personalised IAT, where “pleasant” vs. “unpleasant”, or “negative” vs. “positive” labels of the IAT were replaced with “I like” vs. “I dislike”, which they claimed stimulated an added personal attitude in the participant. Although the issue of a collective evaluation is very important for the research in this thesis, where attitudes towards individuals who have committed sexual or violent offences are measured, it is questionable whether the use of a personalised IAT would help address this. Incorporating: “I like people who commit sexual offences” vs. “I dislike people who commit sexual offences” for the attitude objects in this thesis would potentially trigger more socially desirable responses that could be misconstrued. This adaptation of the computer IAT was therefore concluded to be inappropriate for this study.

A difficulty associated with using computer IATs in forensic settings relates to the resources required, as HMPPS and Secure Forensic Mental Health settings may have limited I.T access due to security issues. When larger groups of participants are required, the resource limitations and time constraints prove to be a significant barrier, and this highlights the need for a more practical measurement of implicit attitudes.

Hence, the development of a 'paper and pencil' version may be a significant advantage for forensic settings.

The IAT research referred to single category IATs. The computer IAT developed for this thesis is a multi-dimensional/target IAT (referred to in Chapter 4, section 4.3.2.2 and Chapter 5, section 5.1.3.1), which was devised to measure attitudes to a wider set of service user backgrounds within forensic settings. When the use of a computer IAT was reviewed, and the use of a pencil and paper named IAT was implemented instead, the same multiple categories were used.

Overall, the above information indicates that spontaneous indirect attitude measures can be conducted simply with pencil and paper. This approach is very helpful when conducting research within environments that may have limited I.T access due to security issues, such as HMPPS and Forensic Mental Health settings, and when larger groups of participants are required. Initially, the computer IAT was chosen due to its perceived flexibility and general reliability, however, as a result of the barriers related to implementing the computer IAT, this method was later replaced with a pencil and paper manual version. As previously explained, this method required no technology; participants simply had to respond by circling their responses. This method eliminated the risk of error from the author and enabled more participants to complete the measure at the same time.

Flexibility of Attitudes Towards Individuals who Have Committed Sexual Offences

As previously stated, research has shown that people have more negative attitudes towards people who have committed sexual offences than people who commit offences of other types of crime (e.g., Rogers & Ferguson, 2011; Willis et al., 2010). People easily form attitudes based on what is conveyed within the media and other social network formats (Crano et al., 2010). Based on this observation, the media is highly likely to have an impact upon the public's attitudes towards individuals who commit sexual offences (Galeste et al., 2012; Harper & Hogue, 2015a; Malinen & Johnston, 2013; McCartan, 2010; Thakker, 2012). The reason for this influence is that a great deal of the information publicised regarding sexual offences is biased, selective and often exaggerated. This helps generate a distorted portrayal of who commits sexual offences (Greer, 2012; Harper & Hogue, 2014). As a result, the public support a range of myths about people who commit sexual offences. Some of these myths include that people

who commit sexual offences: are strangers, are all the same, are predators, have a high rate of reoffending, are specialists, are resistant to treatment, are consequences of early abuse, are mentally ill, and/or are 'dirty old men' (Cromer & Goldsmith, 2010; Fedoroff & Moran, 1997; Fuselier et al., 2002; Galeste et al., 2012; Sanghara & Wilson, 2006).

Harper and Bartels (2017) put forward the idea of these beliefs forming a distorted 'sexual offender schema', similar to a knowledge structure that is stored in memory (Fiske & Taylor, 1984). This 'sexual offender schema' supports people's assessment of those who commit sexual offences, meaning that negative attitudes are formed to some degree because of the interpretations deposited with this schema'. Importantly, this suggestion would mean that the label 'sexual offender' would be related to this schematic depiction (Harris & Socia, 2016). Interestingly, Harris and Socia identified that when policies are structured using the label 'sex offender', community participants are more punitive in their policy support, compared to if they are structured using the term 'people who have committed crimes of a sexual nature'. These findings are likely to penetrate to staff who work in forensic settings.

Punitive attitudes towards people who commit sexual offences are also linked with judgements of sentencing (Harris & Socia, 2016; Levenson et al., 2007; Nelson et al., 2002; Shackley et al., 2014). Harper and Bartels (2017) claim that the general public instinctively extract from the sexual offender schema when making such judgements. This claim would mean that sentencing judgements made about people who have committed sexual offences will be sterner than sentencing judgements for other types of offences (Salerno et al., 2010).

Attitudes of staff toward the service users they support influence their interaction with them. These attitudes are likely to affect how people who commit offences respond to their environment of detainment (whether in the prison service or secure hospitals), and the efficacy of attempts to assist behavioural change in people who commit offences (Hogue, 1993). This discussion relates to the findings from Blagden et al. (2018), referred to in Chapter 1. A range of methods was examined in terms of their effectiveness in changing attitudes, one of which is the use of professional training programmes.

As already seen, several reviews have recommended that staff training should be provided to all key staff who may have contact with detained individuals, so that they

have a better understanding of IDD and mental health issues. The literature regarding the effectiveness of treatment has also highlighted the importance of staff knowledge and understanding; staff attitudes are said to influence treatment effectiveness. This opinion supports the rationale for this study, in that it aims to develop a deeper understanding of staff attitudes towards individuals with IDD who have a history of committing sexual offences. The provision of specialist training for staff who work with people who have committed sexual offences may improve attitudes and behaviour towards them, which may in turn help reduce the associated strain in working with this group.

Measuring if Attitude Change led to Changes in Behaviour

Measures intended to assess self-reported attitudes evaluate behavioural intent rather than tangible behaviours. Therefore, no conclusion can be extracted regarding the behavioural component of the attitude's construction without explicit observation of the behaviour (Fishbein & Ajzen, 2010). Literature exploring stigma and discrimination towards men who commit sexual offences and its impact upon rehabilitation and risk reduction have predominantly focused upon identifying staff and public members' attitudes and what information or interventions assist change in attitudes towards this group. Previous and current research (Harper & Hogue, 2016; Harper, 2018; Harper et al., 2021; Sukhera, 2019) has given little to no consideration to exploring the behavioural level of change, i.e., attitude change to behaviour change. There are a number of possible reasons for this, including the lack of consideration given to the specificity of behaviours being targeted and the resources for follow-up evaluations.

The theory of planned behaviour (TPB) (Ajzen, 1985,1991) has been a predominant theory in research predicting and understanding social behaviour for many years (Elliott, Armitage, & Baughan, 2003). The TPB claims behaviour is formed as a result of behavioural intention and apparent behavioural control. Behavioural intention is informed by three separate constructs, these are attitude towards the behaviour, subjective norm, and perceived behavioural control. Attitude towards behaviour, indicates one's feelings (positive or negative) about possible outcomes of the behaviour. Subjective norm, is where someone believes that most people who are important to them, think they should or should not perform the behaviour in question' (Fishbein & Ajzen, 1975). Whereas, perceived behavioural control is the amount of

capability and resources necessary to perform the behaviour an individual sees themselves as having (Ajzen, 2002).

The theory of planned behaviour complements the attitude models underpinning this current research (the APE and MODE models), yet it does not consider the important roles of habit, impulsivity, self-control, associative learning, and emotional processing (West, 2006). These factors are likely to influence the extent to which changes in attitudes of staff who work with men who have committed sexual offences, are represented in their behaviour. Therefore, given the primary purpose of the workshop is to promote more positive attitudes towards supporting the rehabilitation of men who have a history of committing sexual offences to assist desistance, the evaluation of attitude to behaviour change, as a result of the workshop will be reflected upon and referred to more as a secondary consideration. Such behaviours include the use of labelling to non-labelling language; hostile tone to empathic when interacting with or when discussing service users' needs or behaviours.

The 'behaviour change wheel' is a newer approach to understanding behaviour, which was developed after an evaluation of frameworks for behaviour change interventions was conducted. This aimed to overcome the limitations of existing frameworks (Michie et al., 2011). The 'behaviour change wheel', (Michie et al., 2011) is a useful tool which can help clearly identify which staff behaviours should be targeted during the educational workshop. Thus, the 'Behaviour Change Wheel' will be used as a framework to decide upon methods of evaluating staff behaviour change, during and upon completion of the workshop.

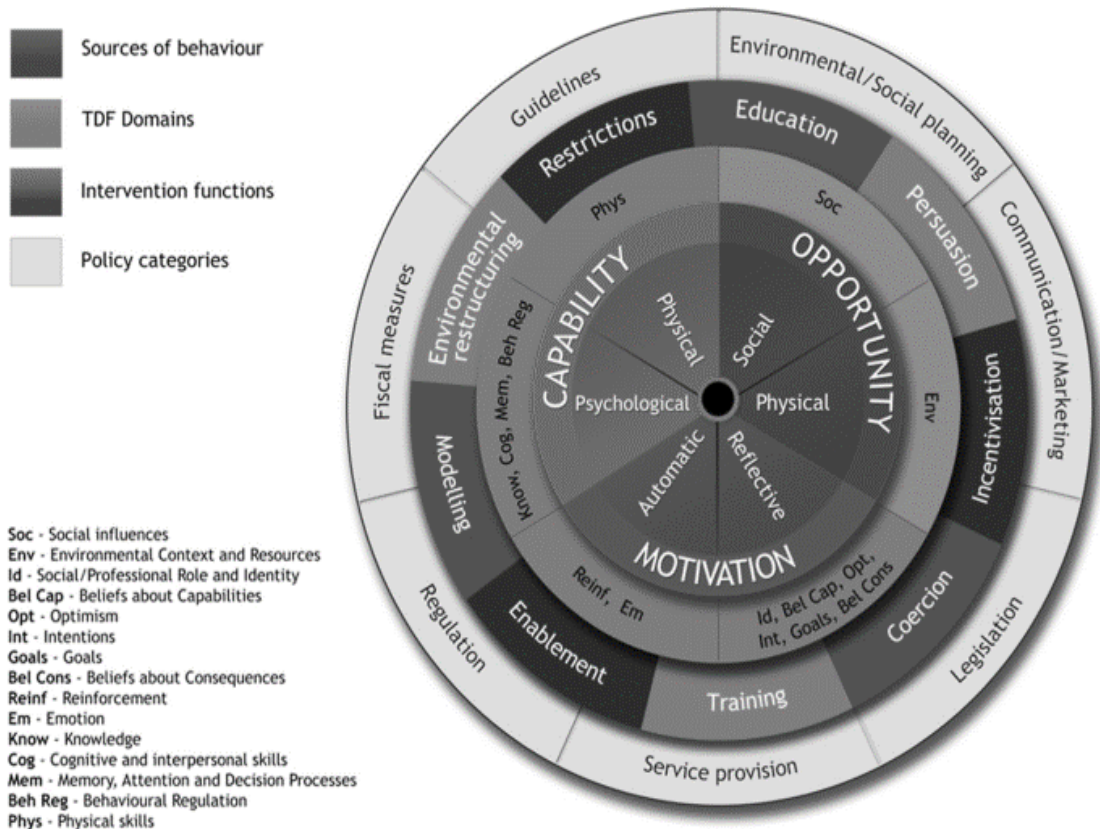


Figure 0-1 The Behaviour Change Wheel (reproduced with written permission from Michie, Atkins, et al. (2014). Protected by copyright

The Behaviour Change Wheel (BCW) was developed from 19 behaviour change frameworks (Michie et al., 2014; Michie et al., 2011). At the core of the ‘Wheel of Change’, sits the COM-B Model of Behaviour Change and the Theoretical Domains Framework (TDF). The COM-B enables the problems to a specific behaviour to be systematically explored (Figure 4-1). The COM-B model is based on the notion that the interaction between several components, that is, the individual’s Capability (C), Opportunity (O) and Motivation (M) can explain why a particular Behaviour (B) is or is not performed (Sinnott et al., 2015). To achieve an effective intervention, in terms of sustained behaviour change over time, one or more of these components need to be focused upon. The COM-B model has previously been applied to physical health issues, such as the behaviour of taking medication (Jackson et al., 2014) and public health concerns, such as barriers to chlamydia testing (McDonagh et al., 2018), but to the researcher’s knowledge, has not been tailored to public concerns, such as barriers to the rehabilitation of men who commit sexual offences. Figure 4-2 shows the interaction between the several components and behaviour.

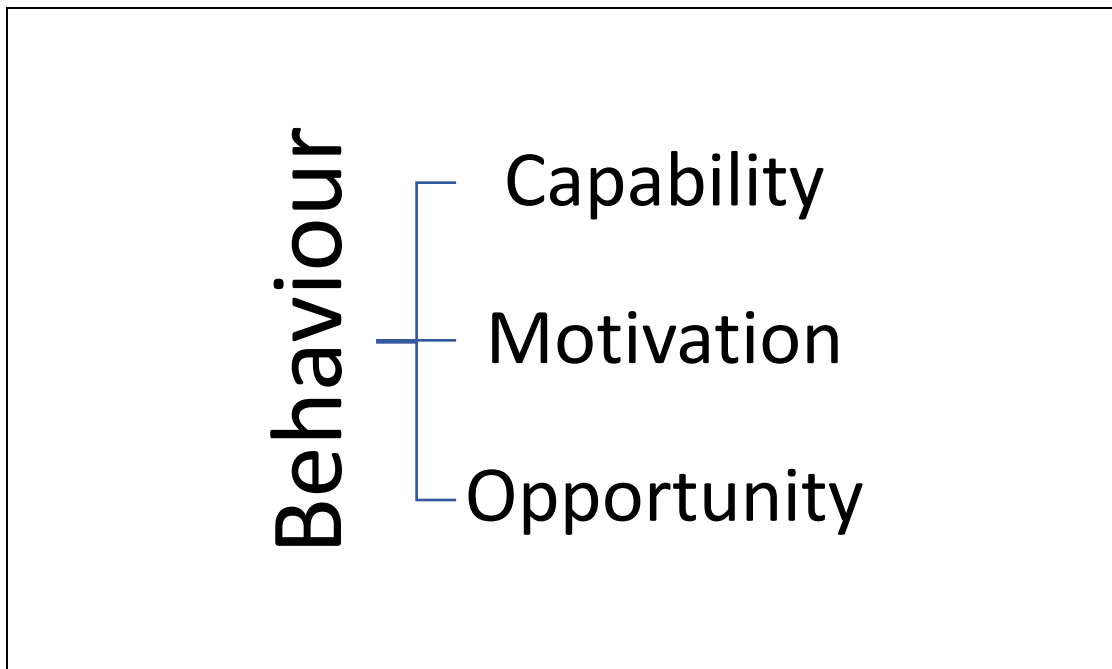


Figure 0-2 The COM-B System. A Framework for Understanding Behaviour (Michie, 2011). Adapted Representation.

Theoretical Domains Framework (TDF) (Atkins et al., 2017)

The TDF can be used to explore the key influences on a target behaviour. There are 14 domains within the TDF, which are categorised under cognitive, affective, social, or environmental influences. The framework is broad and can be used to systematically understand the influence of 84 theoretical constructs. The TDF evolved from a review of theoretical frameworks within behavioural and social sciences. (Davies et al., 2015). All 14 domains of the TDF can be linked back to the COM-B model (see Figure 4-1). The framework has been used in a range of research studies that have explored the barriers and facilitators to behaviour change and the theoretical basis of the framework implements rigour. When it was developed, the TDF was targeted towards non-psychologists, as a tool to use when designing interventions to obtain behaviour change. It is constructive to use both the COM-B and the TDF together to establish possible reasons why people do not carry out a particular behaviour, such as pro-rehabilitative language. By understanding the barriers to undertaking the behaviour using the COM-B and / or TDF, these can be plotted on to the Behaviour Change Wheel (BCW) to choose the most suitable intervention components to bring about behaviour change (Behaviour Change Techniques, BCT's).

Consideration of the COM-B, TDF and the BCW within this study will help assist in the identification of behaviours (undertaken by staff) that have the potential to impact

negatively upon the rehabilitation process of MCSO-IDD, whilst detained or supervised under the MHA. Behaviours will be identified during the course of several group exercises and discussions within the educational workshop (see Chapter 5, Table 5-2 for further details of the workshop content and how it maps onto the BCW, COM-B and TDF).

It is important to be aware that during the intervention itself, BCT's will be demonstrated. The staff will have opportunity to observe roleplays conducted by the workshop facilitators (modelling), as well as partake in roleplay scenarios (enabling). These aspects of the workshop map onto the modelling and enabling factors of the intervention function section of the BCW. They also map onto the capability, opportunity, motivation (COM) elements of the COM-B model. Although this research is primarily underpinned by attitude theory, discussion of the relevant behavioural theory and models will be useful and their application will be reviewed in more detail within the Discussion chapter (chapter 10), when considering future research.

Impact of Training Upon Staff Knowledge and Attitudes

This section looks at research that have investigated the impact of staff training upon level of knowledge and attitudes towards men with a history of committing sexual offences. None of the following studies have evaluated the impact of the training upon behaviour, and the majority have used direct measures to assess non-automatic attitudes.

Hogue (1995) tested an initiative that focused on a three-week staff educational workshop intended to present staff with the required knowledge, skills, and experience to work with this service user group. At the end of the three-week training programme, participants were assessed for attitudes towards people who commit sexual offences with the use of the Attitude Towards Sexual (ATS) offenders measure. Results showed participants felt more confident in their ability to provide treatment following training. They also held a greater belief that treatment could be effective. In addition, with a six-month follow-up, they showed significantly more positive attitudes towards people who have committed sexual offences and to people who commit offences in general. Limitations of this study were that the ATS measure was not examined at the follow-up period and no control group was used. Caution must therefore be exercised regarding

the impact of the staff training programme, as any changes could have been influenced by work-based exposure.

Taylor et al. (2003) evaluated the impact of a two and a half-day training event for 66 care staff (nurses and social workers) on working with people with IDD who have committed sexual offences. Results demonstrated a significant improvement in the participants' overall knowledge and attitudes following training. These effects were particularly marked with those who had less experience of working with people who commit sexual offences. The Taylor et al. (2003) study shows that a short but concentrated training on working with men who commit sexual offences can be effective in enhancing attitudes towards and improving confidence and knowledge in paraprofessionals working with this service user group. This study is of importance, given the settings evaluated and the participant sample.

Craig (2005) measured attitudes towards individuals with a history of sexual offences held by professionals and paraprofessionals and evaluated an introductory two-day training workshop aimed at increasing knowledge and improving attitudes towards these individuals. The findings demonstrated little change in attitudes towards people who have committed sexual offences post-training, which may have been due to the attitude measure used in this case, or demographic factors may have had an influence, such as higher educational attainment and the link with less negative attitudes. Participants in this study may already have had fewer negative attitudes compared to other studies of this nature.

Similar findings were the result of Kjelsberg and Loos' (2008) research. They evaluated a two-day staff educational workshop regarding people who had committed sexual offences given to 153 prison employees in a Norwegian prison service. A total of 90 participants completed the ATS prior to the training and repeated the measure 12 months after the training. Participants also consisted of 412 students who completed the measures but who did not receive the training. The researchers found that prison officers held more negative attitudes than other correctional staff and that the students held more negative attitudes towards people who have committed sexual offences than the correctional staff. There was no significant difference in attitudes towards people who have committed sexual offences 12 months after the training between the trained

and untrained group. This observation raises the point as to how long attitude change remains. This aspect will be reviewed as part of this thesis.

Another study that evaluated a two-day staff educational workshop, 'Principles of Sex Offender Management', to 117 correctional staff, was conducted by Ware et al. (2012). Positive results from the training programme were found. Prior to the training there was a significant difference in ATPs than people who have committed sexual offences. Post-training there was no significant change in ATPs, but attitudes towards people who have committed sexual offences and knowledge improved significantly post-training.

A more recent study evaluated the impact of a one-day workshop upon the non-automatic attitudes of three forensic nursing staff members. The workshop was described as a narrative informed intervention (Challinor et al., 2018). A combination of quantitative and qualitative analysis took place. Positive outcomes were found, where pre- and post-measures evidenced significant change in a positive direction, in terms of the attitudes and perceptions of staff. Outcomes from the qualitative analysis indicated the deepening of narratives. Other observations included a decrease in risk-averse practices and an increase in the development of person-centred care plans. The authors highlight the influence of applied learning tasks focused on care aspects of the forensic nursing role in challenging stereotypical attitudes and improving routine practice. The strengths of this study include the observations to practice, yet the limitations of this study include the examination of non-automatic attitudes and small participant numbers.

Social Education Programmes and Information

A study conducted by Kleban and Jeglic (2012) looked at the effectiveness of psychoeducational methods in changing attitudes towards individuals who have committed sexual offences. The psychoeducational intervention consisted of three levels. The first level required participants to read a brief information paper about individuals who had committed sexual offences, the second level required engagement in level one plus attendance at a presentation about individuals who have committed sexual offences. The third level required participants to engage in levels one and two with the addition of a discussion post-presentation. Findings from this study indicated the interventions were successful. They found that as the level of intervention progressed (e.g., level one to level two), the participants' degree of consideration given

to issues related to sexual offences increased. They also found that as engagement in the different levels progressed, more significant changes were noted, i.e., more positive attitudes towards individuals who have committed sexual offences were observed. The investigators' evaluations were based on the use of the ATS offences scale. Caution is required in the interpretation of these results, however, as Kleban and Jeglic's description of interpretation raises questions as to whether the ATS was scored correctly in accordance with Hogue's (1993) stipulations of the scoring method. Another aspect to consider is that this study only focused on evaluating any changes to staff members' non-automatic attitudes and did not evaluate participants' automatic attitudes. The current thesis will evaluate both automatic and non-automatic attitudes.

Apart from Hogue's (1995) study, other research evaluated training programmes of approximately two-day periods. A further study by Simon and Arnaut (2011) evaluated the difference in ATS scores that were dependent upon the different lengths of training provided. They found registered forensic professionals who had completed over 30 hours of training in working with individuals who had committed sexual offences had more positive attitudes towards them than those who had completed less training or who had received no training at all. The conclusion from this research implies that the effectiveness of staff training programmes is connected to the level of hours received in training. This research does not, however, specify whether the 30 hours of training was received in one training period or whether it was continuous development through ongoing training. It also does not refer to whether the registered professionals received regular clinical supervision, where training, literature and case work could be discussed. Due to the lack of methodological comparisons between the staff training programmes, the results of this study need to be interpreted with caution.

Some studies have examined automatic attitudes towards rape but have not examined the malleability of automatic attitudes (Widman & Olson, 2012; Nunes et al., 2013), whereas Malinen et al. (2014) investigated the flexibility of public attitudes towards individuals who have committed sexual offences. This study used both direct (non-automatic attitudes) and indirect measures (automatic attitudes) to evaluate attitude change in participants exposed to mock news stories. There were three conditions: 1) 'Informative' = fact-based, 2) 'Typical' = fear-laden, and 3) a control group, where no mock news story was presented. The results showed that participants exposed to the 'informative' story expressed significantly more positive attitudes than those in the

control group, whereas there was no difference in responses between the ‘Informative’ or ‘Typical’ mock news story groups. For the indirect measure (ST-IAT), no significant changes were found between the groups.

Gaps in Knowledge

Research into automatic attitudes within forensic settings, particularly forensic mental health settings, is sparse. The use of indirect measures of attitudes towards people who commit sexual offences has not included staff members based within such settings and has not considered behaviour change. Given the complex needs of service users within such settings, there is a need to evaluate multiple categories of attitude targets. This approach would assist in determining the direction of bias, compared to a single-target IAT. Consideration will also be given to attitude change and its links to behaviour change. Therefore, this thesis hopes to address some of these gaps within the research by evaluating staff members’ attitudes towards multiple attitude groups to reflect the populations they work with, including those with IDD, and to use a multiple-target IAT to support this, whilst also exploring the use of the Behaviour Change Wheel.

Section Summary

These studies suggest that where staff receive specialist training, non-automatic attitudes towards people who commit sexual offences have improved and/or their confidence in their knowledge and belief in treatment efficacy has increased. Research findings further support the idea that media presentation may be effective in achieving attitude change, but that frequent exposure to information targeted at emotional responses to sexual offences may be required to accomplish consistent and enduring attitude change. This result would be the expected outcome following the implementation of specialist training by the author. Research so far has, however, shown some inconsistencies in the measures of attitude change, and these may be due to the different types of attitudes being measured. Studies so far have predominantly measured non-automatic attitudes, knowledge, beliefs, and self-reported confidence. Although it is positive to see that Malinen et al. (2014) incorporated indirect measures in the study using a ST-IAT, the sample for this study consisted of university students. It would therefore be beneficial to investigate automatic attitudes through indirect measures with staff members completing an educational workshop aimed to increase knowledge and understanding of factors associated with sexual offences and IDD. This is one of the key objectives of this study. As we know from research on the APE model,

automatic attitudes can be more difficult to change (Gawronski and Bodenhausen, 2006) and are more likely to predict behaviour in the real-world setting. This thesis will therefore explore attitude changes for both automatic and non-automatic attitudes, and it will investigate any interplay between associative and propositional processes.

It will explore behaviour changes to a cursory level, as a result of the intervention through the staff identifying intended behaviour changes and adaptations during the workshop, as well as more informally through discussion at the follow-up point and observations on the units. The follow-up period of three months aims to investigate if any changes in attitudes are maintained over time and if any intended behaviours have been implemented. From the literature reviewed, no specific guidelines are available on when to repeat measures to assess attitude change. Therefore, a three-month follow-up period was selected, primarily to give staff sufficient time to process the information from the workshop and for them to have opportunity to implement new knowledge into their working practices. Additionally, this time period was selected in an attempt to retain follow up numbers due to the high staff turnover. Taking into account sufficient time to process and implement information; time, motivation, opportunity, and resources are some factors that need to be taken into consideration when evaluating the impact of an educational workshop. These aspects relate to the attitude models considered within this thesis (MODE (Fazio, 1990) and APE (Gawronski & Bodenhausen, 2006) models) as well as behavioural models, such as the Theory of Planned Behaviour (TPB) (Ajzen, 1985), as well as the COM-B, (Sinnott et al., 2015), TDF (Atkins et al., 2017) and BCW (Michie et al., 2014). A secondary, more pragmatic reason for selecting the three month follow up was to capture as many follow-up participants as possible due to high staff turn-overs in forensic settings.

Part 2: Development and Feasibility Stages & Empirical Studies

Development of the Staff Educational Workshop; ‘Working Positively With Individuals With a History of Committing Sexual Offences’; the Multi-Dimensional IAT (Md-IAT), and the Brief Knowledge Survey

Introduction

This chapter will provide information regarding the development phase of the educational workshop, and the Md-IAT used to evaluate automatic attitudes. It will also explain how the ‘Brief Knowledge Survey’ was developed and used to evaluate the direction of staff members’ beliefs systems. (i.e., more in line with myth-based information or more in line with fact-based information surrounding individuals who commit sexual offences). The Medical Research Council (MRC) Framework will be referred to assist in outlining the structure of the development phase of this research. Although the MRC Framework was not referred to from the outset of this thesis, it has since been considered in the redevelopment of the thesis. This is in response to valuable feedback obtained from the external examiners, and upon the author’s reflections of the benefits of using the MRC Framework to both explain and review the development phase. The MRC Framework will therefore be utilised within the structure of this and remaining chapters⁶.

As a result, the first part of this chapter will provide an explanation of the MRC Framework and indicate how it relates to the development and feasibility phases of this thesis.

The Medical Research Council Framework for Complex Interventions

The Medical Research Council (MRC) is a national funding agency committed to enhancing human health by endorsing research across the whole spectrum of medical

⁶ Please note the MRC Framework was not used from the outset of this research. The author of this study was based within a private sector secure service within Wales with service users with a primary diagnosis of IDD. The research was self-funded, there was no research panel as such, but a clinical governance team. The staff workshop and evaluation mechanisms were not deemed to be a complex intervention and were not supported as such by the stakeholder. Therefore, the MRC Model was not incorporated from the outset of the research.

sciences in the UK, and around the world. Complex interventions are frequently used in social and health care services and public health services, as well as other services that have implications for health. Interventions within these services are evaluated to different degrees (Shahsavari et al., 2020). In 2000, the Medical Research Council (MRC) published a framework for researchers and research funders on developing and evaluating complex interventions (Campbell et al., 2000). This was revised in 2006 and was recently revised in 2021.

The MRC Framework consists of four key phases. The first is the ‘Development’ phase, where a new intervention is developed, or an existing intervention is modified. Both options are to be based on relevant research and theory of the problem. In addition to this, it can also include the selection of an intervention that exists, or that is planned through policy or practice and proceed to investigate preferred method(s) for evaluation. The second phase is ‘Feasibility’. This is where the planned intervention and method of evaluation are assessed for feasibility, so that the next steps that will enable evaluation can be determined. The third phase is one of ‘Evaluation’. This is where the intervention is assessed by means of the most appropriate methods, in order to address the research questions. The fourth phase is ‘Implementation’, which is where the intervention is put into practice, if after the evaluation phase, it is judged as likely to have impact on the identified problem.

Table 5-1 provides an overview of how the current research maps onto the MRC Framework. Within the table, a brief explanation of the various steps within the phases are cited. These are then cross referenced to the particular section of the thesis process, whilst highlighting the relevant research objectives that were being addressed. Lastly, information within the table identifies which chapter(s) the reader can find information relevant to each phase. As the research did not seek to implement the intervention, the research presented covers the ‘Development’ and ‘Feasibility’ stages.

Table 0.1 Mapping of the MRC Framework to Elements of the Current Research

MRC Framework Phase	MRC Description of Phase	Project Element	Objectives Addressed	Chapter
Development	Identifying the research evidence and theory of the problem Select appropriate theory Establish learning outcomes for educational workshop. Establish evaluative measures.	Review of factors associated with men with IDD who commit sexual offences. Review rehabilitation culture literature. Review attitude and attitude change literature. Educational workshop development. IAT development. Brief Knowledge Survey development. Revisited this section when developing the pencil & paper Md-IAT.	1, 2, 3, 4	1 2 2, 3, 4 3, 5 3, 5, 6 3, 5, 6
Feasibility	Testing direct and indirect measures. Estimating recruitment/ retention Determining sample size (Kyonka, 2018)	Study one; 1 st analysis – Reliability and validity tests of the Md-IAT outcomes and general participant feedback. Study One; 2 nd analysis – Feasibility study facilitated by researcher. Study Two; 1 st and 2 nd analysis. Study 3.	1, 2, 5	6
Evaluation	Effectiveness Understanding change process Assessing cost-effectiveness	Study Five; 1 st and 2 nd analysis. N/A	2, 3, 4, 5 N/A	6,7,8,9,10
Implementation	Dissemination Surveillance and monitoring Long-term follow-up	N/A	N/A	

Background.

As stated in Chapter 1, section 1.1.1. the development of the educational programme was a consequence of working within forensic provisions for adult service users detained under the MHA (1984) with a primary diagnosis of IDD. A high proportion of the service users had a history of committing sexual offences, and the author of this thesis had responsibility for developing and delivering relevant treatment interventions for this group of service users, to help them address their risk factors and develop

protective factors. As referred to within the literature review in Chapter 1, rehabilitation outcomes can be influenced by the support and interactions with staff members. Additionally, staff members require support mechanisms, such as staff training, supervision and peer support to work confidently, positively, and safely within forensic MH settings.

Preliminary work included an informal Training Needs Analysis (TNA), including a review of the literature of developing staffs' knowledge and understanding and discussions with the staff and key stakeholders (please refer to Appendix 1 for reflections as the informal TNA). During discussions with staff, they voiced their struggles in working with MCSO-IDD. They disclosed having difficulties with trust, being suspicious of the service users' behaviours, and being more cautious and restrictive over their activities. They also feeling uncomfortable when escorting service users' in the community. These behaviours were observed to negatively impact the support mechanisms in place for the service users who were accessing rehabilitation interventions, which often unintentionally hindered the service users progress. Observed behaviours included staff enforcing avoidance strategies in situations where they could have encouraged the service user to use knowledge and skills obtained during their rehabilitation intervention. There was also evidence of risk-averse care plans in place when care plans could have utilised or encouraged further development of protective factors. The motivation for these behaviours did not appear malicious in nature, but more driven by feelings of anxiety and fear. Staff conveyed feeling an increased level of responsibility of knowing how to manage situations on the units or when in the community while escorting service users on Section 17 leave. Section 17 of the MHA (1983) enables certain service users who are detained under the MHA to be granted 'leave of absence' from the hospital they are detained, for a specified period, subject to certain conditions specified within their leave care plan. (Gov.UK, 2015). These issues seemed to be a consequence of the staff team having little or no prior training that would support their knowledge and understanding as to what factors may contribute to people committing sexual offences. Additionally, they had received limited information of the importance of rehabilitation. This included the positive impact of a supportive environment, the negative impact of biased attitudes upon the rehabilitation process and future recidivism and the central role they played as support staff within each of these areas. Therefore, due to a limited amount of or no prior

relevant training experienced by staff, emotions heightened by media portrayal and peer pressure not to work positively with MCSO-IDD, more punitive responses were seen towards the service users, which in turn negated rehabilitative efforts. As a result, the support requirements of staff members were reviewed (see Appendix 1 for reflections on an informal TNA completed at the time). The outcome of this was to develop an educational workshop to help address staff needs. This was decided to be the most appropriate mechanism to help inform staff of correct, rather than myth-based information. The incorporation of staff education was to assist in their knowledge development and positive attitudes towards the service users.

The development phase was led by the author of this thesis and was supported by key stakeholders. These included the area director, hospital directors and community group home managers. Advice was sourced from the research supervisory team at the University. Fundamental aspects of the development phase included establishing learning outcomes and content of the educational workshop, as well as developing the assessment measures for automatic attitudes and a brief knowledge survey.

Development of the Brief Knowledge Survey.

Information regarding the development of the Brief Knowledge Survey has been referred to in section 4.2.1 (pages 55 to 57). The Brief Knowledge Survey was developed as a means to give the author an overview of where the staff members' beliefs fell, in terms of knowledge around the occurrence of sexual offences being committed. Literature within Chapters 1 and 2 have referred to the frequency of sexual offences, factors that contribute towards sexual offences, and the level of stigma and stereotypical beliefs that surround such offences and individuals who commit them. Therefore, a selection of questions (six in total) were generated, and these were based on findings from Hanson and Bussiere (1998), and Levenson et al.'s (2007) research. The six questions were; What percentage of sexual assaults of adults do you believe were committed by strangers?

What percentage of people who have committed sexual offences do you believe come to the attention of the authorities?

What percentage of people who commit sexual assaults against adults do you believe were sexually abused as children?

What percentage of people convicted for committing sexual offences do you believe will commit another sexual offence?

What percentage of individuals convicted for rape do you believe reoffend in a sexual manner?

What percentage of individuals convicted for committing sexual offences against children do you believe reoffend in a sexual manner?

Participants were required to respond to the six questions by providing an estimation via circling a percentage level they thought was correct. This aimed to give an indication of whether they underestimated or overestimated the percentage. The percentages ranged from 0 to 100 and increased in increments of 10. Each of the questions related to statistical information that was publicly accessible on relevant Government websites and within literature. Therefore, participants' under or overestimation could be easily checked.

The selection of questions were chosen as they were deemed to provide insight into; staff understanding of the prevalence of sexual offences being committed, who commits them and whether individuals who commit sexual offences can be rehabilitated. The questions were discussed with the author's research supervisors, as well as other professionals who had relevant experience. They were asked to give their views as to whether the questions were appropriate given the intention of the survey and appropriate for the staff population. Therefore, checking the face validity of the tool.

Development of the Staff Educational Workshop.

As already indicated, a lack of knowledge impacted staff members' confidence when working directly with the service users and in creating a supportive rehabilitative environment. It also impacted negatively on the development of individualised care and risk management plans. The staff team's behaviours were often observed to be expressions of negative and punitive attitudes toward service users with a history of committing sexual offences (Koon-Magnin, 2015). An example of this attitude includes two service users behaving in the same manner, yet the service user with a history of committing sexual offences encounters more consequences and is spoken to in a more hostile tone than the other service user with no such history. These attitudes and beliefs seemed to be influenced by media portrayals (Malinen, 2014) and appeared to be readily accepted by the range of support staff due to the lack of training and knowledge

(Willis et al., 2010). Given the available research (Blagden, et al., 2018; McNeill, 2012; Liebling, 2014; Timko & Moos, 2004; Vaughan, 2007; Ward & Maruna, 2007) which highlights the importance of a positive environment to support the impact of rehabilitation of people who commit offences, it seemed appropriate to try to address the lack of understanding and knowledge of the supporting staff teams. A review of the wider literature underpinning the development of the learning outcomes for the education workshop can be found in Chapters 1, 2 and 4.

To help manage or change behaviours, attitudes need to be changed, with the most influential types being automatic attitudes (Brownstein et al., 2020; Landwehr et al., 2017; Velasco & Harder, 2014). Automatic attitudes of staff members in forensic mental health settings, however, have not been evaluated; specifically concerning those who provide care and management of people with a history of committing sexual offences, with a diagnosis of IDD. Additionally, research evaluating the impact of interventions upon staff members attitudes has rarely been evaluated for behaviour change. The main reason cited for such limitations, is time and funding.

The main body of previous research has primarily focused on the effects of non-automatic attitudes (Hogue, 1995; Taylor et al., 2003; Craig, 2005; Kjelsberg & Loos, 2008; Ware et al., 2012). In contrast, this thesis combines the use of direct and indirect measures to evaluate both automatic and non-automatic attitudes. The MODE and APE attitude models were considered in the development, delivery, and evaluation of the educational workshop. From the literature review conducted, no published papers were found in this area that incorporated the use of these attitudes models in the formation of staff training. This thesis will therefore extend the existing literature on staff members' attitudes towards individuals with a history of committing sexual offences, through the development of a multi-dimensional computer-based and a pencil and paper manual IAT. The use of a multi-dimensional IAT measure will provide further clarification of attitude bias (see Chapter 4, section 4.3.2.2). This clarification is important when considering the complex needs and presentations of service users. Thus, an educational workshop being informed by attitude models, and the use of both direct and indirect measures (particularly a specific multi-dimensional IAT) being used to assess attitude direction and change, will enable a deeper understanding of the influence of an educational workshop upon staff attitudes. The outcomes of these measures can potentially be used to guide resources and practices necessary within the

mental health sector to support rehabilitation interventions, and, thus, have social significance.

As non-automatic attitudes are more of a conscious view towards people, they may be more accessible to influence and control (Evans, 2008; Gawronski & Bodenhausen, 2006; 2011). In contrast, automatic attitudes are evaluations spontaneously activated by the presence of an attitude object without a person's full awareness or control and will be more difficult to influence (De Houwer, et al., 2009; Gawronski & Bodenhausen, 2006, 2011; Brownstein et al., 2020). Therefore, there is a clear need to investigate whether staff training can have a positive impact upon both automatic and non-automatic attitudes. This knowledge will support the development of strategies aimed to assist staff members to interact more effectively with the service users.

As for behavioural changes, no specific measures were used, as the targeted behaviours were specific to the service contexts where the educational workshop was delivered. There were several behaviours identified as indicators of potential changes in attitudes. These were the use of non-labelling language by staff (as opposed to labelling language) and the use of supportive tone and language when interacting with service users with a history of committing sexual offences. As there were no suitable pre-existing measures to evaluate these behaviours, feedback on their presence was gained from within the service, this included reports from managers, and attendees at Multi-Disciplinary Team (MDT) meetings, case reviews and at the three-month data collection follow up sessions. Additionally, observations were completed by the author when on the units and when reviewing case notes, care plans, risk management and treatment plans. Here the use of language, conditions or restrictions were reviewed to see if they appeared punitive in nature rather than correlating with evidence-based practice.

The reason for a more systematic process of behavioural observation not being conducted mainly related to the feasibility phase of the MRC framework. Resources had not been provided for the research author or other members of the psychology team to conduct behaviour and observations. Furthermore, the staff sample size was small and did not include the whole workforce, and staff who participated did not always work the same shifts as each other, with some working night shifts. These other factors impacted the availability of resources even further, and made it very difficult to arrange observations. These issues relate to the 'environmental context and resources' domain

of the TDF, which acted as barriers to formally evaluating behaviour change as indicated by the behaviour change wheel. The inclusion of a systematic approach to observing staff behaviours would have been beneficial and this is where the use of the logic model could help, as it professes to assist in the ownership and collective understanding of the intervention (Kaplan and Garrett, 2005; Helitzer et al., 2010; Hulton, 2007). Other measures for behaviour change could have included job key performance indicators (KPIs). These could have been established during the feasibility phase with both the relevant stakeholder and staff members. A KPI could have, for example included the service manager setting targets with staff prior to attending the educational workshop. These targets would be aligned with the rehabilitation goals of the service, and later reviewed these as a formal staff review process upon completion of the workshop. Reasons for not including these will be discussed in the Discussion Chapter (Chapter 10).

Part 1, Chapter 1, referred to staff training programmes (Hogue, 1995; Taylor et al., 2003; Craig, 2005; Kjelsberg & Loos, 2008; Ware et al., 2012) that explored whether staff members' attitudes could be changed with training. Apart from a study conducted by Kjelsberg and Loos (2008), each of the other studies demonstrated positive outcomes linked with improved knowledge and understanding of working with the service user group, thereby highlighting the importance of specialist training. Each study focused solely upon changes to non-automatic attitudes, however, and did not explore the impact upon automatic attitudes. A further study completed by Malinen et al. (2014) utilised a single IAT to evaluate automatic attitudes towards those who committed sexual offences. The independent variable for this study was the presentation of mock news headlines. As explained in Chapter 4, section 4.6, when discussing the limitations of this study, the sample consisted of university students, and was experimental in manner. The aim of the current thesis, however, was to use applied research to examine the influence of an educational workshop upon staff members' automatic and non-automatic attitudes, within the forensic mental health setting.

The timescale for the educational workshop was decided by the author after critically evaluating literature related to the effectiveness of staff training programmes for individuals working with people who have committed sexual offences (Hogue, 1995; Taylor et al., 2003; Craig, 2005; Kjelsberg & Loos, 2008; Ware et al., 2012; please refer to Chapter 4, section 4.4.3 for details). Hogue's (1995) evaluation was of three one-

week training programmes. This intense training programme was for individuals who were being trained to become facilitators of interventions aimed to address sexual offending behaviours with groups of 6-8 men who had committed sexual offences. From the other literature cited above, the average training time was two and a half days, and these programmes also demonstrated positive outcomes.

Craig (2005) highlighted that “training attempting to change attitudes is best delivered over weeks” (p. 206). It is unclear what this caution is based upon. Such level of intensive training is usually aimed at staff who are involved in the delivery of interventions developed to address factors associated with offences of a sexual nature. They are not usually for staff members, where the aim is to raise awareness and understanding of issues related to individuals who commit sexual offences, and to improve daily working practices to foster a rehabilitative environment. This may be a worthy consideration for services to adopt; however, staff resources can make this difficult in practice. Having considered that previous training conducted over two and a half to three days resulted in positive outcomes and resource implications, the author decided to develop a three-day educational workshop. This was a viable training option due to it being a relatively short period for staff rotas to be adjusted so that they were able to attend training whilst providing enough time for the relevant information to be delivered. The research author was also aware that other staff training, such as ‘First Aid’ and ‘Managing Violence and Aggression’ programmes were supported and successfully delivered over 2-3 days at the sites selected for this current research.

The measures used within each study (referred to in Chapter 4) focused on levels of confidence and non-automatic attitude change (Hogue, 1995; Taylor et al., 2003; Craig, 2005; Kjelsberg & Loos, 2008; Ware et al., 2012). None of the authors referred to socio-psychological models of attitude development and attitude maintenance (Fazio, 1990, 2007; Gawronski & Bodenhausen, 2006, 2011, 2018; Greenwald & Banaji, 2017). The purpose of the current educational workshop was to increase knowledge and understanding of individuals who commit sexual offences with IDD and increase positive attitudes towards the rehabilitative process. It was, therefore, important to consider ‘attitude models’ to support the development of a staff educational workshop that would work in line with attitude development, maintenance, and change. With this goal in mind, the ‘Motivation and Opportunity as Determinants’ (MODE) (Fazio, 1990) and APE (Gawronski & Bodenhausen, 2006) models were considered throughout the

development of the educational workshop (please refer to Chapter 2, sections 2.2.2 and 2.2.3 for more information regarding the MODE and APE models).

In preparing the content of the educational workshop, the author explored the literature detailing staff training programmes, and some themes emerged. The themes included theories of, and practical guidance on how to work constructively with men who have committed sexual offences. A common theme also included challenging myths associated with people who commit sexual crimes, as well as the assessment, treatment and management of people who commit sexual offences. An interesting aspect of Taylor et al.'s (2003) training programme covered sexuality and IDD, as this study focused on nurses and social workers who worked with individuals with IDD who committed sexual offences. The author concluded these aspects to be important to discuss in the workshop, as the staff samples provided care for service users with a primary diagnosis of IDD.

In Ware et al.'s (2008) training, information about treatment and its effectiveness, along with worker issues and self-care were included. In connection to these, the author deemed it important to increase staff members' understanding of the treatment interventions available and to enable staff to discuss issues related to working with service users who have IDD and a history of committing sexual offences. The author believed this would help identify what support staff may need to improve and maintain self-care and to encourage a rehabilitative environment. What was not evident from these training programmes was consideration of attitude models and how attitudes are developed and shaped. There was no evidence to suggest the Contact Theory (Allport, 1954) was considered in the content of the training, only in terms of evaluating difference in attitudes between different staff roles (related to level of contact) when completing the direct attitude measures. Additionally, there seemed to be little to no attempt to develop staff members understanding and empathy of potential complex issues related to individual service users histories through human narrative. (Please refer to Chapter 2, sections 2.1 and 2.2.4 and 2.2.5 and Chapter 4, section 4.4.3 and 4.4.4 for further information related to the Contact Theory and previous research on the impact of staff training).

Based on the review of published papers related to the impact of staff training upon staff attitudes, the author identified the following to be primary aims of the educational workshop:

1. Help staff improve their ability to identify myths associated with people who commit sexual offences.
2. Dispel these myths through the provision of correct information by providing relevant statistical information.
3. Increase correct knowledge through the application of the Integrated Theory of Sexual Offending (ITSO; Ward & Beech, 2005). The ITSO primarily focuses on providing a proximate explanation of offences of sexual aggression, and the emphasis is on factors that influence learning, brain development and ecological variables. This theory was felt to be the most appropriate to consider, given the complexity of the service users and determining the knowledge that would be beneficial for the staff to obtain.
4. Develop knowledge of service users' complex histories and complex needs, and understanding of how such factors influence their behaviours.
5. To encourage staff to reconsider their attitudes and behavioural interactions with the service users and support given within their rehabilitation progress.

Secondary aims of the current staff educational workshop included the development of participants' understanding of risk factors, risk assessment and risk management, relevant to individuals who commit sexual offences with links being made to individuals with IDD. As previously stated, it was important to increase staff members' knowledge and understanding of the principles for rehabilitation and the role each staff member plays in terms of influencing the outcome of this process.

Figure 5-1 demonstrates the core aspects of the Integrated Theory of Sexual Offending (ITSO; Ward & Beech, 2005), covered in the workshop to assist staff in developing their knowledge of factors that contribute to people committing sexual offences.

The workshop also aimed to encourage staff members to consider a range of positive strategies that could be used to work in the management and rehabilitation of persons who have committed sexual offences. A focal point related to raising awareness of staff qualities that can support this process. Attention was therefore given to discussing important ‘therapist’ qualities derived from research linked with motivational interviewing (Miller & Rollnick, 2002; Marshall et al., 2003), whilst highlighting connections between therapist qualities and desired qualities of the supporting staff team. Discussion and use of role-plays were thought to be useful methods to demonstrate some of these learning points.

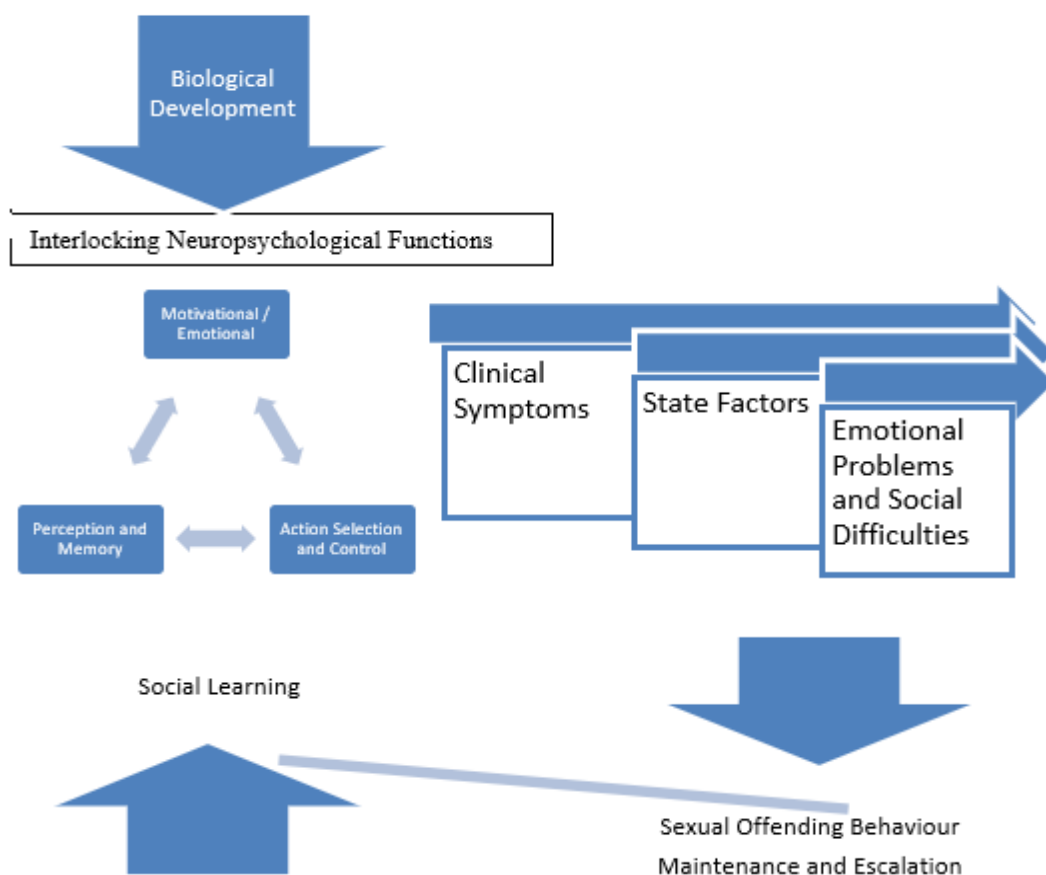


Figure 3-1 Figure. Adapted From the ‘Unified Theory of Sexual Offending,’ (Ward, 2006, p. 51)

The author, therefore, planned to incorporate discussions, small group activities and role-play when discussing desired therapist/staff qualities and the ability to balance these while maintaining professional boundaries. The importance of professional

boundaries, along with self and peer monitoring and support was also considered and incorporated into the workshop. Identification of professional boundaries was important for this educational workshop so that staff would have more awareness of their own and their colleagues' actions. As discussed in Chapter 2, behaviour is influenced by associative and/or propositional attitudes. The outcomes from the attitude measures will therefore help to indicate the type of staff behaviour within the work environment.

Raising awareness and understanding of professional boundaries (Kozar & Day, 2012) aimed to encourage a supportive rehabilitative environment, since staff would be more knowledgeable in determining whether their own, or their colleagues' boundaries and conduct were blurred in terms of being too punitive or over-familiar. This approach would enable them to work toward a more objective perspective based on the literature covered within the current staff educational workshop. Important factors related to developing and maintaining healthy professional boundaries in high-stress environments such as forensic secure settings include staff wellbeing (West et al., 2014) and clinical supervision (Clarke, 2011). These aspects were reviewed, and the author decided to include these in the current workshop, where discussions of benefits, limitations and resource issues were planned into the schedule. This approach was employed so that staff would feel more confident in incorporating the new knowledge into their working practices; an exercise was planned where positive strategies could be identified and discussed as to what they could do on an individual basis and as part of a staff team.

To emphasise the overall aim of this thesis, it was to investigate the influence a staff educational workshop has upon staff members' automatic and non-automatic attitudes. In connection with this, the author wanted to develop a workshop that considered theoretical models of attitude formation and change. The two models selected were the MODE model (Fazio, 1990) and the APE model (Gawronski & Bodenhausen, 2006). Having reviewed the attitude literature it became clear that most attitude topics evaluated tended to be of novel issues, and the need for further investigations into topics of social importance was required to build an understanding of attitude change. The topics for this thesis are of social importance. When considering the workshop content and the MODE model, methods of teaching aimed to increase participants' motivation and the opportunity to engage in effortful processing were considered. These strategies

were employed to enable staff to moderate the impact of automatic activation on judgements and behaviour (Fazio, 2007) when working with service users with a history of committing sexual offences. The author deemed the early exercises within the workshop, which aimed to dispel myths and increase fact-based knowledge, would be useful to increase motivation. Other sections designed to reflect the MODE model were the planned discussions and reviews of case studies and the planned exercises to discuss the influence of the staff member's role on the rehabilitation process. Group discussions were selected to build shared knowledge and understanding within the teams, as this could lead to increased motivation and opportunity to review practices and responses to service users (Van Dessel et al., 2018).

By increasing participants' motivation and by incorporating a range of teaching methods, participants would be more likely to access memories of information taught and discussed during the workshop (Hütter & De Houwer, 2017). The 'Determination' aspect of the MODE Model could be triggered and accessed through several activities. Therefore, through shared experience of colleagues, case studies, increased knowledge of contributory factors to committing sexual offences and the effect of IDD, and group strategies on ways to approach and support the rehabilitation of service users. Through this layered approach, attitudes can be influenced to become more positive towards a supportive environment, rather than rely on accessible information (Ewoldsen et al., 2015), such as information from the media that is often incorrect or embellished for media attention.

Further consideration of the emotive element of the topics for this thesis links with the APE model (Gawronski & Bodenhausen, 2006), as being mindful of the deep-rooted nature of attitudes towards individuals who commit sexual offences is crucial. This is particularly applicable when considering the difficulty in being able to 'unlearn' information condensed into stereotypes and attitudes (Greenwald & Banaji, 2017, pp. 866-867). This aspect is a fundamental factor when considering the influences of the workshop upon participants' automatic attitudes. The APE model suggests that associative and propositional processes are influenced in very different ways. The author of this thesis also considered this influence in the development and evaluation of the educational workshop.

In terms of the workshop content, the author was mindful of the emotive nature of the topics being discussed and wanted to utilise this positively, to attempt to influence the affective domain of participant attitudes. A specific group task was selected for this exercise, where teams worked together to chart a service user's timeline that included details of the service user's history from early childhood to the present time. The aim of the exercise was to help staff teams understand the behaviours the service users have displayed and to see the service user as a person and not solely as a 'sexual offender'. The wider aim of this approach was to develop empathy and understanding of the service user's issues, whilst maintaining awareness of risk and appropriate risk management strategies. This exercise, along with the theoretical knowledge shared from the ITSO and discussions of their role within the rehabilitation process, was completed to have a positive influence upon the staffs' automatic attitudes.

When delivering the workshop, the author was mindful of the language used in the material provided to the participants and the language used within the learning exercises and case examples throughout. The author felt this consideration was important so that the training material within the workshop did not cause any bias to either the participants' associative or propositional processes. An example of this approach was refraining from using labelling language such as 'sex offender', instead referring to 'individuals who have committed sexual offences'. Developing the workshop content highlighted how the majority of literature (including literature that relates to the 'labelling theory'), assessment measures and interventions still use such labelling language, and the potential impact this has upon developing a rehabilitative culture. The workshop delivery was supported by another member of the psychology team (forensic psychologist in training with extensive experience of working with MCSO-IDD. Please refer to Appendix 16 for a brief overview of the staff member's experience). Therefore, all the workshop aims, use of language and awareness of any potential bias portrayed was discussed before any workshops were completed. These were reviewed during a post-delivery discussion.

In terms of evaluation, by utilising both direct and indirect measures, the author aimed to review the interplay of both types of attitudes after having attended the workshop. The author also felt it was important that the information conveyed would enable reasonable evaluations and beliefs when faced with information associated with crimes of a sexual nature, which may be incorrect (Gawronski & LeBel, 2008). This approach

would provide information that is supported by research findings and relevant literature (Van Dessel et al., 2018).

The following table, Table 5-2 provides an overview of the content of the educational workshop. It explains the main aim of the particular workshop sessions, the session content and how the content related to the theories of change, referred to in previous chapters.

Table 0.2 A Summary of the Staff Educational Workshop

Workshop Session	Aim of Workshop Session	Session Content	Link to Theories of Change. Attitude Theories - MODE or APE Behaviour Change Models; TDF and COM-B.
Session 1. Introduction to the training.	Provide an overview of the staff educational workshop and its purpose.	Ask attendees why they are at the workshop and what they hope to gain from attending. Explain the purpose of the workshop and the intended benefits to their daily working practices. Advise that due to the topic of the workshop, some content may trigger thoughts and feelings they may find difficult. Inform them of the different support mechanisms and agencies available during the workshop and outside of the workshop. Some examples of the strategies to be used if necessary during the workshop include; ask to speak to the facilitator who can then arrange a private space in break time to discuss issues; take time out of the workshop, seek a debrief after the session; request counselling within the service; be referred to external agency if they feel it more suitable to their needs. Check any concerns about taking part in the workshop and anyone wanting to withdraw consent.	MODE Model – The introductory section links to this model, as it explores where staff members are at the start of the workshop, in terms of their understanding and motivation to be at the workshop. It also explores what they hope to gain from attending the workshop. This will help give insight into their non-automatic attitudes.
Myths Fact or Fiction.	Explore myths held by staff members of individuals who have committed sexual offences who have IDD and mental health problems. Identify where they are derived from, e.g., media, friends/family and help increase staff knowledge of related facts.	Group exploration/discussion exercise will make the following enquiries: what they think constitutes a sexual offence; who they think might commit a sexual offence and reasons why and who they think might be a victim of a sexual offence; how many people commit further offences?	Contact Theory – use the exercise to review the impact contact with service users within their work has upon them believing fact or myth-based information. MODE Model – increasing correct knowledge can activate motivation to

		<p>Feedback will be requested as to where they obtained their information and understanding from, such as family, friends, work colleagues, media, news etc. A discussion will be held to determine what information they believe is based on fact and what is based on myths. This will be done while drawing out several key statements (linked to the Brief Knowledge Survey) and discuss what they think about each statement. The impact of myth-based knowledge upon the service users rehabilitation, themselves as staff members and their interactions will be explored via discussion.</p>	<p>assess non-automatic attitudes and consider more fact-based information. APE Model – discussions of what influence fact/myth-based information has upon their attitudes towards service users and their rehabilitation. This will help them start to consider how much they believe their automatic and non-automatic attitudes has an influential effect upon their behaviour. Behaviour Change Wheel (TDF and COM-B) – a review of the connections between fact/myth-based knowledge and their interactions with service users, including their use of language and tone of voice, will lead onto discussions surrounding types of behaviour that are supportive of a rehabilitation intervention and what may hinder it. A group exercise will be used to draw out examples of behaviours they believe they should keep due to them being supportive and good practice, and what behaviours should be modified or stopped due to negative impact upon rehabilitation efforts.</p>
<p>Integrated Theory of Sexual Offending.</p>	<p>Increase knowledge and understanding of an integrated theory of factors related to sexual offences being committed, such as learning experiences and abilities, brain development (relating it to individuals with IDD), and ecological variables.</p>	<p>This section will incorporate taught material about the ITSO and how it relates to the service users with IDD. Staff members will be asked to give examples of service users they think the theory relates to (the staff all work with the same service users and respect for service user information and confidentiality will be reiterated).</p>	<p>Contact theory – this will be referred to when exploring how they have interacted with the service users presented in the examples given. It will then be linked to a goal setting section, of how they intend to interact with service users in the future. APE and MODE models – these models link to the provision of information that aims to increase knowledge and understanding of factors that may influence service users decision making/skill development and motivation for engaging in their behaviours. The case</p>

Risk Factors/
Protective Factors.

Increase knowledge and understanding of the range of risk and protective factors related to individuals who commit sexual offences, including those with IDD and mental health problems. To increase knowledge of the importance of protective factors when working with individuals who commit sexual offences, in terms of their treatment plans and care pathways.

By using the information covered in the ITSO section, specific risk and protective factors will be explained and discussed. This will help deepen the level of understanding of factors associated with sexual offences being committed. This section will be delivered in a manner that aims to draw out understanding of the 'Contact Theory':- what staff members knowledge and understanding has developed from the contact and observations they have of service users.

example discussions will help staff review the service user histories. This aims to prompt staff to appraise their MOTivation and Determination in line with their previously held attitudes and behaviours. During this process, they will be given time to reflect on whether the additional knowledge and understanding may shape their attitudes and behaviours. Staff will be asked to note any observed changes in attitudes and any intended changes to behaviours.

Behaviour Change Wheel – TDF and COM-B. These models link to the exercise where they are asked to examine their previously held attitudes and behaviours toward service users and what if any, changes they intend to make to their behaviours and interactions with service users. Discussions around behaviours that are supportive and unsupportive of practice will link to them being asked to consider three examples of practice they think is helpful and three behaviours they may adapt or integrate into their future practice.

As above.

When considering staff members' behaviours - to ask staff to reflect on the three examples of practice previously identified and review how each fit with this section. Staff members will be asked if any amendments or additions could be made to the three examples given to support service user risk management and development of protective factors. This exercise links to several elements of the TDF and BCW. For the TDF, it will

Session 2
What is
Rehabilitation?

Increase knowledge and understanding of what rehabilitation is, the aim of rehabilitation and the range of professions that support the rehabilitation model. Particularly their role within the rehabilitation process and the importance of this.

Strengthen this knowledge through explaining relevant information or risk and protective factors in a way that highlights the service user's narrative.

During the explanation components, staff will be asked for examples of how service users may have in the past, or currently present risk factors and protective factors. Exploration to the possible reasons for these factors will take place. Additionally, staff will be encouraged to review the resources available to the service users (both externally and internally).

Specifically, to manage risk factors and develop/demonstrate protective factors. Thus, information will be relayed back to the ITSO theory, to review the service users experiences and abilities when exploring how and why risk factors may develop, and the difficulties/ barriers the service user may have in being able to manage them effectively. Additionally, during these discussions an exploration of service user restrictions via their MHA requirements and internal restrictions imposed via care and risk management plans will take place.

Within this session, staff members understanding of rehabilitation will be explored. Discussion of whether they believe rehabilitation programmes/aims are different for MCSO and service users with IDD, and if so – what and why? Explore if they believe in rehabilitation and what they think are the outcomes of rehabilitation programmes/environments. To then explore the appropriateness of these views/attitudes given what

require staff to consider social influences of behaviour, environmental context and resources, professional role and identity, beliefs and capabilities, optimism, intentions, goals, beliefs about consequences, reinforcement, cognitive and interpersonal skills. For the BCW, this section relates to environmental restructuring, training, education, persuasion modelling, incentivization and enablement.

MODE and APE

Help staff understand the importance of their role within this process. To review their motivation for working in this profession, and discuss whether any new understanding has strengthened/weakened/alterd this and if so, why.

	<p>information was communicated in the Myth/Fact and ITSO sections. A discussion of the staff members view of their role within the rehabilitation process will take place to help draw out if staff realise the vital role they play. To also explore the level of responsibility the staff members feel they have within this process.</p>	<p>information was communicated in the Myth/Fact and ITSO sections. A discussion of the staff members view of their role within the rehabilitation process will take place to help draw out if staff realise the vital role they play. To also explore the level of responsibility the staff members feel they have within this process.</p>	
<p>Good Lives Model.</p>	<p>Increase knowledge and understanding of a strengths-based approach to rehabilitation. Increase understanding of the importance of helping individuals develop their strengths and capabilities, to reduce their risk of reoffending, rather than defer to avoidance and risk-averse strategies.</p>	<p>Within this section, a review of previous rehabilitation principles will be discussed in terms of their strengths and limitations to deepen understanding and support for why they have changed. The GLM model will be linked back to the Myths/Facts section, as well as the ITSO; risk and protective factors section. Particular attention will be given to the service users experiences and abilities given their IDD diagnoses and trauma backgrounds, and discuss why a strengths-based approach is so important. This discussion will review the staff members role in supporting service users develop their ‘GLM’.</p>	<p>MODE and APE. Strengthen motivation and deepen associations with the treatment targets agreed with service users. BCW – discuss the language used generally when referring to the units the service users reside in. Additionally, the language used to describe their offence backgrounds and language used within their care and risk management plans and their care notes. To then discuss how this may or may not fit with a strengths-based model and how stereotypical and labelling language may impact upon service users motivation to engage, progress. To ask staff for ideas how current practices could be adapted to be more consistently strengths based. This connects to the capability, motivation, and opportunity components of the BCW. It will also require staff to explore both barriers and facilitating factors to their identified behaviour adaptation goals.</p>
<p>Treatment Effectiveness.</p>	<p>Increase knowledge of the range of treatment available in different settings, the effectiveness of the treatment interventions and the important role staff members have in supporting treatment outcomes.</p>	<p>This section aims to develop staff members understanding of the importance of rehabilitation programmes and environments. Information will be provided, with an opportunity to discuss what staff think about such outcomes.</p>	<p>MODE and APE. As above, whilst reviewing if staff have observed any changes within their attitudes towards the service users, rehabilitation processes and their role as staff within the rehabilitation process.</p>

Risk Assessment.	Increase knowledge of the development of risk assessments, the different type of risk assessments and their effectiveness. The purpose and process of conducting a risk assessment and how it feeds into risk management plans/care plans. The staff members' role within the risk assessment process.	Again, this will be linked back to initial discussions in the Fact/Fiction section. A discussion will take place, as to how this data fits with the current services they work within and the service users they work with and support. A discussion of good practice and what could enhance this will take place.	BCW – review with staff if there are any behaviours they as individuals or as a team could amend/enhance/stop in order to develop a more rehabilitative environment.
Session 3 Therapist Qualities.	Discuss qualities associated with developing a successful therapist relationship with service users who have committed sexual offences. To increase knowledge and understanding of how such qualities relate to themselves and the work they undertake in supporting a person's rehabilitative pathway.	Within this section, all the information and discussions so far will be brought together when reviewing the aim of risk assessments, and how risk and risk management can change. Discussions of staff members sense of responsibility to manage risk will also be held. Along with reviewing how confident and supported they feel within this.	MODE and APE. As above. BCW – current practices will be reviewed and discussed to see if any behaviours on an individual or team level needs to be amended and why. Also, what support mechanisms might need to be amended/enhanced/requested.
Professional Boundaries.	Discuss and review the importance of professional boundaries to maintain a healthy working relationship that will support the rehabilitative pathway. To encourage staff to have a healthy curiosity (as opposed to suspicion) of service users',.	Within this section, a review of staff members roles will be discussed and related back to previous discussions. Time will be taken to communicate the similarities and differences in the role of supporting staff and therapists – whilst highlighting the importance of the staff qualities that are known to enhance rehabilitation. To review with staff what shared qualities they feel they have and demonstrate during their working practice or why not.	Contact Theory MODE and APE. Consider qualities staff already have and demonstrate. Use this to strengthen motivation and associations of positive automatic attitudes towards engagement. BCW – discuss with staff any amendments/enhancements could be made to practice on an individual and team basis to increase the rehabilitative environment.
		Within this section a review of current practices will take place and whether there are any concerns/curiosity/anger/confusion about their own or others conduct with service users. A discussion of personal and professional dilemmas will take place, whilst drawing information from the Fact/Fiction section, as well as	MODE and APE This session will help discuss non-automatic attitudes and the motivation for such attitudes, whilst also highlighting some automatic attitudes during the discussions. With links being made to the Fact/Fiction; ITSO; Rehab and GLM sections – staff will be asked to review if their attitudes

Staying Healthy.	To discuss the often-difficult nature of the work the staff members engage in and the reality and frequency of burnout. How to spot the tell-tale signs, and how to develop strategies to maintain a healthy wellbeing.	<p>pressures/stigma encountered from friends/family of working in FMH settings. Information will also be integrated from the ITSO; Rehabilitation and GLM sections, review of current staff conduct, and boundaries..</p> <p>Role-plays will be used with staff to review and demonstrate appropriate and inappropriate boundaries. Opportunities will also be given for staff members to practice via role-play techniques, appropriate professional boundaries with service users and also discussions with colleagues if concern is raised re: inappropriate boundaries.</p> <p>Within this session the importance of self-care and team care will be reviewed for current practice. What is working well, and what is not and why. Discussions will take place of the range of strategies that can be used to enhance staff well-being. This section will be linked back to the GLM and how working with service users to enhance their quality of life can also be useful for staff to consider as well. This aspect will work to enhance the human narrative rather than a ‘us and them’ perspective.</p>	<p>and beliefs have changed at all, and if so, how and why.</p> <p>BCW – staff will be asked to review current conduct and asked to identify behaviours that may need to be changed/stopped/introduced.</p> <p>MODE and APE Increase self-awareness and self-care, will increase motivation to support treatment.</p> <p>BCW – to ask staff to provide three examples of self-care they currently adopt, three examples of how they could improve self-care and three examples of how they could improve team care.</p>
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Helping staff develop recognition and understanding of the important part they play as ‘role models’ in the service users’ rehabilitation process helps to instil a greater sense of ‘value and purpose’; by emphasising how valued they are for the important work they do (Blagden & Wilson, 2020). This focus can lead to more positive responses to working with service users who have committed sexual crimes and service users with IDD (Blagden et al., 2016). This has an impact on participants’ associative processes when responding to a trigger object. This approach is crucial when trying to develop a positive rehabilitative environment. It is imperative not to underestimate the spontaneous apprehension and discomfort experienced by staff when working with service users who have committed sexual crimes. This is associated with specific stigmatisation (Malinen, 2014). In conjunction with this, they have the dilemma of having a professional duty to work against such prejudice and express support for the service users. This challenge is in addition to the stigma already faced by individuals with IDD and mental health issues. Referring to the APE model as a framework for the development and delivery of the educational workshop will therefore assist staff in challenging stereotypical and incorrect knowledge they may hold. This approach aims to help reduce the level of punitive attitudes held towards the service users and the rehabilitation interventions.

Attention was given to the Contact Theory, specifically Allport’s (1954) intergroup contact theory, as referred to in Chapter 2. Improved knowledge and understanding of the service users, because of the workshop, would help influence the development of more positive attitudes towards the rehabilitation of individuals who have committed sexual offences.

As part of the development phase for the educational workshop, other colleagues (clinical psychologist, art therapist, forensic psychologist in training, psychiatrist, two nurses who had completed SOTSEC-ID training), and the author’s supervisors were asked for feedback as to the structure and content of the workshop. This was to ensure the workshop would address the needs of the support staff members and would overcome any potential bias of the research author. Overall, feedback of the content and structure of the workshop was seen to be appropriate given the aims and intended participants of the workshop. There were several areas of feedback as to the number of examples provided for some exercises or the method of delivery. Specific feedback regarding the number of ‘myths’ was incorporated by reducing the number of myths

covered after discussions of which ones seemed most relevant to the support staff, based on the combined observations. Additionally, some of the delivery methods were altered i.e., from group discussions to role-play exercises, and from role-play exercise to group discussions.

Development of the Computer Multi-Dimensional/Target IAT (Md-IAT).

For information regarding the decision making for selecting an IAT to measure automatic attitudes, please refer to chapter 4, section 4.3.2.2. Limited information was available regarding the process of selecting the words for an IAT assessment. The author, therefore, contacted other researchers who had developed IAT programmes to explore how they selected their word choices. Responses indicated that no set procedure had been developed, and word selections were developed during supervision discussions.

For the IAT programme for this research project, the author wanted to incorporate a more robust method other than discussing word lists during supervision, and aimed to develop a more structured process of producing the IAT content. This is provided in Figure 5-2. Once the IAT lists were developed, the four attitude category lists and the two attribute lists were input to an E-Prime 2 programme (Schneider et al., 2002) to generate the IAT programme. An E-Prime programme is an application that enables millisecond-timing precision, which supports researchers to produce a range of ideas that can be executed with fixed or randomised text, auditory and visual arrangements.

The IATs included five blocks, and this format was based on the format of Greenwald et al.'s research carried out in 1998. The computer IAT programme was then developed with a correct and incorrect response application and a Timed Sorting task. The strength of association between attitude targets is measured by determining the average time it takes a participant to sort the words in the third block versus the time taken in the fifth section of the IAT, and a correct and incorrect response application.

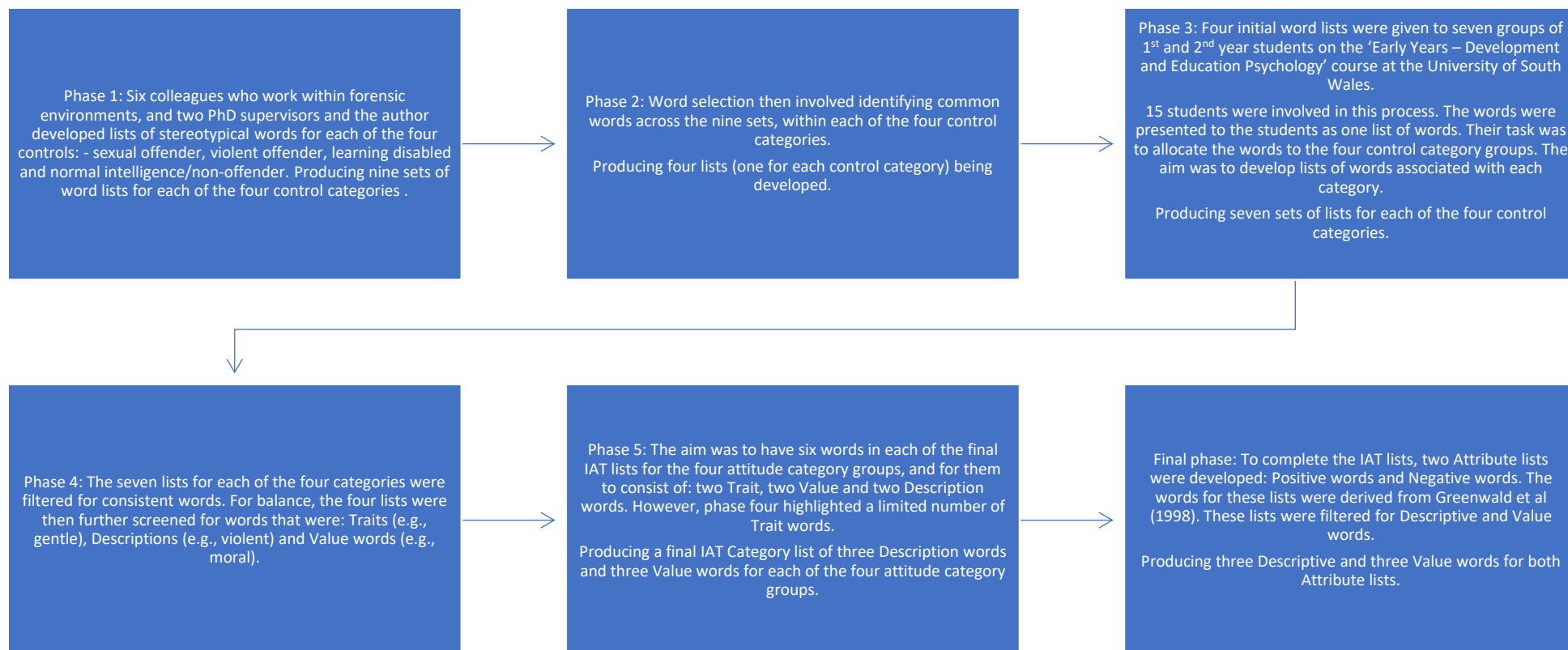


Figure 5-2 Phases in the Development of the Multi-Dimensional/Target IAT

Feedback about the IAT programme, was sought from fellow practitioner colleagues and PhD supervisors. The finalised word lists were discussed with approximately six colleagues. They were asked to complete a trial of the Md-IAT programme. They were asked to give feedback to the research author. Questions asked of colleagues included: How clear were the instructions for the IAT process? How easy or difficult did they find completing the IAT? What were their thoughts/reactions to the attitude contrast lists and the words used? What did they think about the duration in which it took to complete the task? How do they think the staff team would respond to the IAT? Were there any aspects they thought the staff members would have concerns or difficulties with? The method of data collection from this process was informal verbal feedback. This is a limitation and will be discussed later within the Discussion Chapter.

Development of the Pencil and Paper Md-IAT.

When the pencil and paper IAT was developed, the same word lists were used, as it was a pencil and paper manual version of the computer IAT. A ‘name’ method, which is stimuli in the form of names or words was selected, rather than a ‘picture’ method, which uses images as the stimuli (please refer to Section 4.3.2.3 and Appendix 14 for further details).

Statistical Context

This section will provide the general context of statistical considerations applied across the different studies conducted within the thesis. The initial phase of the statistical analysis is to review the descriptive statistics in order to describe any observable patterns and associations of data. This approach is useful as it can help make sense of a lot of data that can seem quite chaotic (Welkowitz et al., 2012). The descriptive analysis was conducted with the use of means, medians, and standard deviations, with the use of tables in order to arrange and display the data.

Methods of Analysis

In attitude research, the main methodology utilised for attitude surveys includes the use of Likert Scales (Likert, 1932), and this is referred to as the method of summated ratings (Fazio & Petty, 2008). Ultimately, Likert data are ordinal and have a limited range, whereas parametric tests presume the data to be continuous and follow a normal distribution. Non-parametric tests tend to be used to analyse ordinal data as they are said to be accurate with ordinal data, although they do not presume a normal

distribution, and there is a concern that non-parametric tests are less able to identify an effect that exists. De Winter and Dodou (2010) evaluated the use of non-parametric and parametric tests, where they measured the competencies of the two-sample t-test and the Mann-Whitney test. The evaluation included a group of 14 distributions of Likert data, and the computer simulation produced independent pairs of random samples that included all possible groupings of the 14 distributions. Results demonstrated both types of analyses produced Type 1 error rates that were virtually equal to the target value and produced almost equal false positive rates for the Likert scale data. As for statistical power, the results showed a diminutive difference between the two types of tests. The debate over non-parametric versus parametric tests seems, therefore, to be less of an issue. In addition to this, attitude survey research (e.g., Hogue, 1995; Harper et al., 2017; Sullivan & Artino, 2013) generally uses parametric tests to analyse the Likert scale data. This further supports the use of parametric tests for this thesis, given that Likert scale data are often used as numeric data, which is used to calculate their mean and standard deviation. Baseline data for this thesis were analysed to assess the assumptions necessary for the use of parametric tests, to apply the most appropriate tests for statistical evaluation. Therefore, data was examined to see if it met normal distribution, homogeneity of variance and interval level data.

Missing Data

Missing data are a frequent problem within studies (Brown & Sleath, 2016). The way missing data are handled varies depending on how much data are missing, and the type of data that is missing, for example, whether it is a single item or a whole questionnaire. It is also important to consider why the data are missing, as this can provide useful information for the study.

How missing data are accommodated is an important issue to consider. The most common option in the Statistical Package for the Social Sciences (SPSS) is that cases with missing data are not included in the analyses. Deleting cases or persons, however, results in a smaller sample size and larger standard errors, and this is an important issue within field studies, where sample sizes are generally small. A potential outcome for this occurrence is that the likelihood of correctly accepting the alternative hypothesis of an effect is reduced. A bias in effect estimates may also be introduced, such as mean differences (from t-tests). The characteristics of responders and non-responders could be different and are important to consider. The missing data, therefore, needs to be

explored before an analysis is conducted (Amsterdam Public Health, Quality Handbook, 2015). Rubin (1976) produced a very useful summary of types of missing data. See Table 5-3 for details.

Table 0.3 Rubin (1976): A Typology for Missing Data

Type of Missing Data	Description
MCAR: Missing Completely at Random	The probability that a value for a variable is missing is not related to the value of other observed variables, or unrelated to the variable with missing values itself. Such as when participants' accidentally miss questions. Thus, the observed values in the dataset are a random sample from your dataset, when it would have been complete.
MAR: Missing at Random (most of the time)	The probability that a value for a certain variable is missing is related to observed values on other variables. Therefore, can be explained by other variables. An example is when older respondents have more missing values than younger respondents. However, within the group of older and younger respondents, the data are still MCAR, and age explains the reason for the missing data. Another example is when respondents with low scores on the first wave are not invited for a second wave.
MNAR: Missing Not at Random	The probability that a value for a certain variable is missing is connected to the scores on that variable itself. An example is that respondents with low income intentionally omit their low-income scores because that infringes their privacy. In that case, the probability that an observation is missing depends on information that is not observed, like the value of the income score, because only low values are missing. MNAR is a serious problem, which cannot be solved with a technique as multiple imputations.

Adapted from Amsterdam Public Health, Quality Handbook (2015).

As a result of this need, the author reviewed the missing data for each of the empirical studies and considered the type of data that was missing. Referring to Rubin's typology of missing data (1976) helped complete this review, and the type of missing data will be stipulated within each study.

Procedure for Missing Data

Missing data was represented with a 'missing data code of 999'. This code was left in place when conducting the data screening methods (see Table 5-3 for more detail). The data was firstly analysed with the missing data being excluded list-wise from the analysis. Then the data was analysed with the missing data being 'replaced' via the SPSS compute calculation of 'Replace missing data', using the 'series mean' method. This approach helped consider whether there was any justification for replacing the data in terms of reducing the error rate.

There are two main methods available to compensate for missing data: method one involves estimation, and method two involves imputation. The IBM SPSS Missing Values 24 manual states that "all methods for estimation give consistent and unbiased

estimates of the correlations and covariances when data are missing completely at random (MCAR)”, which the missing data for each of the empirical studies in this thesis were observed to be. It also indicates that the method of multiple imputations (which would be required if data was to be imputed) would not be appropriate for repeated measures’ designs. As a result of this information, the range of estimation methods was explored including the ‘series mean’, ‘mean of nearby points’, ‘median of nearby points’, ‘linear interpolation’ and ‘linear trend at point’. Upon running a skewness test, the distribution of data was observed to be approximately normal. Due to a normal distribution, the use of the mean was deemed appropriate. If it had not been normally distributed, the median would have been deemed appropriate. When evaluating whether to use the ‘series mean’ or the ‘mean of nearby points’ methods, it was deemed inappropriate to use the mean of nearby points, since the missing data at the follow-up period consisted of a whole data set for the participant, not sections of data. There were consequently no surrounding values to impute. It was concluded that the ‘series mean’ method would be the most suitable to incorporate.

Section Summary

This chapter presented information regarding the development phase of the educational workshop, reviewed which factors were important to include in the workshop and explored how the content mapped onto aspects of the APE and MODE Attitude models. An explanation of the development phase for the multi-dimensional/target IAT was provided as this test was used to evaluate the automatic attitudes, using both a computer-based version and a pencil and paper version. The development phase of the word lists that took place and why such rigour was adapted within this process was discussed in detail. The content of the chapter then covered several key issues relating to the statistical context; literature supporting the use of parametric tests when evaluating Likert scales, and the type and management of missing data. These aspects are relevant across the empirical studies conducted as part of this thesis. This discussion links to the next chapter, where the empirical studies will be reviewed and discussed.

Feasibility for the Research Measures

A Brief Overview of the Empirical Studies

This chapter commences the empirical studies section of the thesis. Here (Chapter 6), Study 1 presents how the multi-dimensional/target computer IAT was evaluated for feasibility.

Chapter 7 includes two studies (Studies 2 and 3), where the evaluation of a staff educational workshop upon both automatic and non-automatic attitudes was conducted. Study 2 evaluated the differences in automatic and non-automatic attitudes of staff members from forensic settings who attended a workshop, as well as evaluating any differences between staff who attended the workshop to staff and student samples that did not attend the workshop. Study 3 evaluated differences in automatic and non-automatic attitudes of staff who had prior knowledge and training of working with men who commit sexual offences, to those who did not.

Chapter 8 discusses Study 4, which investigated the use of a 'low technology' IAT in comparison to the computer IAT with a student sample.

Chapter 9 refers to Study 5, where two evaluations took place, the first exploring any changes in attitudes after completing the educational workshop (staff and students) by comparing the outcomes to those who did not take part. The second evaluation explored differences between the staff and student sample that took part in the workshop.

Introduction

As stated in Chapter 1, there is a lack of literature that has explored the impact of educational workshops within forensic mental health settings upon staff attitudes. Literature is also deficient in assessment of automatic as well as non-automatic attitude change. Most of the research on automatic attitudes has evaluated low-strength attitude groups. A key aspect of automatic attitudes is that they can be formed over many years (Greenwald & Banaji, 2017). Recent research has demonstrated that IAT results are strongly dependent on the target categories (Bading et al., 2020), or has evaluated a singular high strength attitude target group, such as attitudes towards people who commit sexual offences (Malinen, 2014). Within forensic settings, there are often complex issues presented. Currently, there is a lack of literature evaluating the impact of a staff educational workshop upon automatic and non-automatic attitudes towards a

combination of high strength attitude groups, such as attitudes towards individuals with IDD and a history of committing sexual offences. This chapter explores the reliability and validity of a computer-based multi-dimensional IAT (Md-IAT), which was specifically developed to assess the direction of bias for several high strength attitude target groups: individuals with IDD, people with a history of committing sexual offences, and people who commit violent offences. As well as being important to know if the measures selected are reliable and valid in evaluating automatic and non-automatic attitudes, it is also important to determine if the materials used are accessible within forensic settings and whether the materials translate easily to the research participants. Thus, the aim of this chapter is to assess the feasibility of the measures within a forensic mental health setting.

The aim of this chapter supports the overall aim of addressing research questions 1 and 2:

1. To what degree of Internal Consistency does the computer MD-IAT result in?
2. What is the validity of the MD-IAT?
3. What impact does a staff educational workshop conducted in forensic mental health settings have upon staff automatic and non-automatic attitudes towards service users with a history of committing sexual offences?
4. To what extent are staff members' automatic attitudes influenced by the strength of the attitude target group, e.g., individuals with a history of sexual offences, violent offences and IDD? (This will be evaluated with the results for the high strength attitude category groups compared to the low-strength attitude category groups, e.g., non-offender, non-IDD).

Specifically, the key objectives for this chapter are to:

1. Evaluate the reliability and validity of the indirect measure developed for this thesis.

2. Check if participants can understand the questions within the direct measures, understand the instructions and use the technology required to complete the computer IAT.
3. Determine the length of time required for the completion of the direct and indirect measures and identify any modifications required prior to the data collection within the main study.

Reliability and Validity

This study had two primary aims. The first was to assess the reliability of the Md-IAT, whose primary target was men with a history of committing sexual offences. Specifically, internal consistency and test-retest reliability was evaluated. Internal consistency reflects the extent to which items within an instrument measure various aspects of the same characteristic or construct. Internal consistency is a measure of reliability. Reliability refers to the extent to which a measure yields a consistent result each time it is administered, all other things being equal (Hays & Revicki, 2005). Internal consistency of the computer MD-IAT was assessed using the Cronbach's coefficient alpha. Internal consistency estimate of at least .70 was predicted, based on guidelines for scale development and on the scores obtained on IAT's, which have shown to be .80. Similarly, it was predicted that the test-retest reliability would be consistent with average test-retest reliability of prior IATs (.60) (Nosek, Greenwald, and Banaji, 2007). Intraclass Correlation Coefficients (ICC) were used to assess test-retest reliability. This applies to correlations within a set of data, rather than correlations between two different sets of data and is recommended as a measure of reliability of an experimental method (Streiner & Norman, 2008).

The second primary aim was to investigate the construct validity of the computer Md-IAT. Validity is the extent to which a test measures what it claims to measure (Newton & Shaw, 2013). It is essential for a test to be valid in order for the results to be accurately applied and interpreted. There are four types of validity: face validity, content validity, criterion-related validity, and construct validity. Face validity is one of the most rudimentary measures of validity. Effectively, researchers are simply taking the validity of the test at face value by looking at whether it *seems* to measure the target variable (Johnson, (2013). This was done by presenting the finalised word lists for the Md-IAT to fellow practitioner colleagues and PhD supervisors, and asking them to trial the Md-

IAT via the E-Prime computer programme. Feedback was then sought as to whether they believed the Md-IAT seemed to measure the target variables it aimed to target. Responses indicated the Md-IAT had adequate face validity.

Content validity is when test items are adequate for the purpose for which they are intended, i.e., do they measure the concept of focus. Messick (1989) described content validity to have two parts: content representativeness and content relevance. This was done with the input of fellow practitioner colleagues and PhD supervisors (experts) and students (non-experts), where the word lists were produced and refined (please refer to Figure 5-2, for details of this process).

Construct Validity is when a test establishes an association between the test scores and the prediction of a theoretical trait (Ginty, 2013). Fundamentally, construct validity examines whether a test covers the full range of behaviours that make up the construct being measured. This is usually determined by displaying correlations between the measure in question and several other measures that are determined to be theoretically related to it, which is 'convergent validity', or which differ independently from it, and this is 'discriminant' validity (Westen & Rosenthal, 2003). As stated, the second primary aim was to investigate the construct validity of the Md-IAT. Factor Analyses can be conducted to investigate construct validity, but this analysis requires a sample of at least 300 participants (Comrey & Lee, 1992). Due to the design and sites selected for this study, such numbers were not feasible. Therefore, construct validity was evaluated in the following ways. The Md-IAT was compared to several explicit self-report measures of attitudes. To determine convergent validity, the Md-IAT, 'Violent and Non-offenders' (VOND) attitude target group was compared to the Attitudes towards Prisoners (ATP) Scale, and the 'Sexual and Non-offenders' (SOND) attitude target group was compared to the Attitudes towards Sexual Offenders (ATS) scale. Prior IAT's show a wide range of correlations between the IAT and relevant direct reports with an average of .24 (Egloff & Schmukle, 2002). It was predicted that there would be a small-to moderate correlation between the IAT-VOND and ATP, and between the IAT-SOND and the ATS. To determine discriminant validity, the IAT 'Violent Offender and Non-Offender' (VOND) was compared to the ATS, as well as the 'Sexual Offender and Non-Offender' (SOND) being compared to the ATP. The 'Sexual and Violent Offender' (SOVO) Attitude target groups were compared to the ATP and ATS. It was hypothesized that there would be a lower correlation between

these measures and the IAT than between the specific IAT target groups with the related direct measure.

Criterion-related validity can refer to a test that has demonstrated its effectiveness in predicting criteria, or indicators, of a construct. There are two different types of criterion validity: concurrent and predictive. Concurrent validity arises when criterion measures are acquired at the same time as test scores, indicating the ability of test scores to estimate an individual's current state. Concurrent validity was not investigated, as there were no other Md-IAT's to refer to and this will be referred to within the 'Discussion' chapter (chapter 10), a limitation of the validity investigations. Predictive validity is when the criterion measures are obtained at a time after the test (Lin & Yao, 2014). This was reviewed informally at the three-month follow-up period, where talks with staff participants took place and the use of language and examples of practice were observed, again this will be referred to when reviewing the limits of validity tests conducted as part of the 'Discussion' chapter.

Purpose of a Feasibility Study

The main reason for a feasibility study is to evaluate whether a larger scale study is possible (Jeray & Tanner, 2012), by answering essential questions before conducting a full-scale study. This approach helps prevent any unexpected difficulties by identifying any modifications required before commencing the main study.

It is important to acknowledge that conducting a successful feasibility study does not necessarily mean the full-scale study will be equally successful; this is because some difficulties may not come to light until the full-scale study is underway. Despite this, conducting a feasibility study is an important component of a sound study design (Morin, 2013), and forms an essential part of the MRC Model.

The main aim of this feasibility study was ultimately for the associative and propositional measures to be tested to see if they were a) reliable and valid and b) practical to use with staff members in the field environment.

Sites Selected for the Feasibility Study

On developing the educational workshop and computer Md-IAT (see Chapter 5), the author wanted to test the measures objectively with two samples. The sites were therefore specifically selected to recruit participants with limited or no knowledge connected to the direct and indirect measures. The first group selected comprised of

Psychology undergraduate students. The reason for selecting a university population sample was that they would have some theoretical knowledge of issues related to generalised and sexualised violence (due to completing a specific final year module on criminology and forensic psychology and offence related behaviours) but would have limited contact with individuals who have committed sexual offences.

The second group selected was a small group of staff members based in a forensic mental health community group home setting, where care and supervision for individuals with previous criminal conduct were provided. This site was selected because staff members worked with individuals with a range of offence related histories, but not with a history of committing sexual offences. This group would, therefore, have limited experience of working with, and understanding of factors connected with committing sexual offences. Due to the type of service, staffing numbers are relatively low, for example, during a day shift there would generally be three support staff with a unit manager being present. Duties include care and supervision at the unit or within the community when service users accessed voluntary work, social groups, conducted weekly shopping, attended GP appointments, etc. This presented limitations in terms of the number of participants available to take part in the study. This observation reflects the working patterns on similar units, however, and such issues were expected to be replicated within the secure services. It was, therefore, important to consider the practical barriers of implementing the measures and the time constraints of the staff team.

On a more practical level, it was important to test how accessible the evaluation materials would be in both sites. This requirement was particularly important in the case for the use of the computer IAT programme, as a range of forensic settings were planned to be used for the main study, since laptops with the computer IAT programme (E-Prime software) needed to be taken to the sites. If it was feasible to conduct these tests within a small forensic setting, it would therefore be assumed to be replicable on other forensic sites, where training spaces and facilities were increased. The university site chosen would not have the same issues regarding access to equipment, but it was important to assess how accessible the measures were in terms of understanding and completion.

Missing Data

Upon reviewing the missing data from both samples in Study 1 (where a total of 35 participants were approached) and reflecting on Rubin's (1976) typology, the data was deemed to be MCAR. There were 12 missing data sets at Time 2 (3-month delayed follow-up period), nine from the student sample who did not attend the follow-up data collection session, and three from the staff sample who were no longer employed at the service. As explained in the 'Statistical Context, 5.2.2 and 5.2.3 section of Part 2: Empirical Studies, the decision to use the replaced data for the analysis of this feasibility study was made. The initial Md-IAT measures (Time 1) of those who completed the measures at T1 and the follow up period at T2 were compared to those who did not return to the follow up data collection with an Independent-Samples t-test. No significant differences were found ($p > .05$) on each of the Md-IAT attitude categories at T1, between those who completed both visits (visits one and two) and those who completed only visit one. Therefore, there does not appear to be any bias in attitudes towards the service users or attitude target categories, as there were no differences in automatic attitudes to begin with. A range of possible factors could have influenced the decision not to return, such as a lack of motivation to engage in the research, due to the topic or due to there being no personal benefit in taking part. Other unknown factors could include personal circumstances, illness, and staff burnout.

Statistical Analysis

As quantitative data was being collected, analyses were carried out using the Statistical Package for the Social Sciences for Windows (SPSS-version 24, IBM Corp. Released 2016, IBM SPSS Statistics for Windows, Version 24.0, Armonk, NY: IBM Corp). Descriptive statistics were conducted to summarise data in a meaningful way, to show any patterns of emerging data.

Primary Analyses.

To evaluate the first primary aim related to reliability, internal consistency and test-retest reliability was calculated. To evaluate internal reliability of the Md-IAT, Cronbach's Alpha and Intraclass Correlations (ICC) test-retests were conducted. Additionally, to test for construct validity, both Convergent and Divergent Validity, Pearson Correlation tests were conducted. A secondary statistical test was a repeated measures ANOVA. Repeated measures ANOVAs are especially predisposed to the violation of the assumptions of sphericity (Haverkamp & Beauducel, 2017). Sphericity

is the condition whereby the discrepancies of the differences between all combinations of related groups are equal. A violation of sphericity occurs when the discrepancies are not equal.

A formal way of testing sphericity is the use of Mauchly's Test. This test is commonly used because it is automatically produced when conducting a repeated measures ANOVA with SPSS. There are a number of issues with Mauchly's Test of Sphericity, however, which include failing to detect departures from sphericity in small samples and over-detect in large samples. Field (2017) states that Mauchly's Test of Sphericity should be ignored, given its limitations, and a correction should always be applied. When used, Mauchly's Test of Sphericity tests the null hypothesis that the discrepancies of the differences between all combinations of related groups are equal. This means that if Mauchly's Test is statistically significant ($p < 0.05$), the null hypothesis can be rejected, and an alternative hypothesis is accepted due to the discrepancies of the differences not being equal. In this instance, an "appropriate correction must be applied to the *degrees of freedom* of the F-statistic in repeated measures ANOVA. The test works by comparing the *variance-covariance matrix* of the data to an *identity matrix*; if the variance-covariance matrix is a scalar multiple of an *identity matrix*, then sphericity is met" (Field, 2017, p. 1024).

Several authors recommend that when estimates of sphericity are greater than 0.75, the Huynh-Feldt estimate should be used, but when the Greenhouse-Geisser estimate of sphericity is less than 0.75, then the Greenhouse-Geisser correction should be used (Barcikowski & Robey, 1984; Girden, 1992; Huynh & Feldt, 1976). Although reference will be made to Mauchly's Test of Sphericity within the results section of each chapter, because of the issues discussed here an appropriate correction (Huynh-Feldt or the Greenhouse-Geisser) was automatically applied, the decision as to which related to the outcomes stated above.

The repeated measures ANOVA was selected because the study was investigating changes in mean scores for six separate conditions, and the variables for this study were measured using the same participants in all conditions, with a separate ANOVA being conducted on data collected at Time 1 (T1) and at Time 2 follow-up (T2).

Study 1 – Feasibility Study

Participant Information

The feasibility study included a combination of two samples. The first sample consisted of 26 (N = 4, 15% male; N = 22, 85% female; mean age = 22, SD = 5.34) psychology undergraduate students based at a university in South Wales. The method of sampling selected was purposive sampling, which is where members of a group are purposefully sought. This selection was done through the student Psychology Representative placing an advert onto a specific module site for the Psychology undergraduate virtual learning environment. The students received credits for taking part in the research. All the students had attended psychology, criminology, and forensic psychology lectures as part of a specific module they had undertaken as part of their third-year studies. Therefore, the questionnaires were believed to be appropriate, given the material they would have encountered as part of their undergraduate studies and the material they would have been exposed to by the media.

The second population site included nine staff members (N = 6, 67% female; N = 3, 33% male; mean age = 39, SD = 8.26) based at two connected community group homes. The same method of sampling took place, which was through the unit managers informing staff of the research and asking who wanted to take part. The service user population were adults detained under the MHA on section 3 (treatment order), on a Community Treatment Order (CTO; where an individual is supervised when leaving a hospital environment) or were informal (where individuals come into hospital voluntarily, and receive support within the community voluntarily, and therefore are not detained under the MHA) for mental health problems.

The service users had a primary diagnosis of IDD; some had a co-morbid mental health diagnosis, and each service user had a forensic history. The staff provided 24-hour care and supervision to both units. One of the units provided care specifically for male service users and the other unit provided care specifically for female service users.

The reason for grouping the student and staff groups together is due to the aim of the feasibility study, which is to evaluate the reliability, validity, and accessibility of the measures. The purpose is not to look at differences between participants.

Table 0.1 Demographic Composition of Study 1 Sample

	N		% of Sample	
	Staff	Student	Staff	Student
Gender				
Male	3	4	33.33	16
Female	6	22	66.66	84
Age				
19-24	0	19	0	76
25-35	3	5	33.33	20
36-46	4	1	22.22	4
47-57	2	0	22.22	0
Educational Attainment				
Lower than Bachelors	6	21	22.22	84
Bachelors	1	4	11.11	16
Higher than Bachelors	0	0	0	0
Other	1	0	11.11	0
Know Someone in Prison				
Family Member	1	4	11.11	16
Friend/Associate	1	3	11.11	12
Been in Trouble With the Law	1	1	11.11	4
Been a Victim of a Crime	6	10	66.66	40
Prior Relevant Work/Voluntary	3	3	33.33	12
Prior Relevant Training	4	1	44.44	4

Note: N = 35.

Materials⁷

Direct Measures.

Demographic Questionnaire

A demographic questionnaire was developed specifically for this study. Information obtained included age, gender, race, place of origin (city/rural), educational attainment, religious group/identification, political group/identification, experience of family or friends who have been in prison, or if they themselves had been in trouble with the law, experience of either being a victim or perpetrator of a crime, whether they had worked or completed voluntary work within a forensic environment, and whether they had attended previous training relevant to working with individuals who had committed sexual offences.

⁷ Please note, all copies of Materials can be found within the Appendices.

Brief Knowledge Survey

This survey was developed by the author specifically for this study as a simple measure to obtain a brief and quick insight as to the knowledge held, prior to training, about facts and myths related to sexual offences. The survey consisted of six questions, such as: “What percentage of sexual assaults of adults do you believe were committed by strangers?” “What percentage of convicted persons who have committed sexual offences do you believe will commit another sexual offence?”

Working With Offenders Questionnaire (WOQ)

This questionnaire was developed by Hogue (1995), and it consisted of 20 questions examining a range of issues relating to providing treatment groups for people who commit offences who have committed sexual offences and staffs’ attitudes to working in this area. These questions were intended to provide a general picture of staff beliefs about providing treatment interventions for individuals who have committed sexual offences, as it might impact upon the staff themselves. It is not intended to provide a comprehensive assessment of all possible related attitudes.

ATP Scale

This scale was developed by Melvin et al. (1985) and contains 36 statements of attitudes to prisoners, such as “Prisoners should be under strict, harsh discipline,” and “If a person does well in prison, he should be let out on parole.” The participants are asked to rate their agreement via a Likert-type scale, where responses range from Disagree Strongly, Disagree, Undecided, Agree and Agree Strongly. A total of 19 of the items are reverse scored, with each item receiving a score of 1-5. A score of 1 represents the most negative attitude and a score of 5 represents the most positive attitude. A constant of 36 is removed from the sum score, which makes the possible scoring range from 0 to 144. Higher scores indicate that prisoners are regarded as normal persons who are capable of positive change, whereas lower scores are seen as prisoners being persons who are deviant and incapable of positive change.

ATS Scale

This scale was developed by Hogue (1993) and was adapted from the Attitudes to Prisoners scale (Melvin et al., 1985) by replacing the word ‘prisoners’ with ‘sex offenders’. It is a self-report measure, which consists of 36 statements aimed to collect participants’ evaluative and affective judgements of people who commit sexual

offences. The participants rate their level of agreement with each statement using a 5-point Likert scale (Strongly Disagree, Disagree, Undecided, Agree, Strongly Agree). The same scoring process is applied for the ATS as for the ATP scale. The lower the score, the more negative the attitude towards the offender group, and the higher the score, the more positive the attitude towards the offender group.

The CATSO Scale

The CATSO scale was developed by Church et al. (2008). It was designed to examine attitudes, perceptions and stereotypes concerning people who commit offences who had committed sexual crimes. The CATSO is an 18-item self-report measure. The scale requires participants to rate their level of agreement or disagreement with 18 statements concerning people who have committed sexual offences, such as: “With support and therapy, someone who committed a sexual offence can learn to change their behaviour” and “A sex offence committed against someone the perpetrator knows is less serious than a sex offence committed against a stranger,” using a 6-point Likert scale (Strongly Disagree, Disagree, Probably Disagree, Probably Agree, Agree, Strongly Agree). Scores for each of the items are summed and provide a composite score that can range from 18-108, with higher scores indicating more negative views about people who commit offences who have committed sexual crimes.

Indirect Measure.

Computer Implicit Association Test

The IAT (Greenwald et al., 1998) is an accommodating task that can be used to assess most associations between pairs of concepts. The IAT can be used to assess comparative preferences between pairs of objects or categories. It can also be used to assess semantic associations (e.g., stereotypical associations between black and white people, and the attributes of being athletic versus intelligent). The type of target groups can also be accommodated, which may include any pair of objects or categories that can be contrasted in a meaningful manner (e.g., male vs. female).

Multi-Dimensional/Target IAT Procedure

Please refer to Chapter 4, section 4.3.2.2 for information related to the IAT process in general and the multi-dimensional/target IAT used within this thesis. The main evaluation (IAT-effect) takes place at tasks (blocks) three and five, for example, faster responses to sorting ‘sexual offender’ words and pleasant words and ‘non-offender’

words and unpleasant words in task three, compared to the reversed pairings in task five, indicate more positive associations to the ‘sexual offender’ words. If the mean score is negative, this indicates the responses for task 3 are slower than for task 5. This outcome indicates a preference for task 5, e.g., indicating a preference for the non-offender/pleasant word combinations.

Table 0.2 Response Times to Task 3 and Task 5 of the Computer IAT and Direction of Bias.

Attitude Pairing	Block Number Presentation	Mean Response Times (MRT)	Direction of Bias
Learning Disabled and Pleasant Compared to Non-Learning Disabled and Unpleasant	3	Faster response to task 3 (Positive MRT)	Task 3
Non-Learning Disabled and Pleasant Compared to Learning Disabled and Unpleasant	5	Faster response to task 5 (Negative MRT)	Task 5

Power Analysis.

An a priori power analysis was conducted using G*Power version 3.1.9.7 (Faul et al., 2007) to determine the minimum sample size required to test the study hypothesis for small sample numbers (Kyonka, 2019). Results indicated the required sample size to achieve 80% power for detecting a medium effect, at a significance criterion of $\alpha = .05$, was $N = 24$ for a repeated measures ANOVA. Thus, the obtained sample size of $N = 31$ is adequate to test the study hypothesis.

Design

The design was a ‘within-subjects’ design as each participant completed the same measures at two different points. For this study, this measure was taken at an initial and delayed period (approximately three months after the initial testing period). The dependent variables were level of knowledge and awareness of myths and facts associated with sexual offences; perceptions of working with people who commit offences, attitudes towards prisoners, attitudes towards people who have committed sexual offences, and perceptions of people who have committed sexual offences when in the community. The independent variable was ‘time’, as the measures were repeated over two time periods, and the staff and student participants were analysed as one sample. Therefore, a repeated measures ANOVA was selected as the study was investigating changes in mean scores for six separate conditions, with variables for this study being measured with the same participants in all conditions. A separate ANOVA was conducted on data collected at Time 1 (T1) and Time 2 (T2) follow up.

Procedure

Prior to taking part in the research, potential university participants were recruited via the university psychology social media page, where they were provided with information about the research and invited to take part. Students who signed up to take part in the research then attended a research session. Potential staff participants were recruited via the unit managers, who provided them with information about the research and invited them to take part. For both samples, each potential participant was provided with an information sheet, a consent form and a debrief sheet, with the information and debrief sheets providing details of relevant support agencies to contact, if any of the research material raised issues for them. The author read through the information sheets, checked participants' understanding of the information, asked potential participants if they had any queries, and responded to them accordingly. The author then talked through the consent form and informed the individuals that they did not have to take part in the research if they did not want to or felt uncomfortable with the content of the research. The author also highlighted that if they decided to take part, they could withdraw from the research at a later point (up to four weeks post-data collection) if they no longer wanted their data included in the research. Those individuals who wanted to take part indicated this on the consent form, and those that did not also indicated their decision and did not take part in the remainder of the research session.

Following agreement to participate in the research, the group completed the following process once consent was obtained. (Please refer to Appendices 4, 5 and 6 for copies of relevant information and amendments made based on participant feedback).

Procedure for Direct Measures

Each participant completed the direct measures first. This took place within a lecture room for the student sample, and a training venue for the staff sample, where they were sat at a table and a direct measures booklet was placed faced down. Each participant had plenty of space (for privacy) between themselves and the next participant. The author asked the participants to turn their booklets over; these contained the measures previously described in the 'Materials' section (section 6.3.2) and Table 4.1 (also refer to Chapter 4, section 4.2.1 and Appendices 7 to 11 for further details), including a Brief Knowledge Survey and a demographic questionnaire which was completed by each participant at the point of first data collection. The author proceeded to explain the

instructions for each of the measures within the booklet. The participants were asked if they had any questions before commencing the study. They were instructed to complete each question on each booklet and to do this in silence, and to direct any questions they may have had to the researcher. The participants were also informed that completion of the questionnaires was not timed, but that they should work through them as quickly as they could.

Procedure for Indirect Measure - Computer Md-IAT

On completion of the direct measures booklets, participants were taken to a separate space to complete the computer Md-IAT. For the student sample, this space was a psychology laboratory room (holding up to 10 participants at a time), where they were allocated a laptop. For the staff sample, this space was in a separate room (holding up to three participants at a time). The author started the E-Prime programme and logged a number for each participant. The author explained the procedure for the computer-Md-IAT individually for each participant and asked if they had any questions. The author then set the programme ready for the participant to commence the experiment. At this point a display was presented at the top of the computer screen, which explained the task by giving each of the instructions; the duration of this instruction remained visible until the participant selected any key to continue. The stimulus display ended when the participant responded to the task. Participants were instructed to respond as quickly as possible by pressing the 'D' or 'K' keys, which were colour coded (D = green, K = red) to correspond with the colour coded boxes on the computer screen — a green box on the left side of the screen and a red box on the right side of the screen. An example of this setup would be as follows: the green box had the category 'Normal Intelligence' and the red box had the category 'Learning Disabled'. The named category in the box switched as the IAT programme progressed. The display remained until the participant clicked a response key. For each task, the stimuli words fell within two of the four categories ('violent offenders', 'sexual offenders', 'normal intelligence/non-offender', 'learning disabled'), and two quality categories ('pleasant' or 'unpleasant').

The order in which the attitude categories were presented was randomised (as set up in the E-prime programme). The IAT Blocks were not randomised, and words for each attitude category list were presented in a random order in the top centre section of the screen. The instructions were presented in black text on a white background (please refer to appendix 12 for screenshots of the process). This process was repeated until all

participants had completed both the direct measure booklet and the indirect test (the computer IAT). As this was a pilot study of the measures, the educational workshop was not delivered to the participants. The same data collection procedure was repeated approximately three months later, with the students invited to take part in the repeated measures, via the psychology social media page.

The researcher was present during the data collection periods and checked multiple times if the participants had any queries or concerns as to the research and what was expected of them. The researcher circulated around the participants to check they clearly understood the requirements and also if anyone had any apprehension or distress about the content of the research.

Results

Reliability and Validity of the Md-IAT.

To evaluate internal consistency of the Md-IAT, Cronbach's Alpha was evaluated for each of the IAT attitude groups. The Md-IAT was completed by 35 participants. The Learning Disabled, Non-Learning Disabled (LDNLD) at T1 was ($\alpha = .89$), for the follow up stage T2 ($\alpha = .86$). For the Sexual Offender and Learning Disabled (SOLD) category at T1, ($\alpha = .88$), at T2 ($\alpha = .89$). For Sexual Offender and Non-Offender (SOND) at T1 ($\alpha = .78$), at T2 ($\alpha = .91$). For Sexual Offender and Violent Offender (SOVO) at T1 ($\alpha = .93$), at T2 ($\alpha = .89$). For Violent Offender and Learning Disabled (VOLD) at T1 ($\alpha = .88$), T2 ($\alpha = .66$), and finally, for the Violent Offender and Non-Offender (VOND) at T1, ($\alpha = .88$), and T2 ($\alpha = .87$). Thus, the Md-IAT showed a 'Good' level of internal consistency at T1 and T2, with 'Excellent' for SOVO at T1 and SOND at T2. SOND demonstrated an 'Acceptable' level at T1, and VOLD demonstrated a 'Questionable' level at T2 compared to a 'Good' level at T1.

Intraclass correlation (ICC) estimates and their 95% confident intervals were calculated based on a single rater ($k = 10$), consistency definition, two-way mixed effects model. ICC for LDNLD = 0.85 with 95% confident interval = 0.76-0.91; SOLD = 0.89 with 95% confident interval = 0.83-0.94; SOND = 0.80 with 95% confident interval = 0.69-0.89; SOVO = 0.91 with 95% confident interval = 0.86-0.95; VOLD = 0.84 with 95% confident interval = 0.74-0.91 and VOND = 0.85 with 95% confident interval = 0.76-0.91. Based on the ICC results, the test-retest reliability of the Md-IAT is "good" to

“excellent”. Both the internal consistency and test-retest results are in line with previous research results.

The second primary aim was to determine construct validity of the Md-IAT by calculating convergent validity and discriminant validity with the direct self-report measures. To test convergent validity, the Violent Offenders and Non-Offenders (VOND) IAT attitude target group was compared to the Attitude towards Prisoners (ATP) scale. The correlations with the VOND IAT and ATP was small and negative at T1, and a small positive correlation at T2 delayed period. The test discriminant validity, the VOND was also compared to the ATS. The correlations were small and negative at T1 and small and positive at the delayed period, T2.

Table 0.3 Descriptive Statistics and Correlations for Md-IAT (VOND) and ATP and ATS.

Variable	N	M	SD	1	2	3	4	5	6
VONDT1	35	176.64	396.97	–					
ATPT1	35	89.53	15.16	-.25	–				
ATST1	35	78.07	19.98	-.21	.69**	–			
VONDT2	35	336.52	334.72	.21	.05	.02	–		
ATPT2	35	88.38	11.97	.12	.41*	.49**	.17	–	
ATST2	35	79.95	13.02	.27	.31	.44**	.26	.72**	–

*p <.05. **p<.01.

To test convergent validity, the Sexual Offenders and Non-Offenders (SOND) IAT attitude target group was compared to the Attitude towards Sexual Offenders (ATS) scale. The correlations with the SOND IAT and ATS was small and negative at T1, and a small positive correlation at T2 delayed period. The test discriminant validity, the SOND was also compared to the ATP. The correlations were small and negative at T1 and small and positive at the delayed period, T2.

Table 0.4 Descriptive Statistics and Correlations for Md-IAT (SOND) and ATP and ATS T1 and T2.

Variable	N	M	SD	1	2	3	4	5	6
SONDT1	35	394.90	686.27	–					
ATPT1	35	89.53	14.16	-.19	–				
ATST1	35	78.07	19.98	-.14	.69**	–			
SONDT2	35	307.17	289.01	.01	-.07	-.15	–		
ATPT2	35	88.38	11.97	.05	.41*	.49**	-.01	–	
ATST2	35	79.95	13.02	.04	.31	.44**	.13	.72**	–

*p<.05. **p<.01.

To test discriminant validity between the Md-IAT categories and self-report measures, the Sexual Offenders and Violent Offenders (SOVO) IAT attitude target group was compared to the Attitude towards Prisoners (ATP) scale and the Attitudes towards Sexual Offenders (ATS) scale. The correlations with the SOVO IAT and ATS was small and negative at T1, and a small negative correlation at T2 delayed period. The correlations with the SOVO IAT and the ATP were small and negative at T1 and small and negative at the delayed period, T2.

Table 0.5 Descriptive Statistics and Correlations for Md-IAT (SOVO) and ATP and ATS.

Variable	N	M	SD	1	2	3	4	5	6
SOVOT1	35	66.94	251.18	–					
ATPT1	35	89.53	15.16	-.03	–				
ATST1	35	78.07	19.98	-.17	.69**	–			
SOVOT2	35	3.19	237.09	-.07	.05	-.06	–		
ATPT2	35	88.38	11.97	-.22	.41*	.49**	-.01	–	
ATST2	35	79.95	13.02	-.24	.31	.44**	-.04	.72**	–

*p<.05. **p<.01.

Table 6-5 presents the descriptive statistics and correlation outcomes for the discriminant validity tests for the ‘Sexual Offender vs Violent Offender’ (SOVO) automatic attitude contrast group, in comparison to the direct measures.

The results from these tests indicate small correlations were found when testing for convergent and discriminant validity. No significant correlations were found. A significant limitation was the sample size, as factor analyses could not be conducted to test construct validity of the Md-IAT. Therefore, given the sample size and use of replaced data for the missing data at the follow-up stage, caution must be given when interpreting the construct validity of the Md-IAT and the outcomes found.

Secondary Analyses

Indirect Measures of Automatic Attitudes (Computer IAT Response Times) for Within-Subject participants.

Descriptive Statistics

The descriptive statistics provide the strength of association between a pair of contrasted concepts. If responses are faster at task 3 than task 5, it indicates the evaluation at task 3 is more robustly connected than the reverse pairings at task 5. Thus, if the mean score is negative, this indicates that responses for task 3 are slower than for task 5, indicating a preference for the word pairings at task 5. An example of this is

where the IAT paired Learning Disability and Pleasant words and Non-Learning Disability and Unpleasant words in task 3. In this case, a positive mean score would indicate a more robust connection of Learning Disability and Pleasant, than Non-Learning Disability and Pleasant. In contrast, a negative mean score would be a more positive evaluation of Non-Learning Disability and Pleasant, than Learning Disability and Pleasant.

Each pair of target groups indicated that responses were faster to task 5 of the computer IAT programme, apart from target groups: Sexual Offender versus Violent Offender, where the responses were faster to task 3 of the computer IAT for T1 and T2. The Violent Offender versus the Learning Disabled target groups were also faster to task 3 at T2, but faster to task 5 at T1. The results, therefore, indicated a positive evaluation of Non-Learning Disabled compared to Learning Disabled, Sexual Offender and Violent Offender. They also indicated a positive evaluation of Learning Disabled compared to Sexual Offender but a more positive evaluation of the Sexual Offender than the Violent Offender group. For the comparison between Learning Disabled and Violent Offender, results were more positive for Learning Disabled at T1 but surprisingly for Violent Offender at T2. Finally, a positive response was seen towards Non-Learning Disabled compared to Sexual Offender and Violent Offender.

Table 0.6 Means, Standard Deviations and Repeated Measures ANOVA Statistics for Computer IAT variables.

Attitude Comparison Group	M (SD)		F ratio	Df	η^2
	T1	T2			
Learning Disabled vs. Non-Learning Disabled	-87.58 (469.324.)	-194.90 (252.14)	1.31	1, 34	0.04
Sexual Offender vs. Learning Disabled	-98.07 (290.28)	-147.88 (185.98)	0.958	1, 34	0.03
Sexual Offender vs. Non-Offender	-391.23 (686.41)	-312.807 (287.61)	0.395	1, 34	0.01
Sexual Offender vs. Violent Offender	66.19 (251.19)	10.52 (237.14)	0.86	1, 34	0.03
Violent Offender vs. Learning Disabled	-38.78 (336.39)	8.08 (211.810)	0.65	1, 34	0.02
Violent Offender vs. Non-Offender	-178.88 (396.83)	-314.02 (341.24)	2.91	1, 34	0.08

Note: N = 35. ANOVA: Analysis of Variance; IAT: Implicit Association Test; T1, Time 1; T2; Time 2 (3 month delayed). * $p < 0.05$ ** $p < 0.01$

Inferential Statistics

Data were analysed using a repeated measures analysis of variance for a ‘within-subjects’ factor of time (T1 and T2). As stated previously, degrees of freedom were automatically corrected using either the Greenhouse-Geisser or Huynh-Feldt estimates of sphericity depending on whether the Greenhouse-Geisser estimate of sphericity is less than or greater than 0.75.

Results showed there were no statistically significant differences in response times for any of the attitude contrast groups between Time 1 and Time 2.

Direct Measure Results for ‘Within-Subjects’ Participants ‘Brief Knowledge Survey’ mean ‘Under or Overestimation’ Scores at Time 1 and Time 2.

Descriptive Statistics

The results from the Brief Knowledge Survey indicate a reduction of ‘within-subjects’ participants’ overestimations at T2 for questions 1, 2, 4, 5 and 6 and an increase in estimation for question 3. These responses at T2 were all in the right direction, apart from question 3. The level of overestimation was, however, not high to begin with.

Table 0.7 Means, Standard Deviations, and Repeated Measures ANOVA Statistics for the Brief Knowledge Survey Questionnaire for Time Period 1 and 2.

Knowledge Question Number	T1	T2	F ratio	Df	η^2
	M (SD)	M (SD)			
K1: What percentage of sexual assaults of adults do you believe were committed by strangers?	12.34 (20.43)	8.10 (12.86)	3.50	1,34	0.09
K2: What percentage of people who have committed sexual offences do you believe come to the attention of the authorities?	6.24 (10.49)	5.46 (10.73)	0.20	1,34	0.01
K3: What percentage of people who commit sexual assaults against adults do you believe were sexually abused as children?	9.66 (17.65)	10.18 (16.71)	0.06	1,34	0.00
K4: What percentage of people convicted for committing sexual offences do you believe will commit another sexual offence?	18.37(25.58)	15.71 (20.26)	1.58	1,34	0.04
K5: What percentage of individuals convicted for rape do you believe reoffend in a sexual manner?	16.26 (23.07)	13.82 (18.70)	1.51	1,34	0.04
K6: What percentage of individuals convicted for committing sexual offences against children do you believe reoffend in asexual manner?	19.45 (27.78)	16.62 (21.51)	2.87	1,34	0.08

Note: N = 35. ANOVA: Analysis of Variance. Negative mean scores indicate ‘underestimation’. Positive mean scores indicate ‘overestimation’. * $p < 0.05$. ** $p < 0.01$

Inferential Statistics

Data were analysed using a repeated measures analysis of variance with a ‘within-subjects’ factor of ‘Knowledge’ (question 1, 2, 3, 4, 5, 6). Degrees of freedom were automatically corrected using either the Greenhouse-Geisser or Huynh-Feldt estimates of sphericity.

All effects are reported as significant at $p < 0.01$, unless stated otherwise. Results showed no main effect of ‘Time’ for any of the six questions.

Attitude and Perception Measure Results.

Descriptive Statistics

The descriptive statistics provide the mean scores calculated at T1 and T2 for each of the direct measures.

The results indicate a slight increase in scores at T2 for ATS and a slight decrease for the ATP, WOQ and CATSO at T2, but, overall, the results for each of the four direct measures were similar for T1 and T2.

Inferential Statistics

Data were analysed using a repeated measures analysis of variance with a ‘within-subjects’ factor of time (T1 and T2). As stated previously, degrees of freedom were automatically corrected using either the Greenhouse-Geisser or Huynh-Feldt estimates of sphericity.

Table 0.8 Means, Standard Deviations, and Repeated Measures ANOVA Statistics for Direct Measures: - ATP, ATS, WOQ and CATSO.

Questionnaire	T1	T2	F ratio	Df	η^2
	M (SD)	M (SD)			
ATP	89.53 (15.16)	88.38 (11.97)	0.206	1, 34	0.01
ATS	78.07 (19.98)	79.95 (13.02)	0.365	1, 34	0.01
WOQ	58.42 (8.31)	57.74 (3.30)	0.247	1, 34	0.01
CATSO	46.88 (7.45)	46.02 (5.24)	0.348	1, 34	0.01

Note: N = 35. ANOVA: Analysis of Variance; * $p < 0.05$. ** $p < 0.01$; ATP: Attitude Towards Prisoners; ATS, Attitude Towards Sexual Offenders; WOQ, Working With Offenders’ Questionnaire; CATSO, Community Attitudes Towards Sexual Offenders.

All effects are reported as significant at $p = 0.05$, unless stated otherwise. There was no main effect of this for any of the four direct measures. The ATP, $F(1, 34) = 0.21$, $p = .652$, $\eta^2 = 0.01$. The ATS, $F(1, 34) = 0.36$, $p = .550$, $\eta^2 = 0.01$. The WOQ, $F(1, 34) =$

0.25, $p = .623$, $\eta^2 = 0.01$. The CATSO, $F(1, 34) = 0.35$, $p = .559$, $\eta^2 = 0.01$. These results indicate that similar levels of positive ATPs, similar levels of confidence in working with people who commit offences, and people who commit sexual offences based in the community were held at the two different time periods.

Summary

Most of the responses to the attitude category groups at T1 and T2 were biased in the direction expected, apart from the group ‘Sexual Offender versus Violent Offender’, where the participants’ responses indicated a bias towards people who commit sexual offences compared to people who commit violent offences. Another unexpected outcome related to the group ‘Violent Offender versus Learning Disabled’, where participants’ bias was toward individuals who committed violent offences at T2.

There was a large variation in the mean scores of the different attitude category groups. This outcome was expected, as some of the attitude category groups were said to be more difficult to categorise than others (please refer to the qualitative comments in section 6.3.9 and tables; 6.9 & 6.10).

For the direct measures evaluating non-automatic attitudes, these were all understood by the participants, and the outcomes were as expected, given there was no educational intervention. For the Brief Knowledge Survey, there were a low number of correct responses at T1 and T2, which was expected due to there not being an intervention. Results for the ATP and ATS indicated low levels of positive attitudes towards prisoners and individuals who have committed sexual offences. Results for the WOQ indicated low levels of confidence in working with people who have committed sexual offences, and, for the CATSO, low levels of positive attitudes were indicated towards those with a history of sexual offences in the community. All of these results reflect the sample selected for this pilot study, as they did not have direct contact or previous training in working with people with a history of sexual offences.

Summary of Statistical Results

Computer IAT Response Times.

The results from the repeated measures ANOVA showed that the computer IAT Response Time analysis performed as intended and detected the differences in the participants’ response time to the different attitude categories at T1 and T2. The data

provided information that enabled the direction of bias towards the attitude groups at T1 and T2 to be displayed.

Data evaluation with the missing data being replaced demonstrated a reduction in the standard deviation and therefore reduced the error rate.

Direct Measures

The Brief Knowledge Survey indicated that the participants' level of correct knowledge was minimal and reinforced the myths presented. There were no significant differences between T1 and T2: this was to be expected as no training intervention was provided. The results also showed that the Brief Knowledge Survey was working as intended in measuring the level of support for associated myths related to individuals who have committed sexual offences.

For the following measures: ATP, ATS, WOQ and the CATSO, the ANOVA results showed that the relevant information was being detected, and there were no significant differences between T1 and T2. Again, this was as expected given that there was no intervention provided.

The study objectives relates to understanding instructions for the direct and indirect measures, staff were asked by the researcher if they had any questions about the explanation of what was required when completing the measures and the instructions provided on the measures themselves. Overall, there were very few questions from the participants. One staff participant asked for clarification for the ATS. They queried whether they should think of someone who has committed sexual offences against children or adults. This was clarified by the researcher, by stating no direction would be given, but that they were to note at the bottom of the questionnaire if they had considered a particular age range of victim, e.g., child or adult whilst completing the questions. For the indirect measure, a number of participants queried the meaning of the word 'rabid'. An explanation was provided by the researcher and understanding was checked by asking the specific participants to explain in their own words what they now understood this word to mean. The queries raised by participants during the data collection period were recorded to be incorporated into further studies. When the research author asked or checked if participants had any concerns or queries about the measures in terms of understanding or concerns of the topic of research, there were no concerns raised about the topic of the research, but some participants discussed how

they found it difficult to polarise traits or qualities depending on the attitude contrast groups. These are referred to within the ‘qualitative comments’ below.

Staff Comments

Feedback from the participants was collected on their opinions and experiences of completing the measures. This was done once all participants had completed the measures. Staff were asked for feedback as a whole group, as well as asking for any individuals who wanted to give feedback on a one-to-one basis with the researcher. The range of questions asked included: How would you describe your experience of completing the direct measures/ computer measure? What/if any – difficulties did you encounter when completing the measures? From a practical perspective in terms of difficulties in completing the measures; understanding of the instructions, or emotional difficulty due to the topic of the research. How do you feel about being asked to complete the measures again at the delayed data collection stage? What changes/modifications would you suggest and why?

Feedback received at T1 of the perceived effectiveness and/or appropriateness of the measures was used to develop the study methodology. The main patterns derived from the participant comments are split into two subsections: i) Indirect measures (computer IAT), and ii) Direct measures (psychometric questionnaires). The feedback is broken down into ‘process’ and ‘emotional’ difficulties.

The most common word cited for both the indirect and direct measure was ‘Difficult’, and an investigation that was active at the time of data collection. This attracted media attention to a range of sexual crimes committed by several high-profile TV stars that resulted in arrests (Operation Yewtree, Metropolitan Police Service, 2012). Sexual offences against children committed by people in high profile positions in television were, therefore, frequently referred to in the news. These events may have biased the participants in terms of the type of offence considered (sexual offences against children rather than sexual offences against adults) when giving their responses to the assessment measures.

Table 0.9 Feedback for the Direct and Indirect Measures.**Measure Process Difficulty****Indirect – Computer IAT**

One participant felt the IAT polarised words, which they said they would not want to do.

Direct Measures – Brief Survey, ATP, ATS, WOQ and CATSO

A couple of the participants found one question within the ATP and ATS difficult to answer. This related to how they would feel if they lived next door to a prisoner or someone known to have committed sexual offences. Although they did not provide a detailed explanation as to why this was, they referred to the difficulty they found in distinguishing between personal and professional opinions when answering.

Some participants found the answers they gave to the questionnaires depended upon what type of offence they were thinking of.

Emotional Difficulty

Participants did not want to label categories, particularly the Learning Disability stereotypical words.

Participants did not like the word ‘Moral’, as they did not want to judge which group was moral. They felt both category groups were moral.

Some participants found the Learning Disability and Non-Learning Disability the most difficult category of words to respond to, as it made them feel uncomfortable in deciding.

One participant disagreed with many of the IAT categories and did not want to answer them.

One participant found it strange to have to think about these issues, as they do not usually think about such issues.

One of the participants found some of the questions upsetting and did not wish to return for the delayed data collection. This highlighted the importance of the steps taken to ensure informed consent is obtained and relevant support agencies being made clear within the documentation available to all potential participants, prior to and post engagement with the research. In spite of this, participants may become unexpectedly triggered, and this emphasises the need for the debrief process and support.

Table 0.10 ‘Process’ and ‘Emotional’ Themes for Both the Indirect and Direct Measures.

Measure	Themes	
	Process Difficulty	Emotional Difficulty
Indirect Measure	Difficult to respond to ‘polarised’ words	Labelling categories Categorising Learning Disabled versus Non-Learning-Disabled attitude groups Not wanting to categorise words
Direct Measures	Difficult to answer some questions Answers depended upon offence type the participant had in mind	Topic of conversation was strange to consider (1 participant) Topic of conversation was upsetting to consider (1 participant)

Summary of Staff Comments

Upon reflecting on the objectives set for this chapter, it can be concluded that the information received from the participants indicated there were some difficulties with the computer IAT measure. These issues, however, related to how the person felt about the target attitude groups, which may convey the participants’ attitudes towards the different attitude category groups. This aspect correlates to questions that the thesis is exploring and the purpose of the IAT. In terms of the purpose of the feasibility study, the feedback did not indicate that the computer IAT was difficult to understand or complete. Similar feedback was received for the direct measures. One participant, however, indicated that they found the material upsetting (predominantly the attitude words related to learning disabilities), and this issue may have influenced the retention of other participants at T2 of the study. No further feedback of this nature was presented to the researcher or the researcher’s supervisor. No feedback indicated the measures were difficult to understand or difficult to complete because of any complexity within the instructions provided, or because the topic related to sexual offences. This indicated that no modifications were required prior to the main research being conducted. However, the areas of feedback received from participants in the feasibility study, were incorporated into information verbally presented by the author when explaining the research to potential participants. This took place during the period in which the author checked participants’ understanding of the research and training process to ensure any consent given, was informed consent. Therefore, the research author took time to ensure all potential participants were aware of the aim of the research and potential upset that could be triggered by the topic or words used within the research. Potential participants were always clearly informed that they did not have to give consent, that it was

voluntary, and no consequences would be encountered by choosing not to take part. They were also informed if they chose to take part, and changed their minds part-way through, they could ask to speak to the researcher in private and withdraw. This was for the researcher to check if the individual required support and to advise them of the different support options. Information regarding the relevant support mechanisms (internal and external to the university/ secure services) were reiterated prior to participants taking place in the research and upon completion of each research time period. The research author referred to the BPS Ethical Code of Conduct and the HCPC Ethics Standards of Proficiency that were in place and acted accordingly. The feedback regarding the focus of the ATS questions and the word 'Rabid' for the computer IAT, were also covered within the research authors explanation of the measures, and participants were asked to inform the researcher if they were unsure of any of the words or instructions during the data collection period.

Therefore, upon reviewing the results of the study and taking on board the verbal feedback from participants at the end of T1, the questions within the indirect and direct measures seemed to provide relevant information in terms of the research questions. The results from this study indicate the direct measure instructions were followed and the indirect measure worked as intended, and the participants were able to follow the instructions.

In relation to the length of time required to complete both the direct and indirect measures, the time taken to complete the direct measures appeared feasible to conduct as part of the main study. The measures appeared to provide relevant information to support the research questions, as participants considered the nuances of each questionnaire and the questionnaire's individualised focus. Both study sites were able to complete both the direct and indirect measures within a reasonable time. The staff participants required marginally longer than the student participants. However, this outcome was as expected, given the students are more experienced in completing a range of assessments as part of their undergraduate studies.

Discussion Points

Results from the Computer IAT showed none of the attitude target groups were statistically significantly different between T1 and T2. Please note, results from the Computer IAT need to be interpreted with caution, given the outcomes from the validity

analyses that were conducted, and the validity analyses not being able to incorporate factor analysis due to the sample size.

Evaluation Phase of the Educational Workshop and Evaluation of Direct Self-Report and Indirect Computer Md-IAT Measures

Introduction

In Chapter 6, the measures selected to assess non-automatic attitudes and perceptions (direct measures), and measures specifically developed to assess participant automatic attitudes (indirect measures) were tested as part of a feasibility study, within a forensic setting. This approach was chosen because it was necessary to investigate their effectiveness in assessing both non-automatic and automatic attitude types, and whether the assessment measures were accessible within forensic settings. It was also to test if the participants could understand the instructions and use the measures effectively. The findings from these investigations demonstrated that participants had a good understanding of the questions used within the explicit measures and the instructions given for the computer IAT. The results from the computer IAT showed that the programme was executed as anticipated and detailed differences in response times to the range of attitude target groups. As highlighted from the validity tests, outcomes from the Md-IAT need to be interpreted with caution. For the questionnaires assessing non-automatic attitudes, they each collected the information intended. The main feedback from the participants was in relation to the computer Md-IAT, where several participants found it difficult to categorise the words, stating that it made them feel uncomfortable in making a judgement between the attitude categories. This feedback was reflected upon in connection with the purpose of the IAT, as the Implicit Associations Test (IAT) is thought to be a suitable method to test dissonance. This is because it generally shows that a person's automatic and non-automatic attitudes do not match (Thompson & Dempsey, 2010).

Having determined the chosen measures were accessible within forensic settings and functioned in the manner intended, as well as the feasibility of the educational workshop being checked by colleagues in terms of content and timescales (as discussed in Chapter 5), the present chapter will investigate the effectiveness of the implementation of the educational workshop and the selected measures. Specifically, this chapter will assess if the aims of the programme were met within the target population. The first study presented in this chapter (Study 2) includes two analyses. The first analysis evaluates the effectiveness of the staff educational workshop further

by comparing the outcomes of participants who attended the three-day educational workshop to those who did not (as discussed in Chapter 6). The key objectives were to:

1. Establish if the workshop aims were achieved.
2. To identify any impact of the staff educational workshop upon staff members' automatic and non-automatic attitudes towards individuals with IDD who had committed sexual offences. This is done via the use of direct and indirect measures.
3. Demonstrate that automatic attitudes could be investigated in forensic settings.
4. Demonstrate the benefits of using IATs in forensic settings to examine staff attitudes.

The second analysis will explore the impact of the educational workshop upon automatic and non-automatic attitudes prior to and immediately post completion of the workshop and again at a delayed period (approximately three months later). Specifically, the key objectives were to:

1. To check participants' ability to understand the content of the educational workshop.
2. To determine if the length of time allocated to each part of the educational workshop was appropriate.
3. To identify if any modifications to the educational workshop were required prior to conducting further studies.

The second study in this chapter (Study 3) presents results that initially aimed to replicate Study 2, but on a larger scale within a forensic setting. As a result of practical complications encountered at the research site (that had not previously been experienced or highlighted within the pilot studies), data were only collected on one occasion, and no workshop was delivered or evaluated. The data collected were, however, utilised to evaluate any impact of 'Prior Relevant Training' (PRT) upon attitude types in participants.

Therefore, the aim of Study 2 evolved. The primary objective was the following:

1. To identify any impact of prior relevant training upon staff members' automatic and non-automatic attitudes towards individuals with IDD, who had a history of committing sexual offences. This was via the use of direct and indirect measures and compared staff with and without prior relevant training.

The method used in the study and its findings will be discussed then linked back to the objectives for this chapter.

Staff Educational Workshop Overview

Conducting the workshop with participants who work with men who have a history of committing sexual offences was necessary to evaluate the content of the workshop. This approach was important to examine the applicability of the workshop to the range of service users within their care and to assess participants' ability to understand the content of the educational workshop.

To evaluate the impact of the educational workshop upon staff automatic and non-automatic attitudes towards individuals with IDD with a history of committing sexual offences, the educational workshop (as described in Chapter 5; see Table 5.2 for content) was delivered to a number of staff who worked in forensic settings.

Statistical Analysis

Analyses were carried out using the Statistical Package for the Social Sciences for Windows (SPSS-version 28, IBM Corp. Released 2016, IBM SPSS Statistics for Windows, Version 24.0, Armonk, NY: IBM Corp). Descriptive and parametric inferential statistics were conducted. The primary statistical test used for Study 2 was an Analysis of Covariance (ANCOVA). For the first analysis, this was a One Way Between Subjects ANCOVA and for the second analysis, a Repeated Measures ANCOVA was conducted.

The analysis of covariance (ANCOVA) is a method that combines the analysis of variance (ANOVA) and the linear regression. The main principle of an ANCOVA is the inclusion of additional factors (covariates) as a statistical control to explain variation in the dependent variable, reduce the error variation, and increase the statistical power (sensitivity) of the underlying design. A covariate is a variable that has a substantial correlation with the dependent variable and is included in the model to adjust the results

for differences existing among subjects before the study (Keppel, 1991). Therefore, ANCOVA is different from the analysis of variance (ANOVA) which is used to establish whether differences among test samples might be caused by random variation, (Philippas, 2014).

This test was selected for the first analysis of Study 2, as the author wanted to investigate if there was an association between the DV (Attitude Categories at the Delayed Stage; T2) and the IV (Training Type – Trained vs Untrained), after controlling for the covariate (pre-test scores). Using the pre-test scores as a covariate in the ANCOVA is to reduce the error variance, i.e., to make the analysis more precise, which would allow the author to see more clearly the influence of the independent variable on the dependent variable (Neter et al., 1989; Keppel, 1991).

For the second analysis in Study 2, the primary statistical test used was a Repeated Measures ANCOVA. This analysis compares means across one or more variables that are based on repeated observations, while controlling for a confounding variable (Keselman et al., 2001). This test was selected because the author wanted to determine if there was an association between the DV (Automatic Attitudes via the IAT Attitude Categories, Non-Automatic Attitudes via the direct measures) and the IV (Time: T2 and T3) after controlling for the covariate, which were the pre-test measures (T1).

For Study 3 discussed within this chapter, a Multivariate Analysis of Variance (MANOVA) was utilised. This is a group of tests that extend the ANOVA to studies when there is more than one outcome variable to be measured (Field, 2017, p. 737). This method was selected because the author wanted to investigate the influence of prior training upon automatic and non-automatic attitudes of participants, where measures were collected on one occasion. A single data collection period occurred due to the limited resources available on site. Restrictions included a lack of appropriate space available and a limited number of computers available to complete the data collection. The time taken to complete the initial data collection was extensive and made the possibility of delivering the workshop with follow-up data collection periods untenable (refer to Appendix 36 for details).

Study 2; Analysis 1 and 2

Participant Information

The first analysis of Study 2 included a group of 25 staff members (16 females, 9 males, mean age = 36.76 years, SD = 13.94) from two specialist community group homes and a low secure unit who attended the educational workshop. The results from the intervention sample were compared to the results of a group of nine staff members (6 females, 3 males, mean age = 39 years, SD = 8.26) from a specialist community group home who did not provide care for service users with a history of committing sexual offences, and 26 university students (4 males, 22 females, mean age = 23.04 years, SD = 5.35) who also did not have experience of working with individuals with a history of sexual offences. These participants did not attend the educational workshop. The second analysis of Study 2 included the same group of 25 staff members stated above (16 females, 9 males, mean age = 36.76 years, SD = 13.94) from two specialist community group homes and a low secure unit who attended the educational workshop.

Research Site Information

One of the forensic community units provided care for adult males with a primary diagnosis of IDD, some of whom also had a mental health diagnosis and a history of committing sexual offences. The second forensic community unit provided care for adult males and females with a primary diagnosis of IDD, some of whom had a mental health diagnosis. All the individuals had a forensic history, and some of the male service users had a history of committing sexual offences. The service users had regular access to the community, either supervised or unsupervised. A low secure unit provided 24-hour care and supervision for males and females aged 18 years and over, with a primary diagnosis of IDD or a dual diagnosis with a mental illness. All had a forensic history and were detained under the MHA (1983), with 50% of the male service users having a history of sexual offences.

The service users in the community units were either detained under the MHA on section 3 (treatment order), or Community Treatment Order (CTO), where an individual is supervised when leaving a hospital environment). Some service users were informal (i.e., they receive care and support in a hospital or community setting voluntarily and are not detained under the MHA) for mental health problems. Some service users within the low secure unit were detained under a 'hospital order' section 37, or section 41, known as a 'restriction order' due to concerns for public safety. Staff provided 24-hour

care and supervision at each site. As previously stated within Chapter 6, the community services had minimal staffing numbers; for example, on a day shift there would generally be three support staff working at each unit, with a unit manager being present. Duties included a range of care and supervision provisions at the unit or within the community when service users accessed activities or appointments. Staffing numbers for the low secure unit were higher, however, the staff/service user ratio was still limited. These staffing levels presented limitations in terms of the number of participants available for the study.

Table 0.1 Participant Demographics (Studies 2, Analysis 1 and 2).

	N		% of Sample	
	Staff	Student	Staff	Student
Gender				
Male	13	4	22	7
Female	21	22	35	37
Age				
18-30	15	23	25	38
31-45	9	3	15	5
46-65	10	0	17	0
Educational Attainment				
Lower than Bachelors	24	22	40	38
Bachelors	6	4	10	7
Higher than Bachelors	2	0	3	0
Other	0	2	0	3
Know Someone in Prison				
Family Member	6	4	10	7
Friend/Associate	5	2	8	3
Been in Trouble With the Law	6	1	10	2
Been a Victim of a Crime	24	10	40	17
Prior Relevant Work/Voluntary	16	3	27	5
Prior Relevant Training	8	1	13	2

Note: N = 60

The sites selected included a combination of services providing care for males detained under the MHA (1983) with a primary diagnosis of IDD and a history of committing sexual offences. The staff members had little or no prior training in working with individuals who have committed sexual offences. In addition to these sites, participants from the community service and university who did not have experience of working with individuals with a history of committing sexual offences were selected to act as controls for the assessment measures.

The Psychology undergraduate students were based at a university in South Wales. The method of sampling selected was purposive sampling. All students had attended psychology and criminology lectures as part of a specific module undertaken during their third-year studies.

Power Analysis

An a priori power analysis was conducted using G*Power version 3.1.9.7 (Faul et al., 2007) to determine the minimum sample size required to test the study hypothesis. Results indicated the required sample size to achieve 80% power for detecting a medium effect, at a significance criterion of $\alpha = .05$, was $N = 269$ for a one-way ANCOVA. Thus, the obtained intervention sample size of $N = 25$ is inadequate to test the study hypothesis.

Materials

For a full list of materials used in this study, please refer to Chapter 6, section 6.5.2.

Design

For Study 2, a quasi-experimental design was used to establish a cause-and-effect relationship between the educational workshop (IV) and the staff member automatic and non-automatic attitudes (DVs). As the study did not rely on participants being randomly assigned, it relied on participants being assigned to groups due to non-random criteria. The strengths and limitations of this design will be discussed during the ‘discussion’ section of this chapter. For the first analysis, a one way between subjects analysis of covariance (ANCOVA) was conducted. This sought to determine if there was an association between the DV and IV after controlling for the Covariate, which were the relevant pre-test measure (T1). Therefore, two samples were compared, since a ‘between-subjects’ variable of intervention (workshop completed or not) was evaluated. Thus, six separate ANCOVA’s were conducted to investigate the six attitude categories on the indirect measures, and five separate ANCOVA’s were conducted to investigate the five direct measures.

For the second analysis of Study 2, a Repeated Measures ANCOVA was conducted, which sought to determine if there was an association between the DV (Automatic Attitudes via the IAT Attitude Categories, Non-Automatic Attitudes via the direct measures) and the IV (Time: T2 and T3) after controlling for covariates, which were the pre-test measures (T1).

Procedure

Prior to the study being conducted, ethical approval had been obtained from the Independent Hospital Board of Governors that oversaw each of the healthcare services discussed in Chapter 6 (appendix 2). Ethical approval was also obtained from the university (appendix 3). Each unit manager from the healthcare settings gave potential participants a copy of an 'Information sheet' (appendix 4), 'Consent Form' (appendix 5), and a 'Debrief Sheet' (appendix 6). The information and debrief sheets provided details of relevant support agencies to contact, if any of the research material raised issues for them. Staff members informed the unit manager if they wanted to take part in the research. The unit managers allocated these staff members to attend the workshop on the dates agreed. For the university students, information was promoted by the student Psychology representative placing an advert onto a specific module site for the Psychology undergraduate virtual learning environment. Students were given a hard copy of the research information sheets on the first day of the research study. On reading the research information sheet, the understanding of the project was checked by the author who asked potential participants if they had any queries and answered appropriately. The author then talked through the consent form and informed them they did not have to take part in the research if they felt did not want to or felt distressed at all by the content of the research. The author highlighted if they decided to take part, they could withdraw at a later point (up to four weeks post-data collection) if they no longer wanted their data included in the research. Those who wanted to take part in the research indicated this on the consent form; those who did not were also able to indicate their decision and did not take part in the remainder of the research session. Those who gave informed consent, then completed the following process:-

When consent was obtained, each participant was randomly allocated either the indirect or direct measures first. Each participant completed all the measures at an initial data collection stage (T1), (direct and indirect measures) during the same session, with the author being present to answer any questions, save the completed computer IAT programmes and collate the completed direct measures. As the focus of this study was to evaluate the impact of the staff educational workshop intervention, participants undertook the three-day staff educational workshop. Then completed the same direct and indirect measures, immediately upon completion of the workshop (T2). The data collection process was repeated at a 'delayed' stage (T3), approximately three months

later. The control sample did not take part in the educational workshop and took part in data collection at an initial (T1) and a three-month delayed stage, which will be referred to as (T2) for ease of understanding.

Procedure for Direct Measures

The participants were each given a booklet that contained the direct measures previously described in Chapter 4 (see section 4.2.1 ; Table 4.1; Appendices 6 to 10 for details), including a demographic questionnaire, a Brief Knowledge Survey, ATP and ATS questionnaires, WOQ and the CATSO questionnaire. Each participant completed the direct measures booklet at the data collection session attended. The researcher explained each of the questionnaires and asked if there were any questions prior to starting. Participants were asked to complete each of the questionnaires in silence and raise their hand if they needed to ask the researcher a question.

Procedure for Computer Md-IAT

The procedure for completing the computer IAT was the same as described in Chapter 6, (please refer to section 6.3.6 for details, and Appendix 13 for screenshots of the instructions).

Missing Data

As stated in Chapter 6, the author reviewed the missing data for this study against Rubin's Typology of Missing Data (1976) and determined it to be MCAR data. The missing data was for six staff members from the intervention sample at the delayed period due to them no longer being employed at the service, and 11 from the control sample (combination of staff and students) at the delayed period, either due to no longer being employed or because they simply did not return for the follow-up data collection. The author analysed the data in its original form (with data missing) and then conducted the analysis again, with the replaced data. The reasons for exploring the impact of missing data and replacing missing data were discussed in Chapter 6, section 6.2.4.

Table 0.2 Summary of Missing Data.

Study	Missing Data Sets	Time Period	Reason	Missing Data Type
Study 2	3	T2	Left Employment	MCAR
(Intervention)	4	T3	Left Employment	MCAR
Study 2	11	T2	Left Employment	MCAR
(Non-Intervention)			Students did not return for 2 nd data collection.	

Given the impact of missing data and the type of missing data, which were explained in Chapter 6, the missing data for this study was assessed as being MCAR. As a result, the author decided to conduct the analysis by replacing the missing data, using the series mean method on SPSS. Please refer to Chapter 5, section 5.2.2 for an explanation as to why this method was selected.

Results

Study 2, First Analysis

Indirect Measures of Automatic Attitudes (computer Md-IAT)- Between Subject's Participants.

Descriptive Statistics

The descriptive statistics provide the strength of association between a pair of contrasting concepts, (refer to Table 7-3 for details of the direction of attitude association in connection with response speeds to task 3 and task 5 of the Md-IAT). A more positive mean score for the contrasts LD vs NLD would show a more robust connection of Learning Disability and Pleasant, than Non-Learning Disability and Pleasant. In contrast, a negative mean score would be a more positive evaluation of Non-Learning Disability and Pleasant, than Learning Disability and Pleasant.

Each pair of the target groups indicated that responses were faster to task 5 of the computer IAT programme, except for target groups: Sexual Offender versus Violent Offender, where the responses were faster to task 3 of the computer IAT. The results, therefore, indicated a more positive evaluation of Non-Learning Disabled compared to Learning Disabled; a more positive evaluation of Non-Offender compared to Sexual Offender and Violent Offender, a more positive evaluation of Learning Disabled compared to Sexual Offender and Violent Offender. Finally, a more positive evaluation was indicated of people who commit sexual offences compared to people who commit violent offences.

Table 0.3 Computer IAT Task 3 and 5 Direction of Bias.

Attitude Pairing	Block Number Presentation	Mean Response Times (MRT)	Direction of Bias
Learning Disabled and Pleasant Compared to Non-Learning Disabled and Unpleasant	3	Faster response to task 3 (Positive MRT)	Task 3
Non-Learning Disabled and Pleasant Compared to Learning Disabled and Unpleasant	5	Faster response to task 5 (Negative MRT)	Task 5

Inferential Statistics

Table 0.4 Descriptive and ANCOVA Results for the Md-IAT for Delayed-Period ‘Trained and Untrained’, With Pre-Measures (Time 1, T1) as a Covariate.

Variable	Unadjusted		Adjusted		ANCOVA		
	Intervention M (SD)	Non-Int M (SD)	Intervention M (SE)	Non-Int M (SE)	F (1,56)	p	η^2
LDNLD Training	-243.35 (265.55)	-194.90 (252.14)	-247.47 (51.58)	-191.97 (43.56)	.673	.415	.01
Training*LDNLDT1					.285	.595	.01
SOLD Training	-162.74 (175.97)	-147.88 (185.98)	-161.03 (36.10)	-149.09 (30.50)	.064	.802	.00
Training*SOLDT1					.674	.415	.01
SOND Training	-262.80 (281.76)	-312.80 (287.61)	-273.13 (56.79)	-305.43 (47.89)	.187	.667	.00
Training*SONDT1					2.45	.123	.04
SOVO Training	37.35 (254.16)	10.52 (237.14)	38.74 (49.31)	9.53 (41.65)	.204	.653	.00
Training*SOVOT1					.979	.327	.02
VOLD Training	-10.42 (185.36)	8.08 (211.81)	-7.61 (40.43)	6.07 (34.14)	.066	.797	.00
Training*VOLDT1					3.031	.087	.05
VOND Training	-140.44 (248.83)	-314.02 (341.24)	-130.82 (60.72)	-320.88 (51.25)	5.68	.021*	.09
Training*VONDT1					.006	.941	.00

Note. N = 60 (25 = Trained; 35 = No Training). Intervention = Educational Workshop; Control = No Educational Workshop. * $p < .05$

A One-way ANCOVA was conducted to determine a statistically significant difference between 'training type' on the attitude category groups of the Md-IAT at T2, controlling for the Md-IAT attitude categories at T1.

For the ANCOVA, the following assumptions were checked and satisfied: (a) independence of observations, (b) linearity between dependent variable and covariate, (c) normality of the residuals, (d) homoscedasticity (homogeneity of variances), and (e) homogeneity of regression slopes (Neter et al., 1989; Keppel, 1991). The assumption of independence of observations means that there is no relationship between the observations in each group or between the groups themselves. As participants of the study were independent individuals, the assumption of independence of observations was satisfied.

The assumption of linearity between the dependent variable and the covariate means that the covariate is linearly related to the dependent variable for each combination of groups of the independent variables. The linearity assumption was checked by a scatter plot between the covariate and the dependent variable.

The assumption of normality of the residuals means residuals are approximately normally distributed. The normality assumption was checked via a quantile-quantile (QQ) plot. The assumption of homoscedasticity (homogeneity of variances) means the variance of the error is identical for all combinations of the values of the independent variables. The homoscedasticity assumption was checked via a residual plot.

The assumption of homogeneity of regression slopes means the slopes of the different regression lines should be equivalent, i.e., regression lines should be parallel among groups. The assumption of homogeneity of regression slopes was checked via the interaction effect of the IV and the covariate.

After adjustment for the initial measure outcomes (T1), there was a statistically significant difference in the delayed automatic attitudes for the contrast group 'Violent Offender vs non-offender'. $F(1,56) = 5.68, p < .021, \eta^2 = .09$. The main effect of 'training' was not statistically significant for any of the other attitude groups. Therefore, there were no statistically significant differences between the intervention and non-intervention groups for these attitude contrasts.

Direct Measure Results.

Descriptive Statistics

The 'Brief Knowledge Survey' mean 'Under or Overestimation' scores at Time 1 and Time 2 are presented in Table 7.5. The results from this Brief Knowledge Survey indicated a reduction in all participants' overestimations at T2 for each of the six questions. For questions 1, 4, 5 and 6 these results were, therefore, all in the right direction in terms of being closer to factual information. For question 2, the levels were stable for the Trained sample, whereas there was a larger decrease at T2 for the untrained sample (moving further away from fact). Of interest, the largest decreases in the appropriate direction occurred for the Trained sample.

Table 0.5 Descriptive Statistics and ANCOVA Results for the Brief Knowledge Survey. 'Trained and Untrained' Delayed Period with Pre-Measures as a Covariate

Variable	Unadjusted		Adjusted		ANCOVA		
	Int M (SD)	Non-Int M (SD)	Int M (SE)	Non-Int M (SE)	F (1,57)	P	η^2
K1							
Training	13.77 (7.96)	21.65 (19.14)	13.96 (2.94)	21.22 (2.48)	3.54	.065	.06
Training*K1T1					.010	.919	.01
K2							
Training	12.11 (10.60)	10.28 (10.79)	12.69 (2.09)	9.86 (1.76)	1.05	.308	.02
Training*K2T1					3.21	.079	.05
K3							
Training	33.24 (14.88)	21.15 (18.46)	30.35 (2.95)	23.21 (2.48)	3.31	.078	.05
Training*K3T1					1.26	.267	.02
K4							
Training	36.25 (22.84)	41.90 (15.54)	36.09 (3.81)	42.01 (3.22)	1.40	.241	.02
Training*K4T1					2.24	.140	.04
K5							
Training	25.98 (22.18)	35.11 (15.05)	25.30 (3.63)	35.59 (3.06)	4.66	.035*	.08
Training*K5T1					8.28	.006	.13
K6							
Training	34.98 (23.44)	41.81 (17.41)	34.42 (3.78)	42.22 (3.19)	2.48	.121	.04
Training*K6T1					.654	.422	.01

Note: N = 60 (25 = Training (Intervention); 35 = No Training; Control). *p<0.05

Inferential Statistics

A One-way ANCOVA was conducted to assess the effect of ‘training type’ on the level of knowledge, measured by the Brief Knowledge Survey at T2, controlling for the pre-test Brief Survey Knowledge measure at T1.

After adjustment for the initial measure outcomes (T1), there was a statistically significant difference in the delayed ‘brief knowledge survey’ response to question 5, where the non-intervention group responses increased at T2 and the intervention group responses decreased (in the right direction) at T2 ($F(1,56) = 4.66, p < .035, \eta^2 = .076$). The main effect of ‘training’ was not statistically significant for any of the other questions. Therefore, there were no statistically significant differences between the intervention and non-intervention groups for questions, 1,2,3,4 and 6.

Direct Attitude and Perception Measures Results T1 and T2 (3-Month Follow-Up Period).

Descriptive Statistics

The descriptive statistics provide the mean scores calculated at T1 and T2 for each of the direct measures.

The results indicate an increase at T2 for the ATP, ATS and CATSO measures for the participants who attended the educational workshop. This contrasted with the non-intervention sample, where there was only a slight increase in mean scores at T2 for the ATS.

Inferential Statistics

An ANCOVA was conducted to determine the effect of the workshop on delayed non-automatic attitudes when compared to those who did not receive the workshop. This was done via the direct measures (ATP, ATS, WOQ and CATSO) at T2, after controlling for the pre-test measures at T1. After adjustment for the initial measure outcomes (T1), there was a significant interaction effect of ‘Training’ on the ATP outcomes ($F(1,56) = 6.03, p = .017, \eta^2 = .09$). There was also a significant interaction effect of ‘Training’ on the ATS outcomes ($F(1,56) = 4.52, p = .038, \eta^2 = .08$). These results indicated the effect of ‘Training’ depended on the covariate (ATP T1 and ATS T1), with the results indicating the non-intervention sample had higher T1 levels of (ATS & ATP) positive attitudes. The intervention sample showed a slight increase at Time 2. When the main effects of ‘Training’ were examined, no significant differences

were found. ATP ($F(1,56) = .58, p = .451, \eta^2 = .01$; ATS ($F(1,56) = .55, p = .463, \eta^2 = .01$; WOQ ($F(1,56) = 2.19, p = .144, \eta^2 = .04$; and CATSO ($F(1,56) = .04, p = .847, \eta^2 = .00$

Table 0.6 Descriptive Statistics and ANCOVA Results for the Direct Measures, Delayed-Period ‘Trained and Untrained’, With Pre-Measures (Time 1, T1) as a Covariate.

Variable	Unadjusted		Adjusted		ANCOVA		
	Intervention M (SD)	Non-Int M (SD)	Intervention M (SE)	Non-Int M (SE)	F (1,56)	P	η^2
ATP							
Training	91.34 (16.85)	88.88 (11.98)	91.28 (2.36)	88.93 (1.99)	.576	.451	.01
Training* ATPT1					6.03	.017*	.09
ATS							
Training	79.43 (19.66)	79.49 (12.81)	78.24 (2.17)	80.34 (1.83)	.547	.463	.01
Training* ATST1					4.52	.038*	.08
WOQ							
Training	55.19 (3.54)	57.06 (3.56)	55.49 (.686)	56.84 (.578)	2.19	.144	.04
Training* WOQT1					.447	.506	.01
CATSO							
Training	45.60 (7.51)	46.01 (5.13)	46.02 (1.23)	45.71 (1.04)	.037	.847	.00
Training* CATSO					1.25	.269	.02

Note: N = 60 (25 = Training (Intervention); 35 = No Training (Non-Intervention)). * $p < .05$

Study 2, Second Analysis

Indirect Measures of Automatic Attitudes (Computer IAT response times) for Within-Subject’s Participants.

Descriptive Statistics

The descriptive statistics indicate the direction and strength of association between a pair of contrasting concepts, (refer to Table 7-3 for details of the direction of attitude association in connection with response speeds to task 3 and task 5 of the IAT). A

positive mean score for the contrasts LD vs. NLD would show a more robust connection of Learning Disability and Pleasant, than Non-Learning Disability and Pleasant. In contrast, a negative mean score would be a more positive evaluation of Non-Learning Disability and Pleasant, than Learning Disability and Pleasant.

Table 0.7 Descriptive Statistics and Repeated Measures ANCOVA Results for the Computer Md-IAT for the Intervention Sample.

Variable	M (SD)			Adjusted M (SE)		F (1,23)	P	η^2
	T1	T2	T3	T2	T3			
LDNLD	-171.71 (415.23)	-231.41 (260.44)	-243.35 (265.55)	-231.41 (52.79)	-243.35 (52.97)			
Time						.284	.599	.01
Time*LDNLDT1						1.08	.310	.05
SOLD	-126.05 (355.73)	-158.40 (319.04)	-162.74 (175.97)	-158.40 (64.49)	-162.74 (35.80)			
Time						.048	.829	.00
Time*SOLDT1						.209	.652	.01
SOND	-173.75 (713.75)	-174.99 (247.44)	-262.80 (281.76)	-174.99 (50.19)	-262.80 (51.58)			
Time						.628	.436	.03
Time*SONDT1						1.408	.247	.06
SOVO	22.29 (276.45)	27.31 (319.70)	37.35 (254.16)	27.31 (64.49)	37.35 (50.85)			
Time						.015	.904	.00
Time*SOVOT1						.000	.991	.00
VOLD	99.36 (250.36)	-32.45 (269.48)	-10.42 (185.36)	-32.45 (54.78)	-10.42 (36.98)			
Time						.051	.824	.00
Time*VOLDT1						.033	.857	.00
VOND	-271.30 (305.55)	-187.83 (299.83)	-140.44 (248.83)	-187.83 (58.79)	-140.44 (49.42)			
Time						4.59	.043*	.17
Time*VONDT1						5.38	.030*	.19

Note: N = 25. RM ANCOVA: Repeated Measures Analysis of Covariance; IAT: Implicit Association Test. * $p < 0.05$.

Each pair of target groups indicated responses were faster to task 5 of the computer IAT programme, except for the following target group: ‘Sexual Offender’ versus ‘Violent Offender’, where the responses were faster to task 3 of the computer IAT for T1, T2 and T3. This indicated that participants were more positive towards the ‘Sexual Offender’ group than the ‘Violent Offender’ group. Results indicated a more positive evaluation of ‘Non-Learning Disabled’ compared to ‘Learning Disabled’, and a more positive evaluation of non-offenders compared to the ‘Sexual Offender’ and ‘Violent Offender’ contrast groups. Additionally, outcomes indicated a more positive evaluation

of ‘Learning Disabled’ compared to ‘Sexual Offender’. The evaluation of ‘Violent Offenders’ compared to ‘Learning Disabled’ groups changed over time. A more positive response was seen at T1 for ‘Violent Offender’, but this reversed to produce more positive responses for ‘Learning Disabled’ at T2 and T3.

Inferential Statistics

Data were analysed using a Repeated Measures Analysis of Covariance (RM ANCOVA) for the Md-IAT attitude category groups (DV’s), for a ‘within-subjects’ factor of time (IVs; T2 and T3), and the covariate being the pre-test Md-IAT categories at T1. The purpose for selecting this analysis was to determine if there was an association between the DV and the IV, after controlling for the covariate.

For the RM ANCOVA, the following assumptions were checked and satisfied: (a) normality (multivariate normality, (b) sphericity (homogeneity of covariance matrices), and (c) independence of observation. The assumption of normality, for each level of the within-subject factor, the dependent variable is normally distributed. For sphericity, the variances of the differences between any two levels of a within-subject factor are equal. As ‘Time’ was the only within subject factor and it only had two levels (T2 and T3), sphericity did not need to be checked. Finally, for the assumption of independence, the observations from different subjects are independent.

After adjustment for the initial measure outcomes (T1), the only significant result found was for the interaction effect of time and VONDT1, ($F(1,23) = 5.39, p = .03, \eta^2 = .19$), indicating the effect of time on the DV (VOND at T2 and T3) depended on the covariate VONDT1. When the main effect of ‘Time’ upon VOND was examined, a significant difference was found between T2 and T3 ($F(1, 23) = 4.59, p = .043, \eta^2 = .17$).

There were no other indications of significant differences in response times to each of the other attitude contrast groups, $p > 0.05$. This indicated that the response times to the automatic attitude measures for the Violent Offender vs. Non-Offender changed over the three time periods. Participants were less negatively biased towards individuals with a history of conducting violence after attending the educational workshop. However, this outcome needs to be interpreted with caution due to the sample size being underpowered, the limited validity tests that could be conducted and the outcomes that were obtained from those conducted that presents a lack of confidence in the Md-IAT.

Direct Measure Results for ‘Within-Subjects’ Participants - the ‘Brief Knowledge Survey’ Mean ‘Under or Overestimation’ Scores at Time 1, 2 and 3.

Descriptive Statistics

The results from this Brief Knowledge Survey indicate a reduction in participants’ overestimations at T2 and T3 for questions 1, 3, 4, 5 and 6. A reduction in overestimations for questions 1, 4, 5 and 6 is in the right direction, and the changes were maintained over time. Although responses to question 3 changed slightly over the three time periods, they remained fairly consistent. For question 2, there was a slight increase in overestimation at T2, which is in the right direction, but this reduced again at T3. These results indicated that change occurred for this question, but reinforcement of information may be necessary to maintain change over time.

Inferential Statistics

Data were analysed using a Repeated Measures Analysis of Covariance (RM ANCOVA) with a ‘within-subjects’ factor of ‘Knowledge’ (questions 1, 2, 3, 4, 5, and 6) at Time 2 and Time 3, with Time 1 being controlled as the covariate. Negative mean scores indicate ‘underestimation’. Positive mean scores indicate ‘overestimation’.

Results showed no significant ‘interaction’ effects of ‘time; and prior ‘knowledge’ via the brief survey questions (1,2,3,4,5 and 6). Therefore, the ‘main’ effect of ‘Time’ was examined. A significant main effect of ‘Time’ was found for Question 2, $F(1, 23) = 14.42, p < 0.01, \eta^2 = .08$. There were no significant differences between T2 and T3 for questions 1, 3, 4, 5 and 6.

Table 0.8 Descriptive Statistics and RM ANCOVA Results for the Brief Knowledge Survey for Time Periods 1, 2 and 3.

Variable	Adjusted		RM ANCOVA		
	M (SE)	M (SE)	F (1, 23)	P	η^2
Question Number	T2	T3			
K1:	8.18	13.37			
Time	(1.99)	(1.44)	.631	.435	.03
Time*K1 T1			.026	.873	.00
K2:	25.24	12.11			
Time	(2.60)	(1.84)	14.42	<.001*	.39
Time*K2 T1			2.02	.168	.08
K3:	31.82	33.24			
Time	(3.08)	(2.89)	1.44	.242	.06
Time*K3 T1			2.07	.164	.08
K4:	27.73	36.25			
Time	(2.75)	(4.50)	.469	.500	.02
Time*K4 T1			.013	.912	.00
K5:	17.73	25.98			
Time	(2.46)	(3.83)	1.32	.262	.05
Time*K5 T1			3.49	.074	.13
K6:	26.36	34.98			
Time	(2.84)	(4.35)	.327	.573	.01
Time*K6 T1			1.88	.183	.08

Note: N = 25; ANCOVA: Analysis of Covariance; * $p < 0.05$.

Attitude and Perception Measure Results.

Descriptive Statistics

The descriptive statistics below provide the mean scores calculated at T1, T2 and T3 for each of the direct measures.

The results indicate an increase in scores at T2 for the ATS, WOQ and CATSO questionnaires. There was a slight decrease in the ATP at T2. The highest recorded scores for the ATP and CATSO were at T3. These results indicate an increase in the level of positive attitudes towards men who commit sexual offences (ATS) and confidence in working with people who commit offences (WOQ). Additionally, the results indicate an increase in positive attitudes towards prisoners (ATP) in general after receiving the staff workshop, which was maintained at the delayed stage. However, a decrease in positive attitudes towards men who commit sexual offences based in the community was also observed (CATSO).

Inferential Statistics

Data were analysed using a Repeated Measures Analysis of Covariance (RM ANCOVA). The DV's were the direct measures ATP, ATS, WOQ and CATSO, the IV

was time (T2 and T3), and the covariates were the pre-test direct measures at T1. The purpose was to determine if there was an association between the DV and IV after controlling for the covariate. That is, the RM ANCOVA was to determine if there was a difference in the outcomes of the direct measures between T2 and T3, after controlling for the outcomes at T1.

The table below presents the outcomes from the RM ANCOVA.

Table 0.9 Descriptive Statistics and RM ANCOVA Results for Direct Measures: ATP, ATS, WOQ and CATSO

Questionnaire	T1	T2	T3	Adjusted M (SE)	Adjusted M (SE)	F (1,23)	P	η^2
	M (SD)	M (SD)	M (SD)	T2	T3			
ATP Time	89.91 (15.60)	89.48 (17.21)	91.34 (16.86)	89.48 (2.33)	91.34 (2.32)	.087	.771	.00
Time*ATPT1						.031	.863	.00
ATS Time	75.80 (19.03)	84.14 (17.91)	79.43 (19.66)	84.14 (2.52)	79.43 (2.98)	.341	.565	.02
Time*ATST1						.007	.936	.00
WOQ Time	55.04 (5.26)	56.45 (4.78)	55.18 (3.54)	56.45 (.863)	55.19 (.675)	1.141	.296	.05
Time*WOQT1						1.499	.233	.06
CATSO Time	42.96 (10.00)	43.45 (6.99)	45.60 (7.51)	43.45 (1.24)	45.60 (1.42)	.319	.578	.01
Time*CATSOT1						.102	.752	.00

Note: N = 25; ANOVA: Analysis of Variance; ATP: Attitude Towards Prisoners; ATS: Attitude Towards Sexual Offenders; WOQ: Working With Offenders' Questionnaire; CATSO: Community Attitudes Towards Sexual Offenders.

The results from the RM ANCOVA suggested that the interaction effects of time and the direct measures were not statistically significant: ATP ($F(1, 23) = .03, p = .863, \eta^2 = .00$); ATS ($F(1,23) = .01, p = .936, \eta^2 = .00$), WOQ ($F(1,23) = 1.45, p = .233, \eta^2 = .06$) and CATSO ($F(1,23) = .01, p = .752, \eta^2 = .00$). This indicated that the effect of time on the DVs did not depend on the covariate (pre-test scores). Thus, the main effect of 'Time' was examined. No statistically significant differences were found between Time 2 and Time 3, ATP ($F(1,23) = .09, p = .771, \eta^2 = .00$); ATS ($F(1,23) = .34, p = .565, \eta^2 = .02$); WOQ ($F(1,23) = 1.14, p = .296, \eta^2 = .05$); CATSO ($F(1,23) = .32, p = .578, \eta^2 = .01$).

These results indicates that similar levels of positive attitudes towards prisoners, similar levels of confidence in working with people who commit offences, and similar levels of positive attitudes towards people who commit sexual offences in the community

were held at the three different periods and these did not increase or decrease in the anticipated direction as a result of the staff educational workshop (higher scores in the CATSO represents more negative attitudes towards people who commit sexual offences in the community).

Summary

Study 2, First Analysis.

This summary focuses upon the outcomes of those who attended the educational workshop compared to those who did not. The ONE WAY ANCOVA's revealed there were no significant interaction effects of training with any of the attitude category groups at Time 1, indicating the effect of training on the attitude category groups at Time 3 did not depend on the covariate (attitude category groups at Time 1). The main effect of training was then examined. The effect of training was statistically significant for the Violent vs. Non-Violent contrast group at T2 (VOND), ($F(1, 57) = 5.68, p < .05$). Therefore, there was a statistically significant difference in the attitude contrast, VOND between the control and intervention group. This is an interesting outcome, given the educational workshop specifically focused on factors that contribute to sexual offences, rather than general violent behaviour. Thus, these results are not as anticipated. The outcomes from the Md-IAT cannot be interpreted with confidence, due to the findings from the validity tests conducted, and the estimated sample size indicated by the power analysis. Therefore, any results of the Md-IAT are to be interpreted with caution. Additionally, the intervention sample was 25, and the power analysis indicated a sample of 31 would be sufficient to test the hypotheses.

The results from the descriptive statistics for the computer Md-IAT for automatic attitudes indicated that the mean scores for each pair of attitude target groups were faster to task 5, apart from the Sexual Offender versus the Violent Offender, where the responses were faster to task 3 (Sexual Offender = positive, Violent Offender = negative). Although the mean scores were higher for the intervention group, there was no significant difference in the automatic attitude responses for those who received training compared to those who did not, and the direction of bias was the same for both the intervention and non-intervention groups. This outcome indicates that the educational workshop did not affect staff members' automatic attitudes. Caution needs to be applied when interpreting the results from the Md-IAT due to the validity test results and limitations.

Results from the inferential statistics from the ANCOVA's conducted on the Brief Knowledge Survey, revealed a significant interaction effect of group (intervention vs. non-intervention) for question 5. This indicates the effect of the educational workshop upon the responses to this question are influenced on the values of the covariate, which is the participants' knowledge responses at T1. The interaction effect of group was not statistically significant for questions 1,2,3,4 or 6. When the main effect of group was examined, no statistically significant differences were found.

These findings suggest the staff educational workshop had a limited effect, and any effects were not statistically significant in increasing staff members' factual knowledge of factors associated with individuals who have a history of committing sexual offences. The results from the descriptive statistics for the Brief Knowledge Survey revealed that the level of 'overestimation' reduced for all participant, as the mean scores reduced (intervention and non-intervention) at T2 for each of the six questions. For question 2, there was a slight decrease for the intervention sample and a larger decrease in scores for the non-intervention sample at T2. Scores for question 3 decreased for both samples but were reasonably stable. The results for questions 2 and 3, therefore, moved away from fact-based information.

An interesting observation from the mean scores indicated higher scores at T1 for questions 3, 4, 5 and 6 for those who worked with individuals with a history of committing sexual offences. The results at T2 for these participants reduced more substantially when compared to those who did not attend the workshop for questions 4, 5 and 6. This observation indicates that their knowledge moved closer to factual information upon completion of the educational workshop. These results raise some questions in relation to the Contact Theory (Allport, 1954), which will be explored within the discussion section.

Results from the One Way ANCOVA's for the direct attitude measures indicated statistically significant 'interaction' effects for the ATP and the ATS. There were no 'main' effects found for the ATP and ATS, or the WOQ and CATSO. This indicates when the pre-scores (T1) for the intervention and non-intervention groups were controlled for, there were significant differences in the responses to the ATP and ATS for the intervention group when compared to the non-intervention group. The non-

intervention group demonstrated slightly higher levels of positive attitudes for the ATS and less positive attitudes compared to the intervention group for the ATP.

These results, therefore, indicate that the educational workshop did not have a significantly positive effect upon the direct attitudes of those who completed the workshop towards individuals who commit sexual offences in general, but appeared to have more positive effect on attitudes towards individuals who commit offences in general. The results may also have been influenced by the questions and labelling language used within each of the measures. Given the nature of these measures the language is too broad and does not specifically address individuals with an IDD diagnosis who have committed sexual offences. These points will be examined further in the Discussion Chapter.

Summary of Study 2, Second Analysis.

Study 2

The Repeated Measures Analysis of Covariance (RM ANCOVA) results suggested that the interaction effect of time and VOND at T1 was significantly different, indicating the effect of time on the DV (VOND at T2 and T3) depended on the covariate of VOND at T1. There were no other indications of significant differences in response times to each of the other target groups, $p > 0.05$. This indicated that the response times to the automatic attitude measures for the Violent Offender vs. Non-Offender changed after attending the educational workshop. In contrast none of the other target groups changed after attending the educational workshop.

An issue to consider is that several of the staff participants responded at a slower pace than expected, which seemed primarily due to concerns regarding the assessment outcomes. This factor may have had an impact on the overall results, as the premise of the indirect measures is for participants to access their attitudes automatically and without effort, unlike when accessing their non-automatic attitude types. If staff members took more time than necessary to respond to the attitude target, the outcomes are therefore more likely to be representative of non-automatic attitudes. These results relate to the APE model (Gawronski & Bodenhausen, 2006). Delayed responses may be indicative of the interplay between associative and propositional processes, given the level of emotions possibly attached to the attitude target groups. This idea will be explored further in the overall discussion chapter. As previously stated, due to a

combination of the sample size not fully satisfying the requirement identified by the power analysis, the limitations of and findings related to the validity tests of the Md-IAT presented in Chapter 6, there is a lack of confidence in the validity of the Md-IAT. Therefore, all outcomes from the Md-IAT need to be interpreted with caution. This will be discussed further within the Discussion Chapter (Chapter 10).

The descriptive statistics for the indirect measures (computer Md-IAT) demonstrated more positive evaluations for the following attitude contrast groups: Non-Learning Disabled compared to Learning Disabled; Learning Disabled when compared to Sexual Offender, and Violent Offender; Non-Offender when compared to Sexual Offender and Violent Offender, and, finally, Sexual Offender when compared to Violent Offender. The positive bias towards people who have committed sexual offences when compared to people who commit violent offences is interesting and will be explored further in the overall discussion chapter.

For the Brief Knowledge Survey, the Repeated Measures ANCOVA showed no significant interaction effects of time and the brief survey questions. A significant main effect of 'Time' was found for Question 2. This indicated a reduction in overestimation for this question upon completion of the staff workshop. There were no significant differences between T2 and T3 for questions 1, 3, 4, 5 and 6.

This outcome is not as expected, given the literature that surrounds the impact of staff workshops and training upon knowledge levels (Ware et al., 2012; Taylor et al., 2003), and so, more significant differences over time as a result of the workshop were anticipated. The results from the descriptive statistics for the Brief Knowledge Survey indicated that the mean scores were reduced in the right direction for questions 1, 4, 5 and 6. There was an increase in the right direction for question 2 at T2, however, this was not maintained over time at T3. For question 3, although an increase in scores was required to be closer to fact, the levels remained stable over the three periods.

The Repeated Measures ANCOVA revealed that the interaction effects of time and the direct measures were not statistically significant for the ATP, ATS, WOQ or the CATSO. Therefore, the effect of time on the DVs did not depend on the covariate (pre-test scores). When the main effect of 'Time' was examined, again, no statistically significant differences were found for any of the direct measures. Therefore, the

educational workshop has not had a statistically significant impact upon the specific target group.

The descriptive statistics for the direct measures indicated an increase in the mean scores at T2 for the ATS, WOQ and the CATSO. This outcome is in the direction hoped for, as it indicates an increase in the level of positive attitudes towards people who have committed sexual offences, and an increase in the level of confidence in working with individuals who have committed sexual offences. However, the outcomes also indicate a decrease in the level of positive attitudes towards this group who are based in the community, who have a history of committing sexual offences. These results indicate that the staff educational workshop had a limited and no significant effect on developing staff's non-automatic attitudes to become more positive. An interesting observation revealed the highest scores recorded for the ATP and CATSO were found at T3 (3-month delayed period), and for the ATS and the WOQ, the mean scores were highest at T2, and the mean scores at T3 were higher than T1. These results indicate that any limited impact the educational workshop may have had, was maintained over the three-month period.

The results from the RM ANCOVA indicated a significant interaction effect of 'Time' and a main effect of 'Time' on the 'Violent vs. Non-Violent' contrast group at T1 (VONDT1). This result may reflect confirmation bias, where the behaviours were better understood by the staff members and elements of the 'Contact Theory' and the 'Blame Attribution Theory' were influential. However, previous experiences of being victim or witness to physical aggression/violence from service users towards staff, may have remained prominent in their awareness. Results for the Brief Knowledge Survey showed no significant interaction effect for the 6 questions, and this may be related to the points already highlighted for the 1st analysis. For the direct measures of non-automatic attitudes, the RM ANCOVA found no statistically significant interaction effects for the ATP, ATS, WOQ, or the CATSO. The same outcome was found when the main effect of 'Time' was examined.

From the results of Study 2, parts 1 and 2, it appears that the participants were able to understand and follow the instructions for both the indirect and direct measures. Feedback obtained from participants indicated that they understood the content of the educational workshop, although they found the information regarding the national

statistics of offences and treatment effectiveness statistics difficult to focus on after a lunch period. As a result of this feedback, the author made modifications within later studies to have these sections of the workshop conducted before lunch breaks.

Study 3

Participant Information

This study included a group of 20 staff members from an open rehabilitation service of an independent healthcare provider. The staff provided 24-hour care and supervision.

Table 0.10 Demographic Composition of the Study Sample.

Participant	N	% of sample
Gender		
Male	11	55
Female	9	45
Age		
20-40	8	40
41-60	12	60
Educational Attainment		
Lower than Bachelors	10	50
Bachelors	8	40
Higher than Bachelors	1	5
Other	1	5
Know Someone in Prison		
Family Member	6	30
Friend/Associate	4	20
Been in Trouble With the Law	5	25
Been a Victim of a Crime	11	55
Prior Relevant Work/Voluntary	14	70
Prior Relevant Training	9	45

Note: N = 20

Research Site Information

The service provided care for males and females aged 18 years and over who were diagnosed with a mental illness or a dual diagnosis, including IDD. All of the individuals had a forensic history, with some of the male service users having a history of committing sexual offences. The service users were all adults either informal or detained under the MHA (1983) or Mental Capacity Act. As previously highlighted, the nature of ward shift patterns limited staff availability for training and evaluations.. This limitation impacted the availability of staff when completing the pre-measures. The impact of this was two-fold: firstly, getting the staff to complete the direct

measures, as this took several sessions over a period of weeks, and secondly, having staff released to be able to complete the indirect measures on the computer Md-IAT.

Due to staff availability and resources (in terms of suitable rooms to conduct the computer Md-IAT), the data collection for the automatic attitudes required numerous sessions over a couple of months. This requirement highlighted concerns for both the researcher and the manager of the unit in terms of feasibility. After numerous attempts to find additional resources or alternative solutions, it was concluded completing the workshop or the research was not feasible. This was primarily due to the workshop needing to be conducted on multiple occasions if staff were to attend in pairs or threes, as had been later confirmed by the hospital manager. In addition, the same barrier surrounding staff resources would have affected the data collection at 'immediate post' collection and 'delayed post' collection periods. (For further details of the complexity surrounding this outcome, the attempts to continue with the research and the workshop delivery, irrespective of whether the research could be conducted or not, please refer to Appendix 36).

The Descriptive Results for the Brief Knowledge Survey in Study 2 (first analysis) revealed that the intervention group levels of overestimation (myths) were higher than the control group at T1 for questions, 3, 4, 5 and 6 and only remained higher at T2 for question 3. The reduction in scores at T2 was, however, greater for the intervention than the control group for questions 1, 4, 5 and 6. These results raised questions regarding the impact that 'contact' has upon whether myth based, or factual information is believed by staff members regarding individuals who have a history of committing sexual offences. An issue highlighted in the 'Summary Section for Study 2, first analysis, was the broad nature of the Brief Knowledge Survey questions. As they did not specifically address individuals with IDD, this factor may have impacted the results. This aspect was considered further in relation to the service user population of the current research site. It had a more diverse service user population (not all service users had a primary diagnosis of IDD). A number of staff who expressed during the 'research information and consent' process, that they had previously attended training relevant to persons who have committed sexual offences. This triggered the author to explore the frequency based on the demographic details collected, as the results from first analysis in Study 2 (those with increased contact seemed to hold more myths about the service user population), may be reflective of findings from Taylor et al.'s (2003) study. This

study conveyed that staff with less experience of working with people who have committed sexual offences are the most affected after receiving training.

Therefore, given 20 participants had volunteered to take part in the research and gave their time to complete the measures, the frequency of participants who had verbally expressed having completed relevant training beforehand was reviewed via the demographic forms. In total, the number of staff that had ticked the demographic form to indicate they had relevant prior training was 9 ($n = 9, 45\%$), compared to 11 who did not have relevant prior training ($n = 11, 55\%$). There are clearly limitations regarding the criteria used to determine whether someone had prior relevant training and experience. This method was basic in nature and not intended to be a primary indicator for research participation. This evaluation was exploratory to check if this demographic should be investigated more rigorously. The limitations of this study will be reviewed within the summary section of this chapter and also the main Discussion Chapter.

Materials

The materials for this study were the same materials discussed and explained in Chapter 6.

Power Analysis

An a priori power analysis was conducted using G*Power version 3.1.9.7 (Faul et al., 2007) to determine the minimum sample size required to test the study hypothesis. Results indicated the required sample size to achieve 80% power for detecting a medium effect, at a significance criterion of $\alpha = .05$, was $N = 40$ for a Multivariate Analysis of Variance (MANOVA). Thus, the obtained intervention sample size of $N = 20$ is inadequate to test the study hypothesis.

Design

The design was a 2x2 mixed-model design, as it included a 'within-subjects' variable (direct and indirect measures), and a 'between-subjects' variable (level of knowledge and training), those with prior knowledge and training, and those without prior knowledge and training in working with individuals with a history of committing sexual offences. The method of analysis used was the Multivariate Analysis of Variance (MANOVA), due to the number of dependent variables from the direct and indirect measures being evaluated.

Procedure

Following agreement to participate in the research, the participants completed the following process: prior to the study being conducted, the unit manager gave each participant a copy of an 'Information sheet', 'Consent Form', and a 'Debrief Sheet'. On reading the research information sheet, participants' understanding of the project was checked by the author on the day of the data collection at the 'pre-data' collection stage. The individual's ability to provide informed consent was checked and consent was obtained with the consent form being completed with each person on an individual basis in private. As stated previously, given the feedback received from previous participants, the nature of the research, the topic and words they would encounter during the data collection process was highlighted. The potential of this for triggering upset was discussed and the relevant strategies of informing the research author, requesting to withdraw and be given guidance of relevant support agencies both internal and external to their employers and the researcher were discussed and emphasised. When consent was obtained, each participant was asked to complete the direct measures first, as staff had been released from their work for a limited period. The author was present to answer any questions and collate the completed direct measures. Another appointment was then arranged with each participant for the indirect computer Md-IAT measure to be completed. Again, the author was present to answer any questions and to save the completed computer Md-IAT programmes. As previously stated, the length of time taken to collect both the direct and indirect data for all 20 participants took several months, and the study was determined to be unfeasible. Despite the focus of this study being to evaluate staff attitudes prior to and post completion of the staff educational workshop, the staff did not complete the three-day staff educational workshop, and no further data was collected. The factors that acted as barriers to this research being completed, relate to the feasibility stage of the MRC model. This will be discussed more thoroughly within the Discussion Chapter.

Procedure for Direct and Indirect Measures

The specific details of the procedure for the direct and indirect measures are as described in Chapter 6 and also in the earlier part of this chapter for Study 1. The only difference between these measures was that the procedures were repeated on several occasions to enable all 20 participants to attend.

Results

Indirect Measures of Automatic Attitudes (Computer IAT Response Times) Mixed Design.

Descriptive Statistics

As a reminder, the descriptive statistics show the strength of association between a pair of contrasting concepts. If responses are faster at task 3 than at task 5, it would indicate the evaluation at step 3 is more robustly connected than the reverse pairings at step 5. Thus, if the mean score is negative, this indicates that responses for task 3 are slower than task 5, thereby indicating a preference for the word pairings at task 5. An example of this is the IAT that paired Learning Disability and Pleasant words and Non-Learning Disability and Unpleasant words in task 3. In this case, a positive mean score would indicate a more robust connection of Learning Disability and Pleasant, than Non-Learning Disability and Pleasant. In contrast, a negative mean score would be a more positive evaluation of Non-Learning Disability and Pleasant, than Learning Disability and Pleasant.

Table 0.11 Computer IAT Task 3 and 5 Direction of Bias.

Attitude Pairing	Block Number Presentation	Mean Response Times (MRT)	Direction of Bias
Learning Disabled and Pleasant Compared to Non-Learning Disabled and Unpleasant	3	Faster response to task 3 (Positive MRT)	Task 3
Non-Learning Disabled and Pleasant Compared to Learning Disabled and Unpleasant	5	Faster response to task 5 (Negative MRT)	Task 5

Table 0.12 Computer Md-IAT Means, Standard Deviations and MANOVA Statistics Prior Relevant Training/ Non-Prior Relevant Training Sample (PRT/NPRT) Variable.

Source of Variation	PRT M(SD)	NPRT M(SD)	F (1,18)	η^2
PRT/NPRT*LDNLD	-75.95 (324.06)	-211.74 (331.39)	0.85	0.05
PRT/NPRT*SOLD	-222.62 (282.65)	-289.98 (285.54)	0.28	0.02
RPT/NRPT*SOND	-303.06 (471.82)	-465.55 (315.23)	0.85	0.05
RPT/NRPT*SOVO	-249.95 (297.66)	6.70 (234.73)	4.66	0.21
RPT/NRPT*VOLD	-211.54 (384.98)	-160.28 (229.57)	.137	0.01
RPT/NRPT*VOND	-355.39 (406.51)	-381.82 (380.98)	.022	0.00

Note: N = 20; MANOVA, Multivariate Analysis of Variance; * $p < 0.05$.

Mean scores indicated that each pair of attitude target groups had faster responses to task 5 of the computer IAT programme, except for attitude target groups: Sexual Offender versus Violent Offender, where the responses were faster to task 3 of the

computer Md-IAT, and for the 'No Training' group, indicating a positive evaluation of Sexual Offender compared to Violent Offender. The results, therefore, indicated: a more positive evaluation of Non-Learning Disabled compared to Learning Disabled; a more positive evaluation of Learning Disabled compared to Sexual Offender and Violent Offender; a more positive response to Non-Offenders compared to Sexual Offender and Violent Offender; and a more positive response to Violent Offender compared to Sexual Offender.

Inferential Statistics

Data were analysed using a MANOVA for the 'within-subjects' factor of 'Attitude measure' and the 'between-subjects' factor 'Relevant prior training' (No Prior Relevant Training (NPRT), Prior Relevant Training (PRT)).

The results from the One Way MANOVA showed the multivariate test of the differences between the two groups (PRT, NPRT) on attitude target groups was not significant. Pillai's trace = 0.37, $F(6,13) = 1.26$, $p = 0.34$. Separate univariate tests on the outcome variables revealed there was a significant effect of 'Prior Relevant Training' on the attitude contrast groups: Sexual Offender when compared to Violent Offender, $F(1,18) = 4.66$, $p = 0.04$. The results for the other attitude contrast groups were not significant.

Direct Measure Results – Brief Knowledge Survey Results.

Descriptive Statistics

The overall results from this Brief Knowledge Survey indicate the level of knowledge for the sample with No Prior Relevant Training (NPRT) was closer to factual information when compared to the sample that had Prior Relevant Training (PRT), as the scores for questions 1, 2, 4, 5 and 6 were all in the right direction for the NPRT sample. The score for question 3 was in the right direction for the PRT sample.

Table 0.13 Descriptive Statistics and MANOVA Results for Brief Knowledge Survey at Time 1 – Estimate Values for the Variable of Prior Relevant Training.

Knowledge Question Number	PRT M (SD)	NPRT M (SD)	MANOVA F (1,18)	η^2
K1: What percentage of sexual assaults of adults do you believe were committed by strangers?	20.00 (11.18)	10.82 (12.94)	0.02	0.00
K2: What percentage of people who have committed sexual offences do you believe come to the attention of the authorities?	16.56 (12.01)	25.45 (20.18)	1.35	0.07
K3: What percentage of people who commit sexual assaults against adults do you believe were sexually abused as children?	40.00 (18.03)	22.73 (21.49)	3.68	0.17
K4: What percentage of people convicted for committing sexual offences do you believe will commit another sexual offence?	47.78 (19.86)	38.18 (17.22)	1.34	0.07
K5: What percentage of individuals convicted for rape do you believe reoffend in a sexual manner?	34.44 (20.68)	27.27 (19.02)	0.65	0.04
K6: What percentage of individuals convicted for committing sexual offences against children do you believe reoffend in a sexual manner?	51.11 (19.65)	38.18 (17.79)	2.38	0.12

Note: N = 20; 11 = No Prior Relevant Training (NPRT); 9 = Prior Relevant Training (PRT); MANOVA: Multivariate Analysis of Variance.

Inferential Statistics

Data were analysed using a MANOVA with ‘within-subjects’ factor of Attitude measure and the ‘between-subjects’ factor being relevant prior to training (no relevant prior training, relevant prior training).

The multivariate test of the differences between the two groups (PRT, NPRT) on level of knowledge was not significant, Pillai’s trace = 0.26, $F(6,13) = 0.77$, $p = 0.61$. Separate univariate tests on the outcome variables revealed non-significant prior

training effects on the level of knowledge for each of the six questions of the Brief Knowledge Survey.

Direct Measures Results.

Descriptive Statistics

The descriptive statistics provide the mean scores calculated at T1 for each of the direct measures.

The results from these measures indicate that all participants who had previously received relevant training to work with individuals who had committed sexual offences had lower mean scores for each of the direct measures. This outcome indicates lower levels of positive attitudes for the ATP, ATS, WOQ measures. A higher level of positive attitudes for the CATSO measure was shown.

Table 0.14 Means, Standard Deviations, and MANOVA of the Direct Measures of Non-Automatic Attitudes for the Variable of Prior Relevant Training.

Questionnaire	PRT T1 M (SD)	NPRT T1 M (SD)	MANOVA F (1,18)	η^2
ATP	90.11 (6.64)	96.37 (9.00)	1.95	0.10
ATS	79.56 (10.24)	88.09 (11.59)	2.98	0.14
WOQ	55.44 (5.20)	57.18 (7.35)	0.356	0.02
CATSO	45.18 (4.80)	47.82 (6.65)	0.990	0.05

Note: N = 20; 11 = No Prior Relevant Training (NPRT); 9 = Prior Relevant Training (PRT).

Inferential Statistics

Data were analysed using a MANOVA with the ‘within-subjects’ factor of Attitude measure and the ‘between-subjects’ factor of relevant prior training (no relevant prior training, relevant prior training).

The multivariate test of the differences between the two groups (PRT, NPRT) on the non-automatic attitude scales was not significant Pillai’s trace = 0.23, $F(4,15) = 1.10$, $p = .394$. Separate univariate tests were also non-significant.

Summary.

The results from the MANOVA indicated there was no significant effect of ‘Prior Relevant Training’ on the attitude target groups. Separate univariate tests revealed a significant effect of ‘Prior Relevant Training’ on the target groups Sexual Offender versus Violent Offender, where a positive bias was towards the Sexual Offender attitude group. The descriptive statistics for the indirect measure (computer IAT) showed faster

task 5 responses to each of the target groups were faster to task 5, apart from the Sexual Offender versus Violent Offender, where the responses were faster to task 3 (Sexual Offender = positive, Violent Offender = negative).

The inferential statistics for the Brief Knowledge Survey from the MANOVA indicated there was no significant effect of prior training on the level of knowledge. Separate univariate tests also showed there was no significant effect. The descriptive statistics revealed how the mean scores for the NPRT sample were closer to factual information than the sample with PRT.

The MANOVA results for the direct measures indicated no significant effect of prior training on the attitude scale outcomes. The separate univariate tests also revealed there were no significant effects. The results from the descriptive statistics showed that those with 'PRT had lower mean scores for each of the four direct measures, indicating lower levels of positive attitudes towards people who commit offences in general and those with a history of committing sexual offences. The results also indicate less confidence in working with people who commit offences, yet lower scores on the CATSO indicate more positive attitudes towards people who commit sexual offences who are based in the community. More generally, from the feedback obtained throughout conducting this work and from the results of this study, it appears that the participants were able to understand and follow the instructions for both the indirect and direct measures.

Discussion

The outcomes from Studies 2 (first and second analyses) and Study 3 have raised several points for discussion. The first relates to findings from the direct measures for the three studies, as responses were generally favourable for individuals with a history of committing sexual offences. These results contrasted with the results generally found from the indirect measures. This outcome raises the question as to whether these results are simply 'socially desirable responses' that reinforce the need for indirect measures to be used in forensic settings. As the responses to the other direct measures do not seem to be socially desirable responses, it appears, however, that the findings for the ATS were influenced by attending the educational workshop. Results from the indirect measures were inconclusive, as results from Study 3 for the Sexual Offender compared to Violent Offender (SOVO) category were the opposite to those found in Study 2 (first and second analyses), where results indicated a more positive evaluation of the Sexual

Offender compared to Violent Offender targets. Given these outcomes, it would be beneficial to conduct further evaluation of automatic attitudes pre- and post-attendance of an educational workshop. Another possibility could be that indirect measures may be inadequate at detecting changes in attitude bias, due to the strength of emotion attached to the attitude group, 'Sexual Offenders'. Or it may be that because of the strength of the attitude target groups, booster training and other provisions are required to improve attitude change, so that automatic attitudes are affected to a degree that can be detected by indirect measures. As previously stated, all outcomes from the Md-IAT require caution to be upheld in the interpretation of the results, due to lack of confidence in the validity of the Md-IAT tool. To explore issues of validity further, a larger, more sufficient sample size will be required.

Brief Knowledge Survey.

Results from the Brief Knowledge Survey also raised a few questions for discussion. For question 2: 'What percentage of people who have committed sexual offences do you believe come to the attention of the authorities?', the responses indicated a positive response upon completing the workshop, as they increased to be closer in line with factual information, rather than myth-based information. These responses, however, returned to pre-workshop levels at the 'delayed' period (approximately 3 months later). These results indicate that the workshop was successful in addressing this area of knowledge. Participants may, however, require booster training or booster information mechanisms to be implemented. They may require a longer period of exposure to fact-based information in a range of formats in addition to initial training to process and embed the new knowledge.

Direct Attitude Measure – ATS.

The outcomes for the ATS measure also seem to indicate that a similar procedure is required, as results reflected a positive impact because of attending the workshop. The changes were not maintained over a delayed period, however. Booster training and additional interventions, such as peer supervision and case study discussions, would therefore be beneficial. Given the dissonance staff members may experience when faced with media reports, and communication from members of their social networks in relation to men who have committed sexual offences, it is understandable why more positive attitudes towards rehabilitation will be difficult for staff to maintain.

In terms of the main aim of the studies within this chapter, the educational workshop was received well by its participants, and observations from the author indicated that the material was appropriate and relevant. When considering the outcomes from the direct and indirect measures, the direct measures detected changes in attitudes as a result of the workshop. These changes, however, were not maintained over time. This observation highlights the need for regular input and support for the staff members when working with service users with such complex and emotive needs. The indirect measures did not detect the same level of changes, and, again, this may be a result of the attitude target groups being so emotive. This observation does not indicate that the workshop was unsuccessful, but reflects the additional input and support required from staff members. Therefore, further training, supervision and case review reflection sessions would be of benefit to tap into the affective aspect of automatic attitudes. These findings reflect the principles of the MODE and APE models. Evidence indicates that participants developed the motivation to produce a new control strategy when responding to attitude and perception questions towards sexual offences as highlighted in the MODE Model. Further, the interplay between associative and propositional processes (as predicted in APE) can be seen with the indirect measures showing some changes in attitudes, albeit not significant ones.

As for the objectives of the studies within this chapter, participants were able to understand the content of the educational workshop. The length of time allocated to each part of the educational workshop was appropriate, but repetition or different modes of follow-up sessions seem to be required. Based on the participant engagement, there did not appear to be any modifications to the workshop needed prior to conducting further studies.

Behaviour Change Evaluations.

In terms of behavioural changes, observations during the workshop and informal discussions with staff who attended the workshop took place at the follow-up data collection period; when on the wards; units; case reviews and at meetings. During the discussions, the staff were asked questions such as: ‘What, if any changes have they noticed in their interactions/behaviours towards the service users after attending the workshop?’ ‘What/if any changes have they noticed in their working practices? Teamwork? Boundaries? Self-care? The research author also observed staff members behaviours whilst on the units, and also reviewed the use of language used within

service user case notes/risk assessments and care plans to see if the use of language had become more humanistic, rather than stigmatising and labelling. Consideration of the Behaviour Change Wheel (BCW) and the COM-B and TDF was made when identification of these behaviours were made and were observed as potential indicators of changes in attitudes.

From these discussions and observations, a number of staff members expressed how they no longer saw the service user simply as someone who committed sexual offences. They began to see the person, someone with a range of qualities and a range of difficulties. They expressed having more patience toward the service users, not only toward those with a history of committing sexual offences, as they had learned more about the complexities of IDD and the impact upon a person's abilities and difficulties. Some staff expressed being more aware of their boundaries, were more confident in what information would be useful and appropriate to share, and were not completely against sharing suitable personal information. In terms of observations, more positive language was overheard on the units and seen within case notes which were more pro-rehabilitation. The limitations of these discussions and observations is that they were not formal and were not measured. Therefore, these reflections may be influenced by the research author's own confirmation bias, due to factors that initially motivated the development of the workshop and research, and the level of personal investment. Therefore, it would be beneficial to directly measure behaviour change as well as attitude change, as indicated in Chapter 5 when discussing the MRC Model. One method would be to conduct qualitative research to obtain richer quality information, as well as conduct audits of language used in service user files before and after attending the workshop. In addition to this, conducting more formal observations, where observations are clinically recorded over a prolonged period of time would be useful. Further consideration to these points will be given within the main Discussion Chapter in Chapter 10.

Practical Issues Highlighted.

The complications encountered during this study highlighted a range of difficulties in utilising high-technological equipment in forensic settings. The need to identify a suitable measure that is accessible within such settings became paramount. As a result, the impact of such complications led to the original design for this study being altered, as the practical barriers hindered the full design of a training intervention being

conducted with a larger staff group and repeated data collection taking place. The factor that caused the most significant delay in collecting data was the use of the computer Md-IAT. The time taken to complete the computer programme in general, and numerous participants taking an excessive amount of time to complete the programme, severely impacted the length of time required for the data collection. This data collection was hindered by the forensic service not having computers on which the IAT programme could be installed and run, and generally having a small number of computers available across the services. This problem resulted in the researcher bringing in laptops to the service, which created difficulties in terms of security requirements.

This issue was not the sole problem. Having adequate resources on the units for sufficient numbers of staff to be released at the same time to take part in the data collection proved to be another problem. In addition to this, the forensic service did not have sufficient space to deliver the workshop to 20 staff in one period (despite being informed of a suitable venue); therefore, space and resources for data collection and workshop delivery were insufficient. It was apparent that in each of the forensic settings there was inadequate space that would enable participants to have enough room between them and their colleagues, privacy, appropriate lighting, and opportunity to concentrate. From the staff who completed the computer Md-IAT, a high proportion were observed to take longer than anticipated to complete the Md-IAT (approximately 45-70 minutes). This longer time may have been due to concerns of 'getting it right', or from fears of the healthcare manager 'discovering' their attitudes towards individuals with different histories. These practical issues related to the use of indirect measures in forensic settings, raised concerns and required the researcher to reconsider the methodology used for the indirect measures. These practical barriers were the catapult for the changes described in the following chapter. (Please refer to Appendix 36 for further details of the processes that led up to the changes being decided, and alternative solutions being offered by the research author).

A Reconsideration of the Implicit Association Test in Forensic Settings

Introduction

The last study discussed in Chapter 7 highlighted issues related to measuring indirect measures and the barriers encountered when attempting to evaluate automatic attitudes for larger groups of participants, particularly within forensic settings. The author was aware that using computers to assess automatic attitudes could present some challenges when trying to obtain large quantities of data. The time taken to complete the computer Md-IAT method for more than 11 participants on one site presented significant barriers to the research being conducted and a fundamental reason for it not being feasible. As a result, the author needed time to reflect on the impact this could possibly have for future studies intended for this thesis. Particularly as plans to conduct the educational workshop for the last study (study 3, reported in chapter 7) became unfeasible. The complications encountered in using a computer IAT raised concerns about the wider implications of improving the use of indirect attitude measures within forensic settings. The use of the computer IAT also presented difficulties in the time taken to complete the task. Longer response times were displayed by several participants within the forensic settings, despite instructions to work as quickly as possible.

Based on these difficulties, a preliminary aim for this chapter was to review and identify a suitable low-technology method that could be used to evaluate automatic attitudes within forensic settings. The use of alternative measures had been highlighted within the literature. “Low-tech” means of assessing such attitudes may prove to be a useful supplement to computer-based measures (Vargas et al., 2007). Upon completion of this review, the main aim of this chapter was to conduct a study using an alternative ‘low technology’ method and to present the findings.

This chapter will therefore address the following research questions:

1. Which alternative low-technology method to the computer Md-IAT would be most accessible in forensic settings?
2. Will the alternative method demonstrate an acceptable level of reliability in comparison to the computer Md-IAT method?

Given the overall aim of the thesis is to evaluate the impact of an educational programme delivered in forensic settings on automatic and non-automatic attitudes, it is important to identify a measure that can be easily utilised within forensic settings. Currently the evaluation of automatic attitudes within forensic settings is extremely limited, therefore a practical and reliable evaluation method needed to be identified and utilised. Therefore, the need to compare both high-tech and low-tech methods was of importance.

The first section of this chapter provides a layout of the objectives. The chapter will then provide an explanation of the research sample and the statistical analysis used for this study, and the methodology employed and the results found. A summary of the findings will then be linked back to the objectives for this chapter.

The objectives for this chapter are:

1. To identify a low-technological indirect measure that can be easily utilised within forensic settings.
2. To evaluate the alternative indirect measure alongside the computer Md-IAT method to test for reliability.
3. To check if participants can understand the instructions for the new methodology used to capture automatic attitudes.
4. To identify any modifications required prior to further data collection.

Low-Technology Methods of Measuring Automatic Attitudes

Considering the practical barriers associated with using a computer Md-IAT in a forensic setting, it was important to review methods that would require little or no specialist equipment. This approach is necessary to increase the possibility of measuring automatic attitudes in such settings. Please refer to the information included in Chapter 4, section 4.3.2.3, which relates to ‘pencil and paper measures’.

The times utilised within the computer Md-IATs for the staff and student participants have previously been discussed (please refer to Chapter 7 for further details). The same considerations were given for the pencil and paper Md-IAT.

As the ‘manual’ version of the computer Md-IAT had already been used within the thesis, the author decided to pilot an alternative measure that replicated the computer

Md-IAT. This method would enable the same words to be used for each of the contrast concepts. With the methodology being similar, evaluating the reliability of the pencil and paper IAT against the reliability of the computer IAT would be easier. For the alternative pencil and paper IAT method, a fixed amount of time was available in which to complete the paper IAT, therefore, participants would not be able to take extended periods to complete the measure. This change was important for two reasons: a) to increase the reliability of the assessment, and b) to control the time required for all staff to complete the indirect measure. Lastly, this version of the pencil and paper IAT would enable groups of participants to complete the measure at the same time. As previously highlighted, time efficiency was an important aspect, due to staff resources and the time needed to complete the pre-measures, workshop, immediate post-measures and delayed period measures.

As previously referred to in Chapter 4, research by Lemm et al. (2002) identified the benefits of the pencil and paper ‘name’ version of the computer IAT, when compared to the ‘picture’ version of the pencil and paper IAT. The importance of these findings was discussed in Chapter 4 (section 4.3.2.3). Due to the reliability and reduced potential for bias and trauma of using words as opposed to pictures, the pencil and paper ‘name’ version was the method selected for the remainder of the studies.

Several studies have looked at the reliability of the pencil and paper IAT (Lemm et al., 2002; Lemm et al., 2007; Bardin et al., 2016) and have obtained positive results, which confirm the paper and pencil IAT’s discriminant validity. These results have indicated that spontaneous implicit attitude measures can be conducted simply with pencil and paper. Therefore, it was hypothesised that the paper and pencil Md-IAT would have positive results, demonstrating the same level of reliability as the computer IAT presented in Chapter 6 and in this chapter, when reliability of the computer IAT was tested.

This method is very helpful when conducting research within forensic environments. Given the flexibility and general reliability of the IAT, a paper IAT was therefore produced. This method was a manual version of the computer IAT (please see Chapter 5 for more details on how this pencil and paper IAT was developed).

Statistical Analysis

A review of the descriptive statistics is the primary feature of the statistical analysis, where apparent configurations and relationships within the data are described.

Power Analyses

A priori power analysis was conducted using G*Power version 3.1.9.7 (Faul et al., 2007) to determine the minimum sample size required to test the study hypothesis. Results indicated the required sample size to achieve 80% power for detecting a medium effect, at a significance criterion of $\alpha = .05$, was $N = 34$ for a repeated measures ANOVA. Thus, the obtained sample size of $N = 31$ was slightly under this requirement, and needs to be taken into consideration when interpreting the outcomes of this study.

Primary Analyses

As a result of introducing a new method to evaluate automatic attitudes via a paper and pencil Md-IAT, the primary analysis was related to reliability, thus internal consistency and test-retest reliability were calculated. To evaluate internal reliability of the paper and pencil Md-IAT, Cronbach's Alpha was used, and for test-retest evaluations Intraclass Correlations ICC were conducted. These were compared to the reliability tests for the computer Md-IAT (please refer to Chapter 6 for more details of these tests). A secondary statistical test included a repeated measures ANOVA. A 2x2 'within-subjects' ANOVA, with independent variables of Time (two levels: T1 (pre-workshop), T2 (immediately post-workshop)), and indirect measure version (two levels: computer Md-IAT and manual paper and pencil Md-IAT). This test was selected because the study was investigating changes in mean scores for six separate conditions, and the variables for this study were measured using the same participants in all conditions. A separate ANOVA was conducted on data collected at Time 1 (T1) and at Time 2. When considering if estimates of sphericity were met, an appropriate correction was automatically applied (please refer to section 6.2.5, pages 128 & 129).

Study 4

Methodology

Participant Information.

This study included a group of 31 undergraduate university students (1 male, 3.23%; 30 females, 96.77%; mean age = 25.55 years; SD = 9.64), based in a South Wales university, who did not have experience of working with individuals with a history of sexual offences.

Table 0.1 Table Demographic Composition of the Study Sample.

	N	% of Sample
	Student	Student
Gender		
Male	1	3.23
Female	30	96.77
Age		
18-30	24	77.42
31-45	5	16.13
46-65	2	6.45
Educational Attainment		
Lower than Bachelors	26	83.88
Bachelors	2	6.45
Higher than Bachelors	0	0
Other	2	6.45
Know Someone in Prison		
Family Member	16	51.61
Friend/Associate	8	25.81
Been in Trouble With the Law	3	9.68
Been a Victim of a Crime	17	54.84
Prior Relevant Work/Voluntary	4	12.90
Prior Relevant Training	3	9.68

Note: N = 31

Research Site Information.

The Psychology undergraduate students were based at a university in South Wales. The method of sampling selected was purposive sampling, where members of a group were purposefully sought. This selection was done through an advert for a 'Short Course' being placed on the specific module site for the Psychology undergraduate virtual learning environment by the Module Leader for the Psychology and Criminology module. All participating students had attended psychology and criminology lectures as part of their undergraduate programme; therefore, the questionnaires were believed to be appropriate. As the aim of the study was to evaluate the reliability of the paper

and pencil Md-IAT in comparison to the computer Md-IAT, an educational workshop was offered. The focus of the workshop was on a psychological intervention programme (Dialectical Behaviour Therapy, DBT), for individuals with an emotionally unstable personality disorder, where the therapy is designed to give clients a set of skills to help them manage painful and distressing emotions and help them decrease conflict within both intimate and non-intimate relationships, to “build a life worth living”, (Linehan, 2020). The content of the workshop was not based on behaviours related to crime and was not associated with the variables being measured on the indirect measures.

The intention of a three-day educational workshop was for several reasons: to replicate the same time frame pre and post workshop; to provide the participants with a beneficial outcome for investing their time, but primarily to remove the possibility of changes occurring as a result of the training. This relates to the ‘Hawthorne Effect’ (Landsberger, 1958). The Hawthorne effect refers to the predisposition in some individuals to modify their behaviour in response to their knowledge of being observed (Fox et al., 2008). Although there is some critique of the Hawthorne effect in terms of suggesting the research data was lost (Rice, 1982); not written up (Gale, 2004, p.439); fictional (Levitt & List, 2011), other research has sought to determine if the Hawthorne Effect exists and if so, under what conditions and to what degree (McCambridge, et al., 2014). From McCambridge et al.’s systematic review, it was concluded that while research participation may influence behaviours being investigated, further examination is required to understand more about its process and extent. Due to the aim of the current study being to examine the level of reliability of the paper and pencil Md-IAT in comparison to the computer Md-IAT, the research author did not want the participants to ‘perform’ better simply because they were aware of being observed when taking part in research. This was because the intention was to replace the computer for the pencil and paper version in further studies. Literature that supports the idea of the Hawthorne Effect also supports the idea of incorporating mechanisms to attempt to reduce this potential effect. Therefore, by providing a three-day workshop related to DBT (which is a topic that is theoretically ‘unrelated’ to the theories underpinning the staff educational workshop), the time and interaction with the researcher within this capacity would make participants familiar with the researcher

and potentially reduce the effects of being observed when completing the measures. It is recognised that a limitation of this primarily relates to the post-workshop measures.

Materials.

Please refer to Chapter 6, section 6.3.2 for details of the measures used.

Design

The design was a repeated measures ANOVA design. The dependent variables were the outcomes for the direct measures and indirect measures. The independent variables were ‘time’ of data collection (T1 and T2), and the indirect measure used (computer IAT and the pencil and paper IAT).

Procedure

Prior to the study being conducted, ethical approval had been obtained from the University. The university students were notified of the short course and research through an advert, as previously explained. On arrival at the workshop and after reading an information sheet and signing a consent form, participants were randomly allocated either the indirect measure, the computer IAT, or the direct measures booklet first. When each student had completed the computer IAT and direct measures, all participants took part in completing the pencil and paper IAT within the same lecture room at the same time. The direct and indirect measures were conducted during the same data collection session. As the focus of this study was to test the reliability of the pencil and paper IAT against the computer IAT, the participants completed a control workshop, not the educational workshop used within the main evaluations for this thesis. On completion of the workshop, participants completed the same indirect and direct measures.

Procedure for Direct Measures.

Participants were each given a booklet that contained the direct measures previously described in Chapter 4, (see Table 4.1 and Appendices 7 to 11 for details), including a demographic questionnaire, a Brief Knowledge Survey, ATP and ATS questionnaires, WOQ and the CATSO questionnaire. Each participant completed the direct measures booklet before and at the end of the workshop. The researcher ran through each of the questionnaires to explain what was required and asked if there were any questions or concerns prior to starting. Participants were informed that they would not be timed, but to complete each of the questionnaires and answer each question. They were instructed

to complete the questionnaire in silence, and to raise their hand if they needed to ask the researcher any questions.

Procedure for Computer Md-IAT.

The participant was allocated a computer in a psychology laboratory (please refer to Chapter 6, section 6.3.6 for details, and Appendix 12 for screenshot examples of instructions).

Procedure for Paper and Pencil Md-IAT.

Upon completing the direct measures and computer IAT, all participants were allocated to the same room, where they were each given a pencil and paper IAT booklet (randomising participants to complete either the direct measures or computer IAT, but not randomising the procedure for the paper and pencil IAT, could have resulted in an ‘order effect’, this is a limitation of the study procedure and will be discussed in the ‘Discussion Chapter’). The paper and pencil IAT booklets were placed face down on a table in front of them until they were instructed to turn the booklet over. On doing so, participants saw a page with two separate columns. Both columns had a central row containing the stimuli, with the specific target category and attribute words at the top left- and right-hand corner of the central row. Participants were instructed on how to complete the IAT and were then given the opportunity to complete a practice IAT. On completing this, the researcher asked if they had any queries/difficulties with the process. Two of the conditions were consistent with a left-hand response and the other two with a right-hand response. Each IAT had two conditions; for example, in condition 1, the target word ‘flowers’ was on the left-hand side with the attribute word ‘pleasant,’ whereas the target group ‘insects’ was on the right-hand side with the attribute word ‘unpleasant’. In condition 2, the target group words switched; therefore, ‘insects’ was seen on the left with the attribute ‘pleasant’, and ‘flowers’ on the right with the attribute word ‘unpleasant’ (see Figure 1 for an example). Each IAT page had a fixed time of 20 seconds for participants to complete as many as they could without missing any out. The timings for this study were based on the 20-second time limit used in Lemm et al.’s (2002) study. Consideration to research linked with age-related slowing (Brinley, 1965; Ratcliffe et al., 2000) was also given. Given the young age of the participants and their responses to the practice items, 20 seconds was an appropriate fixed amount of time. Participants worked from the top of the column on the left-hand side, and, if completed, they would continue to the column on the right-hand side. The researcher then gave

instructions to all participants for the remaining IATs until the pencil and paper IAT booklet was completed.

Missing Data

Missing data for this study was reviewed against Rubin's Typology of Missing Data (1976) and determined to be MCAR data. Missing data for 20 participants at the delayed period was due to them not returning for the follow-up data collection. As a result, the author decided not to analyse the delayed data. The analysis focused on T1 and T2.

Table 0.2 Pencil and Paper IAT Trial Example.

Flowers		Insects	
Pleasant			Unpleasant
0	Wasp		0
0	Orchid		0
0	Gentle		0
0	Enjoy		0
0	Poison		0
0	Cockroach		0
0	Vomit		0
0	Tulip		0
0	Daisy		0
0	Moth		0
0	Love		0
0	Gloom		0
0	Hurt		0
0	Ant		0
0	Lily		0
0	Evil		0
0	Bedbug		0
0	Rose		0
0	Friend		0
0	Ugly		0
0	Flea		0
0	Damage		0
0	Primrose		0
0	Heaven		0
0	Happy		0
0	Daffodil		0
0	Cheer		0
0	Centipede		0

Flowers		Insects	
Pleasant			Unpleasant
0	Poison		0
0	Gentle		0
0	Wasp		0
0	Tulip		0
0	Ant		0
0	Ugly		0
0	Heaven		0
0	Orchid		0
0	Daffodil		0
0	Flea		0
0	Happy		0
0	Rose		0
0	Vomit		0
0	Hurt		0
0	Cockroach		0
0	Cheer		0
0	Gloom		0
0	Primrose		0
0	Moth		0
0	Enjoy		0
0	Evil		0
0	Daisy		0
0	Bedbug		0
0	Friend		0
0	Centipede		0
0	Lily		0
0	Love		0
0	Damage		0

There was one data set missing from T1 for the paper IAT and Direct Measures, but no missing data for the computer IAT. This data was determined to be MCAR, with the

participant completing the computer IAT and then leaving. For T2, nine data entries were missing for the paper IAT and the direct measures, and seven for the computer IAT. Two missing data entries were determined to be MCAR for the same reason above. The seven remaining missing data were also due to MCAR. Given that most of the missing data for this study were assessed as being MCAR, the author decided to conduct the analysis by replacing the missing data for T1 and T2 using the series mean method on SPSS. (Please refer to Chapter 6, section 6.2.4 for an explanation as to why this method was selected).

Results

Primary Analyses

To evaluate the first primary aim related to reliability, internal consistency and test-retest reliability was calculated. To evaluate internal consistency of the paper and pencil Md-IAT and the computer Md-IAT, Cronbach's Alpha was calculated for each of the IAT attitude contrast groups. For the paper and pencil Md-IAT, the correct responses for 'Condition 1 and 2' for each contrast group were used. For the computer Md-IAT, responses to Block 3 and 5 were used. The Md-IAT (both formats) were completed by 31 participants.

Table 0.3 Computer and Paper and Pencil Format Cronbach Alpha Scores.

Indirect Measure Method	Computer		Paper & Pencil	
	TIME 1	TIME 2	TIME 1	TIME 2
Attitude Target Group	α	α	α	α
Learning Disabled vs. Non-Learning Disabled	.734	.870	.625	.626
Sexual Offender vs. Learning Disabled	.930	.864	.669	.586
Sexual Offender vs. Non-Offender	.846	.880	.503	.648
Sexual Offender vs. Violent Offender	.829	.907	.795	.891
Violent Offender vs. Learning Disabled	.869	.893	.791	.624
Violent Offender vs. Non-Offender	.898	.838	.553	.466

These results show an 'Excellent' level of internal consistency at T1 for SOLD, and at T2 for SOVO for the computer IAT. A 'Good' level of internal consistency for SOND, SOVO, SOLD, VOLD and VOND at T1, and LDNLD, SOLD, SOND, VOLD, and VOND at T2, for the computer IAT, and SOVO at T2 for the paper/pencil IAT. An 'Acceptable' level of internal consistency for LDNLD at T1 for the computer IAT. Plus, SOVO and VOLD for the paper/pencil IAT. A 'Questionable' level of internal consistency for LDNLD and SOLD at T1, and LDNLD, SOND, and VOLD for the

paper/pencil IAT. A ‘Poor’ level of internal consistency for SOND and VOND at T1 for the paper/pencil IAT, and lastly, an ‘Unacceptable’ level of internal consistency for VOND at T2 for the paper/pencil IAT.

For the ‘Test-Retest’ reliability evaluations, Intraclass correlation (ICC) were conducted. Intraclass correlation (ICC) estimates and their 95% confident intervals were calculated using SPSS statistical package version 28 (IBM Corp. Released 2021. IBM SPSS Statistics for Windows, Version 28.0. Armonk, NY: IBM Co), based on a mean-rating ($k = 4$), consistency definition, two-way mixed effects model. ICC for LDNLD = 0.87 with 95% confident interval = 0.77 - 0.93; SOLD = 0.91 with 95% confident interval = 0.84 - 0.95; SOND = 0.85 with 95% confident interval = 0.74 - 0.92; SOVO = 0.87 with 95% confident interval = 0.78 - 0.93; VOLD = 0.91 with 95% confident interval = 0.84 - 0.95 and VOND = 0.88 with 95% confident interval = 0.80 - 0.94. Based on the ICC results, the test-retest reliability of the Computer Md-IAT is “good” to “excellent”. For the paper and pencil Md-IAT, the ICC for LDNLD = 0.73 with 95% confident interval = 0.54 - 0.86; SOLD = 0.73 with 95% confident interval = 0.54 - 0.86; SOND = 0.71 with 95% confident interval = 0.49 - 0.84; SOVO = 0.73 with 95% confident interval = 0.53 - 0.86; VOLD = 0.72 with 95% confident interval = 0.52 - 0.85 and VOND = 0.72 with 95% confident interval = 0.51 - 0.85. Based on the ICC results, the test-retest reliability of the Paper and pencil Md-IAT is “acceptable”.

The outcomes from the reliability tests will be considered when interpreting the results of the repeated measures ANOVA and will be discussed in the ‘summary’ and discussion part of this chapter.

Implicit Test (Computer and Paper/Pencil IAT Response Outcomes)

Descriptive Statistics.

The descriptive statistics show the strength of association between a pair of contrasting concepts, either as a response being faster to task 3 or 5, as presented in the computer IAT, or as in the result of the number of current responses to the target groups.

The Means and SDs for the computer Md-IAT indicated that each pair of the target groups’ responses were faster to task 5 of the computer IAT programme, except for target groups: Sexual Offender versus Violent Offender at Time 1, and Violent Offender vs. Learning Disability at Time 2, where the responses were faster to task 3

of the computer IAT. Indicating a more positive evaluation of Sexual Offender compared to Violent Offender; and a more positive response to Violent Offender compared to Learning Disability. The responses to the remaining contrast groups indicated a more positive evaluation of Non-Learning Disabled compared to Learning Disabled; a more positive evaluation of Non-Offender compared to Sexual Offender and Violent Offender (T1), a more positive evaluation of Learning Disabled compared to Sexual Offender and Violent Offender (T1). Finally, a more positive evaluation of Violent Offender compared to Sexual Offender (T1).

Table 0.4 Computer and Pencil and Paper Format IAT Descriptive Statistics and RM ANOVA Results.

Computer IAT					
Attitude Target Group	Time 1	Time 2	F (Df)	P	η^2
	M (SD)	M (SD)			
Learning Disabled vs. Non-Learning Disabled	-154.39 (317.43)	-134.37 (227.86)	(1, 30)=0.14	0.714	0.01
Sexual Offender vs. Learning Disabled	-114.60 (146.47)	-130.06 (207.59)	(1, 30)=0.14	0.709	0.01
Sexual Offender vs. Non-Offender	-129.62 (244.56)	-100.57 (168.49)	(1, 30)=0.40	0.533	0.01
Sexual Offender vs. Violent Offender	54.16 (199.02)	-11.34 (181.74)	(1, 30)=1.70	0.202	0.05
Violent Offender vs. Learning Disabled	-99.05 (207.84)	1.44 (184.93)	(1, 30)=2.74	0.108	0.08
Violent Offender vs. Non-Offender	-140.73 (204.72)	-27.01 (243.51)	(1, 30)=3.10	0.088	0.09
Paper IAT					
Learning Disabled vs. Non-Learning Disabled	5.62 (3.33)	3.77 (2.98)	(1, 30)=6.72	0.015*	0.18
Sexual Offender vs. Learning Disabled	3.10 (4.41)	1.40 (2.84)	(1, 30)=4.43	0.044*	0.13
Sexual Offender vs. Non-Offender	6.60 (4.08)	6.45 (3.14)	(1, 30)=0.04	0.854	0.00
Sexual Offender vs. Violent Offender	-0.04 (2.48)	0.27 (1.76)	(1, 30)=0.30	0.587	0.01
Violent Offender vs. Learning Disabled	1.66 (3.15)	1.26 (3.39)	(1, 30)=0.30	0.586	0.01
Violent Offender vs. Non-Offender	-6.88 (3.58)	-4.92 (3.96)	(1, 30)=4.88	0.035*	0.14

Note: N = 31; * $p < 0.05$

Results at T1 and T2 indicated that both samples rated Non-Learning Disabled more positively than Learning Disabled, and Non-Offenders more positively than both Violent Offenders and Sexual Offenders. The Learning-Disabled group was rated more positively than both offence types. Finally, participants had more positive initial

attitudes towards the Sexual Offenders category compared to Violent Offenders, whereas at Time 2, Violent Offenders were rated more positively compared to Sexual Offenders.

Please refer to the table 8.5 to see the similarity in associations between the computer and paper/pencil Md-IAT.

Table 0.5 Directions of Positive Associations Detected by the Computer IAT in Comparison to the Pencil and Paper IAT.

Comparisons in the Same directions for the Computer IAT and the Paper and Pencil IAT		Comparisons in Different Directions for the Computer IAT and the Pencil and Paper IAT		Nature of Differences
T1	T2	T1	T2	
NLD compared to LD	NLD compared to LD			
LD compared to VO	LD compared to VO			
ND compared to SO	ND compared to SO			
ND compared to VO	ND compared to VO			
SO compared to VO	VO compared to SO			
LD compared to VO			VO compared to LD	Computer IAT
			LD compared to VO	Pencil and Paper IAT

Note: NLD, Non-Learning Disabled; LD, Learning Disabled; VO, Violent Offender; SO, Sexual Offender.

Inferential Statistics.

Data were analysed using a repeated measures analysis of variance with a ‘within-subjects’ factor of time (T1 and T2). As stated previously, degrees of freedom were automatically corrected using either the Greenhouse-Geisser or Huynh-Feldt estimates of sphericity depending on whether the Greenhouse-Geisser estimate of sphericity is less than or greater than 0.75.

Indirect Test (Computer Md- IAT responses)

All effects are reported as significant at $p < 0.05$ unless stated otherwise. Results showed there were no significant differences in response times to each of the target groups, $p > 0.05$. This result indicated that the response times to the indirect automatic attitude measures for each of the target groups remained stable after attending a ‘Nonaligned’ educational workshop.

Indirect Test (Paper IAT responses)

Results showed there were significant differences in the correct responses to the target group Violent Offender compared to the Non-Offender target group, $F(1,30) = 4.88$, $p = .035$, $\eta^2 = 0.14$, indicating a more positive evaluation of the non-offender target group compared to the violent offender group at T1 and T2. There were significant differences found in the responses to the target group Learning-Disabled when compared to Non-Learning Disabled, $F(1,30) = 6.72$, $p = .015$, $\eta^2 = 0.18$, indicating a more positive evaluation towards the Non-Learning-Disabled group compared to the Learning-disabled group at T1 and T2. For the target Sex Offender group when compared to the Learning-Disabled group, $F(1,30) = 4.43$, $p = .044$, $\eta^2 = 0.13$, results indicated a more positive evaluation towards the Learning Disabled compared to the Sexual Offender target group at T1 and T2.

Results showed there were no significant differences in the responses to the following target groups: Violent Offender group when compared to the Learning-Disabled group, $F(1,30) = 0.30$, $p = .586$, $\eta^2 = 0.01$; Sexual Offender group when compared to the Violent Offender group, $F(1,30) = 0.30$, $p = .587$, $\eta^2 = 0.01$; and Sexual Offender group when compared to the Non-Offender, $F(1,30) = 0.04$, $p = .854$, $\eta^2 = 0.00$. These results indicated that the number of correct responses to the paper Implicit Association Test changed significantly for 50% of the target groups.

Direct Measure Results

As the focus of this chapter was to evaluate the reliability of the pencil and paper IAT in comparison to the reliability of the computer IAT, the results of the direct measures can be found within Appendix 15.

Summary of Results

The descriptive statistics showed that the means and standard deviations followed the same pattern of results for each of the attitude groups at T1 for both the computer and the pencil and paper IAT. The same result was found for each of the attitude groups at T2, except for the Violent Offender when compared to Learning Disabled attitude comparison group. These results indicated that the pencil and paper IAT detected the same bias in attitudes towards the range of attitude groups in 100% at T1 and 91.67% at T2 of the IAT target groups.

The inferential statistics from the repeated measures ANOVAs indicated no significant findings for the computer IAT method. There were, however, significant findings for three of the attitude groups with the use of the pencil and paper IAT.

When reliability of the paper and pencil Md-IAT was assessed and compared to the computer Md-IAT, the Cronbach's alpha for the pencil and paper IAT indicated a varied level of internal consistency for each of the attitude contrast groups. It found a 'Good' level for SOVO at T2 and an 'Acceptable' level SOVO and VOLD at T1. However, a 'Questionable' level was suggested for LDNLD, SOND, and VOLD at T1, and a 'Poor' level for SOND and VOND at T1. Finally, an 'Unacceptable' level was suggested for VOND at T2. In contrast, the Cronbach's alpha for the computer IAT indicated a range from 'Acceptable' to 'Excellent' level of internal consistency. When 'Test-retest' reliability was assessed via ICC analysis, results suggested a more positive outcome for the paper and pencil Md-IAT, with the 'test-retest' reliability being at 'Acceptable' level for each of the attitude contrast groups. This was in comparison to a range from 'Good' to 'Excellent' for the computer Md-IAT. These results are more in line with what was anticipated, based on previous findings.

Discussion

The objectives for this chapter included:

1. To identify a low-technological indirect measure that can be easily utilised within forensic settings.
2. To evaluate the alternative indirect measure alongside the computer Md-IAT method to test for reliability.
3. To check if participants can understand the instructions for the new methodology used to capture automatic attitudes.
4. To identify any modifications required prior to further data collection.

When considering the first objective, the results from this study clearly indicate the pencil and paper is an accessible low-technology method that can be used more easily than computer-based technology. Therefore, the pencil and paper IAT appears to be more accessible in forensic settings for two reasons. Firstly, this method is time limited and so it will help prevent staff from accessing their non-automatic attitudes during an

automatic attitude assessment. Also, the shorter time required to complete the pencil and paper IAT makes this method much more feasible to use within forensic settings. This method requires fewer resources making it easier for staff to be released from their duties to take part in the evaluation. Secondly, the method enables larger numbers of participants to be assessed together, as no specialist equipment is required. All the forensic services recruited for the research have adequate facilities to cater for service user case reviews, staff meetings and training. Therefore, it seems a reasonable assumption that such resources would be more easily accessed and utilised to conduct group data collection using the paper and pencil IAT. This is unlike the computer based IAT, where such technological resources are limited within forensic settings. Additionally, due to the security requirements, computers are generally situated within offices, and these tend to be much smaller spaces and not readily accessible. However, it is to be acknowledged that given the testing of the paper and pencil IAT did not take place within a forensic setting, firm conclusions of the feasibility of paper and pencil IATs within forensic settings cannot be made. This is a limitation of this study in fully addressing this research objective.

In terms of the second objective, there are scientific and practical aspects to consider. From a scientific perspective, the pencil and paper IAT was found to demonstrate a range of internal consistency levels, from 'Good' to 'Unacceptable', compared to 'Excellent' to 'Acceptable' for the computer IAT. Whereas the 'Test-retest' via ICC analyses found an 'Acceptable' level of test-retest reliability for each of the attitude contrasts with the paper and pencil IAT. Given previous research findings, this outcome was anticipated. Although the pencil and paper IAT cannot detect participants' response times, it can assess participants' direction of attitude bias in a controlled timeframe. Given the benefit of assessing automatic attitudes within forensic settings, it would be advantageous to assess pencil and paper IATs further, within lab-based and field-based studies.

The time restrictions in place when completing the pencil and paper IAT may control participants' responses more effectively and inhibit their ability in accessing non-automatic attitudes, as they are working to a set time with the researcher using a timer for participants to complete as many items on the IAT as possible. This task is more pressured, and participants have less time to consider what is the most socially desirable response. They are completing these measures under 'exam' parallel conditions. This

is more controlled compared to the computer IAT, as although participants are advised to work as quickly as they can, they are not working under the same type of pressure and are not working against a physical clock. Based on the theoretical models (the APE and MODE) of automatic and non-automatic attitudes, such conditions facilitate objective access of automatic attitudes. This outcome is important when assessing socially significant factors, as participants' responses may be affected by issues related to the wider contexts of the working environment. This outcome would then address concerns raised in Chapter 7, where several participants from the forensic setting samples took longer than expected to complete the computer IAT. Feedback received at the time of testing indicated this longer response time was due to participants' concerns of who would access the information and associated apprehensions. In such complex environments, the responses on a computer IAT that are not 'time controlled' may result in attempts to present attitudes in a socially desirable manner. The delay in response times then negates the purpose of the computer IAT, which is response time sensitive. This delay makes the tool less effective in detecting significant differences, making the computer IAT less reliable and the pencil and paper IAT more reliable from a practical perspective. It appears that the lack of sophistication of the pencil and paper IAT may serve research within field studies more successfully, as although staff may still have concerns managers could see their results, the time constraints of the test do not allow such deliberation.

When considering objectives three and four of this study, from a practical perspective, the investigations using a pencil and paper IAT ran smoothly. There were no practical barriers that prevented the full study from being carried out. The researcher explained the instruction for the paper and pencil IAT and checked participants understanding by asking if they had any questions regarding the procedure, and also by asking for volunteers to reiterate the procedure. If some of the questions or feedback indicated confusion or a lack of understanding, the researcher took the time to explain the process again, and being mindful to use different language. Before proceeding to the trial runs, the researcher asked again if anyone had any questions. During the trials, the researcher observed participants to see if there was any noticeable issue, such as someone not completing the trial or appearing confused for example. The researcher then went around the room once the trial was completed to check participants had completed the trial as it was intended, and asked for feedback or any concern before moving onto the

official paper and pencil IAT section. There were a couple of questions that indicated some participants required clarification of what was required and the process. These seemed to be answered adequately, as all participants completed the trials for the paper and pencil IAT as requested. In terms of modifications, the researcher modified the time and speed for explaining the instructions, and checked understanding. A modification was made to check participants trial runs, as the researcher had not anticipated being required to do this with a student sample and so deemed it of importance for a staff sample as well.

The procedures conducted as part of this chapter have been positive in terms of ease in carrying out the automatic attitude tests via the pencil and paper Md-IAT. However, the reliability outcomes for the pencil and paper IAT were inconsistent and demonstrated less internal consistency when compared to the computer Md-IAT version. This result indicates that although the use of a low-tech measure such as the pencil and paper IAT work efficiently within forensic settings, further testing with larger sample sizes need to be conducted to tests its reliability more robustly. Within the next chapter, further evaluations are conducted. These evaluations use the newly developed measure to assess the influence of the educational workshop on automatic attitudes of participants (particularly staff members within forensic settings), towards individuals with a history of committing sexual offences.

The Use of the Pencil and Paper Md- IAT to Evaluate the Impact of a Staff Educational Workshop

Introduction

The last study described in Chapter 8 looked at the value and implications of replacing the computer IAT programme with a low-technology-based IAT assessment. This was to evaluate automatic attitudes in a time-efficient manner without the need for specialist equipment. When several low-technology IATs (Lemm et al., 2007; Kitayama & Uchida, 2003) were reviewed, the author decided to evaluate a pencil and paper-based IAT (Bardin et al., 2016). This was because such methods enable multiple participants to be assessed at the same time. Given the time constraints identified in Chapter 7, this was of utmost importance. The use of a measure that was practical and accessible within forensic settings was paramount. The levels of reliability reported in Study 4, when testing for internal consistency, suggested Cronbach's Alpha levels ranging from 'Good' to 'Unacceptable' for the paper and pencil IAT, compared to 'Excellent' to 'Acceptable' for the computer IAT. The results from the 'Test-retest' ICC's, showed an 'Acceptable' level of reliability for each of the IAT contrast groups on the paper and pencil IAT. Such results reflect similar findings from previous research (Lemm et al., 2002; Lemm et al., 2007; Bardin et al., 2016) and they reaffirm the potential benefit of using such an approach when environments are restrictive. However, due to the outcomes of the validity tests of the computer Md-IAT from chapter 6, caution needs to be applied when interpreting the results from the pencil and paper Md-IAT.

The study in Chapter 8 highlighted how the 'pencil and paper' IAT was able to detect the same direction of bias as the computer IAT. An example of this is whether attitudes were positively biased or negatively biased toward the client population within the specific service. The author's decision to proceed with the use of the pencil and paper IAT to investigate automatic attitudes was influenced by the following factors: the range of alpha levels suggested for the paper and pencil IAT; the consistent 'Acceptable' reliability level found from the ICC 'test-retest' evaluations for each of the contrast groups; and the literature available, which indicates the benefits of using pencil and paper IATs in situations where the use of a computer IAT is not feasible (Vargas et al., 2007; Mori et al., 2008; Bardin et al., 2016). To the author's knowledge, this is the first study to investigate automatic and non-automatic attitudes towards

individuals with a history of committing sexual offences, violent offences, and IDD, using such a measure.

It is hypothesised that participants would exhibit more positive attitudes towards individuals with a history of committing sexual offences after attending an educational workshop, particularly as it was developed around the principles of APE and MODE attitude models. The workshop aimed to increase knowledge and understanding of factors that contribute to such offences being committed, and the importance of reducing recidivism through processes of rehabilitation. Earlier research has, however, revealed the affective element of attitudes to be consistently negative across a range of demographic groups (Willis et al., 2010). Given that the intervention for this study revolves around the provision of information, it is expected that the cognitive and behavioural elements will show more change than the affective element, as demonstrated in Malinen et al.'s (2014) research. Due to the educational workshop being formed around attitude models and the inclusion of a humanistic narrative in the delivery of specific tasks and roleplays, it was anticipated that some changes in participants' automatic attitudes will be detected.

Aim: - This study aims to evaluate the impact of an educational workshop on automatic and non-automatic attitudes.

Objectives: -

1. To assess automatic and non-automatic attitudes with the direct measures and the pencil and paper indirect measure.
2. To evaluate attitude change by comparison of an experimental group with a control group.
3. To evaluate attitude change by assessing the intervention sample, staff members compared to students.

Study 5

Method

Statistical Analysis.

Analyses were carried out using the Statistical Package for the Social Sciences for Windows (IBM Corp. Released 2021. IBM SPSS Statistics for Windows, Version 28.0.

Armonk, NY: IBM Co). Descriptive and parametric inferential statistics were conducted. The primary statistical test used for Study 5 was an Analysis of Covariance (ANCOVA). For the first and second analysis, a One Way ANCOVA was conducted. (Please refer to Chapter 7, sections 7.1.2 for explanations of the ANCOVA).

This test was selected for the first analysis of Study 5, as the author wanted to investigate if there was an association between the DV (Attitude Categories at the Delayed Stage; T3) and the IV (Intervention Type – Intervention vs Non-Intervention), after controlling for the covariate (pre-test scores). Using the pre-test scores as a covariate in the ANCOVA is to reduce the error variance, i.e., to make the analysis more precise, which would allow the author to see more clearly the influence of the independent variable on the dependent variable (Neter et al., 1989; Keppel, 1991).

For the second analysis in Study 5, initially a Repeated Measures ANCOVA was selected because the author wanted to determine if there was an association between the DV (Automatic Attitudes via the paper and pencil IAT Attitude Categories, Non-Automatic Attitudes via the direct measures at T2 and T3) and the IV (Group: Trained Student and Trained Staff) after controlling for the covariates, which were the relevant pre-test measures (T1). However, due to the number of missing data at T3, the research author decided to evaluate T1 and T2 data only, using a One-Way ANCOVA analysis.

Power Analysis

An a priori power analysis was conducted using G*Power version 3.1.9.7 (Faul et al., 2007) to determine the minimum sample size required to test the study hypothesis. Results indicated the required sample size to achieve 80% power for detecting a medium effect, at a significant criterion of $\alpha = .05$, was $N = 269$ for a one-way ANCOVA. Thus, the obtained sample size of $N = 133$ was under this requirement, and needs to be taken into consideration when interpreting the outcomes of this study⁸.

Participant Information

The first analysis of this study commenced with 135 participants. Two were removed (from the student sample) due to non-completion of the T1 measures. Therefore, a total

⁸ Please note, initially an ANOVA was the primary analysis used where a sample size of 128 was the requirement indicated.

of 133 people took part: 104 undergraduate university students based within a university in South Wales, and 29 staff members. The university students had no experience of working with individuals with a history of committing sexual offences. Purposive sampling was selected, meaning that members of the study group were purposefully sought. The method of recruitment was the same as that described in Chapter 8, section 8.3.1.2.

The aim of the study was to evaluate the effectiveness of the educational workshop upon the direction of attitudes towards individuals with IDD and a history of committing sexual offences. Students were invited to attend the same three-day educational workshop as offered to staff members as part of the intervention sample for this project. The process for this was, if the students were interested in taking part in the research after having read the advert, they were asked to sign up for either completion of the measures only, or to also attend a three-day educational workshop. The purpose of this selection process was to provide the student sample with an incentive to take part in the research. It would enable them to attend an educational workshop that could give them insight into the type of work they could pursue as a practitioner. However, it is recognised that such recruitment processes could have resulted in self-selection bias. This will be explored further in the discussion chapter.

Given the topic of the workshop, case examples used for the student sample were those accessible to the public via the media. They were not unit-specific service users. Therefore, the information presented was readily available in the public domain. It was used solely as a basis to attach the theoretical principles to and not for the purpose of exploring details of the behaviours conducted. The intervention sample consisted of 42 students (31.57% of overall sample; 13 Male, 29 Female, Mean age = 23.3, SD = 6.93), and 29 staff members (21.80%; 12 Male, 17 Female, Mean age = 40.5, SD = 12.6). The results from the intervention sample were compared to 60 students (45.11%; 14 Male, 46 Female, Mean age = 22.5, SD = 5.5) who did not attend the educational workshop.

The second analysis of Study 5 explored for any differences between the intervention sample. Therefore, included the same group of 29 staff members stated above, who were compared to the 42 students stated above.

The reason for offering the same educational workshop to a student audience was primarily related to the influence of ‘contact’ and consideration of the ‘Contact Theory’

(Allport, 1954), upon automatic and non-automatic attitudes. Some results from the previous studies suggested an interesting outcome for the VOND attitude contrast group on the IAT assessment for staff members, who may have been exposed to violent conduct on the units. Therefore, having a sample with no relevant work experience would support further exploration of the influence of contact on attitudes. The students were undertaking a psychology degree which included coverage of criminal and forensic psychological content.

Research Site Information

The student sample were all from a university in South Wales, undertaking an undergraduate degree in psychology and who had selected modules that related to criminal and forensic psychology. None of the students had any work experience with MCSO-IDD.

The 29 staff members worked within a range of forensic settings. These settings included a low secure unit intended to provide care and treatment for adult males, and it was anticipated that some service users would have a history of committing sexual offences. At the time of delivering the workshop, there were no service users detained at the unit, as it had recently opened, and the staff educational workshop formed part of the staff team induction training package. The staff team included members with a vast range of experience. Some had worked with individuals with a history of committing sexual offences, and had previously worked at other low or medium secure units. Whereas other members of staff had no prior experience or knowledge of working within such settings and had no experience of working with individuals with a history of committing sexual offences. Other participants in the staff sample were drawn from specialist community group homes that provided care for both adult males and females. Some of the male service users had a history of committing sexual offences or engaging in inappropriate sexual behaviour. Some of the specialist community group homes provided care solely for adult males with a history of committing sexual offences. Staff members referred to within this study attended the staff educational workshop and took part in the data collection at T1, T2 and T3.

Participant Demographics Summary

Table 0.1 Demographic Composition of the Study Sample

	N		% of Sample	
	Student	Staff	Student	Staff
Gender				
Male	29	12	27.9	41.4
Female	75	17	72.1	58.62
Age				
18-30	96	8	92.3	27.6
31-45	5	11	4.8	37.9
46-65	3	11	2.8	37.9
Educational Attainment				
Lower than Bachelors	92	1	88.4	3.4
Bachelors	6	8	5.7	27.6
Higher than Bachelors	3	3	2.8	10.3
Other	1	0	0.9	0
Know Someone in Prison				
Family Member	42	10	40.3	34.5
Friend/Associate	25	9	24.0	31
Been in Trouble With the Law	12	5	11.5	17.2
Been a Victim of a Crime	65	18	62.5	62
Prior Relevant Work/Voluntary	14	12	13.4	41.4
Prior Relevant Training	21	4	20.1	17.2

Note: N = 133 (Staff, N = 29, Students, N = 104).

Materials

For a full list of materials, please refer to Chapter 6, section 6.2.2, and Chapter 8, section 8.3.3.2 for information regarding the pencil and paper Md-IAT.

Design

The design was a mixed-model design. The first analysis included a ‘between-subjects’ variable (type of training, completed the educational workshop or did not) and included ‘within-subjects’ variables (the same measures were conducted with all participants). Data collection periods for those who took part in the educational workshop were at T1, T2 and T3. For those who did not take part in the workshop intervention, data were collected only at T1 (baseline) and T3 (3-month delayed follow-up). Therefore, data from T1 and T3 were compared. Please note, T3 was renamed for the purpose of this write up as T2. The second analysis included a ‘between subjects’ variable (type of sample; student or staff), and ‘within-subjects’ variable, where the same measures were completed at T1 (initial period), T2 (immediately post educational workshop period)

and T3 (delayed period – approximately three months after the initial testing period). As a result, the dependent variables were the same for both samples and the independent variable was the staff educational workshop, or sample type.

Procedure

Ethical approval had been obtained from the University of South Wales and the forensic mental health settings (see Appendices 2 and 3). As with the previous procedure described in Chapter 8, students were notified of the research through an advert on a specific module site on the virtual learning environment, placed by the Module Leader. Staff members were notified by their unit managers. Students and staff members were given a hard copy of the research information sheets on the first day of the study, (please refer to chapter 6, (page 124), chapter 7, (page 146, 147) and chapter 8, (page 183) for further details regarding the process of participants giving informed consent). The information and debrief sheets provided details of relevant support agencies to contact if any of the research material raised issues for them. On reading the research information sheet, the author checked understanding of the project, the measures that were to be used and the general aim and content of the workshop for those who had indicated they wanted to complete the workshop. The research author checked potential participants understanding by asking if they had any queries, and answered accordingly. The author then talked through the consent form and informed them they did not have to take part in the research if they did not want to or felt concerned at all by the content of the research. The author highlighted if they decided to take part, but later changed their minds, they could withdraw at a later point (up to four weeks post-data collection) if they no longer wanted their data included in the research. Those who wanted to take part in the research indicated this on the consent form, and those who did not, were also able to indicate their decision and did not take part in the remainder of the research session. For those who gave informed consent, they then completed the following process:-

Each participant completed the direct measures first, followed by the paper and pencil Md-IAT (the student sample completed this within the same lecture room at the same time, the staff sample completed this within the same room at the specific training venue based at each service). Each participant completed measures (direct and indirect) during the same session, with the author being present to answer any questions and collect the completed direct and indirect measures. The intervention group then undertook the

three-day educational workshop and completed the same measures immediately post-workshop. All participants were requested to attend a follow-up data collection session, approximately three months later.

Procedure for Direct and Indirect (Pencil and Paper Md-IAT) Measures.

The procedure for the direct and indirect measures was a replication of that completed in Chapter 8 (see section 8.3.3). It is important to note that different time limits were applied to the staff and student samples. For the student sample, each IAT page had a fixed time of 20 seconds for participants to complete as many questions as they could without missing any. The timing for this study was based on the 20-second time limit used in Lemm et al.'s 2002 study. Consideration to research linked with age-related slowing (Brinley, 1965; Ratcliffe et al., 2000) was also given. Due to the young age of the student participants, their prior experience of using such methods during their undergraduate degree and their responses to the practice items, 20 seconds was an appropriate fixed amount for the student sample. When the practice trials were re-run with a 30 second time limit, the student sample were easily able to complete all questions for both Block A and B (reverse condition). In contrast, when the 20-second time limit was used as part of a practice run for the staff sample, the majority (with the exception of one participant) were not able to progress to the reversed IAT category comparison group. This was in stark contrast to the student sample outcomes discussed in Chapter 8, and what was observed in the additional trial run through with the students in this current study. After considering the age-related slowing literature and lack of prior experience in completing measures, the time limit of 30 seconds, as used in Mast's study (2004), was carried out as an additional test as part of a practice run with the staff. This time limit seemed more appropriate, as staff responses were more comparable to the amount achieved by the student sample.⁹

The main evaluation of this chapter was the impact of the educational workshop upon both automatic and non-automatic attitudes. Those who attended the workshop were compared to those who did not. The direct comparison of staff to student responses was

9. Impact of 'Time Limit' differences between staff and students were explored with an independent t-test. Please refer to the results section.

not the main purpose of this study, but was conducted as a means to further explore outcomes, possibly influenced by different levels of contact.

Missing Data

Missing data for this study was reviewed against Rubin's Typology of Missing Data (1976) and was determined to be MCAR data. For the staff sample, there were missing data for three staff participants at T2 (recalled to the unit wards), and 10 at T3 (due to problems retaining staff, and staff not being on shift). For the student sample, two participants failed to complete some measures at T1 and were removed from the data, as there were no baseline measures available. There were four at T2, and the largest number at T3, which consisted of 52 participants failing to attend. Given that most of the missing data for this study were assessed as being MCAR, the author decided to conduct the analysis by replacing the missing data for T1 and T2, but due to the number of participants missing at T3 (40 from the trained sample of 73; 10 staff members and 30 student), the author decided not to replace the missing data at T3 or incorporate any data from this collection point, within the analysis. For missing data at T2, it was replaced using the series mean method on SPSS. Please refer to Chapter 5, section 5.2.2, page 107 and Chapter 6, section 6.2.4, page 117 for an explanation as to why this method was selected.

Results

Preliminary Analysis

Indirect Measure (Pencil and Paper Md-IAT) Time Limit Difference Evaluation.

An Independent Samples t-test was performed to compare responses to the pencil and paper IATs for the staff participants who were given a 30-second limit to complete each IAT block (Block A&B), and student (20-second limit) groups, to evaluate any impact of the time limits upon the number of responses completed. All effects are reported as significant at $p < 0.05$.

There were significant differences for the Learning disabled compared to Sexual Offender, Staff group ($M = 0.85$), $SD = 3.92$ and Student group ($M = 3.32$), $SD = 4.43$; $t(71) = 2.43$, $p = .017$; and Violent Offender compared to Sexual Offender, Staff group ($M = -1.35$), $SD = 2.45$ and Student group ($M = 1.84$), $SD = 7.15$; $t(71) = 2.31$, $p = .024$. There were no significant differences for the remainder attitude category groups.

These results indicate there were significant differences in the mean scores between the staff and student groups for two of the category groups, Learning Disabled compared to Sexual Offender, and Violent Offender compared to Sexual Offender. The direction of bias for the Learning Disabled compared to Sexual Offender was the same for both staff and students (more positive attitudes towards LD and more negatively towards SO); whereas the staff viewed the contrast group ‘Sexual Offender’ more positively to the ‘Violent Offender’ contrast group and students were biased in the opposite direction. These results seem more indicative of the direction of attitude bias influenced by contact, rather than the variation in the time limit for the SOVO contrast group. Overall, the results indicate that the difference in time limit had no adverse effect.

Table 0.2 Indirect Measure (Pencil and Paper IAT) Difference of Time Limit Evaluation.

Pencil and paper IAT	Staff	Student	t (71)	P	Cohen's d
	30 sec	20 sec			
Attitude Contrast Group	M (SD)	M (SD)			
NLDLD	4.59 (3.48)	5.51 (4.37)	0.952	0.344	0.23
LDSO	.85 (3.92)	3.32 (4.43)	2.43	0.017*	0.59
NOSO	12.12 (27.98)	11.61 (11.86)	-0.106	0.916	0.02
VOSO	-1.35 (2.45)	1.84 (7.15)	2.31	0.024*	0.60
LDVO	1.76 (2.37)	1.93 (3.99)	0.207	0.837	0.05
VONO	-6.02 (7.12)	-6.31 (6.23)	-0.187	0.852	0.04

N = 29 Staff; N = 44 Students. NLDLD = Non-Learning Disabled vs. Learning Disabled; LDSO = Learning Disabled vs. Sexual Offender; NOSO = Non-Offender vs. Sexual Offender; VOSO = Violent Offender vs. Sexual Offender; LDVO = Learning Disabled vs. Violent Offender; VONO = Violent Offender vs. Non-Offender

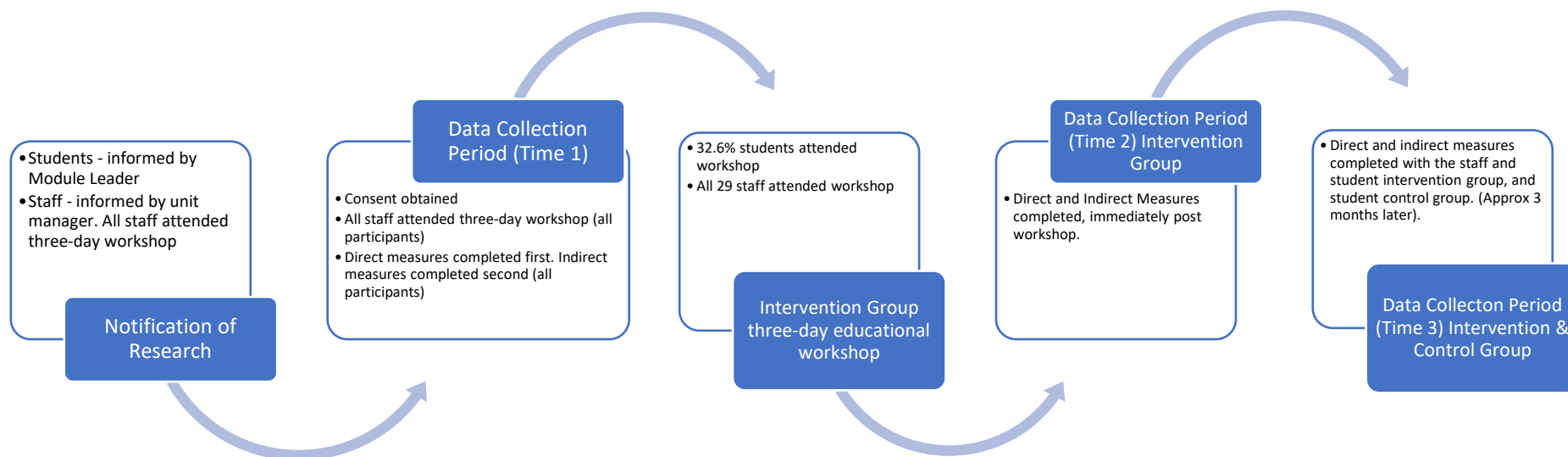


Figure 0-1 Procedure for Both the Intervention and Non-Intervention Group

*First Evaluation**Indirect Test (Pencil and Paper Md-IAT) Outcomes for Trained (Staff and Students) and Untrained (Students) Samples**Descriptive Statistics*

Results indicated that both samples rated ‘Non-Learning Disabled’ more positively than ‘Learning Disabled’, and ‘Non-Offenders more positively than ‘Sexual Offenders’ and ‘Violent Offenders’. The ‘Learning Disabled’ group was rated more positively than both offender types. Finally, trained participants had more positive initial and delayed attitudes towards the ‘Violent Offenders’ group compared to ‘Sexual Offenders’, whereas the untrained group indicated more positive associations towards the ‘Sexual Offenders’ attitude contrast group when compared to the ‘Violent Offender’ contrast group.

Table 0.3 Descriptive Statistics and ANCOVA Results for Automatic Attitudes of Trained (Staff and Students) and Untrained (Student) Participants.

Variable	Intervention	Non-Int	Intervention	Non-Int	ANCOVA		
	T2	T2	T2	T2	F	P	η^2
	Unadjusted	Unadjusted	Adjusted	Adjusted	(1,129)		
	M (SD)	M (SD)	M (SE)	M (SE)			
LDNLD	6.26 (5.22)	5.46 (1.75)	2.300 (.340)	1.830 (.376)			
Training					.111	.740	.00
Training *					.412	.522	.00
LDNLDIFFT1							
SOLD	3.011 (4.07)	2.96 (1.69)	2,970 (.375)	2.969 (.414)			
Training					.245	.621	.00
Training *					1.02	.315	.01
SOLDIFFT1							
SOND	9.29 (6.76)	8.86 (3.02)	9.231 (.636)	8.985 (.791)			
Training					.063	.802	.00
Training *					.012	.914	.00
SONDIFFT1							
SOVO	.652 (2.85)	-.208 (1.86)	.606 (.281)	-.296 (.314)			
Training					4.03	.047*	.03
Training *					6.12	.015*	.05
SOVODIFFT1							
VOLD	2.31 (3.44)	1.81 (2.04)	2.300 (.340)	1.830 (.376)			
Training					.837	.362	.01
Training *					.036	.849	.00
VOLDIFFT1							
VOND	-9.32 (6.36)	-8.71 (2.64)	-9.093 (.576)	-8.746 (.638)			
Training					2.58	.110	.02
Training *					3.40	.067	.03
VONDIFFT1							

Note: N = 133; 73 = Intervention (Educational Workshop), 60 = Non-Intervention (No Staff Educational Workshop). *<0.05

Inferential Statistics

A One-way ANCOVA was conducted to determine a statistically significant effect of ‘training type’ on the attitude contrast groups of the pencil and paper Md-IAT at the delayed period. This will be referred to as T2, after controlling for the covariate, which was the pre-test outcomes (T1).

The interaction effect of Training*SOVODIFFT1 was statistically significant ($F(1, 129) = 6.12, p = .015, \eta^2 = .05$). This indicated the effect of training on this attitude contrast group at Time 2 depended on the covariate at Time 1. The main effect of ‘training’ was examined and was statistically significant ($F(1, 129) = 4.03, p = .047, \eta^2 = .03$). This indicated a statistically significant difference between the intervention and non-intervention group, with the opposite biases being displayed (intervention = positive associations towards Violent Offenders; non-intervention having positive associations towards the Sexual Offender contrast group). There were no statistically significant interaction or main effects for the other attitude category groups. This indicated the effect of training on the attitude contrast groups at Time 2 did not depend on the covariate at Time 1. There were no statistically significant differences between the non-intervention and intervention groups for the following attitudes contrast groups: LDNLD, SOLD, SOND, VOLD, or VOND.

Direct Measure Results for the Brief Knowledge Survey, ATP, ATS, WOQ and CATSO for Trained and Untrained Participants

Brief Knowledge Survey Results

Descriptive Statistics

The descriptive statistics provide the mean ‘Under or Overestimation’ at Time 1 and Time 2 for the Brief Knowledge Survey. Results indicate a reduction within participants’ overestimations at T2 for questions 1, 4, 5 and 6, for both samples. For question 2, the intervention group scores at T1 increased in the right direction at T2, to be closer in line with factual information. For the non-intervention sample, their responses decreased at T2; therefore, these responses were even further away from factual-based information. For question 3, participants’ scores at T1 increased in the right direction at T2 for both samples.

Data were analysed using a One-way ANCOVA. This was conducted to determine a statistically significant difference between ‘training type’ on the level of knowledge

of the Brief Knowledge Survey at T2, controlling for the pre-test Brief Survey Knowledge measure at T1.

Table 0.4 Descriptive Statistics and ANCOVA Results for the Brief Knowledge Survey of Trained (Staff and Students) and Untrained (Student) Participants.

Variable	Unadjusted	Adjusted	Unadjusted	Adjusted	ANCOVA		
	T2 INT M (SD)	T2 INT M (SE)	T2 Non-Int M (SE)	T2 Non-Int M (SE)	F (1,129)	P	η^2
Ques 1	22.24 (16.72)	22.81 (1.78)	25.14 (13.41)	25.01 (1.97)			
Group					2.31	.131	.02
Group* K1 T1					1.69	.196	.01
Ques 2	16.39 (10.89)	16.87 (1.14)	16.53 (7.88)	16.54 (1.26)			
Group					.900	.345	.01
Group* K2 T1					2.65	.106	.02
Ques 3	23.30 (17.98)	23.42 (1.66)	23.55 (9.65)	23.49 (1.83)			
Group					1.22	.272	.01
Group* K3 T1					2.23	.137	.02
Ques 4	44.89 (21.25)	45.66 (2.05)	47.18 (12.12)	46.70 (2.28)			
Group					.746	.389	.01
Group* K4 T1					.660	.418	.01
Ques 5	36.82 (20.17)	37.93 (1.83)	37.69 (10.80)	37.58 (2.03)			
Group					5.78	.018*	.04
Group* K5 T1					6.94	.009*	.05
Ques 6	42.35 (20.03)	42.24 (1.88)	47.32 (10.89)	47.45 (2.07)			
Group					.594	.442	.01
Group* K6 T1					.008	.930	.00

Note N = 133; (73 = Intervention; 60 = Non-intervention). ANCOVA. * $p < 0.5$

Inferential Statistics From the Brief Knowledge Survey for Trained and Untrained Participants

The interaction effect of group (intervention vs. non-intervention) was statistically significant for question 5, $(F, 129) = 6.94, p = .009, \eta^2 = .05$. The interaction effect of group was not statistically significant for questions 1,2,3,4 or 6. When the main effect of group was examined, a statistically significant difference was also found for question 5, $(F, 129) = 5.78, p = .018, \eta^2 = .04$, although for both samples, scores reduced in the correct direction at T2.

Direct Attitude and Perception Measures for the Trained and Untrained Sample.***Descriptive Statistics***

The descriptive statistics provide the mean scores calculated at T1 and T2 for each of the direct measures.

Table 0.5 Descriptive Statistics and ANCOVA Results for Direct measures: ATP, ATS, WOQ and CATSO.

Variable	Unadjusted	Adjusted	Unadjusted	Adjusted	ANCOVA		
	T2	T2	T2	T2	F	P	η^2
	Intervention M (SD)	Intervention M (SE)	Non-Int M (SD)	Non-Int M (SE)	(1,23)		
ATP	91.88(13.66)	92.40 (1.15)	92.51(8.45)	92.14 (1.27)			
Training					3.29	.072	.03
Training* ATPT1					3.53	.062	.03
ATS	79.26(14.75)	80.13 (1.28)	82.53(9.09)	81.95 (1.42)			
Training					4.09	.045*	.03
Training* ATST1					3.45	.065	.03
WOQ	57.07(5.74)	56.81 (.524)	56.80(2.78)	56.95 (.583)			
Training					1.38	.242	.01
Training* WOQT1					1.34	.250	.01
CATSO	47.47(7.04)	47.46 (.641)	45.56(4.48)	45.56 (.71)			
Training					6.39	.013*	.05
Training* CATSOT1					8.10	.005*	.06

Note: N = 133; 73 = Intervention (Trained) 60 = Non-Intervention (Not Trained); ANCOVA: Analysis of Covariance; ATP: Attitude Towards Prisoners; ATS: Attitude Towards Sexual Offenders; WOQ: Working With Offenders' Questionnaire; CATSO: Community Attitudes Towards Sexual Offenders.

The results for the intervention group indicate an increase in scores at T2 for the ATP and ATS, and a slight increase for the CATSO. There was a slight decrease at T2 for the WOQ. These results are in the direction desired for the ATP and ATS. The results

for the non-intervention group indicate an increase at T2 for the ATP, ATS, WOQ, and a decrease in the CATSO. These results are all in the direction desired.

Inferential Statistics From the Attitude Measures, ATP, ATS, WOQ and CATSO for Trained and Untrained Participants

A One-way ANCOVA was conducted to determine a statistically significant difference between ‘training type’ on the direct measures (ATP, ATS, WOQ and CATSO) at T2, controlling for the pre-test measures at T1.

There was a significant interaction effect of training * CATSOT1 ($F(1,23) = 8.10, p = .005, \eta^2 = .06$). The main effect of ‘Training’ was examined, where there was a significant main effect of ‘Training’ found ($F(1,23) = 6.39, p = .013, \eta^2 = .05$). There were no significant interaction effects for the ATP, ATS or WOQ.

When the main effect of ‘Training’ was examined, a significant main effect of ‘Training’ was found for the ATS ($F(1,23) = 4.09, p = .045, \eta^2 = .31$). There was no significant main effect of ‘Training’ for the ATP ($F(1, 23) = 3.29, p = .072$) or for the WOQ ($F(1,23) = 1.38, p = .242, \eta^2 = .01$).

Given that the aim of the educational workshop was specifically to increase positive attitudes towards individuals with a history of committing sexual offences, these results are positive. However, the M(SD) increased to a similar degree for the non-intervention, which indicates other variables may have influenced this outcome. This will be considered in the Discussion chapter.

Second Evaluation

This study investigated differences between the intervention samples. Data were only investigated at T1 and T2 due to the number of missing data at T3 (10 for staff participants and 30 for student participants). This was primarily due to the point in the academic year where students were prioritising assessment deadlines. Whereas for the staff sample, these members had left employment.

Trained Students and Trained Staff, Time 1 and Time 2.

Descriptive Statistics From the Pencil and Paper IAT

The results indicated a positive evaluation for both samples at T1 and T2 to the following attitude contrast groups: Non-Learning Disabled compared to Learning Disabled; Learning Disabled compared to Sexual Offender; Non-Offender compared to

Sexual Offender; Non-Offender compared to Violent Offender; and Learning Disabled compared to Violent Offender. There was a positive response to Sexual Offender compared to Violent Offender at T1 and T2 for the staff sample, whereas there was a positive response to Violent Offender compared to Sexual Offender at T1 and T2 for the student sample.

Table 0.6 Descriptive Statistics and ANCOVA Results for the Pencil and Paper Md-IAT of Trained Staff and Trained Student Participants.

Variable	Unadjusted	Adjusted	Unadjusted	Adjusted	ANCOVA		
	T2	T2	T2	T2	F	P	η^2
	Student	Student	Staff	Staff	(1,69)		
	M (SD)	M(SE)	M (SD)	M(SE)			
LDNLD	6.35(6.49)	6.24(.808)	5.09(2.86)	5.11(1.01)			
Sample					.011	.918	.00
Sample *					.575	.451	.01
LDNLDIFFT1							
SOLD	4.01(6.30)	3.83(.811)	.91(3.35)	1.61(1.04)			
Sample					4.16	.045*	.06
Sample *					.799	.375	.01
SOLDIFFT1							
SOND	9.72(8.21)	9.76 (.984)	6.34(2.82)	6.35 (1.21)			
Sample					.515	.475	.01
Sample *					3.32	.073	.05
SONDIFFT1							
SOVO	1.09(3.06)	.943(.422)	-1.09(2.33)	-1.04 (.656)			
Sample					7.00	.010*	.09
Sample*					.174	.678	.00
SOVODIFFT1							
VOLD	2.18(4.05)	2.18 (.531)	1.91(2.41)	1.95(.655)			
Sample					.588	.446	.01
Sample *					.862	.356	.01
VOLDIFFT1							
VOND	-8.33(5.29)	-8.35(.668)	-6.71(2.55)	-6.72(.822)			
Sample					3.67	.059	.05
Sample *					1.32	.254	.02
VONDIFFT1							

Note: N = 73 Training (Staff, 29; Students, 44). * <0.05

Inferential Statistics for the Pencil and Paper Md-IAT for Trained Staff and Student Samples

Data were analysed using a One-Way Analysis of Covariance (ANCOVA) with a 'within-subjects' factor of time (T1 and T2), with 'Sample' as the 'between-subjects' factor.

Implicit Test (Pencil and Paper Md-IAT Responses).

Results of the ANCOVA (Table 9-5) suggested there was no interaction effect of ‘Sample’ for any of the attitude contrast groups, indicating the effect of ‘Sample’ on the DV’s LDNLD, SOLD, SOVO, SOND and VOLD, did not depend upon the covariate (LDNLDT1; SOLDT1; SOVOT1; SONDT1; VOLDT1). The main effect of ‘Sample’ was then examined and showed a main effect of ‘Sample’ for the Sexual Offender compared with Violent Offender (SOVO), $F(1,69) = 7.00, p = .010, \eta^2 = .09$. There was also a main effect found for the Sexual Offender compared with Learning -Disabled group, $F(1,69) = 4.16, p = .045, \eta^2 = .06$. There were no other main effects of ‘Sample’ found for the other attitude target comparison groups.

These results indicated there were significant differences between samples for Learning Disabled vs. Sexual Offender, and Violent Offender vs. Sexual Offender. For the ‘Sexual Offender’ compared to ‘Violent Offender’ contrast groups, there was a significant difference in the direction of bias. Staff indicated more positive associations for individuals with a history of committing sexual offences, which was the opposite direction of bias compared to the students. For the Learning Disabled compared to Sexual Offender contrast groups, both samples indicated the same direction of bias, however, there was a significant difference in the level between the staff and students. The more positive association towards individuals with IDD was more clearly defined in the student sample, compared to the staff sample.

Direct Measure Results for the Brief Knowledge Survey, ATP, ATS, WOQ and CATSO for the Intervention (Staff and Student) Samples

Brief Knowledge Survey Results.

Descriptive Statistics

A reduction in participants’ estimations at T2 for question 1, 4, 5 and 6 for both samples, was found. For questions 2 and 3, participants’ scores increased in the right direction at T2 for both samples. Changes were all in the correct direction and indicated a move closer to fact-based information. Table 9.6 includes the Brief Survey questions as a reminder to the reader.

*Inferential Statistics***Table 0.7 Descriptive Statistics and ANCOVA for the Brief Knowledge Survey for Intervention Samples, Time Periods 1 and 2.**

Variable	Unadjusted T2	Adjusted T2	Unadjusted T2	Adjusted T2	ANCOVA		
	Student M (SD)	Student M (SE)	Staff M (SD)	Staff M (SE)	F (1,69)	P	η^2
Ques 1	24.04 (18.39)	23.52 (2.50)	19.50 (13.65)	20.14 (3.09)			
Group					.108	.744	.00
Group* K1 T1					.040	.842	.00
Ques 2	16.64 (10.64)	16.47 (1.62)	16.02 (11.44)	16.09 (1.99)			
Group					.257	.614	.00
Group* K2 T1					.981	.325	.01
Ques 3	19.93 (17.02)	20.57 (2.58)	28.42 (16.17)	27.38 (3.23)			
Group					.955	.332	.01
Group* K3 T1					.006	.939	.00
Ques 4	43.63 (21.62)	43.43 (3.11)	46.81 (20.90)	46.86 (3.84)			
Group					2.26	.137	.03
Group* K4 T1					1.84	.179	.03
Ques 5	36.50 (20.96)	36.33 (2.74)	37.31 (19.24)	37.38 (3.37)			
Group					3.93	.051	.05
Group* K5 T1					4.13	.046*	.06
Ques 6	39.61 (20.40)	39.96 (2.98)	46.51 (19.04)	45.49 (3.70)			
Group					.020	.889	.00
Group* K6 T1					.362	.549	.01

Note: N = 73; ANCOVA: Analysis of Covariance; * $p < 0.05$.

K1: What percentage of sexual assaults of adults do you believe were committed by strangers?

K2: What percentage of people who have committed sexual offences do you believe come to the attention of the authorities?

K3: What percentage of people who commit sexual assaults against adults do you believe were sexually abused as children?

K4: What percentage of people convicted for committing sexual offences do you believe will commit another sexual offence?

K5: What percentage of individuals convicted for rape do you believe reoffend in a sexual manner?

K6: What percentage of individuals convicted for committing sexual offences against children do you believe reoffend in asexual manner?

Data were analysed using a One-Way Analysis of Covariance (ANCOVA) with a

‘within-subjects’ factor of ‘Knowledge’ (questions 1, 2, 3, 4, 5, and 6) at Time 2, with Time 1 being controlled as the covariate. Negative mean scores indicate ‘underestimation’. Positive mean scores indicate ‘overestimation’.

The results from the ANCOVA (Table 9.6) suggested there was an interaction effect of ‘Sample’ and Question 5 ($F(1,69) = 4.13, p = .046, \eta^2 = .06$). This indicates the effect of ‘Sample’, did depend upon the covariate of level of knowledge at T1 (Question 5 T1). There were no interaction effects for the remaining questions. When the main effect of ‘Sample’ was examined, no main effect of ‘Sample’ was found.

Direct Attitude Measures from the ATP, ATS, WOQ and CATSO from the Intervention Samples (Student and Staff).

Descriptive Statistics

Table 0.8 Descriptive Statistics and ANCOVA Results for the Direct Measures: ATP, ATS, WOQ and CATSO for the Intervention Samples (Student and Staff).

Variable	Unadjusted T2	Adjusted T2	Unadjusted T2	Adjusted T2	ANCOVA		
	Student M (SD)	Student M (SE)	Staff M (SD)	Staff M (SE)	F (1,69)	P	η^2
ATP	93.90(14.26)	94.79(1.68)	88.81(12.30)	87.52(2.10)			
Sample					.119	.731	.00
Sample * ATPT1					.010	.919	.00
ATS	80.80(15.49)	82.64(1.87)	88.81(12.30)	75.51(2..37)			
Sample					1.04	.312	.02
Sample* ATST1					2.50	.118	.04
WOQ	57.36 (5.65)	56.79(.819)	56.64 (5.93)	56.76(1.01)			
Sample					5.20	.026*	.07
Sample* WOQT1					5.25	.025*	.07
CATSO	47.46 (8.03)	47.00(.924)	47.49 (5.32)	47.82(1.143)			
Sample					3.23	.077	.05
Sample* CATSOT1					2.94	.091	.04

Note: N = 73; ANCOVA: Analysis of Covariance; ATP: Attitude Towards Prisoners; ATS: Attitude Towards Sexual Offenders; WOQ: Working With Offenders' Questionnaire; CATSO: Community Attitudes Towards Sexual Offenders.

The results for the staff sample indicate an increase in scores at T2 for the ATS and WOQ, which were in the desired direction. There was a slight decrease for the ATP at T2, but the initial result was higher than the students' T1 results, although the student T2 results increased more. There was a slight increase in the CATSO outcomes for the staff sample; ideally, this would have decreased. For the student sample, there was an increase in scores at T2 for the ATP and ATS, which was in the desired direction. There

was a decrease in the WOQ at T2 and a slight increase in the CATSO, both of which were not in the desired direction.

Inferential Statistics From the Attitude Measures, ATP, ATS, WOQ and CATSO for Trained Student and Trained Staff Participants.

The results from the ANCOVA, suggested the interaction effect of ‘Sample’ and WOQ was statistically significant, $(F(1,69) = 5.25, p = .025, \eta^2 = .07)$. The interaction effects for the other direct measures were not statistically significant: ATP, $(F(1, 69) = .01, p = .919, \eta^2 = .00)$. ATS, $(F(1, 69) = 2.50, p = .118, \eta^2 = .04)$. CATSO $(F(1, 69) = 2.94, p = .091, \eta^2 = .04)$. When the main effect of ‘Sample’ was examined, a main effect of ‘Sample’ and the WOQ was found, $(F(1,69) = 5.20, p = .026, \eta^2 = .07)$.

These results indicate responses from the staff sample at T2 were not significantly different for the direct measures when compared to the student sample. Therefore, the educational workshop had no significantly different impact upon the staff samples’ ATPs, ATS’s, or their attitudes towards individuals with a history of committing sexual offences and based in the community. Interestingly, the staff results at T1 for the ATP, ATS and CATSO were indicative of more positive associations towards prisoners, individuals who have committed sexual offences and are detained and individuals who have committed sexual offences but are within the community. Yet the results at T1 suggested they had less confidence in working with individuals who had committed offences, when compared to the student sample.

Summary of Results

The first evaluation of Study 5 looked for differences between the intervention sample (staff members and students) and the non-intervention sample (students) at T1 and T3 (renamed T2 for ease of understanding). The use of the pencil and paper IAT found significant differences over time for both samples for the attitude contrast group : ‘Sexual Offenders’ versus ‘Violent Offenders’. The intervention sample had more positive attitudes at T1 and T2 towards the ‘ Violent Offender’ group when compared to the ‘Sexual Offender’ group, and the non-intervention group displayed more positive associations towards the ‘Sexual Offender’ group, when compared to the ‘Violent Offender’ group. Both samples demonstrated an increase in positive associations towards the ‘Learning-Disabled’ attitude contrast group. For the Brief Knowledge survey, an interaction effect of ‘Group’ (Intervention vs Non-intervention) and ‘Time’

upon question response was significantly different for question 5, with both samples reducing their estimations to be more in line with factual based information. As for the direct attitude measures, results showed a significant interaction effect of 'Training' upon the CATSO results. When the main effect of 'Training' was examined, a significant difference was suggested for the ATS and CATSO. The outcomes indicated both the intervention and non-intervention groups increased to be more positive towards individuals who committed sexual offences, but the intervention sample increase was slightly more. For the CATSO, results showed the intervention sample developed more negative bias towards MCSO based in the community, whereas the non-intervention sample's level of bias reduced. These results indicated a limited impact of the educational workshop.

The second evaluation within Study 5 looked for differences between the intervention samples (staff compared with students) at T1 and T2. Evaluations were not conducted at T3, due to reasons stated previously regarding the number of missing data at the delayed follow-up period.

The pencil and paper IAT results found no interaction effects for any of the IAT contrast groups. When the main effect of 'Sample' was examined, a main effect was found for the SOLD and SOVO attitude contrast groups. Although both samples indicated more positive associations towards individuals with IDD when compared to individuals who had committed sexual offences, this was less clearly defined for the staff sample. For the SOVO contrast group, there was a difference within the direction of bias between the samples. The staff indicated more positive associations towards those with a history of committing sexual offences when compared to those indicated to have violent conduct. This was the opposite outcome found for the student sample.

For the Brief Knowledge survey, results showed a significant difference between the samples for question 5. However, the results did not give a clear indication of which sample was closest to the correct levels as this varied for each of the questions. Both samples' mean scores significantly reduced post workshop, to be in line with fact-based information, with the student sample reducing further than the staff sample.

For the direct measures, the results indicated the responses at the post workshop evaluation (T2) were significantly different for the WOQ. Results indicated the student sample initially expressed more confidence in working with people who commit

offences, this level reduced upon completion of the educational workshop. Whereas the staff sample indicated less confidence at the initial phase, and this increased upon completion of the educational workshop. No other significant differences were found for the ATP, ATS or CATSO. Although these results indicate no significant differences were found, it has been highlighted that staff results at T1 for the ATP, ATS and CATSO indicated more positive associations towards prisoners, individuals who have committed sexual offences and in the community and individuals who have committed sexual offences and are detained or imprisoned. From the analyses of automatic attitudes in Study 5, both evaluations found significant differences for the attitude contrast group 'Sexual Offender vs. 'Violent Offender' (SOVO). In the first analysis, results indicated the intervention sample held more positive associations towards the 'Violent Offender' group, and the non-intervention sample held more positive attitudes towards the 'Sexual Offender' group. When this was explored further in the second analysis, the staff intervention sample indicated more positive associations towards the 'Sexual Offender' group. However, the student sample, indicated more positive associations towards the 'Violent Offender' group. The level of positive attitudes expressed towards MCSO at the initial phase (T1), was notably higher for the staff sample than the student sample. This will be reflected upon in the discussion chapter. Another significant difference was found in the second analysis of Study 5, for the attitude contrast group 'Sexual Offender' vs. 'Learning Disabilities'. Although both samples indicated more positive associations towards the 'Learning Disabilities' group, the staff sample were more neutral in their response compared to the student sample.

Discussion

These findings are important to consider when reflecting on the overall aim of this thesis, which was to evaluate the influence an educational workshop has upon both automatic and non-automatic attitudes towards MCSO-IDD. It was hypothesised that more positive associations would be developed because of attending the educational workshop. This hypothesis was supported to a minimum degree for the staff sample who attended the educational workshop, but not for the students. The effects of the educational workshop aimed to increase knowledge and understanding of a population and enhance attitudes towards rehabilitation may, therefore, may be inhibited if the attendees have little or no experience or contact with that population.

The positive associations observed towards men who have committed sexual offences detected by the pencil and paper IAT for the staff sample, could be related to the Contact Theory (Allport, 1954). Such outcomes for the staff may have been influenced by their ability to attach learning points from the educational workshop to service users within their care. Therefore, this combined with attending an educational workshop developed around attitude models, may have assisted in challenging stereotypical beliefs.

For the findings regarding the ‘Sexual Offender’ versus ‘Violent Offender’ attitude contrast groups, a main effect of ‘Training’ was found between the ‘Trained’ and ‘Untrained’ sample in the first analysis of Study 5, and a main effect of ‘Sample’ for the trained samples in the second analysis. These findings again, reflect the premise of the Contact Theory (Allport, 1954), as the staff indicated more positive associations were held towards individuals with a history of committing sexual offences. This was both before the workshop was completed and upon workshop completion, where there was a slight increase. An additional consideration is that given the workshop did not specifically target generalised violence, staff ‘responses to the SOVO contrast group may reflect their experience of high levels of violence in forensic settings. As a result of attending the educational workshop, a better understanding of issues relating to individuals who commit sexual offences may have developed. This could lead to more clarity of fact-based information and less blurring of boundaries between generalised violence and sexualised violence. This indicates both the importance of the breaking down stigma and prejudice via contact and the benefit of staff workshops to help increase knowledge and understanding. Both could reinforce positive associations and raise awareness of staff roles within the service users rehabilitation pathways.

Additionally, the strength of positive associations towards individuals with IDD was less explicit for staff. One possible reason could be the staff found it difficult to separate the attitude contrasts. All of the service users in their care, have a primary diagnosis of IDD, and a proportion of them have histories of committing sexual offences. Here, consideration of both the contact theory (Allport, 1954) and blame attribution (Shaver, 1985) model, may explain how staff could have found this attitude contrast group more difficult to respond to than the students. From observations of the staff members during the case study exercises, there seemed to have been more of an impact upon them emotionally in comparison to the student sample. The exercise highlighted the service users’ traumatic histories, particularly during their childhood, which were dominated

by experiences of neglect and abuse. Discussions from staff indicated a sense of understanding and empathy for the service users, relating to their experiences during their childhood, and as adults. The exercises and discussions involving staff may therefore have had more impact upon the 'affect' component of automatic attitudes than for the student sample. It is important to note, for staff, these exercises were attached to someone they knew and had contact with. Whereas, in stark contrast, the reaction from the student sample appeared more detached. Such responses may have been due to the exercises referring to someone known from media coverage due to being T.V personalities, rather than being someone they personally met. The research author is however mindful of their own confirmation bias. This is highly likely to be linked to the level of self-investment and hope for the educational workshop to have a positive effect upon staff attitudes towards the service users. It may have been impacted by the desire for the educational workshop to help staff connect to the services users' rehabilitation plans and future offence free lifestyle. Therefore, such exercises conducted may not have had such a profound effect as interpreted by the author.

The findings for the student population relate to research conducted by Malinen et al. (2014), which consisted of a student sample, as fewer differences were found from the pencil and paper IAT than the direct measure ATS scale. The benefits of considering the APE and MODE attitude models in the development and delivery of the educational workshop are, however, unclear. It could be interpreted that the outcomes from the pencil and paper Md-IAT seem to indicate an impact of participants having different levels of contact and experience, with service users' histories being relevant to the attitude contrast group. However, the different direction in bias between the staff and student intervention sample for the 'Sexual Offender' vs. 'Violent Offender' attitude contrast group, could be a result of the different examples used in the exercises. It would be interesting to explore if a different outcome was achieved by the case examples given to the students, being referred to as a 'service user', rather than a T.V personality, whose case was publicised. Another factor that needs to be considered, is the different time allocations given to the staff and student groups to complete the pencil and paper Md-IATs. Although, when tested in Chapter 8, this seemed to have had little impact on the outcomes.

The pencil and paper IAT detected several statistically significant differences upon completion of the educational workshop, and significant differences between samples.

These results affirm previous findings related to the influence of contact in challenging stereotypical beliefs. The outcomes from the pencil and paper IAT highlight the importance of being able to evaluate automatic attitudes. They demonstrated how staff members' baseline attitudes towards individuals who have committed sexual offences were reasonably positive to begin with. Having such data will assist services to enhance interventions and provide additional resources to support staff in their work and the rehabilitative process. However, as previously highlighted, all findings from the computer and the paper and pencil Md-IAT are to be interpreted with caution, given the findings from the validity tests of the computer Md-IAT and the internal consistency reliability test for the paper and pencil Md-IAT.

Reflecting further on the finding from the first analysis of Study 5 (Intervention (73) versus Non-Intervention (60)), results from the Brief Knowledge Survey indicated significant interaction effect and main effect of 'Group' for question 5. A contributing factor to this outcome could have been the samples evaluated. The untrained sample consisted solely of students enrolled onto a Psychology Undergraduate (UG) programme. This may have covered material related to this particular question during the three-month time lapse. Being asked the questions at T1 could have also triggered the students' curiosity to investigate such issues further or be more aware of information that may have been linked to the questions.

For the direct attitude measures, it was interesting to see that there were significant differences between the intervention and non-intervention samples for the ATS and the CATSO. The provision of the workshop seems to have had a positive influence based on the ATS outcome but not for the CATSO, where changes occurred in the undesired direction. This outcome may again be related to the non-intervention sample being psychology UG students. Therefore, more clarity of the impact of the workshop may have been obtained if the control sample included lay members of the public.

The effect sizes found in Study 5, analyses 1 and 2 would be categorised as 'small'. Cohen, (1988), however, highlights the risk of using terms such as 'small', 'medium' and 'large' out of context. Glass et al. (1981, p. 102) raised an important point when considering the results in applied studies. They stated that the "effectiveness of a particular intervention can only be interpreted in relation to other interventions that seek to produce the same effect". The practical importance of an effect, therefore, depends

entirely on its relative costs and benefits. The authors give an example within education settings and use the argument that “if it could be shown that making a small and inexpensive change would raise academic achievement by an effect size of even as little as 0.1, then this could be a very significant improvement, particularly if the improvement applied uniformly to all students, and even more so if the effect were cumulative over time.”

Given that the effect sizes are small within this thesis, it is important to keep in mind the numbers within the staff sample, as a number of them were underpowered. The results from the validity tests of the computer Md-IAT and consequently the pencil and paper Md-IAT, as well as the internal consistency results of the paper and pencil Md-IAT indicates caution should be applied when interpreting the results. In terms of the MRC Model, the results in the context of a three-day educational workshop, and the difficulty in changing automatic attitudes for such emotive attitude categories, indicate further evaluations would be beneficial. From a practice point of view, staff engagement with service users may become more understanding and supportive and less punitive. This approach can have a greater influence upon a service users’ rehabilitative experience and support the goal towards an offence free lifestyle.

Chapter Summary

This chapter has evaluated the influence of an educational workshop, where the MODE and APE models of attitude formation and change were considered. The workshop aimed to increase knowledge and understanding of factors that contribute towards MCSO-IDD. This evaluation also aimed to increase knowledge and understanding of the role rehabilitation has in reducing risk and the important effect staff members have within this process. The use of both direct and indirect measures was used to conduct this evaluation, with a pencil and paper named IAT being utilised to assess automatic attitudes.

The pencil and paper IAT detected a few important differences between participant populations, which could have significant implications for service resources in developing supportive environments to enhance rehabilitation. The primary implication was the impact that contact had upon the results. The outcomes of these studies highlight the use of the pencil and paper IAT being beneficial for use within forensic settings and public settings. This approach is not resource-intensive and can provide

clear direction as to where interventions are required in developing supportive environments to benefit rehabilitation programmes aimed to reduce the risk of future sexual offences. However, given the small sample sizes, limitations in terms of validity tests for the Md-IAT and reliability tests, such interpretations are to be held with caution and require further investigation.

The final chapter to follow is a general discussion, where the outcomes of the thesis will be considered as a whole. In addition, the implications for future research and practice will be presented.

Part 3 – General Discussion

General Discussion

The central focus of this thesis has been the evaluation of an educational workshop aimed to improve understanding and clinical practice when working with MCSO-IDD and the evaluation of a Md-IAT developed specifically to assess the impact of the workshop upon automatic attitudes. Theoretical principles were drawn from the MODE and APE models in the formation of the educational workshop. Throughout the principal studies reported in thesis chapters six to nine, two key factors seem to have influenced to a limited extent the enhancement of positive automatic and non-automatic attitudes towards this population. These factors are the workshop, which was formed around attitude models, and the level of contact with this population.

Within this final chapter, the overall findings will be brought together, and considerations linked to these findings will be discussed. This ‘General Discussion’ chapter is broken down into four sections. The first section will provide a summary of the key findings from the empirical studies conducted as part of this thesis (whilst considering the outcomes from the validity and reliability assessment of the Md-IATs (computer and pencil and paper version) and the originality of the research. The second section will explore the implications in terms of feasibility, both from a practical and methodological perspective. The third section will consider the limitations of the evaluation methods developed and used, as well as the implementation phase of the workshop. It will explore the future directions of research that examines the attitudes of staff who work with MCSO-IDD. The fourth section will contain final reflections and observations for this thesis.

The rehabilitation of individuals who have committed sexual offences is a contentious and emotive area (Cohen & Jeglic, 2007; Harper & Harris, 2017; Lussier et al., 2020; McCartan & Richards, 2021; Walsh et al., 2020) that generates a lot of interest, opinions, and beliefs from the media, public and Government (Willis et al., 2010; Harper, 2019). Media coverage can, and does in turn, contribute to members of the public acquiring incorrect and biased information that often results in the demand for harsh treatment and management of people who commit offences (Harper & Hogue, 2015a; McCartan and Gotch, 2020; Willis et al., 2013; Harper & Harris, 2017; Hogue & Harper, 2019). The impact of such media portrayal and public outcry often leads to

Government legislation being brought in line with these expectations (Harris & Socia, 2016; Levenson et al., 2007; Munro, 2011; Munro 2012; Munro et al., 2020; Shackley et al., 2014). The persistent cycle of incorrect information, stereotyping and stigmatisation of individuals who have committed these type of crimes filters through to staff who work within the settings where individuals are detained. Such influences potentially result in biased attitudes (non-automatic or automatic), and intolerance. Such interactions can impact negatively upon any rehabilitation efforts conducted whilst detained or in the community (Harper & Harris, 2017; Hogue, 1993; Blagden et al., 2018; Tovey, et al., 2022). This related to the research sites for this current research. These ranged from Low Secure Units to community group homes.

An increase in staff knowledge and understanding of the service users they care for can help address negative attitudes toward this population (Blagden et al., 2018), and relationships between staff and service users (Gaab et al., 2020). A core aspect of this thesis was to investigate whether an educational workshop positively influences staff attitudes when working with MCSO-IDD. In the ‘preparation’ and ‘planning’ phase of developing the educational workshop, it was important for the author to consider the literature surrounding attitudes and to review theoretical models as to how attitudes are developed. Understanding this information helped shape both the content and delivery of the staff educational workshop. The MODE (Fazio, 1990) and APE (Gawronski & Bodenhausen, 2006) models were considered when developing this workshop. These were considered for the general workshop content and the specific exercise formats, which were intended to influence both automatic and non-automatic attitude changes. The principles of both the MODE and APE models were also applied to the language used within the delivery. This approach was deemed important to give the staff educational workshop the best opportunity to support attitude change.

Given the importance of investigating both non-automatic and automatic attitudes with staff members, appropriate measures needed to be sourced. There were several suitable measures to evaluate direct attitudes and perspectives of individuals who commit sexual offences. However, there was no suitable indirect attitude measure that would assess the complexity of attitude groups required for this thesis. The measure needed to be able to assess attitudes towards MCSO-IDD, and individuals with a history of committing violent offences. As a result, the author developed a multiple-dimensional IAT (a computer-based Implicit Association Test). As referred to in Chapter 3 and 5,

the multi-dimensional IAT (Md-IAT) enables the examination of more than one attitude target category, unlike a single-target IAT that restricts the examination to one attitude target.

The indirect method selected was a computer IAT. As part of the 'Development Phase', in producing the computer Md-IAT, the author adopted a systematic approach to produce the word lists selected for the measure (see Part 2, Chapter 5: Development Phase and Methodological Considerations for further details). A primary analysis reported in Chapter 6 related to the reliability and validity of the computer Md-IAT, and the results indicated Cronbach's Alpha levels for the IAT contrast groups to generally produce a 'Good' level of internal consistency and an 'Excellent' level for the SOVO at T1 and SOND at T2. When the ICC test-retest' evaluations were conducted, results indicated 'Good' to 'Excellent' levels of test-retest reliability. The development phase also involved feasibility studies. These assessed the accessibility of the Md-IAT for a mixed population of staff members working in forensic secure and community settings and Psychology undergraduate students. At this point in the research, it was decided that the computer Md-IAT would be suitable to use within these settings. However, when larger numbers were required to attend the educational workshop, resource barriers became apparent. These problems related to the 'feasibility' aspect of the MRC Model, and 'service provision' of the Behaviour Change Wheel (BCW) and became significant. These issues were connected to limited resources within the forensic settings, including included limited appropriate space to use equipment to access the computer IAT programme, and not always having a large enough environment to conduct the workshop. In addition to this, staff availability was limited, as the units were being managed with minimum staff numbers. This resulted in the unit manager being unable to fulfil their previously stated commitment to the completion of the educational workshop by the staff workforce. Ultimately, the financial constraints imposed by a company takeover impacted greatly on achieving sufficient staff numbers to accommodate the sample size indicated by the power analyses. Such issues highlighted concerns of further 'service provision' difficulties. It also brought to light the need for a measure that did not require technical equipment. This would be less time-consuming and therefore, less resource intensive for services. The author proceeded to explore potential low-technology indirect measures, with the literature indicating the pencil and paper manual IAT (name version) to be the most

suitable replacement (see Part 1, Chapter 4 and Part 2, Chapter 5 for details). Pencil and paper IATs are often neglected by researchers due to their reduced reliability compared to the computer IAT, although they provide a range of benefits (Bardin et al., 2016), particularly in environments that prohibit the use of high-technology assessments. A pencil and paper manual version of the computer IAT was therefore developed as part of this thesis. When this new format was tested against the computer IAT, results showed a range of alpha levels from ‘Good’ to Unacceptable’, compared to the computer Md-IAT showing a range from ‘Excellent’ to ‘Acceptable’. When ‘test-retest’ reliability was assessed with ICC analyses, results were more positive for the pencil and paper Md-IAT, suggesting ‘Acceptable’ levels for each of the contrast groups. This was in comparison to a range from ‘Good’ to ‘Excellent’ for the computer MD-IAT. These results better reflect previous findings. This was deemed sufficient to i) identify the direction of bias in staff attitudes towards the range of attitude targets and ii) to assess consistency or change in response to the completion of the educational workshop.

Overview of Key Findings

Summary of Computer IAT Studies and the Direct Measures

The feasibility study (Study 1) reported in Chapter 6, was conducted to evaluate the reliability and validity of the computer-based Md-IAT, as well as the practicality of using the computer-based assessment in restricted environments. This was to assess staff members automatic attitudes given the lack of previous research available. Further, it was to assess if the use of a computer-based measure (a multi-dimensional IAT), aimed to evaluate automatic attitudes, was viable within Forensic Mental Health (FMH) settings. Thus, preliminary analysis examined the validity and reliability of the computer Md-IAT. In terms of reliability, results from the Cronbach’s Alpha indicated the IAT contrast groups generally suggested a ‘Good’ level of internal consistency, with some of the attitude contrast groups (SOVO at T1 and the SOND at T2) suggesting an ‘Excellent’ level. The results from the ‘Intraclass Correlation Test-Retest’ examination indicated ‘Good to Excellent’ levels of Test-Retest’ reliability. As for validity, results indicated small correlations when testing for convergent and discriminant validity. No significant correlations were found. Therefore, given the sample size being limited and the inability to run a factor analysis, caution was applied in the interpretation of the results from the Md-IATs.

Another key objective of Study 1 was to confirm the length of time required to utilise both the direct and indirect measures and to obtain baseline measures of both automatic and non-automatic attitudes towards men who commit sexual offences (MCSO). These were obtained from participants with no contact or Previous Relevant Training (PRT) in working with MCSO. From a feasibility perspective, the outcomes indicated that the measures could be used in Forensic Mental Health (FMH) settings and the length of time to complete the measures did not exceed anticipated timescales. The use of indirect measures to assess the automatic attitudes of staff within FMH settings will be of benefit. These could enhance the development of rehabilitative environments by providing additional information on staff biases towards the service user population. This outcome will help inform required service provision for staff, which can, in turn, aid the rehabilitation process for MCSO's and support the reduction in future risk (Blagden et al., 2018). It can assist the rehabilitative pathways for service users with other needs, as the Md-IAT could help identify strength of associations in overlooked areas.

Outcomes for the direct measures indicated positive attitudes towards prisoners (ATP's) in general and those with a history of committing sexual offences (ATS). They also showed positive perceptions of those with a history of committing sexual offences who are based within the community (CATSO) and a moderate level of confidence in working with people who commit offences (WOQ). For the indirect measure, the computer Md-IAT results detected biases in the anticipated directions for most pairings, except for the attitude contrast group; 'Sexual Offenders' compared to 'Violent Offenders'. For this attitude contrast group, positive associations towards people who commit sexual offences were found. In addition, positive associations towards the 'Violent Offender' category were found when compared to the IDD category at the delayed data collection point. These findings are interesting, as the participants' automatic attitudes seem to go against the previous literature. This showed that members of the public hold more negative and punitive attitudes towards people who commit sexual offences (Willis et al., 2010; Harris & Socia, 2016). These results may be influenced by participants' experience with individuals who display violent behaviour. Staff members working with individuals with IDD can be subject to higher levels of aggression (Steans & Duff, 2018) and this may impact the direction of bias when measuring their automatic attitudes. The results for the student sample are,

however, unclear and require further investigation. The inclusion of a qualitative analysis would be helpful in providing further insight into these results.

When examining results for the IDD compared to ‘Violent Offender’ at T2, the reason for the change from more positive associations with the IDD target group at T1 to more positive associations with the Violent Offender target group at T2 is unclear. There was no intervention in place, and, therefore, external variables such as media portrayal may have influenced this outcome. Alternatively, these outcomes may relate to previous findings about stigma towards individuals with IDD, where less blame is apportioned to their actions, but more violence is anticipated (Steans & Duff, 2018). It is possible that contact, or exposure to violence from individuals with IDD, in the period between T1 and T2 data collection may have contributed to the change in attitude outcomes. Other authors claim an unsympathetic, disparaging view of individuals with disabilities, as substandard and unwanted, pervades our society and sways hate crimes against people with disabilities (Quarmby, 2008; Quarmby, 2011). If this were the case, however, then similar results would have been found at T1. Wilson and Scior (2015) found that automatic attitudes (measured by a single IAT) towards individuals with IDD were negative and were not linked to any demographic factor, such as stereotypes and non-automatic attitudes are found to be. Further investigation of automatic attitudes towards this population would therefore be beneficial, particularly with the inclusion of investigating factors that contribute towards automatic attitudes, to be able to improve them.

For the first analysis of Study 2 in Chapter 7, which looked at differences between those who attended the workshop and those who did not, results from the computer IAT indicated there was no significant interaction effect between baseline scores ‘Time 1’ and ‘Training’ (intervention / non-intervention). This suggested that any effects of training at the follow up period (T2) were not dependent upon attitude levels at the initial stage (covariate) of the ANCOVA analysis. When the main effect of ‘Training’ on attitude contrasts was examined, a significant difference was found for the attitude contrast group ‘VOND’ at the follow up point at T2. The direction of bias for both samples was more positive towards the ‘non-offender’, compared to the ‘violent offender’ group. The results of there being no statistically different interaction effects for any of the attitude contrast groups (particularly the contrast groups which included the ‘sexual offenders’ as one of the target groups), are comparable with previous

research findings. This research indicated participants with a higher level of educational attainment demonstrated more positive attitudes towards individuals who have committed sexual offences (Willis et al., 2013; Rothwell et al., 2021). Therefore, given the non-intervention group comprised a student sample on a psychology undergraduate programme, this may have improved their attitude towards individuals with a history of committing sexual offences. This makes it difficult to detect any difference in attitudes when compared to the staff sample, who generally had lower educational attainment, but greater contact levels. For the Brief Knowledge Survey, results indicated there was no significant interaction effect between baseline scores 'Time 1' and Training Group' (Intervention vs. non-intervention), for questions 1,2,3,4 and 6. There was a significant interaction effect between baseline scores 'Time 1' and 'Group' for question 5, $F(1, 57) = 8.28, p = .006$. These results suggest the workshop affected the trained samples level of knowledge for this question only. The main effect of 'Group' (intervention / non-intervention) on 'Knowledge' was significant for Question 5, $F(1, 57) = 4.66, p = .035$. The main effect of 'Group' on Knowledge was not significant for questions 1,2,3,4 and 6. Such results may be related to the student samples' educational attainment. This outcome may also be related to the subject matter on their undergraduate programme (a Psychology degree, which included criminology and forensic psychology content) influencing such results.

A fascinating observation from the mean scores indicated that participants who worked with individuals with a history of sexual offences demonstrated higher levels of overestimations for questions 3, 4, 5 and 6 at T1. These views were therefore closer in line with myth-based beliefs when considering a range of behaviours associated with people who commit sexual offences. This outcome highlighted the need for staff working in this environment to develop fact-based knowledge related to individuals who commit sexual offences, which the educational workshop aimed to do. The results at T2 reduced overestimations to a larger degree for those who received the training for questions 1, 4, 5 and 6 when compared to those who did not. For example, participants' responses to questions regarding rates of further offences being committed, moved closer towards the figures reported in the Office for National Statistics than representations reported in the media. This observation implied that the staff educational workshop modified beliefs to be more in range with fact-based knowledge, compared to those who did not attend the educational workshop. This outcome reflects

the impact of discussions around myth-based information presented in the media and staff members' own beliefs surrounding these.

When interpreting this outcome, considering the prior knowledge of the student sample is important, as they would have received taught sessions and materials that address issues related to people who have committed generalised and sexualised violence. This factor possibly had an impact on the effect of 'Group'. For the direct measures of non-automatic attitudes and perceptions, significant differences were found between the two groups for the ATP and the ATS, but not the WOQ or the CATSO, with the non-intervention group having higher levels of positive associations at Time 1. This outcome may again, be related to educational attainment of the student sample.

For the second analysis conducted as part of Study 2 in Chapter 7, the influence of an educational workshop upon automatic and non-automatic attitudes towards MCSO-IDD was explored. Analysis of data collected from this study showed a significant interaction effect of 'Time' and the attitude contrast group 'Violent Offender vs. Non-Offender' (VOND) at T1. This indicated the effect of 'Time' on the attitude contrast group upon VOND at T2 and T3 depended on the finding for VOND at T1 (covariate). When the 'main' effect of time was examined, a significant difference was found between T2 and T3. There were, however, no other significant interaction or main effects found. On the surface, this observation can be taken to indicate that the workshop had limited influence upon participants' automatic attitudes. However, the results may confirm previous literature showing limited changes to automatic attitudes as a result of information sharing processes, such as training (Malinen et al., 2014). This is said to be due to the 'affect' component of attitudes, but also the strength of the attitude object being evaluated (Bading et al., 2020). Thus, given the attitude targets were of social importance and high strength, the positive increases post completion of the workshop is noteworthy, as they may indicate the success of the workshop. However, given the limited sample size and validity test results for the Md-IAT, as well as the influence of confirmation bias due to the authors' invested interests, outcomes from the Md-IAT are to be interpreted with caution.

Upon further exploration of the direction of bias and the descriptive statistics for the attitude group: Sexual Offender compared to Violent Offender, results showed that the staff held more positive associations towards the Sexual Offender group than the

Violent Offender group, prior to and on completion of the workshop. Although these findings were not statistically significantly different at data collection points T2 and T3, the level of positive associations towards the Sexual Offender group increased at these points. The impact of contact, therefore, appears positive. Staff would have predominantly experienced interactions with service users where problems of sexual offences were not explicitly observed due to the support mechanisms and restrictions in place. In contrast difficulties with social skills, problem-solving and emotional regulation, for example, would have been observed more obviously during their interactions. The content of the workshop would have improved staff members' understanding of the service users' needs. Additionally, it appears that attending the workshop affirmed and strengthened staff members' associations towards the rehabilitation of individuals with a history of committing sexual offences.

Results also indicated that staff held more positive associations towards IDD compared to people who commit sexual offences, which, given that the service users had a primary diagnosis of IDD, is not necessarily surprising. Again, this observation may be confirmation of the contact theory, with IDD being a primary consideration and less responsibility being apportioned to individuals with IDD who have carried out violence or sexualised violence (Steans & Duff, 2020).

As for the Brief Knowledge Survey, there were no significant interaction effects of 'Time' and 'survey question' found. When the 'main' effect of 'Time' was evaluated, only responses to question two indicated a significant difference. For the attitude and perception measures, results indicated that the workshop did not have a positive impact upon staff members' non-automatic attitudes, as no significant differences were found for the measures.

For Study 3 discussed in Chapter 7, the focus was altered to explore any impact of prior experience or training upon attitudes by looking at results from those with 'Prior Relevant Training' (PRT) and training in working with MCSO-IDD to those with none. Results from the computer Md-IAT indicated no significant differences between the two groups, although separate univariate tests revealed a significant effect of 'Prior Relevant Training' (PRT) on the target groups 'Sexual Offender compared with Violent Offender. The group with no PRT had more positive attitudes towards the Sexual Offender category. As no details of participants' previous training were provided, it is

not possible to identify specific reasons for this outcome. It is possible that, if the content of training was purely risk management focused, this could produce more negative bias. Participants with previous training may also have worked for a longer duration of time with MCSO, during which time staff encounter negative impacts (Hatcher & Noakes, 2010), as well as staff who work with MCSO who also have a diagnosis of autism (MacDonald et al., 2017). As the outcomes may be influenced by staff members' exposure to violent conduct on the wards, compared to less violent conduct demonstrated by individuals with a history of committing sexual offences and no diagnosis of IDD or autism (Oates et al., 2020). Therefore, a range of factors important to consider, may be related to previous training. For the Brief Knowledge Survey, there were no significant differences between the two groups. As for the direct measures of non-automatic attitudes and perception, no significant differences between the groups were found. It is possible therefore, that previous training had no positive impact upon staff members' non-automatic attitudes. However, this cannot be confidently concluded, as the content of staff members' previous training is unknown, and so there is a potential, that the content of staff educational workshops would benefit from being developed in line with theoretical knowledge from attitude models.

Comparison of the Computer Md-IAT and the Pencil and Paper Md-IAT

Due to the practical barriers of carrying out the computer Md-IAT in forensic settings on a larger scale, Study 4, discussed in Chapter 8, set out to identify an effective low-technology method to assess automatic attitudes. A computer IAT was evaluated against a pencil and paper IAT (manual name version) with a student population. As the primary focus of Study 4 was on the indirect measures, only these outcomes will be reviewed here. The primary focus of this study was to evaluate the reliability of the pencil and paper Md-IAT in comparison to the computer Md-IAT. Results from the Cronbach's Alpha indicated a range of internal consistency levels for the pencil and paper Md-IAT, ranging from 'Good' to 'Unacceptable'. In contrast the internal consistency levels for the computer Md-IAT ranged from 'Good' to 'Excellent'. Results from the ICC test-retest evaluations for the pencil and paper Md-IAT were more positive. The levels of reliability were suggested to be 'Acceptable' for each of the attitude contrast groups in comparison to the computer Md-IAT, which demonstrated 'Good' to 'Excellent' levels. The results from the ICC for the pencil and paper Md-IAT were as anticipated, based on previous findings. However, as indicated for the computer

Md-IAT, all outcomes are to be interpreted with caution due to the outcomes from the validity tests conducted on the Md-IAT, and Factor Analysis not being carried out, due to insufficient participant numbers.

Results from the Repeated Measures ANOVA found no significant differences between the computer Md-IAT when compared to the pencil and paper Md-IAT. The pencil and paper IAT did, however, detect significant differences for three of the attitude comparison groups. The descriptive statistics showed that the pencil and paper IAT detected the same direction of bias found with the computer IAT at T1 for each of the attitude comparison groups. The same was found at T2, except for the 'Violent Offender compared to Intellectual Disability' category groups. The time restrictions imposed with the pencil and paper IAT are consistent across data collection periods, whereas response times for the computer format, are more within participants' control. The staff feelings of anxiety and fear over their responses being known by their manager may have contributed to participants accessing propositional process as opposed to the associative process. The pencil and paper IAT appeared to prevent this, given participants were aware they were working under timed conditions. This potentially removed the opportunity to access propositional processes, and the direction of bias identified via both methods were the same for the computer and the pencil and paper IATs. However, caution needs to be applied to such interpretations, given the inconsistent outcomes from the reliability tests.

Summary of Pencil and Paper Md-IAT Studies and Direct Measures

Finally, Chapter 9 examined the influence of the educational workshop upon automatic and non-automatic attitudes of both staff members based within forensic mental health settings and student samples. Here automatic attitudes were examined with the use of a pencil and paper Md-IAT. For Study 5, outcomes from the initial analysis of trained staff and students were compared to untrained students. The results showed significant differences over time for both groups for the attitude category groups: 'Sexual Offender' vs. 'Violent Offender', with the direction of bias for the intervention group being positive towards the 'Violent Offender' group, whereas the non-intervention group demonstrated the opposite direction of bias. Both groups showed more positive associations to the 'IDD' group. For the direct measures, an interaction effect of 'Group' and 'Time' significantly impacted questions 5 on the Brief Knowledge Survey.

For the attitude measures, significant interactions of ‘Training’ upon the CATSO were found. The main effect of ‘Training’ was significant for the ATS and the CATSO.

Summary and Discussion of Study 5, Second Analysis, Trained Staff Compared to Trained Students

Results from Study 5 of the second analysis (trained staff compared to trained students) reported no significant interaction effects for any of the IAT contrast groups. A main effect of ‘Sample’ was found for the contrast groups:- ‘Sex Offender’ vs. ‘Learning Disability’ (SOLD) and ‘Sex Offender’ vs. ‘Violent Offender’. Interestingly, although both groups had more positive associations towards the IDD group when compared to men who commit sexual offences; this was not as explicit for the staff sample. When considering the ‘Contact Theory’ in this context, this is understandable given staff working relationships with MCSO with a primary diagnosis of IDD. For the SOVO contrast group, the direction of bias was different for the two samples, as the staff suggested more positive associations towards MCSO than MCVO.

For the Brief Knowledge Survey, results showed no significant interaction effect for the six questions. There were, however, significant differences in the level of knowledge over time for three of the six questions. A main effect of ‘Sample’ was found for question five, but there was no ‘clear’ sample that was more in line with fact-based information, as this varied across the six questions.

Descriptive statistics from the direct measures suggested the staff sample at T1 had more positive attitudes towards prisoners, as indicated by the ATP results, more positive attitudes for MCSO, as indicated from results for the ATS, and more positive attitudes towards MCSO in the community, as indicated by the CATSO than the student sample. In contrast, results suggested less confidence in working with individuals who had committed offences, as indicated by the WOQ, when compared to the student sample. Such outcome might reflect the student sample’s lack of experience, and possibly overconfidence in working with service users with complex needs, based on an intellectual rather than an emotional view. The results from the ANCOVA showed a significant interaction effect and main effect of ‘Training’ for the CATSO measure. There were, however, no other significant interaction effects for the ATP, ATS or WOQ. Yet when the main effect of ‘Training’ was examined, a significant effect was found for the ATS. Therefore, given the focus of the workshop and possible influence of contact, these results indicate some positive outcomes. These results are of relevance,

as they imply the impact of contact to be two-fold. Firstly, staff members' contact with MCSO appears to challenge the stigma associated with this group. Secondly, the workshop utilised discussion and exercises in a way that the staff could 'attach' the learning to service users within their care. This provided a connection to the 'affective' component of attitudes. The examples used within the student workshop, on the other hand, were more detached, thus having less impact upon 'affect'. Contact appears, therefore, to challenge the stigma associated with this group. Having information on the direction of bias towards service user groups will assist services in the development of tailored staff training and development plans, as well as staff support mechanisms that will assist staff in feeling more confident within their work. These factors will help towards enhancing the rehabilitation environment.

Potential Factors Accountable for the Automatic and Non-Automatic Attitude Outcomes

The Interplay of Attitude Types.

Direct (non-automatic) attitudes were positive towards individuals with a history of committing sexual offences. These results were contrasted with the results generally found from the indirect measures of automatic attitudes. However, some of the studies detected more positive associations towards people who commit sexual offences when compared to people who commit violent offences. These results support the theory that attitudes are not a unitary construct and endorse the principles proposed by the APE model (Gawronski & Bodenhausen, 2014). Consideration should also be given to the possibility of the IATs not being able to detect significant changes. This issue may also be reflected in the outcomes of the validity and reliability examinations conducted for both the computer Md-IAT independently, and the pencil and paper Md-IAT comparison to the computer Md-IAT version. The outcomes from these analyses require any outcomes from both versions of the Md-IAT to be interpreted with caution. Another factor might be related to findings from previous research, where automatic attitudes are more stable and less malleable to change if the affect component is not modified (Malinen et al., 2014). Given the strength of the attitude groups, however, an increase in positive associations is promising and indicates support for the educational workshop that was informed by the APE and MODE models. These findings suggest a positive impact of the workshop upon non-automatic attitudes for both samples. The exercises used for non-staff samples need to be reviewed, however, to influence the

‘affect’ component of automatic attitudes. Again, these results and interpretations cannot be firmly held and further studies are required given the implications of the validity tests. To help address some of these issues, future research needs to include control groups and include learning exercises that aim to have the same impact upon ‘affect’ as the exercises used for the intervention sample. Including measures to specifically explore the impact of the exercises upon participants emotions, such as an emotion thermometer. Alternatively, or qualitative research could be included to explore which aspect of the workshop had the biggest impact upon their emotions and emotional evaluation to help support this. Further consideration will be given to these and other limitations later in this chapter.

Social Desirability.

The findings also relate to the APE model, in that the non-automatic attitudes presented may have been influenced by the participants’ perceptions of socially desirable responses. Staff participants may have evaluated and responded to the attitude objects presented that conformed with the services’ ‘Model of Care’ and principles conveyed within the staff educational workshop. Student responses could also possibly be socially desirable, with the aim to demonstrate learning. As for the results from the indirect measures, participants’ automatic responses may have been triggered by associations (Gawronski & Bodenhausen, 2014) with the attitude objects, which are more widely supported by members of the public and align with what is conveyed in the media (Harper et al., 2017). This consideration may be emphasised more with the student sample responses, as examples referred to within the workshop were focused on media-based examples. Greater association with media portrayals may have therefore filtered through to their responses. An important factor to consider with regard to the topic of the workshop is the potential dissonance experienced when holding or expressing positive attitudes towards the rehabilitation of individuals who have a history of committing sexual offences. Doing so is likely to result in negative responses from partners, friends, and family members, as well as members of the public, and the ‘take-home’ message conveyed in the media (Clarke, 2004; Olver & Barlow, 2010). Therefore, the influence of such pressures to conform is an area that would be important to cover during any workshop, given staff may experience feeling they are part of the ‘outgroup’ compared to the ‘ingroup’. Such aspects were discussed in the workshop, such as during the fact or fiction section, staff boundaries and wellbeing

sections, where discussions explored the degree of negative responses encountered from people outside of the workshop environment. However, further specific follow-up support sessions may be beneficial. The support sessions could incorporate a safe space to discuss the impact of being perceived by others as being part of an ‘outgroup’, rather than part of the ‘in-group’. Relevant support strategies (individual and team), as well as support mechanisms internal to and independent from the employer, could be emphasised. Whilst factual information could be reiterated about the importance of a rehabilitative culture upon the reduction of recidivism.

Implications and Originality of This Research

Work conducted as part of this thesis provides some original application of theoretical principles in practice, and methodological consideration to the literature within this area of research. The next section of this chapter will focus on these aspects and will provide more detail as to how this work has added to the literature and why it is important for practice within forensic settings.

Theoretical Implications and Originality

Implications for Attitude Models in the Formation of Staff Educational Workshops.

The formation and delivery of the educational workshop based upon principles of the attitude models had not previously been given any consideration in the delivery of other staff education workshops conducted in forensic settings. These models were the MODE and APE within this current research. Given the study of attitudes and the development of attitude models has been a key focus of social psychology for decades (Bodenhausen & Gawronski, 2013), it would be beneficial for forensic services to review and apply such theoretical knowledge when attempting to bring about cultural changes. Therefore, this remains an area that requires further examination and implementation when focussing on developing more positive rehabilitation cultures within complex forensic settings.

Research indicates that automatic attitudes are more stable, and, therefore, more difficult to change as a result of information sharing processes (Malinen et al., 2014; Haines, 2017., 2018; Willis et al., 2013). More effective shaping of automatic attitudes, particularly strong attitudes (Fazio, 1990; Fazio, 1995; Krosnick & Petty, 1995), requires an intervention that evokes similar levels of emotion (Mason, 2007). Therefore, examining the interplay between automatic and non-automatic attitudes,

assessed by direct and indirect measures, of staff within forensic mental health settings is important.

The results from study two, within the first analysis indicated significant difference to the VOND attitudes contrast group at the follow up period. Given the focus of the workshop, these results were not expected. The use of both direct and indirect measures helped highlight a potential need for the staff to address the experience and fear of violence within their work environment. This would aid the enhancement of a rehabilitation culture for all. The benefit of evaluating both automatic and non-automatic attitudes was reinforced with the outcomes of Study 5, which explored differences between those who attended the educational workshop, to those who did not (first analysis) and different samples of intervention participants (who had different contact levels with MCSO-IDD). The findings from Study 5, analysis one and two; found significant interaction effects of the educational workshop, and a significant main effect of ‘training’ for the ‘Sexual Offender’ vs ‘Violent Offender’ contrast group (with the non-intervention demonstrating more positive associations towards the ‘Sexual Offender’ group, and the intervention sample demonstrating more positive associations towards the ‘Violent Offender’ group). When this was examined further in the second analysis, results showed that staff participants were more positive in their associations of MCSO, when compared to MCVO, and the opposite bias was found for the student sample. These results, however, need to be interpreted with caution due to the results from the validity tests and underpowered studies, which highlight the importance of viewing these studies as a feasibility phase.

The results for both the automatic and non-automatic attitude measures indicate knowledge and contact can enhance positive attitudes towards the rehabilitation of MCSO-IDD. In view of the strength of the attitude categories and the affective component of attitudes, the results suggest the formation of an educational workshop based on principles of attitude models was beneficial in enhancing staff members’ attitudes towards MCSO. From referring to these models, the researcher was mindful and aware of the ‘affect’ component, and carefully considered exercises and service user case examples to motivate and activate the shaping of attitudes. Helping staff create a human narrative of the service user case examples, also helped emphasise the impact of stigmatisation with regard to the ‘in-group’ vs. the ‘outgroup’. Doing so encouraged staff to break down such barriers, which was observed in their behaviour,

from their use of words and tone of voice. Within this process, the ‘attribution theory’ (Heider, 1958; Weiner, 1974, 1985) was evident in the level of blame and responsibility attributed to the service users, what support they considered the service users needed and their role as staff within this process. This outcome highlights the potential advantage of implementing theoretical models with staff educational workshops in supporting attitude change and behaviour change. Such results are of relevance, as previous research has indicated shifts in automatic attitudes are difficult to achieve in response to information sharing procedures (Malinen et al., 2014). Due to the small sample sizes of staff members who attended the educational workshop, it would be valuable to build on the result of this feasibility study. This could be done by conducting further workshops and using an assessment tool that would evaluate staff attitudes towards a range of attitude targets. This would reflect the complex needs and presentations of the service users within their working environment. More consideration of appropriate assessment tools will be given in section 10.6.1. In addition to assessment tools, supplementary workshops or booster information may be required to strengthen and maintain change. This will be referred to further within section 10.6.

On the surface, results from the direct measures could be interpreted as being socially desirable. Further evaluation, however, suggests these outcomes are complex and require further evaluation. Only the IAT’s and CATSO suggested significant interaction effects and main effects of ‘training’ between the intervention and non-intervention groups. If such responses were simply a case of social desirability, this would have been reflected in all four measures. The ATS and the CATSO measures specifically related to the primary focus of the educational workshop, which was directed at attitudes and perceptions of MCSO. Therefore, these results appear to support the evaluative aspect of attitudes, where participants had to assess their response to the nature of the question of the measure. Participants were therefore required to evaluate questions or statements directly related to the subject matter of the educational workshop. This is a positive product of the workshop, with staff more able to determine factual and theoretical-based information regarding individuals who commit sexual offences.

Another aspect that is crucial to consider is the complexity of attitude formation, attitude change and maintenance. Attitude change toward individuals with IDD and a

history of committing sexual offences is a difficult goal and goes beyond the remit of a singular educational workshop. Providing information to ‘outside’ group members (individuals who do not have contact or relevant training) about factors that may contribute to an individual committing a sexual offence is, often, received with hostility (Scheela, 2002). Outside group members can include colleagues who have not received training, partners, family, friends, and the media. Research that has explored the influence of the media upon the levels of negative and positive attitudes towards individuals with a history of committing sexual offences (Malinen et al., 2014; Harper & Hogue, 2015a; Burrell & Laskey, 2017) is key to this. In conjunction with this is the Contact Theory (Allport, 1954), which refers to the moral majority and minority. Putting this into context, the staff members who attended the educational workshop may have attempted to transition from the ‘moral majority’ to the ‘moral minority’. This is a difficult position to sustain when constantly faced with perceptions of the ‘moral majority’. This highlights the need for staff to have frequent support sessions to strengthen and sustain this transition, and receive the emotional and psychological support required. Such encounters can prove difficult and draining and can lead to staff burnout, which can result in staff resigning. This in itself can have a detrimental impact upon a rehabilitative culture, due to the lack of stability faced by the service users. This could be assessed more formally by conducting qualitative research with staff regarding the impact of attending the educational workshop. This would help enrich understanding of what aspects provide the most support and what they require more support or follow-up support with.

Results from Study 3 potentially gives further encouragement to the importance of applying principles of attitude models, such as the APE and MODE models, when developing educational workshops and considering delivery methods. The results from this study found no significant differences in the automatic and non-automatic attitudes of staff who had Prior Relevant Training (PRT) compared with those who had No Prior Relevant Training (NPRT). Such results may indicate that previous training communicated information without giving attention to truth values and therefore did not attempt to challenge myth-based information. Alternatively, it may not have included information about the importance of rehabilitation; instead maintaining a focus upon risk. The outcome may simply reflect attitude change not being maintained over time. A significant limitation of this study was the selection criteria used to

determine PRT and NPRT and the lack of detail about any prior relevant training being obtained. Without having details of the previous training, these are all simply suppositions. Evaluating more workshops that refer to models of attitudes formation in their development and delivery processes would provide more clarity about the impact on attitude change.

The outcomes from the direct and indirect measures indicate a potential benefit of investigating automatic attitudes within forensic settings. These can be used as a springboard to openly discuss such complexities of working with individuals who have a history of committing sexual offences. The results from the indirect and direct measures can provide data to the management team and highlight the resources required to develop a rehabilitative culture (Blagden et al., 2016). Staff knowledge and understanding plays an important role in developing and shaping a rehabilitative environment, and workshops can assist with this (Mann et al., 2019). However, policy categories within the Behaviour Change Wheel (BCW), such as ‘service provision’ and ‘communication and marketing’, can act as barriers to staff training being made available and supported in its roll out. This emphasises the need to incorporate a process evaluation informed by a logic model at the beginning, to obtain the necessary commitment to the provision of relevant resources.

An important factor to consider when trying to maintain knowledge development and attitude change and the transition to behaviour change, is the need for information to be repeated (Ebbinghaus, 1885; Murre & Dros, 2015). This would give consideration to the daily stigma and stereotypes encountered by staff from communications in their daily lives. This does not necessarily mean that a whole workshop needs to be repeated, but a ‘booster’ session that applies the learning to case reviews and individual services would be of use. Where appropriate, it would be beneficial to include service users to share their stories (with relevant support mechanisms in place). The inclusion of booster sessions, incorporating further case reviews, would assist participants to focus on their feelings. This would help develop stronger connections between automatic and non-automatic attitudes (Gawronski & LeBel, 2008). Providing information to staff in incremental stages would assist in scaffolding understanding. This could be achieved by incorporating models such as the MRC and ‘Logic’ models to form a collaborative approach with the stakeholders. This would include agreeing a workforce development plan, where deepening staff members’ knowledge and understanding of service users’

complex needs is supported and resourced. Other mechanisms of information sharing and experiential learning, would be beneficial in supporting the knowledge development and attitude influence from the workshop. These methods could include mechanisms such as supervision, peer discussions and information sheets being made appropriately accessible.

In terms of resources, a combination of follow-up methods is more realistic to achieve, given the cost and practical implications for arranging staff groups to attend an educational workshop for several days. In the current research, despite service assurances of sufficient provisions, the reality proved to be much more restricted. Therefore, a more feasible option would be to provide staff support aimed to enhance rehabilitative environments in smaller stages, rather than as an isolated event. The practical barriers encountered when trying to conduct Study 3 meant it was not viable to administer the educational workshop with the staff sample. This highlighted a number of factors within the 'Behaviour Change Wheel' (BCW) that were not evident from the stakeholders stated commitment to the delivery of the workshop and research. These included lack of financial support for guidelines on the value of staff training in working with complex populations. This impacted upon the following aspects of the intervention functions that form part of the BCW: service provision, training, education, modelling, restrictions and incentivisation. The lack of appropriate space and equipment required to assess and complete the computer-based Md-IAT is connected to the BCW policy category of 'service provision' within complex forensic settings. Further research that follows the MRC Model within Forensic Mental Health (FMH) settings would be beneficial to assess feasibility more thoroughly and systematically. Incorporating this model that is usually used within physical health and behaviour change research, could assist the identification of resources required when conducting research. It could also be implemented in the progress review, which would help identify if the research remains feasible in order to progress to the implementation phase. However, unexpected issues can still arise even if such a model is followed, such as a change in management, funding, resources, global pandemic for example. Additionally, incorporation of a model such as the MRC Model would require investment and commitment from higher management to support these research initiatives.

Practical Implications

The findings from the studies in this thesis are meaningful when considering how to assess automatic attitudes within complex forensic settings. The outcomes from the first and second analyses in Study 5 have implications for the use of low-technology automatic attitude measures within forensic settings.

Implications for the Assessment of Automatic Attitudes in Forensic Settings

Practical barriers encountered when trying to carry out Study 3 led to the development and use of a low-technological method to assess automatic attitudes. As discussed earlier in Chapter 8, the pencil and paper manual IAT (name version) was developed and tested against the computer IAT with a sample of undergraduate psychology students. Instead of receiving the staff educational workshop, the students received an educational workshop that looked at the use of Dialectical Behaviour Therapy (DBT) with individuals with Emotionally Unstable Personality Disorder. The findings from this study's descriptive statistics showed that the pencil and paper IAT detected the same direction of bias 100% across the attitude comparison groups at T1, and 91.67% at T2 (please refer to Chapter 8, section 8.4.1). These results are encouraging and important when evaluating staff automatic attitudes, especially in forensic settings, where environmental factors can make access to high-technological equipment more difficult to achieve. When reliability was evaluated by testing the internal consistency levels of the computer IAT and the pencil and paper IAT, the outcomes demonstrated the internal consistency levels for the pencil and paper IAT, ranged from 'Acceptable' to 'Poor' at T1 and 'Unacceptable' to 'Good' at T2, ($\alpha = 0.50$ to 0.79 at T1; 0.46 to 0.89 at T2). Interestingly, the attitude contrast group 'Sexual Offender' vs. 'Violent Offender' suggested an 'Acceptable' level of internal consistency at T1 ($\alpha = 0.80$) and a 'Good' level of internal consistency at T2 ($\alpha = 0.89$). These findings are not as strong when compared to the computer IAT, where the internal consistency levels ranged from 'Acceptable' to 'Excellent' at T1 and 'Good' to 'Excellent' at T2, ($\alpha = 0.73$ to 0.93 at T1; 0.83 to 0.90 at T2). The level of internal consistency from results found in Bardin et al.'s (2014) study using a computer based Personalised SC-IAT was ($\alpha = 0.77$) which is within the range found for the computer Md-IAT within this study. Bardin et al used a Personalised SC-IAT compared to a Md-IAT used within this study. When the 'Test Retest' reliability was examined through Intraclass Correlation tests (ICC), the pencil and paper IAT demonstrated an 'Acceptable' level for each of the attitude contrast

groups. Whereas the computer Md-IAT showed a 'Good' to 'Excellent' level. As the aim was to help enhance a rehabilitative environment of individuals with a history of committing sexual offences, knowing the direction of staff bias toward the service user populations is beneficial. Therefore, given both the computer and pencil and paper Md-IATs detected the same direction of bias at T1 (100%) and T2 (91.67%), the pencil and paper Md-IAT could be an appropriate tool to serve this purpose and support this aim. This can give service providers clarification as to what resources are required to develop and maintain a rehabilitative environment, whilst recognising the importance an educational workshop has in achieving this. However, a number of limitations surrounding the use of IAT's has been raised, and these will be examined later in this chapter.

The outcomes from Study 4, where the pencil and paper IAT were evaluated in comparison to the computer IAT, found that the pencil and paper Md-IAT detected significant differences between T1 and T2 for three of the comparison groups compared to no significant differences found for the computer IAT. Upon initial review, these findings were unexpected, as the workshop provided did not specifically address working with individuals with a history of committing sexual offences. The control workshop aimed to increase participants' understanding of personality disorder (PD) and Emotionally Unstable PD, and to understand DBT and its purpose. On reflection, the content of this workshop could have influenced participants' automatic attitudes towards people who commit offences, including people who commit sexual offences when responding to the pencil and paper IAT task. This impact may relate to the implicit social influence, where an individual's automatic attitudes can influence another person's automatic attitudes (Mason, 2007). Or in this case, improved knowledge and attitudes of another population could influence knowledge and attitudes toward another population. The timed aspect of the pencil and paper IAT may have also helped detect attitude change. Having an enforced time limit to respond drives the individual to defer to their automatic attitudes (Vargas et al., 2007). In contrast the omission of a time restriction on the computer IAT could result in participants accessing their evaluative attitudes, which are more likely to be influenced by a range of extraneous variables. However, another factor that is important to take into consideration is to the validity of the computer Md-IAT reported in Chapter 6. With the pencil and paper IAT being based on the same logic as the computer version, Teachman and Brownell (2001) and

Sekaquaptewa et al. (2010), suggest it is likely to have the same limitations as the computer version. This, therefore, highlights the need to consider these findings and interpretations of them with caution.

To summarise, outcomes from the first and second analyses within Study 5 detected the strength of positive associations (automatic attitudes) towards people who commit sexual offences increased post completion of the educational workshop. The outcomes indicated a significant interaction effect of 'Training' for the 'Sexual Offender' vs. 'Violent Offender' (SOVO) attitude contrast groups, with the direction of bias being towards men with a history of committing sexual offences compared to individuals who commit violent offences. The findings indicated a significant difference between the direction of bias for the trained and untrained sample. In addition to this, a significant interaction effect of 'Training', and a significant 'main' effect of 'Training' was found for the CATSO. This was as well as a significant 'main' effect of 'Training' being found for the ATS. For the second analysis which examined differences between the trained staff and trained students, no significant interaction effects were found for 'Sample' upon the attitude contrast groups. However, when the 'main' effect of 'Training' was examined further, a significant main effect was found for the 'Sexual Offender' vs. 'Violent Offender' (SOVO) attitude contrast groups. The staff sample showed more positive associations towards the 'Sexual Offenders' contrast group compared to the 'Violent Offender' group. In addition to this, a main effect of 'Training' for the 'Sexual Offender' vs. 'Learning Disabled' contrast group was seen. Although both samples demonstrated the same direction of bias, this was less explicit for the staff when compared to the student sample who showed stronger positive associations towards IDD. These findings indicate a potential benefit of incorporating principles of attitude models in the formation, delivery, and evaluation of staff educational workshops. This particularly applied to workshops whose audience have 'contact' with the targeted attitude groups through their role at work, and where the aim of the workshop is to enhance attitudes towards service users and their rehabilitation and risk management plans. It also highlights the potential benefits of using a social climate measure, such as the EssenCES, as this might have identified issues related to a sense of safety within the services, which would have corroborated the findings from the Md-IAT.

Implications for Multi-Dimensional/Target IATs

Forensic settings detain individuals and provide treatment and risk management for diverse populations, with varied needs. Stereotypes and stigma (Kemshall & Moulden, 2017; McCartan et al., 2015; Richards, 2018) are often encountered towards these populations. Most attitude research towards people who commit sexual offences or individuals with IDD has utilised direct measures to evaluate non-automatic attitudes, or single-target IATs to evaluate automatic attitudes (Malinen et al., 2014; Harper & Bartels, 2017). When working with complex populations with a range of presentations and difficulties, a single-target IAT is not able to detect the direction of attitude bias towards the range of attitude target groups. Thus, if staff work with MCSO who have mental health and IDD diagnoses, by only exploring attitudes towards sexual offences, such an approach will not clarify whether the other attitude categories are more positively or negatively associated with. Outcomes from the computer and pencil and paper Md-IAT from this thesis demonstrated the attitude category with the most negative associations was that of people who commit violent offences, despite this not being highlighted as a concern during the Training Needs Analysis (TNA). This indicates a potential benefit of using an Md-IAT, where such findings can be used to inform and guide service and staff development, as well as aid practice procedures and environmental adaptations. However, given the impact of the small sample sizes upon the necessary validity tests with the correct power levels being able to be conducted for both the Computer/ Pencil and Paper versions, further evaluations are necessary. This will require additional services that provide care and treatment for service users with similar backgrounds and similar demographics for the staff samples, to take part in the validity testing. As a fundamental barrier within the forensic services were the resources available, both in terms of sufficient space to conduct the tests, and also availability staff from the wards. Having access to larger numbers to satisfy the power analysis, would address whether the Md-IAT, particularly the pencil and paper version, could be applied to complex forensic settings. Having more insight into the direction and strength of associations towards service users, would provide clarity of resources required to strengthen staff attitudes and behaviours in supporting the rehabilitative and risk management practices. It would also enable staff to communicate their development and support needs. Additionally, reflective practice sessions based on the outcomes of the Md-IAT could assist staff to reflect upon whether working in complex

settings is suitable to them and their well-being. Other examples where the use of Md-IATs would be of benefit include settings that detain; both male and female service users, service users with histories of committing sexual offences against children and those against adults, service users with complex needs such as mental health problems or personality difficulties, and service users with IDD compared to those without IDD. This could assist in the staff development plans and strengthen staff teams by having more rehabilitative ‘champions’ within the teams to support the development of a rehabilitative culture.

Implications for Forensic Practice

Research has indicated how rehabilitation practices can be enhanced if staff have a deeper understanding of factors that contribute to their conduct, why rehabilitation is key to reducing the risk of future offences being committed and where the ‘affect’ component of attitudes is targeted. This is particularly relevant when working with individuals with IDD and a history of committing sexual offences. Limited resources can impact the time available to staff in the decision-making processes which are required for service user risk management plans. This relates to the MODE Model of attitude formation, as the individual has less time and motivation to evaluate the consequences of their actions. They will also have less motivation to determine a new strategy to manage any stereotypical beliefs, and, therefore, retain the negative biases. This can lead to more punitive attitudes (Harper, Bartels & Hogue, 2018), which can often result in restrictive care and risk management plans. These occurrences can impact negatively upon the rehabilitation process and indirectly increase risk of future sexual offences being committed (Hogue, 1993; Blagden et al., 2018). This also applies to individuals with IDD and relates to some of the recommendations of the ‘Prison Strategy’ White Paper (2021); plus, the ‘Neurodiversity in the criminal justice system: A review of evidence (Criminal Justice Joint Inspection, July 2021). Staff training and the need to address punitive attitudes is emphasised in both. Therefore, further investigation of automatic and non-automatic attitudes towards the range of service users within a forensic setting, and exploration of the relationships with service users’ risk management plans, could help inform future educational workshops.

Original Contributions to the Field of Forensic Practice

Multi-Dimensional/Target IAT Within Forensic Settings

The lack of research available evaluating the automatic attitudes of staff within forensic settings has been highlighted, particularly automatic attitudes towards individuals who have committed sexual offences. One study conducted by Malinen et al. (2014) investigated automatic attitudes via the use of a single-target IAT (ST-IAT; Wigboldus et al., 2006). For this current thesis, a Md-IAT was developed and examined. Results from the computer-based version highlighted an interesting outcome of participants having more positive associations towards the attitude category group 'Sexual Offenders' when compared to 'Violent Offenders'. These findings were also found with the pencil and paper Md-IAT in Study 5 (first analysis) for the non-intervention sample, but not for the intervention sample that comprised of staff and student participants. However, in the second analysis where the intervention sample were examined further, the staff demonstrated more positive associations towards the 'Sexual Offender' category when compared to the 'Violent Offender' category, and the opposite direction in bias was found for the student participants. These results indicate the importance of interpreting results in context. When working within forensic settings, staff are more likely to be exposed to more frequent occurrences of violent behaviour, and this may trigger a stronger negative emotional reaction towards the 'Violent Offender' group than the 'Sexual Offender' attitude contrast group. This effect potentially relates to perceptions of dangerousness (Haines et al., 2018). For the staff members, this could possibly be an indicator of the influence 'contact' has upon the direction of attitude bias. Thus, a number of factors may have influenced this finding, including the impact of staff members' contact with service users along with their attendance at an educational workshop that was developed and delivered around the APE and MODE Models. In addition to this, the delivery of some of the workshop tasks incorporated narrative humanisation to help generate a wider appreciation of the service users' history and complexity. This approach appears to have influenced and challenged stereotypes and myth-related information surrounding service users with a history of committing sexual offences. This could have assisted staff to be more mindful of the service user's whole story and not solely the offences they have committed. All of this can lead to more positive attitudes towards rehabilitation interventions. However, the influence of 'contact' is not present for the sample that did not attend the educational

workshop, and so possibly, the label ‘Violent Offender’ is as indicated, more related to the perception of dangerousness (Haines et al., 2018), for the non-intervention sample. The findings from the pencil and paper IAT can help customise organisations’ priorities in the resources required to support staff. Information necessary to enhance positive attitudes towards rehabilitation in the form of an educational workshop can then be targeted, which can support the aims of rehabilitation interventions. In addition to this, given that positive changes were detected but not always to a significant level, booster information sessions or materials would be beneficial. The outcomes from the Md-IATs also indicated a need to examine further, the importance of increased knowledge of staff safety on the wards. This could include the addition of service strategies and environmental features aimed to increase the safety and wellbeing of staff and service users through safety procedures. This aspect was highlighted due to staff fear of violence and prominent negative attitudes towards the ‘Violent Offender’ group (Haines et al., 2018). This information highlights the importance of assessing automatic attitudes, and the use of a multi-target IAT when working with complex populations. Assessing a multidimensional construct in a unidimensional (ST-IAT) way, would not have detected the different direction of bias towards service users with multiple complex needs and behaviour presentation. This therefore emphasises the further potential benefits of examining the validity and use of the Md-IAT.

Implications for Non-Labelling Language

Another implication is the use of non-labelling language when delivering the staff educational workshop. Avoiding labelling language was an important factor considered and implemented in the delivery of the workshops and the reason was explained to the participants. This appeared as an issue with labelling language continuing to be used on assessment measures, including the measures used within the current research. The author discussed the conflict this presented, compared to the aim of the workshop and rehabilitative culture. Observations of staff participants, where case reviews of specific service users were conducted, highlighted a lack of understanding of the service users’ background, abilities, and support requirements. Negative attitudes were expressed towards the individuals. These observations were made before a timeline of what that person had encountered throughout their lives had been completed. This exercise appeared to have an emotional impact on the staff, which aimed to target the ‘affect’ component of automatic attitudes. Noticeable changes in tone and attitude towards the

service user were observed as a result. The staff participants appeared more open and understanding of the person following this process, rather than solely seeing them as an ‘offender’. Such observations may have been influenced by the authors’ desire for there to be a positive outcome of the workshop, due to the level of investment and commitment to the workshop and research. Therefore, it is important to keep in mind the potential for confirmation bias, when interpreting the authors’ reflections and evaluations. Future research would benefit from an independent evaluation. This will be discussed further in the ‘Suggestions for Future Research’ section.

This seems a worthy consideration when helping staff develop rehabilitative environments and is important, given research associated with the ‘Labelling Theory’ (Tannenbaum, 1938). Literature has demonstrated the negative consequences associated with the use of formal labelling within the CJS upon the individual who is engaged in rehabilitation interventions (Chiricos et al., 2007; Maruna et al., 2004; Mingus & Burchfield, 2012; Schultz, 2014). Therefore, to promote non-labelling language, the need to avoid it should be conveyed to frontline staff. A recent study highlighted the importance of this approach by examining the impact of labels on the public’s willingness to volunteer with individuals in the community with histories of different types of offences. Results indicated offence-based labels related to more reluctance to volunteer, and this finding was far more explicit for the ‘sex offender’ and ‘child sex offender’ labels (Lowe & Willis, 2020). This study supports findings from Imhoff (2015), which explored the impact of different languages. It also endorses points highlighted by Harper and Hogue, (2017), and findings from Lowe and Willis, (2017). Harper et al. (2017) proposed the label ‘sex offender’ is linked with a negative implicit emotional response. Harris and Socia (2016) suggested the use of labels in attitudinal scales might trigger more negative responses to the attitude scales. This suggestion was supported by results from a study conducted by Lowe and Willis (2020), and Harper et al., (2017) claimed these results signify a positive influence to assisting the development of a more open environment to primary and secondary prevention services (e.g., The Dunkenfield Project: Beier et al., 2009; The Safer Living Foundation – The Aurora Project, 2018) than previously thought. Therefore, the use of labelling language and avoiding such language appears essential in forming a safe environment to support the effective implementation of prevention services.

The use of non-labelling language needs to be implemented across domains (e.g., research, government legislation, media portrayal and practice within settings). Most research papers and direct and indirect attitude measures continue to use labelling language, (Willis, 2018), as was the case within this thesis. Although the author considered the APE model and the use of non-labelling language in the development and delivery of a staff educational workshop, the assessments used to detect attitudes continued to use labelling language. The measures available to evaluate non-automatic attitudes or perspectives of persons who have committed sexual offences, each refer to 'sex offender'. This influenced the author to maintain the same language for the indirect measures of automatic attitudes, so that comparisons could be made. However, the implications of doing so will be reviewed within the limitations section to follow. Thus, the need for language within the literature to evolve is of utmost importance, in order to have a consistent message from relevant literature that shapes and guides practice.

Limitations of the Study

General Theoretical and Methodological Issues

Students as Participants.

One methodological issue was the use of student participants. Using students as participants is often criticised due to the lack of generalisability of findings to other contexts, such as frontline staff who work within forensic settings. However, only several published studies have explicitly evaluated the effect of demographic factors upon attitudes and perceptions towards MCSO (Shackley et al., 2014; Willis et al., 2013). The demographic factor of educational attainment has been found to influence the level of attitudes towards MCSO, and some research identified students as having a higher level of positive (or lesser negative) attitudes towards individuals who have committed sexual offences (Willis et al., 2013; Rothwell et al., 2021; Shackley et al., 2014). Although Shackley et al.'s, (2014) research compared forensic psychology students to members of the public, several limitations of this study are important to consider when interpreting the results. These include the sample size being relatively small, and the age gap between the two samples, given more traditional views tend to be held more by older adults (Eaves et al., 1997). The use of case vignettes in this study were kept purposefully brief, and are not reflective of details which are available in the public domain for real-life cases. The research is also quite dated. It is important to note that the demographic effect of 'educational attainment level' has, however, not been

consistently found (Hogue & Peebles, 1997; Kjelsberg & Loos, 2008; Katz-Schiavone et al., 2008). Further investigation is required to determine if responses were influenced by the educational attainment of the student sample and the content of the specific undergraduate programme from which the student sample was recruited. Therefore, it is a possibility not a certainty that such demographic factors have impacted the outcomes of the studies within this current research. It is likely that the students' level of knowledge being more to begin with in comparison to the staff sample, may have contributed to the students' demonstrating similar associations towards the attitude objects that the staff showed. These issues and the limitations highlighted for Shackley et al.'s (2014) research are equally applicable to this current research. The main considerations for future research to address include the need for a larger sample size and to use either staff samples as a control throughout, or members of the public with a similar educational attainment level to the staff sample in order to reduce the possibility of education and age being confounding variables.

10.5.2 Sample Size and Diversity

The issue of the age gap between the samples in Shackley et al.'s (2014) research is of relevance to this current study, given the student population was predominantly younger than 30 years of age, and staff were predominantly in the middle age bracket. Therefore, it is possible that the student samples were more susceptible to attitude change than staff, as previous research indicates a link between age and attitude change (Briñol & Petty, 2005; Eaves et al., 1997; Visser & Krosnick, 1998). Therefore, the potential for participant selection bias needs to be considered when interpreting the results. Research that has looked at the effect age has upon attitude malleability has, however, tended to focus on older adults, and so this factor would benefit from further investigation. Having considered the education level and age of the student participants, it is important to note the purpose of including student participants in the current study. The primary reason for using this population was that the research was exploratory in nature. This aimed to assist in testing the feasibility of the study and to help inform the development and evaluation of the measures. A secondary reason was for the population to act as a comparison sample, which is not unusual within psychological research and often supports the development of new research. Yet, due to issues highlighted above, it would be beneficial to recognise these limitations in this current study and echo the importance of future research including a more comparable

comparison group. Selecting participants from the general public might yield similar demographics to the support staff and would help address the potential for selection bias.

The sample size was a key limitation of this study regarding the staff sample (intervention and non-intervention). Although power analyses were conducted in line with the recommendation given for small number samples (Kyonka, 2019), the staff member sample sizes were still underpowered and were not matched to the student sample, in terms of participant numbers, age or sex. These factors present a range of limitations, one being ‘under coverage bias’ where the staff sample size were targeted, but due to resource implications were inadequately represented in comparison to the student sample. Thus, the sample may not have the intended qualities of the population. Whereas, for the student sample, ‘self-selection bias’ could have been present due to student interest within the research topic. Self-selection bias is where the participants volunteer to take part in research, which may reflect their personal interest in the research topic and can affect the results (Kaźmierczak et al., 2023). There is a strong possibility of such bias being present in this current research, given the topic of the educational workshop and the undergraduate programme being undertaken. Therefore, this limitation is relevant for the students who volunteered to attend the workshops, and future research would benefit from randomising any intervention samples.

Research Design

The topic of randomisation brings the focus onto some of the limitations with the research design. Incorporating a Randomised Controlled Trial (RCT) may have been more appropriate to use in comparison to purposeful sampling. In the development phase of this study, RCT was not considered possible due to the size of the service, and not having a large enough sample size to have a randomised intervention sample and a randomised non-intervention sample. Upon further reflection, this perception of RCT’s resulted in additional shortcomings of the research design, as without conducting RCT’s within feasibility studies and/or quasi-experimental studies, it is not possible to know if the intervention had an impact upon outcome or other untested variables. In addition to this, concerns of ‘under coverage bias’ in terms of excluding potential participants from accessing the intervention was unwarranted, as in reality, the resource constraints throughout the delivery of this current research, emphasised how a RCT would not have resulted in more staff members being excluded from attending the

workshop, and it may have assisted the student sampling, by lessening the self-selection bias. When considering the benefits of a RCT over other research designs, it is also important to acknowledge limitations associated. RCT's are said to be a poor evaluation method when the sample size is small, and it is difficult to have a pure control group. However, the strengths and limitations of any research design needs to be considered and balanced with the view of which method has the least limitations and is more likely to produce higher quality research. For this current research, randomising participants' completion of the direct or indirect measures was not consistently implemented in the current research. Therefore, another option to reduce the impact of purposive sampling would be to incorporate this into the research design consistently throughout. This response would however not fully address the limitations associated with a small sample size, or unequal sample sizes (Kim & Shin, 2014). Both suggestions for randomisation help address some of the design issues, but they do not address the issues of resources made available to support the research and implementation of the workshop for the staff.

Issues With Attitude Measurement Scales

Indirect Measures of Automatic Attitudes.

Computer IAT

Further methodological limitations relate to the measures used. The indirect measure, specifically developed for the range of services for this thesis, incorporated a Md-IAT. This was beneficial for the reasons already discussed, and the outcomes from the multi-target IAT reinforced the idea of using a multi-dimensional measure. The indirect measures, therefore, considered the complexities of the service users by incorporating an evaluation of attitudes towards IDD, a history of committing violent offences and a history of committing sexual offences.

Before proceeding to review the reliability and validity of the Md-IAT, the methods of checking the IAT programme before commencing the feasibility studies need to be considered. As indicated in Chapter 5 (5.1.2), informal methods were used to check the face validity of the IAT. This presents a number of limitations. Firstly, no formal evaluations were conducted or recorded and the trial procedure was completed with fellow colleagues. This is likely to result in a number of biases from participants. Given the working relationship, colleagues are likely to have given socially desirable responses so not as to offend the researcher. In addition to this, they were experienced

practitioners who had worked for many years with people with a history of committing sexual offences. Therefore, their reactions and emotional responses may have been different to less experienced staff and student participants. The colleagues involved in the trial procedure, were also involved in the generation process of the IAT word lists. Therefore, they were already familiar with the content and possibly had a vested interest in the research. Hence, future research would benefit from adapting a more formal, structured, and independent process. It would be important for the participants trialling the IAT to be representative of the intended research population, and with no prior involvement with the research. This would assist in more objective feedback being received. The outcomes from the IAT programme could be analysed and incorporated into a semi-structured interview, where more rich data about their views of the IAT programme could be obtained.

However, when testing the validity and reliability of the computer-based and pencil and paper Md-IAT's, the outcomes indicated the need for caution when interpreting the results. This was especially the outcome from the validity tests. The construct validity outcomes obtained from the convergent and discriminant tests demonstrated no significant findings. However, assessing validity of the indirect measures by comparing them to the direct measures presents its own issues, as they are both different. Non-automatic attitudes are derived from conscious evaluations, while automatic attitudes are derived from indirect conscious evaluations. Therefore, a method to measure the validity and reliability of automatic attitudes in a more standardized way that does not include the comparison to direct measures is required (Eislele, 2022). Additionally, the range of validity tests were limited due to a number of factors. Factor analyses could not be conducted due to the small sample size, and concurrent validity could not be tested as there were no other Md-IAT's available to refer to. With regard to predictive validity, this was not checked formally. Some of the limitations in the range of validity testing could be addressed by having larger sample size, which as stated previously, would require recruitment sites to be more far reaching in order to have sufficient sample size, and predictive validity could be addressed by incorporating the Behaviour Change Wheel. Use of the BCW can assist in clearly identifying specific behaviours associated with punitive attitudes, which can then be monitored more formally and accurately. This will enable evaluation of the Md-IAT criterion, by using follow up measures and behaviour observations, as well as the inclusion of audits of behaviour

change and qualitative research as a means to obtain rich data from an individual and team perspective.

Another limitation is the matched variables being tested for across both the indirect and direct measures. The direct measures selected did not evaluate attitudes towards people (with IDD) who commit offences, and although the direct measures evaluated attitudes towards people who commit offences in general, they did not specifically evaluate attitudes towards people who commit generalised violent offences. Putting this into context, the focus of the thesis was upon attitudes towards people who have committed sexual offences. However, exploring participants' automatic attitudes towards the other attitude category groups was done to help draw out differences in attitudes, due to the complex nature of the service users and resulted in some interesting findings. Therefore, the lack of consistency of measurements for automatic and non-automatic attitudes needs to be recognised and addressed by using measures that analyse the same range of attitude groups within the direct measures as evaluated within the indirect measures if possible. The literature review indicated there is not a specific direct measure that examines non-automatic attitudes towards MCSO-IDD. However, some examples of research that have evaluated perceptions of MCSO-IDD have incorporated the use of vignettes (Steans & Duff, 2020) or a systematic review (Czosnyka, 2019), and these methods are worth considering in future research.

Pencil and Paper Md-IAT

The issue of validity and reliability for the Md-IAT has already been highlighted as a limitation for both computer and pencil and paper versions. Similarly, difficulties in comparing indirect to direct measures applies to comparing the pencil and paper IAT to a computer based IAT, as they are not constructed the same. For the pencil and paper IAT, the number of responses given by the participant do not mirror a predefined number of items, and the test is intended to be impossible to complete (Bardin et al., 2016). Lane et al., (2007) listed studies in which the IAT had undergone testing-retesting and reported that reliability was satisfactory, although the correlations ranged from .25 to .69. This raises questions of the reliability of research outcomes as well as concerns for the reliability of all IAT measuring tools and their derivative versions and the origin of the variations found in the literature (Schimmack, 2021). Therefore, the need to develop a standardized method to assess the reliability and validity of indirect measures that does not require comparison to direct measures, equally applies to testing

the pencil and paper Md-IAT. Thus, it is promising to see other research being conducted to work towards a standardized low-tech measure of automatic attitudes (Eisele, 2022), which will be explored further in the ‘Suggestion for Future Research’ section.

An additional limitation for the pencil and paper Md-IAT concerns the different time limits used for the staff sample compared to student sample. This practice aimed to reduce practice effects for the students and reduce the impact of age and processing speeds for the staff, and which could have resulted in response bias. Although potential impact of the time differences was evaluated in Chapter 8, it is still possible that the different time allocations affected the quality of the research. This links back to the limitations referred to earlier regarding the sample selection, and the need for future research to match participants on demographics, so that no adjustments are required to the procedure.

Direct Measures of Non-Automatic Attitudes

Following on from this, the ATS and CATSO measures were used as part of this thesis rather than the ATS 21 and the PSO. At the time this thesis commenced, work in relation to both the ATS 21 and the PSO had not been completed or published. Therefore, research for this thesis had already commenced using the ATS and the CATSO. The ATS-21 is a shortened version of the original ATS. The revised scale consists of 21 of the original ATS items that load equally onto the three factors labelled: Trust, Intent and Social Distance. These provide a comprehensive examination of all three components of attitudes: affect, cognitive and behavioural. The original ATS also provides this examination, as the 21 items are taken from the original ATS. For the CATSO, several items refer to stereotypical perceptions of people who commit sexual offences and do not reliably infer information about attitudes. The revised version of the CATSO, the Perceptions of Sexual Offenders Scales (PSO), avoids this ambiguity. When the ATS 21 and the PSO had been validated and published, a large proportion of data had already been collected using the ATS and CATSO. Consequently, the author decided to continue with these measures. This was primarily to provide consistency in the findings. Secondly, as the original ATS examines all three components of attitudes, and the author acknowledged the CATSO measures perceptions, rather than attitudes, such a decision was concluded to be the most appropriate given the level of data

obtained at that point. Future research within this area would benefit from utilising measures deemed to reflect current best practice.

Measures and the use of Labelling Language

The use of labelling language and its implications upon responses and attitude triggers has been referred to (see page 259), where Harper et al., (2017) claimed the label ‘sex offender’ is linked with a negative implicit emotional response, and Harris and Socia (2016) advised that attitude scales may trigger more negative responses if the scale use negative labels. The limitation for this current research resulted from the author wanting to maintain consistency across the direct and indirect measures, which resulted in the continued use of labelling language found within the ATS and CATSO. Although the author attempted to reduce the impact of such labelling language by openly discussing the impact of language during the workshop, such use is believed to have influenced participants responses. Therefore, this needs to be addressed in future research by developing and using both direct and indirect measures that include non-labelling language.

Measures of Behaviour Change

The aim of the research was to evaluate the impact of the educational workshop upon staff members automatic and non-automatic attitudes towards MCSO-IDD, where direct and indirect measures were used specifically to evaluate this. The link between attitude change and behaviour change remains a valid question. Effect sizes from experimental studies indicate small effects. Albarracin and Schavitt (2018, p. 303) reported “attitude change based on interventions or messages delivered at a particular time hovers around $d = 0.22$, which is a small effect”. This is based on their amalgamation of findings from research that investigated attitude change both via the use of direct and indirect measures. Other studies that have looked at the impact of targeting attitudes and behaviour change, have also found small to medium effect sizes (Sheeran et al., 2016). There are several reasons for the variability in attitude to behaviour change. Firstly, some people may not be aware of their attitudes, others may be insincere about their attitudes and others may change them frequently, as they do not deem them to be important. Secondly, the strength of the attitude might be strong and so is relatively stable over time, difficult to change and has an impact upon behaviour (Howe & Krosnick, 2017). Thirdly, some situations occur in which the influence of attitude upon behaviour is weakened, as the prevailing behaviour is governed more by

procedures considered a habit, and are less sensitive to variations in attitude (Verplanken & Orbell, 2022).

The evaluation of attitude change to behaviour change was informally conducted within this current study in the form of role-play exercises, where demonstration by the workshop facilitator took place and practice opportunities for the attendees were incorporated. Feedback was sought from the participants in the roles of observers and role-players. The author looked for changes in behaviours in terms of the language used (labelling to non-labelling), plus changes in tone of voice (hostile to empathic). Informal observations of staff behaviours took place during the workshop, and this was repeated during conversations when conducting the follow up measures, as well as whilst on the wards or at case reviews for example. However, a limitation of this study is that a more structured evaluation of behaviour change was not included within the development phase. This relates to the principle of compatibility, where attitudes forecast behaviour only to the degree to which both are outlined at the same level in terms of their target, action, context, and time elements (Ajzen, 2005). This links to the MRC model referred to in Chapter 5, where complex interventions are developed with clear behaviours being identified with the aid of the COM-B and TDF models. Thus, the identified behaviour change of 'labelling' language to 'non-labelling language' would benefit from being made more explicit. The behaviour change target within this current research is too broad and reinforces the need to invest time in using the Behaviour Change Wheel (BCW) to identify which behaviours need to be targeted. Additionally, it will be beneficial to refer to the COM-B model to clearly identify the problems for specific behaviours, whilst examining the TDF model to identify the barriers to behaviour change. Plus, given the focus of this thesis is on staff attitudes and interactions, the evaluation of evidence-based practice (EBP) would benefit from exploring staff members' intention to change behaviour. This was done within session in an exercise where attendees were asked to identify three behaviours they intended to change as a result of what they had learned from the workshop. However, data were not collected from this exercise, and upon reflection, formal recordings of participant responses, and a review of whether the intended changes had been implemented would be required to assess if behaviour change was in fact obtained. This would require further commitment from the key stakeholders of the research sites, as both qualitative and quantitative evaluations would be beneficial, as would longer term follow ups.

These could incorporate participants being requested to complete diary logs of changes in behaviour, with the opportunity to review and discuss these on an individual and staff group basis, such as a supervision session. In addition to this, it would be beneficial to have an audit of case notes and care / risk management plans, in conjunction with feedback from wider members of the staff teams and service users about any changes. This would then provide a more robust and formal evaluation of attitude and behaviour change. This brings us onto a key limitation in the commitment section of the development phase of this current research, which will be discussed in the next section; ‘evaluation of theory-based approaches.

Evaluation of Theory-Based Approaches

As already identified within the write up of this research, a key limitation has been the resources provided by the stakeholders. These were resources to release staff to attend the workshop, resources in terms of space to complete the measures, and staff retention. All of these resources were stated during the early parts of the development phase to be supported by the stakeholders, who indicated these would be made available. The limitations regarding the assessments and design have been discussed, and when conducting a complex intervention with a range of uncertainties, a theory– based evaluation can offer an effective approach to measuring impact. Therefore, in addition to recognising the benefit of using the MRC Model, use of the ‘Logic’ Model in the development phase would have been useful. “A logic model is a graphic display or ‘map’ of the relationship between a programme’s resources, activities, and intended results, which also identifies the programme’s underlying theory and assumptions.” (Kaplan & Garrett, 2005). The logic model can assist in the ownership and shared understanding of the intervention (Kaplan and Garrett, 2005; Helitzer et al., 2010; Hulton, 2007). The sense of shared ownership and understanding became dissipated when the original stakeholders were taken over by another organisation. Therefore, the incorporation of the logic model could have helped address some of the resource implications that impacted upon staff recruitment, retention and staff development and support in a general manner, and staff recruitment specifically for the workshop and research. Use of the logic model during the transition phase would have been a good point to facilitate communication with stakeholders, through clearly explaining the vision and expected outcomes in a responsible way and stating what it means for participants and stakeholders (Kaplan and Garrett, 2005). This may have resulted in a

collaborative approach being successfully achieved. This was a key element lost during the upheaval generated by a new stakeholder taking over the services. Generating a strong logic model can, nevertheless, cause some difficulties, as it requires commitment in time, resources, and training (Kaplan and Garrett, 2005). This was a key barrier to the delivery of the workshop and research, as the new stakeholder's commitment to staff and training seemed displaced, with financial savings taking precedence. As a result, all training deemed to be 'non-mandatory' was stopped for a whole year. This was not an isolated occurrence during the research period, it happened several times, and impacted significantly upon the workshop delivery and data collection procedures. Therefore, Kaplan and Garrett's, (2005) suggestion of involving an expert in the process to support such a model might have been advantageous in obtaining the necessary investment of the relevant resources. Yet, the feasibility of the stakeholder funding an expert to support the implementation of the logic model seemed limited, given their response in line with the 'Policy Categories' of the BCW. Thus, it might not have been supported. However, this perception might be due to the author's own position of being an internal employee when conducting the research, as this can also create barriers. Being an internal employee can result in concerns of creating more work for colleagues. Upon reflection, this was experienced by the research author, as the staffing levels on the wards were kept at minimum and communications between the MDT Leads and higher management was strained. Therefore, requesting funding for an 'expert' to be brought in seemed disparate to the situation, where frontline staff lacked support. Therefore, the lack of 'shared' ownership was evidently present.

Content and Implementation of the Workshop

The content of the workshop was reviewed regularly by the research author and assistant who supported the facilitation of the workshop. This was to ensure the information shared was in line with current and relevant literature. However, a limitation of this approach, could be linked to personal biases on several levels. One such bias could be the information sourced and shared could have been influenced by their previous training, experiences, and dual role of being risk assessors, developer, and manager of interventions for MCSO-IDD. Dual roles could also have introduced biases. Being a colleague/supervisor/line manager of the assistant, as well as being in a position of higher management when compared to staff members attending the workshop could have resulted in the research author overlooking key information, or

colleagues not presenting their views due to perceptions of power imbalances. These factors could have also been relevant to the implementation of the workshop, as the research author may have interpreted staff members engagement as being positive and receptive, whereas, it may not have been.

Considering the claimed importance of ‘intention’ to change behaviour, it would be useful to incorporate discussions and group exercises around the staff team’s intentions to enhance their behaviours to align more consistently with a rehabilitative culture. Such an exercise could include the generation of ideas and development of plans of how they plan to act in specific cue contexts (Hagger & Luszczynska 2014). If the planned behaviour is adequately specific, and continues to function beyond a single situation, and the prompt stated takes place in a stable context, it is likely that with repetition over a prolonged period, the initial implementation strategy might become firmly established when triggered and become directly prompted by habit (Holland et al., 2006, Keller et al., 2021; Verplanken & Orbell., 2021).

Suggestions for Future Research

Evaluation of Automatic and Non-Automatic Attitudes Towards Men with IDD who Commit Sexual Offences, within Complex Forensic Settings

Literature referred to in Part 1 (introduction section of the thesis), indicated that higher levels of negative attitudes are associated with individuals who commit sexual offences, compared to other types of criminal behaviour. Findings from Chapters 7, 8 and 9, however, found that the Md-IAT (computer and pencil and paper version) generally detected greater levels of negative associations with the ‘Violent Offender’ attitude contrast category. Outcomes also suggested that the ‘Sexual Offender’ attitude category had more positive biases when compared to ‘Violent Offenders’, with the IDD category being generally more positively biased when compared to the ‘Sexual Offender’ or the ‘Violent Offender’ category groups. The literature surrounding stigma and stereotyping of individuals with IDD indicates less blame is apportioned to their behaviours, yet greater levels of violent conduct are anticipated (Steans & Duff, 2020). The findings from this thesis indicate support for Steans and Duff’s (2020) results, in more positive associations with the IDD attitude category when directly compared to the ‘Sexual Offender’ and ‘Violent Offender’ attitude categories. This outcome needs to be considered in the context of the categories being highly emotive in relation to the IDD category, and the outcomes from the validity and reliability evaluations of the Md-

IAT, which indicate caution needs to be applied when interpreting the results. Additionally, such outcomes may have been confounded by the research sites providing detention and care for individuals with a primary diagnosis of IDD. Further research is therefore required to evaluate a larger sample size of staff members and their attitudes towards a range of attitude objects that represent the diverse nature of forensic settings. In addition to this, it would be beneficial to investigate the attitudes of the general public rather than a student sample due to the potential impact of educational attainment, age-gap and self-selection bias, and to have a more representative sample (King & Roberts, 2015; Gakhal & Brown, 2013; Rothwell et al., 2021).

As seen from Study 3, discussed in Chapter 7, a potential barrier to investigating automatic attitudes is the limited resources available within forensic settings, and difficulty in supporting the use of high technology equipment. Results from Chapter 8, which evaluated the use of a manual pencil and paper Md-IAT in comparison to the computer Md-IAT would in principle assist in overcoming this barrier; due to no technology being required and larger numbers of participants able to be tested in one period. Both of these aspects greatly reduced the resources necessary. However, due to the varied levels of internal consistency found for the pencil and paper Md-IAT, compared to higher levels of internal consistency for the computer Md-IAT, the reliability of findings from the pencil and paper Md-IAT are questioned. Additionally, the barriers to testing construct validity of the computer Md-IAT apply to the pencil and paper IAT, and some researchers have more recently begun to question the validity of the IAT (Harper et al., 2021; Schimmack., 2021). The issue of publication bias was identified in a review of the validity of IATs, which indicated previous research failed to publish or mis-represent the validity outcomes, resulting in claims that the IAT lacks construct and predictive validity. Recommendations from the review included future validation studies to be conducted by independent researchers, and for validation studies to be pre-registered and suitably powered (Schimmack., 2021). Additionally, the results of validity tests need to be published (Paluck et al., 2021). If such claims are correct, then the outcomes from the current research could be reflective of the IAT's general lack of construct or predictive validity. However, Kurdi et al., (2021) question the evidence base for such claims and highlights the contradictions presented by Schimmack, given what he has previously reported in relation to the IAT. Therefore, this issue of validity and reliability remains unresolved. Thus, further research using a

pencil and paper IAT would be of benefit, as developing a low-technological method with higher levels of internal consistency would be beneficial. Other methods, such as the use of the Mouse Tracker System (Freeman & Ambady, 2010), would likely encounter similar resource barriers to those encountered when using the computer IAT in complex forensic settings.

More recent research has looked into developing a standardized low-technological method to measure automatic attitudes (Eisele, 2022), where a technique has been developed to measure automatic attitudes via a questionnaire. If successful, this method will help reach a broader range of participants, thereby, helping address some of the difficulties associated with ‘under coverage bias’. The results from this research indicated the combination of situational and dispositional attributions appeared to be an adequate measure of automatic attitudes. However, a number of limitations are evident for this study. One limitation relates to the sample population which comprised of Criminology students. Therefore, a more diverse sample is required to investigate the applied nature of this indirect measure. It is also unclear whether situational and dispositional attributions are positive or not and might not correspond to the ‘simple continuum’ found in direct measures. Thus, it would be beneficial for future investigations to address these issues.

With the results for the direct measures suggesting minimal improvement towards factual knowledge and some evidence of enhanced non-automatic attitudes towards MCSO upon completion of the workshop, it would be beneficial for future research to explore whether participants were genuinely evaluating propositional information by conducting further follow-up data collections. In addition to quantitative evaluations, the use of qualitative studies would be advantageous, particularly the use of ‘Story Completion’ (Clarke et al., 2019), which could also assist the evaluation of automatic attitudes towards this group of individuals. Observation studies and case study discussions would help provide more information appropriate to evaluate participants’ assessments of propositional information and to assess and record more formally, attitude change to behaviour change. This could be done by exploring and recording questions asked of staff during the workshop, such as: how much do they ‘intend’ to use non-labelling language with service users; how likely it is they will perform the identified behaviour, and request staff to keep diary logs of then they have done so, with reflections of their learning as a result of doing so.

Another option might be to incorporate a formal review with staff of ‘Key Performance Indicators (KPI), and for this to review specific behaviours identified from the BCW. However, considering the logic model and the MRC model, this will need commitment from the key stakeholders, as well as ethical consideration of the staffs’ ability to give informed consent to conduct such procedures. It may also be difficult for the ‘line-manager’ who is usually responsible for conducting KPI’s, as they may not be fully informed or invested in evaluating behaviour changes. Such a formal method may result in staff responding in a socially desirable manner, due to the power imbalance and fear of perceived repercussions if agreed behaviour change has not been achieved. Therefore, the use of KPI’s does not seem to be an adequate solution to assessing behaviour change.

An audit of service users’ care and risk management plans could be another method to review targeted behaviour changes. This could be conducted to observe language and descriptions used. This would allow for a more objective method, and one that may seem less ominous to staff. The inclusion of semi-structured interviews with staff could be beneficial in obtaining richer data to help understand what has helped or hindered behaviour change. These methods for measuring behaviour change would map onto the ‘Behaviour Change Wheel’, and the COM-B and the TDF, where evidence-based practice would need to be clearly identified from the outset of the research and agreed with the key stakeholder. These options would require commitment from key stakeholders, and a collaborative approach informed by the ‘Logic’ Model would assist in the identification of and shared ownership of behaviours that would be directly targeted during the workshop.

Attitude Change Over Time

Research has indicated attitude change towards individuals who have committed sexual offences is difficult to achieve (Malinen et al., 2014; Harper & Bartels, 2017). It is connected to the impact that stereotypical knowledge has, and the mechanisms of attitude formation and change (Greenwald & Banaji, 2017). A question that was posed within this thesis was: if attitude change was obtained as a result of attending the workshop, would it be maintained over time? Outcomes from some of the empirical studies of this thesis indicated that some changes were maintained over time, albeit to a lesser degree at the delayed data collection period (three month follow up period) when compared to the immediate post-workshop data collection period (T2). A recent

investigation explored the type and duration of an intervention (Marquardt et al., 2021) and its impact upon automatic and non-automatic attitudes. Results found changes to the non-automatic attitudes, but none for the automatic attitudes. The type and duration of training, therefore, had no impact upon automatic attitudes. However, there was no follow-up review as part of this study to see if any changes observed, were maintained over time. As enduring and consequential attitude change happens progressively, over a period of weeks, months, and years (Briñol et al., 2015), it would be beneficial for follow-up workshops and other interventions to be implemented routinely throughout the year, and for this to be a continuous provision due to high staff turnover in forensic settings. This connects with the literature regarding one's 'intention' to behave a certain way; the strength of the emotional response to the attitude target and habit formation (Howe & Krosnick, 2017). Therefore, considering staff abilities to form new habits in line with the targeted behaviour, they will require a strong intention to do so, and the opportunity at work to convert the behaviour practice to an embedded habit (Verplanken & Orbell, 2021). Future research that investigates this further would therefore be beneficial.

From the discussions in Chapter 9, it would also be useful to investigate other modes of staff support to see if they help maintain attitude change and enhance attitude change further. Therefore, future research that evaluates the impact of additional resources, such as booster sessions/ workshops, supplementary case reviews and peer discussions is important. This further exploration is particularly important when considering the 'affect' component of automatic attitudes (Malinen et al., 2014). It would be useful to have a deeper understanding of which mode of staff interventions has the greatest influence upon affect, to increase levels of positive attitudes towards the rehabilitation procedures.

Evaluation of Automatic Attitudes Towards Attitude Targets of High Emotional Strength

Previous literature regarding the evaluation of automatic attitudes and attitude change has indicated that the strength of emotions associated with the attitude object greatly influences the ability to achieve attitude change (Bodenhausen & Gawronski, 2013; Howe & Krosnick, 2017; Mason, 2007; Malinen et al., 2014). From information discussed within Chapter 9 of this thesis, and the directions of automatic attitude bias,

it also seems that factors such as ‘contact’ and ‘environment’ are important to consider, as staff perceptions of dangerousness seemed to influence outcomes.

A potential issue for future research is that quantitative data can be limited, when trying to access greater detail regarding the strength of emotional responses to attitude objects. Therefore, future studies that incorporate specific assessment of emotional strength, such as those used by Malinen et al.’s (2014) may help address this in some way. Malinen et al. used a ‘Feeling Thermometer’ which required participants to rate on a scale of 0 (very negative) to 100 (very positive), how they felt about individuals who had committed sexual offences being released. In addition to this method, qualitative information could be obtained from semi-structured interviews with staff members in order to obtain rich data, or from a novel technique of ‘Story Completion’ (Clarke et al., 2018). This involves a story ‘stem’ (usually a sentence or two), which the participant continues or completes, which would be another mechanism to evaluate automatic attitudes.

Incorporating Principles of Attitude Models in the Formation of Educational Programmes Aimed at Enhancing Attitudes

Chapter 2 discussed the consideration of attitude models when developing the educational workshop. As part of this thesis, both the MODE and APE models were considered. Considering the attitude types and how they are formed was important when planning the content of the workshop, as were the type of exercises used to convey information and attempt to influence the affect component of automatic attitudes, and reflected a humanisation narrative.

More recent research evaluating attitudes towards individuals who have committed sexual offences has begun to refer to such models, but the research has not specifically included the evaluation of staff training. Research has indicated the difficulty of achieving changes to automatic attitudes. Therefore, several findings from this thesis which detected such changes, with some results indicating significant differences, suggests a positive effect from utilising attitude models in the formation of an educational workshop. Such an inference is inconclusive, however, and so further evaluation of workshops that refer to attitude models would help to develop the current understanding of such influence. Further evaluations about the validity and reliability of indirect measures used to assess automatic attitudes is key, as both reliability and validity outcomes of the Md-IAT (computer and pencil and paper formats) were shown

to be inconsistent within this current study, and caution is required when interpreting the findings from these studies. Therefore, it would be useful to consider more deeply which aspects of feasibility were modelled within this current study and which were not. It is important to consider what remains outstanding, and reflect upon how to address this before being able to proceed to a more extensive study.

The MRC Framework; Reflections of ‘Feasibility’ and Aspects Modelled.

In order to reflect deeply upon which aspects of feasibility were modelled within this current study, objectives and questions generated by Orsmond and Cohn (2015) to help evaluate a feasibility study were referred to, to assist in this process.

Evaluation of Recruitment Capability and Resulting Sample Characteristics

In terms of eligible members of a targeted population being accessible, given the research was testing the feasibility of support staff at FMH services, an extensive range and proportion of the workforce in the FMH services were eligible. As for recruitment rates, this was slow to achieve, with low numbers obtained due to provision takeover and the management constraints imposed on running the wards with minimum staff. Therefore, recruitment was a significant delaying factor to the study's completion. It was not the case that potential participants refused to take part in the research, as staff stated they wanted to attend the workshop and support the evaluation. However, shift patterns meant it was challenging to organise shifts to provide cover on the wards for staff to attend the workshop. Running the wards with minimum staffing was a restriction imposed and audited by higher management. Only three of the staff sample that attended the workshop could not complete it; one related to emergency management, and the other two were placed on rest days (not working) for the second and third day in error, and so did not attend. The eligibility criteria for staff and student samples were appropriate. However, the criteria for additional and control samples were too restrictive. More diverse university programmes would have been appropriate instead of solely using students from the psychology undergraduate programme. Additionally, recruitment could have included members of the public as well as students or in place of students. The obstacles to recruitment within the FMH services lay heavily with higher management, as pressures were placed upon hospital and unit managers to run the wards and units on minimum numbers. Another factor that influenced recruitment and the difficulty of having staff put on the rota to attend the workshop was that higher management did not view the workshop as mandatory. In

contrast, the hospital and unit managers had indicated the staff needs during the informal TNA discussions. The intervention was relevant to the intended population as support staff and managers had expressed the need for greater understanding and knowledge of their service users' histories and needs. The support staff teams showed evidence of the need for the intervention via the informal TNA and from observations. The characteristics of the study participants from the FMH services were consistent with the range of expected characteristics as informed by the research literature. Student samples were recruited in similar research, where the sample is used as a comparison sample. However, upon reflection, members of the public would have been more in line with the characteristics of the FMH support staff.

In terms of how to address this so that future recruitment is feasible, is for discussions with higher management of any stakeholder takeover to take place, where the original agreement can be reviewed and revisited in line with the new stakeholders vision and understanding of staff support needs. Meetings would need to be conducted, where information in line with the logic model could be presented to obtain a mutually agreed plan for the research and recruitment.

If a student sample were to remain, ethics approval would be required from other schools within the University to seek recruitment that would be more reflective of the support staff demographics. Therefore, year one of nurse and social worker training programmes would be appropriate programmes to recruit. In addition, further ethics applications would need to be approved by the university, with clear safeguarding measures in place in order to approach members of the public.

The commitment of the FMH services needs to be demonstrated before progress can be made to the implementation phase. However, sufficient numbers would be required to satisfy the power analysis requisite in order to conduct the full range of validity tests on the Md-IAT. Although this issue is separate from the recruitment aspect of a feasibility study, it is a requirement to use a valid tool to measure automatic attitudes towards a range of target groups.

Evaluation and Refinement of the Data Collection Procedures and Outcome Measures.

A question important to reflect upon here is how appropriate the data collection procedures and outcome measures are for the intended population and purpose of the

study. The participants understood the direct measures used. These seemed straightforward to explain, and there were no concerns regarding missing or unusable data when participants attended the data collection sessions. The computer-based Md-IAT appeared to take longer to complete than anticipated for several staff members. This seemed to be due to concerns of management becoming aware of their responses rather than difficulties in understanding the instructions. Upon further reflection, the time taken to complete the Md-IAT overall was too long, therefore, challenging the feasibility of its application within services. Furthermore, access to relevant equipment was a key barrier. Both of these factors resulted in the paper and pencil version being developed to replace the computer-based version. Although the paper and pencil version reduced completion time considerably, and it enabled the participant group to complete the measure at the same time, therefore reducing the resources required, it would be beneficial to randomise the completion of the indirect and direct measures in order to try and address potential order effects.

On reflection, the participants could complete the measures allocated, but the overall data collection period when using the computer-based Md-IAT format was excessive, potentially hindering the participant's experience in taking part in the research. The direct and indirect measures seemed to perform in a way consistent with the intended population when compared to similar measures within the literature. The indirect measures of the computer Md-IAT had good levels of internal consistency, whereas the pencil and paper-based Md-IAT demonstrated a range of internal consistency, with some of the attitude target groups indicating a good level of internal consistency. However, in terms of validity, the range of validity tests that could be performed were limited due to sample size. Plus, the outcomes from the computer and pencil and paper IAT showed varying ranges of validity. This raises concern for the validity of the tests and makes it a requirement to interpret any results from the Md-IATs within this research with caution. Another consideration is that the outcome measures potentially lack the sensitivity required to measure any change in the strength of the automatic attitudes being tested.

In terms of how to refine the data collection process and outcome measures to make them feasible before progressing to an extensive study, a larger sample size is required to test the validity of the Md-IAT more thoroughly via factor analysis. Randomised Control Trials' also need to be incorporated in order to test the measures further. A

more suitable outcome measure that is less time-consuming and has more robust evidence for the tool's validity needs to be developed. One possible measure has been developed by Eisele, (2022) and is in the process of being evaluated.

Evaluation of Acceptability and Suitability of Intervention and Study Procedures

When considering the acceptability aspect of feasibility within this study, it is essential to reflect on whether the study procedures and intervention were suitable for and acceptable to the participants. The staff and student sample retention numbers were very good, from the pre-measures to the completion of the intervention and immediate post-intervention data collection. The delayed measures (3-month follow-up) for the student sample were, however, generally poor, and there were some difficulties with the staff delayed measures due to high staff turnover. Nevertheless, none of the staff sample who consented to take part, later refused or declined to attend the data collection sessions or the intervention. It was only those members who were no longer employed by the stakeholders who were absent from the delayed data collection period. Both staff and student participants adhered to the study procedures. The study fitted with the daily life or routine activities when the current research first commenced with the original service providers, as staff training and development were highly prioritised. However, when another provider took over the company, investment in staff training and development was reduced to what was deemed mandatory, such as 'Health & Safety' and 'First Aid.'

When support staff participants were recruited, all, apart from two staff members, were given time to attend and complete the three-day intervention and delayed follow-up measures. A training intervention always takes time and attending can feel like a burden in the sense of work commitments and needing to complete work ahead of the training event and having to catch up with work demands upon completion of the training programme. Therefore, these issues potentially apply to the participants of this current research, although, the primary candidates for this current research were support staff who did not have line management responsibilities. Consequently, they could enjoy the intervention that aimed to improve their knowledge and confidence in working with the service users within their care, as they may have had fewer concerns about missed workloads. From observations and verbal feedback received from the support staff participants, enthusiasm about attending the intervention was conveyed, and the students volunteered to attend, and seemed enthusiastic to learn from the

intervention. However, a three-day workshop can be intense in terms of concentration and the level and type of information required for processing, particularly given the sensitive and emotive topic of the intervention. Although participants were made aware of this from the information sheet and consent process at the beginning of and throughout the three-day intervention, a different delivery method might be less overwhelming, than a consecutive three-day workshop.

When considering how to model the acceptability of the study procedures and intervention in the future, it would be beneficial to have less time-consuming evaluation measures pre and post intervention, and consider using different methodologies to impart knowledge and its application to practice. Therefore, providing a variety of connected interventions, such as 'bite-size' educational interventions where learning and a review of its implementation and impact takes place via a portfolio approach, along with scheduled supervision, reflective practice, and case study sessions. Such an approach would incorporate the overall aims of the three-day workshop being integrated into practice gradually and consistently. This may be more suitable and acceptable to participants in terms of not overwhelming them with evaluation measures and an intense intervention being conducted closely together.

Evaluation of Resources and Ability to Manage and Implement the Study and Intervention

When reflecting upon this aspect of feasibility, it is essential to consider whether the research team has the resources and ability to manage the study and intervention. Regarding administration, the research team was limited to the primary researcher and two other staff members. One was a forensic psychologist in training who assisted in the co-delivery of the intervention, the second staff member was a psychology assistant who supported some of the printing preparation for the data collection materials and intervention slides for the participants. As the study was part of the research author's PhD, which was self-funded initially, no other administrative support was available. Therefore, the research author scored all of the measures and inputted the data. This lack of resources was an additional factor that effected the time required for the research evaluations to be completed.

Regarding expertise, the study was completed and supported by individuals with appropriate training and experience. The critical issue was the resources and time available for individuals involved in the administration. When the intervention was

successfully scheduled with the FMH services, the management structure supported the research author to conduct this by giving them time to do so. However, although some of the core workload was appropriately suspended or delegated to others within the team, not all of the workload was suitable to be allocated to others. Therefore, delivering the intervention was in addition to the research author's daily work rather than in place of it. Nevertheless, the study procedures and interventions were conducted ethically, and the research was designed and conducted to respect the participants' rights, interests, values, dignity, and autonomy.

As previously stated, there was no funding for the research, as it was a self-funded PhD at the research author's place of work. The central part supported by the service was to assist the access to support staff to attend the intervention and enable the researcher and colleagues to support the preparation and delivery of the intervention. The technological equipment and appropriate space became another issue when conducting the intervention with larger participant members within the FMH hospitals, which was a key barrier to the feasibility of this study. As for the computer-based Md-IAT, resources were provided for the research author to receive training from the university technicians in the use of the Eprime software, which the Md-IAT was developed. As stated, data analysis management lacked efficiency since it remained solely the research author's responsibility.

In order to address the issue of insufficient resources to be able to support the feasibility of this study before progressing to more extensive research, would require sufficient funding to be achieved. As administration support would be required, along with additional technological equipment, and the potential hire of a training venue if this was the format pursued, and additional staff with relevant training to deliver and co-deliver the interventions.

Preliminary Evaluation of Participants' Responses to the Intervention

When reflecting upon this aspect, it is essential to consider if the intervention shows promise of success with the intended population. The evaluation of the quantitative data does not indicate that the intervention will successfully enhance automatic attitudes

toward the rehabilitation of MCSO-IDD. Additionally, due to the sample size and constraints of validity tests, the outcomes from the Md-IAT cannot be interpreted with confidence. Some of the outcomes from the direct measures and the verbal feedback received from the support staff suggest the intervention is of help in terms of enhancing confidence and understanding of service users' history, needs, and support required. However, no formal qualitative evaluations were incorporated into the research design and evaluation, so it would be beneficial to implement qualitative evaluations within future research.

However, as already stated, the outcomes from the indirect and direct measures cannot be interpreted confidently due to two central, but different issues. One issue relates to the small sample sizes, meaning the studies were predominantly underpowered. However, in the context of this being a feasibility study, low numbers are often underpowered and are therefore used to generate ideas that there will be a movement toward significance that provide support for larger studies to be conducted. Yet, even if statistically significant findings are determined from a feasibility study, it is still possible that a more extensive study could generate different results (McGrath, 2010). The second issue concerning the reliability and validity of the Md-IAT is connected to the studies being underpowered, as the small sample sizes limited the type of validity tests that could be conducted. Therefore, sufficiently powered sample sizes are required to thoroughly test the validity and reliability of the Md-IAT for both the computer and the pencil and paper versions.

It is important to conduct further tests of both versions of the Md-IAT, as the pencil and paper Md-IAT demonstrated lower levels of internal consistency in comparison to the computer-based version. Thus, a more appropriate low-tech automatic attitude test may be required. This will be important for FMH settings, as the need for minimal resources required is essential, and this includes the time needed for data collection as this has to be more efficient for relevant services. Additionally, the Md-IATs might not be sensitive enough to detect significant levels of changes in automatic attitudes to highly emotive attitude target groups such as those focussed upon within this research. Furthermore, the direct measures need to be fully mapped onto the indirect measures, as some of the attitude categories for the indirect measures were not mirrored in the direct measures. Therefore, the measures or absence of some measures and the intervention are not fully theoretically aligned. From conducting deeper reflections

regarding what aspects of feasibility were modelled and which were not, given the outcomes indicated the intervention did not change the desired direction of automatic and non-automatic attitudes for support staff, the manner in which the workshop was delivered was reflected upon. Although the intervention was implemented in the intended manner, three whole days of an educational workshop might be too intense, and does not allow enough time to process and apply learning, which possibly impact and limit potential changes to automatic attitudes. Therefore, a different intervention delivery mode might be more suitable as referred to within the last section of 10.7.3.1. This brings the reflections of which aspects of feasibility were or were not modelled onto professional reflections of the educational workshop and its value.

Professional Reflections of the Value of the Educational Workshop

The research author has reflected upon the value of the educational workshop based upon the experiences of conducting it over a prolonged period of time during this research process. This also considers the feedback received directly from staff participants during and upon completion of the workshop.

The feedback received from staff was always positive. However, the results from the direct and indirect measures raises questions regarding the reliability of this feedback, given the limited impact found upon both automatic and non-automatic attitudes. Nevertheless, multiple factors have been highlighted as to the possible causes for such outcomes which do not necessarily reflect there being no value in conducting the educational workshop. Upon reflection, it is not believed that such feedback was insincere or the result of ‘socially desirable’ responses given, although it is accepted that these reasons could very much be the case. Having conducted the workshops, the staff genuinely seemed appreciative of the time invested in their learning needs, the opportunity to be taught information relevant to their day-to-day work, and the opportunity to discuss issues in depth whilst applying the knowledge in a concrete manner to the service users they worked with. Thus, based on the surface level of what was expressed by staff participants, both during the workshop and upon completion of the workshop, the content and delivery of the educational workshop seemed to be valued.

In terms of the continuing value of delivering the educational workshop, the outcome results from the direct and indirect measures are potentially reflective of barriers to

learning and attitude change. The main barrier relates to resources available to staff that support the implementation of ‘learning’ to ‘practice’. From observations of the service resources, it could be seen that the opportunity for staff to process, reflect and discuss such learning was extremely limited. When staff are frequently managing services on minimum numbers, the priority is often to identify tasks that need to be done during that shift and how to maintain service user and staff safety. There is of course, the possibility that some staff members do not value training of any type in general, or training provided by psychology staff members, or training provided by internal staff members. This is potentially the case within any work setting and staff members, and this is something that could be evaluated in future research.

Having reflected on the value of delivering staff training generally within complex forensic settings and the particular educational workshop for this current research, it is not the view that the educational workshop is of no value. It is, however, the view that resources will always be limited and therefore the information shared within the educational workshop could be adapted, provided in smaller but more frequent, and through different modes of delivery.

Considerations of Future Practice in the Provision of Staff Development Aimed to Enhance Rehabilitative Attitudes and Culture, in Working with Men who Have Committed Sexual Offences

In terms of future practice based on having conducted the workshop multiple times and encountered various barriers to its delivery based on the resources available and the staffs’ limited availability, an adapted format could follow a ‘rolling’ staff support system. This would involve a shorter duration of workshops being made available (e.g., 1-2 hours) per week over a series of weeks. This format could then be repeated more frequently throughout the year, so that staff could sign up for the relevant session as appropriate. However, some formalities would be required, which would need to be supported by key stakeholders. Staff would need to complete the set workshop sessions within a given timeframe. In addition to the workshop, follow-up information could be provided online and in workbooks. This method reflects work conveyed by Wood et al. (1976), which is often referred to as a ‘scaffolding’ approach to learning. This is defined as “a process that enables a child or novice to solve a task or achieve a goal that would be beyond his unassisted efforts” (p. 90). The scaffolding approach to learning, is a method still used in further education. This could assist staff to develop their

knowledge and understanding of the complexity of service user needs and histories, through smaller workshops conducted by staff with more specialist knowledge. In between attending the short workshops, staff would be requested to reflect upon this information. A portfolio approach could then be used to check staff members' understanding and ability to implement learning, via specific tasks set within a workbook. The content of the workshops and tasks set within the portfolio would map onto behaviours clearly identified from the Behaviour Change Wheel (BCW), where the COM-B and TDF Models would have been used to explore the key influences on a target behaviour. The portfolio work would need to be shared and discussed in follow up workshops or supervision sessions. A safe environment would also need to be fostered in order for staff to feel able to share relevant information. This would then enable more formal evaluation of whether attitude change has led to behaviour change.

This format would still require commitment by key stakeholders to provide relevant resources, and this commitment would need to be considered holistically and to form part of the identity and culture of the service. Thus, the use of the 'Logic' Model would be key in supporting the development of a collaborative approach and ownership of the staff development plan. This part of the development phase is of the utmost importance as although resources via this adapted version would not be as resource intensive over a condensed period of time, they would still need to be consistent. Thus, a sense of shared ownership is at the core of a successful outcome. This would be between the key stakeholders and the relevant department(s) having the role of developing staff members knowledge of this complex concept.

To reiterate the importance and value of staff training specific to working in specialist forensic settings, relevant guidelines and inspection reports, such as the 'Joint Thematic Inspection of the Criminal Justice Journey for Individuals with Mental Health Needs and Disorders, November 2021'; and the 'management and supervision of men convicted of sexual offences', (HM Inspectorate of Probation and HM Inspectorate of Prisons, 2019), continue to emphasise the need for the provision of relevant training for key staff. These refer to the little progress that has been made since the Bradley Report, which was produced in 2009. Therefore, staff training, education and the additional support for staff who work with complex service users and prisoners remains a key need and is insufficient in terms of what is provided.

Overall Conclusion

The primary aim of this thesis was to explore the influence of an educational workshop, where the content and learning exercises were developed with key components of attitude models being considered. The influence of the workshop was evaluated by assessing both non-automatic and automatic attitudes of staff members who worked within Forensic Mental Health (FMH) settings. These supported service users detained under the Mental Health Act (MHA, 1983), with a primary diagnosis of IDD and a history of committing sexual offences. Appraisal of the present literature highlighted how the existing work in this area was predominantly with staff who delivered interventions, or who worked with service users without IDD, and principally evaluated non-automatic attitudes only.

The results from the four main studies highlighted how non-automatic attitudes towards individuals with a history of committing sexual offences were more positive than anticipated, given previous research. This outcome was seen for samples with limited contact or no contact with MCSO, for participants who did not attend the workshop and for participants prior to and upon completion of the workshop. Additionally, outcomes from the indirect measures highlighted that automatic attitudes were more positively associated with people who commit sexual offences, when compared to attitudes towards people who commit violent offences. This was found for the staff sample when assessed with the computer and the pencil and paper Md-IATs. However, the computer Md-IAT detected this direction of bias for the non-intervention student sample in Study 2 (first analysis), as well as the non-intervention sample in the first analysis of Study 5, whereas the opposite direction of bias was found for the intervention sample. For this sample, more negative associations were found towards people who commit sexual offences when compared to those who commit violent offences. When this was explored further in the second analysis, where the intervention sample (students and staff) were evaluated and compared, results showed the staff sample had more positive associations towards people who commit sexual offences. This was compared to the student sample, who demonstrated more positive associations towards those who commit violent offences. This highlighted potential implications for contact as well as level of educational attainment.

Outcomes from the direct measures indicated that increases in positive attitudes were maintained to a lesser degree over time. Therefore, the provision of booster training

may assist in the sustainability of attitude change. This issue appears to be linked to the dissonance staff may encounter in relation to the treatment and rehabilitation of MCSO. Staff may experience difficult discussions in and out of the work setting which creates this dissonance.

Even though there were no significant differences between the staff and students who attended the educational workshop for the direct measures, the pre and post outcomes for the ATS were markedly higher at T1 for the staff sample. For the indirect attitudes, there were significant differences between the samples for the 'Learning Disabled' compared with 'Sexual Offenders' attitude contrast group (higher positive associations) and the 'Sexual Offender' (higher positive associations) compared with the 'Violent Offender' attitude contrast group, with the staff sample being more positive towards the Sexual Offender attitude category group. Therefore, levels of positive attitudes towards people who commit sexual offences appear connected to the level of contact they have with relevant service users. This result implies that attitudes towards people who commit violent offences were possibly linked to perceptions and encounters of physical harm and dangerousness (Haines et al., 2018). Therefore, type of contact and attending an educational workshop may have contributed to certain points of knowledge becoming more in line with fact-based information, particularly question 5 of the Brief Knowledge Survey. Significant differences were found for those who completed the workshop for this question, as well as different levels of positive association towards people who commit sexual offences. The use of a pencil and paper IAT also detected significant differences as a result of attending the workshop, compared to a computer IAT that did not detect significant differences. However, it is important for these results to be interpreted with caution, due to the issues related to evaluating validity and the validity and reliability outcomes for the computer-based Md-IAT and the pencil and paper Md-IAT.

These findings have several implications for developing rehabilitative environments when working with MCSO-IDD in Forensic Mental Health (FMH) settings. Firstly, to incorporate attitude models in the development and delivery of staff educational workshops, secondly, to include exercises aimed to influence the affect component of attitudes and encourage a human narrative of the service users, and thirdly, to further examine the validity of Md-IATs, both computer and pencil and paper formats. The development of a valid low-technological indirect measure is important for use within

complex forensic settings. Therefore, extended evaluation is required to achieve this. Consequently, it would be beneficial to conduct further validity and reliability tests on the pencil and paper IAT, as well as the method being evaluated by Eisele, (2022). It will be important to conduct validity tests that do not rely on comparison to direct measures. Additionally, it will be important to have large enough sample sizes that include samples relevant to forensic settings. While this thesis provides some support for the benefits of developing a workshop around principles of attitudes models, further research is required to build upon these results. This would develop a deeper understanding of the impact of referring to attitude models in the formation and delivery of educational workshops or provision of educational information in other formats. The outcome of the research also highlight the need for further evaluation into the validity and reliability of the pencil and paper IAT or other low-technological methods, particularly a multi-target IAT, to effectively assess attitudes towards a wide range of complex and emotive attitude target groups.

References

- Abel, G. G., Blanchard, E. B. & Becker, J. V. (1978). An Integrated Treatment Program for Rapists, in R. T. Rada (Ed.), *Clinical Aspects of the Rapist*. (pp. 161-214) New York: Grune and Stratton.
- Agerström, J., & Rooth, D. O. (2011). The role of automatic obesity stereotypes in real hiring discrimination. *The Journal of Applied Psychology*, 96(4), 790–805. <https://doi.org/10.1037/a0021594>
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behavior* (pp. 11–39). Heidelberg: Springer.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. doi:[10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T).
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32(4), 665–683. <https://doi.org/10.1111/j.1559-1816.2002.tb00236.x>
- Ajzen, I. (2005). *Attitudes, personality, and behavior* (2nd ed.). Milton-Keynes: Open University Press/McGraw-Hill
- Albarracin, D., & Shavitt, S. (2018). Attitudes and attitude change. *Annual Review of Psychology*, 69, 299–327. <https://doi.org/10.1146/annurev-psych-122216-011911>
- Allport, G. W. (1935). Attitudes. In *A Handbook of Social Psychology* (pp. 798–844). Clark University Press.
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, Mass: Addison-Wesley Pub. Co.
- Amsterdam Public Health, Institute for Health and Care Research. (2015) *Quality Handbook – Handling Missing Data Guidelines (V2.0: 12 May 2015)*. Retrieved November 2018, from <http://www.emgo.nl/kc>
- Andrews, D. A. & Bonta, J. (2003) *The Psychology of Criminal Conduct* (3rd Edition). Cincinnati, OH: Anderson.
- Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct* (5th Edition). Cincinnati, OH: Anderson.
- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P. & Cullen, F. T. (1990). Does Correctional Treatment Work? A Clinically Relevant and Psychologically Informed Meta-analysis, *Criminology*, 28(3), 369–404. <https://doi.org/10.1111/1990.tb01330.x>
- Antonak, R. F., & Harth, R. (1994). Psychometric analysis and revision of the Mental Retardation Attitude Inventory. *Mental retardation*, 32(4), 272–280.
- Antonak, R.F., & Livneh, H. (2000). Measurement of attitudes towards persons with disabilities. *Disability and Rehabilitation*, 22, 211-224.

- Antonak, R.F., & Livneh, H. (1988). The measurement of attitudes toward people with disabilities: Methods, psychometrics, and scales. Springfield IL: Charles C. Thomas.
- Ashworth, S., Mooney, P., Browne, K., & Tully, R.J., (2020). An Exploratory Analysis of a Scale to Measure Attitudes Towards Mentally Disordered Offenders. *Journal of Forensic Psychology Research and Practice*, 21(10):1-30, DOI: [10.1080/24732850.2020.1829448](https://doi.org/10.1080/24732850.2020.1829448)
- Ashworth, S., Browne, K.D., & Tully, R.R. (2018). A Systematic Review Exploring the Quality and Effectiveness of Tools Currently Utilised to Measure Attitudes Toward Prisoner Populations: Exploring Reliability and Validity. *Journal of Forensic Psychology Research and Practice*, 18(1), 19-44, DOI: [10.1080/24732850.2017.1409605](https://doi.org/10.1080/24732850.2017.1409605)
- Association for Positive Behavior Support (APBS) 2019. Definition of positive behavior support (PBS). <http://www.apbs.org/about/what-is-pbs>
- Association for the Treatment of Sexual Abusers, (2011). A Reasoned Approach: Reshaping Sex Offender Policy To Prevent Child Sexual Abuse (Report). Retrieved from <http://www.atsa.com/pdfs/ppReasonedApproach.pdf>
- Atkins, L., Francis, J., Islam, R. O'Connor, D., Patey, A., Ivers, N., Foy, R., Duncan, E.M., Colquhoun, H., Grimshaw, J.M., Lawton, R., & Michie, S. (2017). A guide to using the Theoretical Domains Framework of behaviour change to investigate implementation problems. *Implementation Science*.12(77), <https://doi.org/10.1186/s13012-017-0605-9>
- Bading, K., Stahl, C., & Rothermund, K. (2020). Why a standard IAT effect cannot provide evidence for association formation: the role of similarity construction. *Cognition & emotion*, 34(1), 128–143. <https://doi.org/10.1080/02699931.2019.1604322>
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, 71(2), 364–374. <https://doi.org/10.1037/0022-3514.71.2.364>
- Bagozzi, R. P., Tybout, A. M., Craig, C. S., & Sternthal, B. (1979). The construct validity of the tripartite classification of attitudes. *Journal of Marketing Research*, 16, 88–95. <http://dx.doi.org/10.2307/3150879>
- Barcikowski, R. S & Robey, R. R. (1984) Decisions in Single Group Repeated Measures Analysis: Statistical Tests and Three Computer Packages. *The American Statistician*, 38(2), 148-150, <https://doi.org/10.1080/00031305.1984.10483187>
- Bardin, B., Perrissol, S., Py, J., Fos, Y and Souchon, N. (2016). Testing of a paper-and-pencil Personalised Single Category Implicit Association Test (SC-IAT-P). *International Review of Social Psychology*, 29(1), 31-44, <http://dx.doi.org/10.5334/irsp.35>
- Bardin, B., Perrissol, S., Py, J., Launay, C., & Escoubès, F. (2014). The personalised SC-IAT: A possible way of reducing the influence of societal views on assessments of implicit attitude toward smoking. *Psychological Reports*, 115(1), 13-25, <http://dx.doi.org/10.2466/18.07.PRO.115c10z8>

- Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In R. S. Wyer & T. K. Srull (Eds.), *Handbook of social cognition* (pp. 1-40). Hillsdale, NJ: Erlbaum.
- Bargh, J. A. (1999). The cognitive monster: The case against the controllability of automatic stereotype effects. In S. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp. 361-382). New York: Guilford Press.
- Bargh, J. A., Chaiken, S., Raymond, P., & Hymes, C. (1996). The automatic evaluation effect: Unconditional automatic activation with a pronunciation task. *Journal of Experimental Social Psychology*, 32, 104-128.
- Beatty, L., Gibbs, G., and Morgan, A. (1997). Learning orientations and study contracts. In Marton, F., Hounsell, D.J., and Entwistle, N.J. (eds.), *The Experience of Learning* (2nd edn.), Scottish Academic Press, Edinburgh, UK, pp. 72-88.
- Becker, H. S. (1963). *Outsiders: Studies in the sociology of deviance*. Free Press Glencoe.
- Beech, A. R., & Hamilton-Giachritsis, C. E. (2005). Relationship between therapeutic climate and treatment outcome in group-based sexual offender treatment programs. *Sexual abuse: a journal of research and treatment*, 17(2), 127–140. <https://doi.org/10.1177/107906320501700204>
- Beeghly, E. (2021). Stereotyping as Discrimination: Why Thoughts Can Be Discriminatory. *Social Epistemology*, 35(6), 547–563. <https://doi.org/10.1080/02691728.2021.1930274>
- Beier, K. M., Grundmann, D., Kuhle, L. F., Scherner, G., Konrad, A., & Amelung, T. (2015). The German Dunkelfeld project: a pilot study to prevent child sexual abuse and the use of child abusive images. *The journal of sexual medicine*, 12(2), 529–542. <https://doi.org/10.1111/jsm.12785>
- Bell, S., & Palmer-Conn, S. (2018). Suspicious minds: Police attitudes to mental ill health. *International Journal of Law and Public Administration*, 1(2), 25–40. <https://doi-org.ezproxy.cardiffmet.ac.uk/10.11114/ijlpa.v1i2.3878>
- Bell, N., Tonkin, M., Chester, V., & Craig, L. (2018). Adapting measures of social climate for use with individuals with intellectual developmental disability in forensic settings, *Psychology, Crime & Law*, 24:4, 362-378, <https://doi.org/10.1080/1068316X.2017.1298761>
- Bennett, A., & Hanna, P. (2021). Exploring the Experiences of Male Forensic Inpatients' Relationships with Staff within Low, Medium and High Security Mental Health Settings. *Issues in mental health nursing*, 42(10), 929–941. <https://doi.org/10.1080/01612840.2021.1913683>
- Berry, S. & Robertson, N. (2019). Burnout within forensic psychiatric nursing: its relationship with ward environment and effective clinical supervision? *Journal of Psychiatric and Mental Health Nursing*, 26(7–8), 212–222. <https://doi.org/10.1111/jpm.12538>
- Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., Maquil, A., Demoulin, S., & Leyens, J.P. (2009). Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis among majority and minority groups in three European countries. *Journal of*

- Personality and Social Psychology*, 96(4), 843–856. <https://doi.org/10.1037/a0013470>
- Birdgen, A (2004). Therapeutic jurisprudence and responsivity: Finding the will and the way in offender rehabilitation. *Psychology Crime and Law*, 10(3), 283–295. <https://doi.org/10.1080/10683160410001662771>
- Blagden N. J., Perrin C. (2016). “Relax lads, you’re in safe hands here”: Experiences of a sexual offender treatment prison. In Reeves C. (Ed.), *Experiencing imprisonment: Research on the experience of living and working in carceral institutions* (pp. 27-45). Oxon, UK: Routledge.
- Blagden, N., & Wilson, K. (2020). “We’re All the Same Here”—Investigating the Rehabilitative Climate of a Re-Rolled Sexual Offender Prison: A Qualitative Longitudinal Study. *Sexual Abuse*, 32(6), 727-750. <https://doi.org/10.1177/1079063219839496>
- Blagden, N., Winder, B., & Hames, C. (2016). “They treat us like human beings”: Experiencing a therapeutic sex offenders’ prison. *International Journal of Offender Therapy and Comparative Criminology*, 60, 371-396. <http://dx.doi.org/10.1177/0306624X14553227>.
- Blagden, N., Winder, B., Gregson, M. and Thorne, K. (2012). The practical utility of using repertory grids with sexual offenders maintaining their innocence: a case study. *The British Journal of Forensic Practice*, 14(4), 269-280. <https://doi.org/10.1108/14636641211283075>
- Blagden, N. J., Mann, R., Webster, S., Lee, R., & Williams, F. (2018). “It’s Not Something I Chose You Know”: Making Sense of Pedophiles’ Sexual Interest in Children and the Impact on Their Psychosexual Identity. *Sexual Abuse*, 30(6), 728-754. <https://doi.org/10.1177/1079063217697132>
- Blagden, N., Perrin, C., Smith, S., Gleeson, F., & Gillies, L. (2017). “A different world” exploring and understanding the climate of a recently re-rolled sexual offender prison. *Journal of Sexual Aggression*, 23(2), 151–166. <https://doi.org/10.1080/13552600.2016.1264633>
- Blair, I. V. (2001). Implicit stereotypes and prejudice. In G. B. Moskowitz (Ed.), *Cognitive social psychology: The Princeton Symposium on the Legacy and Future of Social Cognition* (pp. 359 – 374). Mahwah, NJ: Erlbaum.
- Blasingame G. (2005) Developmentally disabled persons with sexual behavior problems. second ed. Oklahoma City: Wood “N” Barnes Books/ Safer Society Press; 2005.
- Blasingame, G.D. (2016). Assessment, Diagnosis, and Risk Management of Sexual Offenders with Intellectual Disabilities. In: Phenix, A., Hoberman, H. (eds) *Sexual Offending*. Springer, New York, NY. https://doi.org/10.1007/978-1-4939-2416-5_11
- Blasingame, G. D., Boer, D. P., Guidry, L., Haaven, J., & Wilson, R. J. (2014). Practice Assessment, Treatment, and Supervision of Individuals with Intellectual Disabilities and Problematic Sexual Behaviors. Beaverton, OR: Association for the Treatment of Sexual Abusers. Available from www.atsa.com.

- Blow, A. J., Sprenkle, D. H., & Davis, S. D. (2007). Is who delivers the treatment more important than the treatment itself? The role of the therapist in common factors. *Journal of marital and family therapy*, 33(3), 298–317. <https://doi.org/10.1111/j.1752-0606.2007.00029.x>
- Bodenhausen, G. V., & Gawronski, B. (2013). Attitude Change. In D. Reisberg (Ed.), *The Oxford Handbook of Cognitive Psychology* (pp. 957-969). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195376746.001.0001>
- Boer, D. P., Tough, S., Haaven, J. Assessment of risk manageability of intellectually disabled sex offenders. (2004). *Journal Applied Research of Intellectual Disabilities*. 17(4),275–83. <https://doi.org/10.1111/j.1468-3148.2004.00214.x>
- Boer, D. P., Haaven, J. L., Lambick, F., Lindsay, W. R., McVilly, K., Sakdalan, J., & Frize, M. (2012). ARMIDILO-S Manual: Web Version 1.0. Available from www.armidilo.net
- Bogardus, E.S. (1959). *Social Distance*. Yellow Springs, OH: Antioch Press.
- Bonta, J. & Andrews, D.A. (2007). Risk-Need-Responsivity Model for Offender Assessment and Rehabilitation. 6. 1-22.
- Bradley, K. (2009). *The Bradley Report: Lord Bradley's Review of People with Mental Health Problems or Learning Disabilities in the Criminal Justice System*. London: Department of Health.
- Breckler, S.J. (1984). Empirical validation of affect, behaviour, and cognition as distinct components of attitude. *Journal of Personality and Social Psychology*, 47(6), 1191-1205.
- Bressington, D., Stewart, B., Beer, D., & MacInnes, D. (2011). Levels of service user satisfaction in secure settings. A survey of the association between perceived social climate, perceived therapeutic relationship and satisfaction with forensic services. *International Journal of Nursing Studies*, 48, 1349-1356. doi:10.1016/j.ijnurstu.2011.05.011
- Brinley, J. F. (1965). Cognitive sets, speed and accuracy of performance in the elderly. In A. T. Welford & J. E. Birren (Eds.), *Behavior, Aging and the Nervous System*. Charles, C. Thomas, Springfield, IL, (pp. 114-149).
- Briñol, P., & Petty, R. E. (2005). Individual Differences in Attitude Change. In D. Albarracín, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 575–615). Lawrence Erlbaum Associates Publishers.
- Briñol, P., Petty, R. E., & Wheeler, S. C. (2006). Discrepancies between explicit and implicit self-concepts: Consequences for information processing. *Journal of Personality and Social Psychology*, 91(1), 154–170. <https://doi.org/10.1037/0022-3514.91.1.154>
- Briñol, P., Rucker, D. D., & Petty, R. E. (2015). Naïve theories about persuasion: implications for information processing and consumer attitude change. *International Journal of Advertising*, 34(1), 85–106. <https://doi.org/10.1080/02650487.2014.997080>
- Bromley, J., & Emerson, E. (1995). Beliefs and emotional reactions of care staff working with people with challenging behaviour. *Journal of Intellectual Disability Research*, 39(4), 341-352.

- Brown, K., Spencer, J., & Deakin, J. (2007). The reintegration of sex offenders: Barriers and opportunities for employment. *The Howard Journal*, 46, 32-42. <http://dx.doi.org/10.1111/j.1468-2311.2007.00452.x>.
- Brown, S., & Sleath, E. (2016). *Research methods for forensic psychologists: A guide to completing your research project*. Routledge/Taylor & Francis Group.
- Brown, S.J. (2010) An Introduction to sex offender treatment programmes and their risk reduction efficacy. In Harrison, K. (Ed). *Managing high-risk sex-offenders in the community*. Cullompton, Devon: Willan Publishing. <http://www.routledge.com/books/details/9781843925262>.
- Brownstein, M., Madva, A., & Gawronski, B. (2019). What Do Implicit Measures Measure? Wiley interdisciplinary reviews. *Cognitive Science*. <https://doi.org/10.1002/wcs.1501>
- Brownstein, M., Madva, A., & Gawronski, B. (2020) Understanding Implicit Bias: Putting the Criticism into Perspective. *Pacific Philosophical quarterly*, 101(2), 276–307. <https://doi.org/10.1111/papq.12302>
- Burrell, J. W. and Laskey, P. (2017). Attitudes towards sexual offenders returning to live in the community. *Journal of Applied Psychology and Social Science*, 3 (2). pp. 52-69.
- Callahan, L. (2004). Correctional officer attitudes toward inmates with mental disorders. *International Journal of Forensic Mental Health*, 3(1), 37–54. <https://doi-org.ezproxy.cardiffmet.ac.uk/10.1080/14999013.2004.10471195>
- Campbell, M., Fitzpatrick, R., Haines, A., Kinmonth, A.L., Sandercock, P., Spiegelhalter, D., & Tyrer, P. (2000). Framework for design and evaluation of complex interventions to improve health. *BMJ*; 321(2762), 694-696. doi:10.1136/bmj.321.7262.694
- Carnes, M., Devine, P. G., Baier Manwell, L., Byars-Winston, A., Fine, E., Ford, C. E., Forscher, P., Isaac, C., Kaatz, A., Magua, W., Palta, M., & Sheridan, J. (2015). The effect of an intervention to break the gender bias habit for faculty at one institution: a cluster randomized, controlled trial. *Academic medicine : journal of the Association of American Medical Colleges*, 90(2), 221–230. <https://doi.org/10.1097/ACM.0000000000000552>
- Challinor, L. E., Whitaker, Z., & Duff, S. (2018). Understanding forensic nursing staff attitudes towards men who have committed sexual offences: a narrative intervention. *Forensic Research and Criminology International Journal*. 6(5):331-337, 10.15406/frcij.2018.06.00225
- Chan, V., Homes, A., Murray, L., & Treanor, S. (2010). *Evaluation of the offender community disclosure pilot*. Scotland: IPSOS MORI.
- Chavis, M. D., & Wanderman, A. (1990). Sense of community in the urban environment. *American Journal of Community*, 18(1), 55-81. <https://doi.org/10.1007/BF00922689>
- Chester, V., McCathie, J., Quinn, M., Ryan, L., Popple, J., Loveridge, C., & Spall, J. (2015). Clinician experiences of administering the Essen Climate Evaluation Schema (EssenCES) in a forensic intellectual disability service. *Advances in*

Mental Health and Intellectual Disabilities, 9, 70–78. doi:10.1108/AMHID-06-2014-0024

- Chiricos, T., Barrick, K., Bales, W., & Bontrager, S. (2007). The labelling of convicted felons and its consequences for recidivism. *Criminology: An Interdisciplinary Journal*, 45(3), 547–581. <https://doi.org/10.1111/j.1745-9125.2007.00089.x>
- Church, W. T., Wakeman, E. E., Miller, S. L., Clements, C. B & Sun, F. (2008). The Community Attitudes Toward Sex Offenders Scale: The Development of a Psychometric Assessment Instrument. *Research on Social Work Practice*, 18(3) 251-259.
- Clarke, J.M. (2011). Working with sex offenders: Best practice in enhancing practitioner resilience. *Journal of Sexual Aggression*, 1-21.
- Clarke, N. (2004). HRD and the challenges of assessing learning in the workplace. *International Journal of Training and Development*, 8(2), 140–156. <https://doi.org/10.1111/j.1468-2419.2004.00203.x>
- Clarke, V., Braun, V., Frith, H., & Moller, N. (2019). Editorial Introduction to the Special Issue: *Using Story Completion Methods in Qualitative Research*. *Qualitative Research in Psychology*, 16(1), 1–20. <https://doi.org/10.1080/14780887.2018.1536378>
- Coates, S. (2016). Unlocking Potential. Dame Coates Review of education in prison. *Ministry of Justice*. May, 2016.
- Cohen, G., & Harvey, J. (2016). The use of psychological interventions for adult male sex offenders with a learning disability: A systematic review. *Journal of Sexual Aggression*, 22(2), 206–223. <https://doi.org/10.1080/13552600.2015.1077279>
- Cohen, M., & Jeglic, E. L. (2007). Sex offender legislation in the United States: what do we know?. *International journal of offender therapy and comparative criminology*, 51(4), 369–383. <https://doi.org/10.1177/0306624X06296235>
- Cohen, J. (1988). The Effect Size. *Statistical Power Analysis for the Behavioral Sciences*. Abingdon: Routledge, 77-83.
- Committee on Psychological Testing, Including Validity Testing, for Social Security Administration Disability Determinations, Board on the Health of Select Populations, & Institute of Medicine. (2015). *Psychological Testing in the Service of Disability Determination*. National Academies Press (US).
- Comrey, A.L., & Lee, H.B. (1992). *A First Course in Factor Analysis* (2nd ed.). Psychology Press. <https://doi.org/10.4324/9781315827506>
- Conley, T., Hill, K., Church, W. T. II, Stoeckel, E., & Allen, H. (2011). Assessing probation and community corrections workers' attitudes toward sex offenders using the Community Attitudes Toward Sex Offenders (CATSO) Scale in a rural state. *Sexual Addiction & Compulsivity*, 18(2), 75–85. <https://doi.org/10.1080/10720162.2011.582775>
- Conn, V. S., Algase, D. L., Rawl, S. M., Zerwic, J. J., & Wyman, J. F. (2010). Publishing pilot intervention work. *Western journal of nursing research*, 32(8), 994–1010. <https://doi.org/10.1177/0193945910367229>

- Cook, S. W., & Selltitz, C. (1964). A multiple-indicator approach to attitude measurement. *Psychological Bulletin*, 62(1), 36–55. <https://doi.org/10.1037/h0040289>
- Corbett, A. (Ed.). (2018). *Intellectual Disability and Psychotherapy: The Theories, Practice and Influence of Valerie Sinason* (1st ed.). Routledge. <https://doi.org/10.4324/9780429451300>
- Corneille, O., & Hütter, M. (2020). Implicit? What Do You Mean? A Comprehensive Review of the Delusive Implicitness Construct in Attitude Research. *Personality and Social Psychology Review*, 24(3), 212–232. <https://doi.org/10.1177/1088868320911325>
- Corneille, O., & Stahl, C. (2019). Associative attitude learning: A closer look at evidence and how it relates to attitude models. *Personality and Social Psychology Review*, 23(2), 161–189. <https://doi.org/10.1177/1088868318763261>
- Côté-Lussier, C., & Hohl, K., & David, J. D. (2020). *Disadvantage, Crime, and Criminal Justice*. 10.2307/j.ctv1198zp4.14.
- Councell, R. (2003). The prison population in 2002: A statistical review. Research Development and Statistics Directorate: Findings Report 228, Home Office: Available from, The Research Development and Statistics Directorate, Communication Development Unit, Room 264, Home Office, 50 Queen Anne's Gate, London, SW1H 9AT. Available electronically from: <http://www.homeoffice.gov.uk/rds/pdfs2/r228.pdf>
- Craig, L., Browne, K.D., & Beech, A.R. (2008). *Assessing risk in sex offenders: A practitioner's guide*. Chichester: Wiley.
- Craig, L.A. (2005). The Impact of Training on Attitudes Towards Sex Offenders. *Journal of Sexual Aggression*, 11(2), 197-207.
- Crano, W. D., Cooper, J., & Forgas, J. P. (2010). Attitudes and attitude change. An introductory review. In J. P. Forgas, J. Cooper, & W. D. Crano (Eds.), *The psychology of attitudes and attitude change* (pp. 3-18). New York, NY: Psychology Press.
- Craun, S. W., & Theriot, M. T. (2009). Misperceptions of sex offender perpetration: considering the impact of sex offender registration. *Journal of Interpersonal Violence*, 24(12), 2057–2072. <https://doi.org/10.1177/0886260508327706>
- Crewe, B. (2012). The Prisoner Society: Power, Adaptation and Social Life in an English Prison, *Clarendon Studies in Criminology* (Oxford, 2009; online edn, Oxford Academic, 22 Mar.2012), <https://doi.org/10.1093/acprof:oso/9780199577965.003.0004>,
- Crown Prosecution Services (CPS). (2019, October 14, updated, 2023, April 25). *Mental Health: Victims and Witnesses | The Crown Prosecution Service* ([cps.gov.uk](https://www.cps.gov.uk)). <https://www.cps.gov.uk/legal-guidance/mental-health-victims-and-witnesses>
- Criminal Court Statistics quarterly, England and Wales, January to March 2018 (Annual 2017). Ministry of Justice, National Statistics. Published 28th June 2018.

- Criminal Justice Joint Inspectorates (January 2014), A joint inspection of the treatment of offenders with learning disabilities within the criminal justice system. HMI Probation Publications <https://www.justiceinspectorates.gov.uk>.
- Criminal Justice Joint Inspection. (2021). Neurodiversity in the criminal justice system: A review of evidence report.
- Cromer, L. D., & Goldsmith, R. E. (2010). Child sexual abuse myths: Attitudes, beliefs, and individual differences. *Journal of Child Sexual Abuse, 19*, 618-647, doi:10.1080/10538712.2010.522493.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297–334. doi:10.1007/bf02310555.
- Cunningham, W. A., Preacher, K. J., & Banaji, M. R. (2001). Implicit attitude measures: Consistency, stability, and convergent validity. *Psychological Science, 12*(2), 163–170. <https://doi.org/10.1111/1467-9280.00328>
- Czosnyka, O.J. (2019). Attitudes towards sex offenders: a review of therapists' attitudes and their impact on therapeutic alliance, and a qualitative study of support workers' attitudes towards sex offenders with intellectual disabilities.
- Darlaston-Jones, D. (2007). Psychological sense of community and its relevance to well-being and everyday life in Australia. *Australian Community Psychologist, 19*(2), 1-25.
- Davis, R., Campbell, R., Hildon, Z., Hobbs, L., & Michie, S. (2015). Theories of behaviour and behaviour change across the social and behavioural sciences: a scoping review. *Health Psychol Rev. 2015;9*(3):323–44.
- Day, A., Casey, S., Vess, J., & Huisy, G. (2011). Assessing the social climate of Australian prisons. *Trends and Issues in Crime and Criminal Justice, 427*, 1–6.
- De Houwer, J., Teige-Mocigemba, S., Spruyt, A., & Moors, A. (2009). Implicit measures: A normative analysis and review. *Psychological bulletin, 135*(3), 347–368. <https://doi.org/10.1037/a0014211>
- de Winter, J. C., & Dodou, D. (2010). The Driver Behaviour Questionnaire as a predictor of accidents: a meta-analysis. *Journal of safety research, 41*(6), 463–470. <https://doi.org/10.1016/j.jsr.2010.10.007>
- de Winter, J. & Dodou, D., (2010). Five-Point Likert Items: t test versus Mann-Whitney-Wilcoxon, *Practical Assessment, Research, and Evaluation 15*(1): 11. <https://doi.org/10.7275/bj1p-ts64>
- Denk-Florea, C. B., Gancz, B., Gomoiu, A., Ingram, M., Moreton, R., & Pollick, F. (2020). Understanding and supporting law enforcement professionals working with distressing material: Findings from a qualitative study. *PloS one, 15*(11), e0242808. <https://doi.org/10.1371/journal.pone.0242808>
- Denzin, N. K; Lincoln, Y. S. (2013). *Strategies of Qualitative Inquiry*. 4th edn. Sage, Thousand Oaks
- Department for International Development (2018). Disability Inclusion Strategy, 2018 to 2023. Policy Paper.Gov.UK

- Department of Health (2001). *Valuing people - a new strategy for learning disability for the 21st century*. [White Paper]. Crown. <http://www.archive.official-documents.co.uk/document/cm50/5086/5086.pdf>
- Department of Health and Social Care (2018). Independent Report. Modernising the Mental Health Act - final report from the independent review. <https://www.gov.uk/government/publications/modernising-the-mental-act-final-report-from-the-independent-review>.
- Department of Health (DH). (2011). Personalised care planning: improving care for people with Long term conditions. 2011. <https://tinyurl.com/uc3u3tkh>
- Dickens, G. L., Johnson, A., Steel, K., Everett, B., & Tonkin, M. (2022). Interventions to Improve Social Climate in Acute Mental Health Inpatient Settings: Systematic Review of Content and Outcomes. *SAGE open nursing*, 8, 23779608221124291. <https://doi.org/10.1177/23779608221124291>
- Dovidio, J. F., & Fazio, R. H. (1992). New technologies for the direct and indirect assessment of attitudes. In J. Tanur (Ed.), *Questions about survey questions: Meaning, memory, attitudes, and social interaction* (pp. 204 – 237). New York: Russell Sage Foundation.
- Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of personality and social psychology*, 82(1), 62–68. <https://doi.org/10.1037//0022-3514.82.1.62>
- Dovidio, J. F., Kawakami, K., Johnson, C., Johnson, B., and Howard, A. (1997). On the nature of prejudice: Automatic and controlled processes. *Journal of Experimental Social Psychology*, 33, 510-554.
- Doyle, P., Quayle, E., & Newman, E. (2017). Social climate in forensic mental health settings: A systematic review of qualitative studies. *Aggression and Violent Behavior*, 36, 118–136. <https://doi.org/10.1016/j.avb.2017.06.008>
- Dweck, C. S. (2000). *Self-Theories: Their Role in Motivation, Personality, and Development*. Psychology Press.
- Eagly, A.H., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich.
- Eaves, L., Martin, N., Heath, A., Schieken, R., Meyer, J., Silberg, J. & Corey, L. (1997). Age changes in the causes of individual differences in conservatism. *Behavior Genetics*, 27(2), 121-124.
- Ebbinghaus, H. (2013). Memory: a contribution to experimental psychology. *Annals of neurosciences*, 20(4), 155–156. <https://doi.org/10.5214/ans.0972.7531.200408>
- Edwards, E. R., & Mottarella, K. (2015). Perceptions of the Previously Convicted: The Influence of Conviction Type and Therapy Participation. *International Journal of Offender Therapy and Comparative Criminology*, 59(12), 1358–1377. <https://doi.org/10.1177/0306624X14536899>
- Egan, G. (1998). *The Skilled Helper: a problem-management approach to helping*. USA: Brooks/Cole publishing Company.

- Egloff, B., & Schmukle, S. C. (2002). Predictive validity of an implicit association test for assessing anxiety. *Journal of Personality and Social Psychology*, 83(6), 1441–1455. <https://doi.org/10.1037/0022-3514.83.6.1441>
- Eisele, P. (2022). Toward a Standardized Low-Tech Measure of Indirect Attitudes. *Psychology*, 13, 552-565. <https://doi.org/10.4236/psych.2022.134037>
- Ellington, H., and Race, P. (1993). *Producing Teaching Materials -A Handbook for Teachers and Trainers*. London: Kogan Page.
- Elliott, M. A., Armitage, C. J., & Baughan, C. J. (2003). Drivers' compliance with speed limits: An application of the theory of planned behavior. *Journal of Applied Psychology*, 88(5), 964–972. <https://doi.org/10.1037/0021-9010.88.5.964>
- Elton, L. (1977), in Percival, F., Ellington H., & Race, P. (1993). *A Handbook of Educational Technology*. London: Kogan Page.
- Entwistle, N., McCune, V., & Hounsell, J. (2003). Investigating ways of enhancing university teaching-learning environments: Measuring students' approaches to studying and perceptions of teaching. In E. De Corte, L. Verschaffel, N, Entwistle, & J. van Merriënboer (Eds.), *Powerful learning environments: Unravelling basic components and dimensions* (1st ed., p. 89). Amsterdam: Pergamon.
- Eraut, M. (2004). Transfer of Knowledge between Education and Workplace Settings. In H. Rainbird, A. Fuller, & A. Munro (Eds.), *Workplace Learning in Context* (pp. 201-221). London: Routledge.
- Evans J. S. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annual review of psychology*, 59, 255–278. <https://doi.org/10.1146/annurev.psych.59.103006.093629>
- Evans, J. S., & Stanovich, K. E. (2013). Dual-Process Theories of Higher Cognition: Advancing the Debate. *Perspectives on psychological science: a journal of the Association for Psychological Science*, 8(3), 223–241. <https://doi.org/10.1177/1745691612460685>
- Ewoldsen, D. R., Rhodes, N., & Fazio, R. H. (2015). The MODE model and its implications for studying the media. *Media Psychology*, 18(3), 312–337. <https://doi.org/10.1080/15213269.2014.937440>
- Farrall, S., & Calverley, A. (2006). *Understanding desistance from crime: Theoretical directions in resettlement and rehabilitation*. Berkshire, UK: Open University Press.
- Farrenkopf, T. (1992). What happens to therapists who work with sexual offenders? *Journal of Offender Rehabilitation*, 8, 217-223.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191. <https://doi.org/10.3758/BF03193146>
- Fazio, R. H. (1990). Multiple processes by which attitudes guide behaviour: The MODE model as an integrative framework. In M. P. Zanna (ED.), *Advances*

- in experimental social psychology* (Vol, 23, pp. 75-109). Orlando, FL: Academic Press.
- Fazio, R. H., Jackson, J. R., Dunton, B. C., & Williams, C. J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: a bona fide pipeline?. *Journal of personality and social psychology*, 69(6), 1013–1027. <https://doi.org/10.1037//0022-3514.69.6.1013>
- Fazio, R. H., Sanbonmatsu, D. M., Powell, M. C., & Kardes, F. R. (1986). On the automatic activation of attitudes. *Journal of personality and social psychology*, 50(2), 229–238. <https://doi.org/10.1037//0022-3514.50.2.229>
- Fazio, R. H., & Petty, R. E. (Eds.). (2008). *Attitudes: Their structure, function, and consequences*. Psychology Press.
- Fedoroff, J. P. and Moran, B. (1997). "Myths and misconceptions about sex offenders." *Canadian Journal of Human Sexuality*, 6: 263-276.
- Feelgood, S., & Hoyer, J. (2008). Child molester or paedophile? Sociolegal versus psychopathological classification of sexual offenders against children. *Journal of Sexual Aggression*, 14(1), 33–43. <https://doi.org/10.1080/13552600802133860>
- Feldman, D. B., & Crandall, C. S. (2007). Dimensions of mental illness stigma: What about mental illness causes social rejection? *Journal of Social and Clinical Psychology*, 26(2), 137–154. <https://doi.org/10.1521/jscp.2007.26.2.137>
- Ferguson, K., & Ireland, C. A. (2006). Attitudes towards sex offenders and the influence of offence type: A comparison of staff working in a forensic setting and students. *The British Journal of Forensic Practice*, 8(2), 10–19. <https://doi.org/10.1108/14636646200600009>
- Field, A. (2017). *Discovering Statistics Using IBM SPSS Statistics*, (5th Ed). London. Sage Publications Ltd. P 1009.
- Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics*, (5th Ed). London. Sage Publications Ltd.
- Finlay, W. M., & Lyons, E. (2001). Methodological issues in interviewing and using self-report questionnaires with people with mental retardation. *Psychological Assessment*, 13(3), 319–335. <https://doi.org/10.1037/1040-3590.13.3.319>
- Fishbein, M., & Ajzen, I. (1974). Attitudes towards objects as predictors of single and multiple behavioral criteria. *Psychological Review*, 81(1), 59-74. <https://doi.org/10.1037/h0035872>
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The Reasoned Action Approach*. New York: Taylor & Francis
- Fiske, S. T., & Taylor, S. E. (1984). *Social cognition*. Reading, MA: Addison-Wesley.
- Försterling F. 2001. Attribution. In *An introduction to theories, research and applications* (pp. 1–10). Hove, England: Psychology Press. <https://doi.org/10.4324/9781315804514>

- Fox, N. S., Brennan, J. S., & Chasen, S. T. (2008). Clinical estimation of fetal weight and the Hawthorne effect. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, *141* (2), 111-114.
- Franke, D., Bierie, D., & Mackenzie, D. L. (2010). Legitimacy in corrections: A randomized experiment comparing a boot camp with a prison. *Criminology and Public Policy*, *9*, 89-117.
- Freeman, J. B., & Ambady, N. (2010). MouseTracker: Software for studying real-time mental processing using a computer mouse-tracking method. *Behavior Research Methods*, *42*(1), 226–241. <https://doi.org/10.3758/BRM.42.1.226>
- Freeman, J. B., Pauker, K., & Sanchez, D. T. (2016). A Perceptual Pathway to Bias: Interracial Exposure Reduces Abrupt Shifts in Real-Time Race Perception That Predict Mixed-Race Bias. *Psychological Science*, *27*(4), 502–517. <https://doi.org/10.1177/0956797615627418>
- Frieze, I., & Weiner, B. (1971). Cue utilization and attributional judgments for success and failure. *Journal of Personality*, *39*(4), 591-605.
- Fuselier, D. A., Durham, R. L., & Wurtele, S. K. (2002). The child sexual abuser: Perceptions of college students and professionals. *Sexual Abuse: A Journal of Research & Treatment*, *14*(3), 267–276. <https://doi.org/10.1177/107906320201400306>.
- Gaertner, S. L., & McLaughlin, J. P. (1983). Racial stereotypes: Associations and ascriptions of positive and negative characteristics. *Social Psychology Quarterly*, *46*(1), 23–30. <https://doi.org/10.2307/3033657>
- Gakhal, B. K., & Brown, S. J. (2011). A comparison of the general public's, forensic professionals' and students' attitudes towards female sex offenders. *Journal of Sexual Aggression*, *17*(1), 105–116. <https://doi.org/10.1080/13552600.2010.540678>
- Gale E. The Hawthorne studies- a fable for our times? *QJM* 2004; *97*:439e49.
- Galeste, M. A., Fradella, H. F., & Vogel, B. (2012). Sex offender myths in print media: Separating fact from fiction in U.S. newspapers. *Western Criminology Review*, *13*(2), 4-24.
- Gallagher, C. A., Wilson, D. B., Hirschfield, P., Coggeshall, M. B., & MacKenzie, D. L. (1999). A quantitative review of the effects of sex offender treatment on sexual reoffending. *Corrections Management Quarterly*, *3*(4), 19-29.
- Gannon, T. A., Olver, M. E., Mallion, J. S., & James, M. (2019). Does specialized psychological treatment for offending reduce recidivism? A meta-analysis examining staff and program variables as predictors of treatment effectiveness. *Clinical psychology review*, *73*, 101752. <https://doi.org/10.1016/j.cpr.2019.101752>
- Garcia, J. L., Johnson, A. J., Carlucci, M. E., & Grover, R. L. (2020). The impact of mental health diagnoses on perceptions of risk of criminality. *The International journal of social psychiatry*, *66*(4), 397–410. <https://doi.org/10.1177/0020764020913322>
- Garland, R. J., Dougher M.J. (1990). The Abused/Abuser Hypothesis of Child Sexual Abuse: A Critical Review of Theory and Research. In: Feierman

- J.R. (eds) *Pedophilia*. Springer, New York, NY.
https://doi.org/10.1007/978-1-4613-9682-6_20
- Gattol, V., Saaksjarvi, M. & Carbon, C. (2011). Extending the Implicit Association Test (IAT): Assessing Consumer Attitudes Based on Multi-Dimensional Implicit Associations. *PloS one*, 6(1), e15849.
<https://doi.org/10.1371/journal.pone.0015849>.
- Gawronski, B., & Bodenhausen, G. V. (2006). Associative and propositional processes in evaluation: an integrative review of implicit and explicit attitude change. *Psychological bulletin*, 132(5), 692–731.
<https://doi.org/10.1037/0033-2909.132.5.692>
- Gawronski, B., & Bodenhausen, G. V. (2005). Accessibility Effects on Implicit Social Cognition: The Role of Knowledge Activation and Retrieval Experiences. *Journal of Personality and Social Psychology*, 89(5), 672–685. <https://doi.org/10.1037/0022-3514.89.5.672>
- Gawronski, B., & Bodenhausen, G. V. (2011). The associative propositional evaluation model: Theory, evidence, and open questions. *Advances in Experimental Social Psychology*, 44, 59–127. <http://dx.doi.org/10.1016/B978-0-12-385522-0.00002-10>
- Gawronski, B., & Bodenhausen, G. V. (2014). The associative—Propositional evaluation model: Operating principles and operating conditions of evaluation. In J. W. Sherman, B. Gawronski, & Y. Trope (Eds.), *Dual-process theories of the social mind* (p. 188–203). The Guilford Press.
- Gawronski, B., & LeBel, E. P. (2008). Understanding patterns of attitude change: When implicit measures show change, but explicit measures do not. *Journal of Experimental Social Psychology*, 44(5), 1355–1361. <https://doi.org/10.1016/j.jesp.2008.04.005>
- Gawronski, B., Brannon, S. M., & Bodenhausen, G. V. (2016). The associative-propositional duality in the representation, formation, and expression of attitudes. In *Reflective and Impulsive Determinants of Human Behavior* (pp. 103–118). Taylor and Francis Inc.. <https://doi.org/10.4324/9781315523095>
- Gawronski, B., Peters, K. R., Brochu, P. M., & Strack, F. (2008). Understanding the relations between different forms of racial prejudice: a cognitive consistency perspective. *Personality & social psychology bulletin*, 34(5), 648–665.
<https://doi.org/10.1177/0146167207313729>
- Gilbert, D. T., & Hixon, J. G. (1991). The trouble of thinking: Activation and application of stereotypic beliefs. *Journal of Personality and Social Psychology*, 60(4), 509–517. <https://doi.org/10.1037/0022-3514.60.4.509>
- Gill, F., Stenfert Kroese, B., & Rose, J. (2002). General practitioners' attitudes to patients who have learning disabilities. *Psychological medicine*, 32(8), 1445–1455. <https://doi.org/10.1017/s0033291702006608>
- Giordano, P. C., Cernkovich, S.A., & Rudolph, J.L. (2002). Gender, crime, and desistance: Toward a Theory of Cognitive Transformation. *American Journal of Sociology*, 107(4), 990–1064. URL:
<http://www.jstor.org/stable/1010.1086/343191>.

- Ginty, A. T. (2013). Construct validity. In: Gellman, M. D, Turner, J. R, eds. *Encyclopedia of Behavioral Medicine*. Springer, New York, NY; 2013. doi:10.1007/978-1-4419-1005-9_861
- Girden, E. R. (1992). ANOVA: Repeated Measures. *Sage University Paper Series on Quantitative Applications in the Social Sciences*, 84, 07-084. Newbury Park, CA: Sage. <https://doi.org/10.4135/9781412983419>
- Glaser, D. (1969). *The Effectiveness of Prison and a Parole System*. Indianapolis Bobbs - Merrill.
- Glass, G. V., McGaw, B., & Smith, M.L. (1981). *Meta Analysis in Social Research*. London: Sage.
- Göbbels, S., Ward, T., & Willis, G. M. (2012). An integrative theory of desistance from sex offending. *Aggression and Violent Behavior*, 17(5), 453-462. doi: 10.1016/j.avb.2012.06.003
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. New York, NY: Simon and Schuster.
- Goldblatt, P., & Lewis, C. (Eds) (1998). *Reducing offending: An assessment of research evidence on ways of dealing with offending behaviour*. Home Office Research Study, 187. London: HMSO.
- Gordon, K. E. (2013). The registered sex offender population as a marker of social disorganization. *The Howard Journal of Criminal Justice*, 52(5), 527-542
- Goulet, M-H., Latulippe, M., Pariseau-Legault, P., Hallett, N., & Crocker, A. G., (2022): Violence Prevention Climate in Civil and Forensic Mental Health Settings: Common Goal, Different Views?, *International Journal of Forensic Mental Health*, <https://doi.org/10.1080/14999013.2022.2150335>
- Gov.UK. (2015). Ministry of Justice. HM Prison & Probation Service. Mental Health Casework Section. Section 17- Leave of Absence. December 2015. Retrieved from <https://assets.publishing.service.gov.uk/media/5d441c4940f0b674a285a081/mhcs-guidance-s17-leave.pdf.docx>
- Govan, C. L., & Williams, K. D. (2004). Changing the affective valence of the stimulus items influences the IAT by re-defining the category labels. *Journal of Experimental Social Psychology*, 40(3), 357–365. <https://doi.org/10.1016/j.jesp.2003.07.002>
- Graham, D., Saunders, A., Gadsby, B. & Hazard, A. (2014). *The Bradley Report five years on. An independent review of progress to date and priorities for further development*. London: Centre for Mental Health.
- Greenwald, A. G., & Banaji, M. R. (2017). The implicit revolution: Reconceiving the relation between conscious and unconscious. *American Psychologist*, 72(9), 861–871. <https://doi.org/10.1037/amp0000238>
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102(1), 4–27. <https://doi.org/10.1037/0033-295X.102.1.4>
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: the implicit association test. *Journal of*

- personality and social psychology*, 74(6), 1464–1480.
<https://doi.org/10.1037//0022-3514.74.6.1464>
- Greer, C. (2012). *Sex crime and the media: Sex offending and the press in a divided society*. Abingdon, UK: Routledge.
- Grove, L., Morrison-Beedy, D., Kirby, R., & Hess, J. (2018). The Birds, Bees, and Special Needs: Making Evidence-Based Sex Education Accessible for Adolescents with Intellectual Disabilities. *Sexuality and Disability*, 36(4), 313-329. <https://doi.org/10.1007/s11195-018-9547-7>.
- Griffiths, D., Hingsburger, D., Hoath, J., & Ioannou, S. (2013). 'Counterfeit deviance' revisited. *Journal of applied research in intellectual disabilities* : *JARID*, 26(5), 471–480. <https://doi.org/10.1111/jar.12034>
- Gschwendner, T., Hofmann, W., & Schmitt, M. (2008). Differential stability: The effects of acute and chronic construct accessibility on the temporal stability of the Implicit Association Test. *Journal of Individual Differences*, 29(2), 70–79. <https://doi.org/10.1027/1614-0001.29.2.70>
- Haaven, J. (2006). Suggested treatment outline using the Old Me/New Me model. In: Blasingame, G., editor. *Practical treatment strategies for forensic service users with severe and sexual behavior problems among persons with developmental disabilities*. Oklahoma City: Wood ‘N’ Barnes/Safer Society Press.
- Hagger, M. S., & Luszczynska, A. (2014). Implementation intention and action planning interventions in health contexts: state of the research and proposals for the way forward. *Appl. Psychol. Health Well-Being* 6(1),1–47. <https://doi.org/10.1111/aphw.12017>
- Haigh, R., Harrison, T., Johnson, R., Paget, S. & Williams, S. (2012). “Psychologically informed environments and the Enabling Environments initiative”, *Housing, Care and Support*, 15 (1), 34- 42.
- Haines, D. (2017). Ethical considerations in qualitative case study research recruiting participants with profound intellectual disabilities. *Research Ethics*, 13(3–4), 219–232. <https://doi.org/10.1177/1747016117711971>
- Haines, D., Wright, J. and Comeramy, H. (2018). Occupational Therapy Empowering Support Workers to Change How They Support People with Profound Intellectual and Multiple Disabilities to Engage in Activity. *Journal of Policy and Practice in Intellectual Disabilities*, 15: 295-306. <https://doi.org/10.1111/jppi.12257>
- Hanson, R. K., & Bussière, M. T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66(2), 348–362. <https://doi.org/10.1037/0022-006X.66.2.348>
- Hanson, R. K., & Morton-Bourgon, K. E. (2005). The Characteristics of Persistent Sexual Offenders: A Meta-Analysis of Recidivism Studies. *Journal of Consulting and Clinical Psychology*, 73(6), 1154–1163. <https://doi.org/10.1037/0022-006X.73.6.1154>
- Harper, C.A. (2018). The role of the media in shaping responses to sexual offending. In: H. Elliott, K. Hocken, R. Lievesley, N. Blagden, B. Winder and P. Banyard, eds., *Sexual crime and circles of support and*

- accountability*. Sexual crime. Cham: Palgrave Macmillan, pp. 127-150. ISBN 9783319748221
- Harper, C.A. (2019). Public Attitudes and Penal Policy in the Desistance Process for Sexual Offenders. In: Blagden, N., Winder, B., Hocken, K., Lievesley, R., Banyard, P., Elliott, H. (eds). *Sexual Crime and the Experience of Imprisonment*. *Sexual Crime*. Palgrave Macmillan, Cham.
https://doi.org/10.1007/978-3-030-04930-0_8
- Harper, C. A., & Bartels, R. M. (2017). The influence of implicit theories and offender characteristics on judgements of sexual offenders: A moderated mediation analysis. *Journal of Sexual Aggression*, 23(2), 139–150.
10.1080/13552600.2016.1250963
- Harper, C. A., Bartels, R. M., & Hogue, T. E. (2018). Reducing Stigma and Punitive Attitudes Toward Pedophiles Through Narrative Humanization. *Sexual abuse : a journal of research and treatment*, 30(5), 533–555.
<https://doi.org/10.1177/1079063216681561>
- Harper, C. A., & Harris, A. J. (2017). Applying moral foundations theory to understanding public views of sexual offending. *Journal of Sexual Aggression*.
<https://doi.org/10.1080/13552600.2016.1217086>.
- Harper, C. A., & Hogue, T. E. (2014). Measuring public perceptions of sex offenders: reimagining the Community Attitudes Toward Sex Offenders (CATSO) scale, *Psychology, Crime & Law*, 21(5), 452-470, <https://doi.org/10.1080/1068316X.2014.989170>
- Harper, C. A., & Hogue, T. E. (2015a). The emotional representation of sexual crime in the national British press. *Journal of Language and Social Psychology*, 34, 3–24. doi:10.1177/0261927X14544474.
- Harper, C. A., & Hogue, T. E. (2016). Press coverage as a heuristic guide for social decision-making about sexual offenders. *Psychology, Crime & Law*, 23(2), 118–134. <https://doi.org/10.1080/1068316X.2016.1227816>
- Harper, C.A., Hogue, T.E. and Bartels, R.M.(2017). Attitudes towards sexual offenders: what do we know, and why are they important? *Aggression and Violent Behavior*, 34, pp. 201-213. ISSN 1359-1789
- Harper, C.A., Lievesley, R., Blagden, N.J. and Hocken, K., 2021. Humanizing pedophilia as stigma reduction: a large-scale intervention study. *Archives of Sexual Behavior*. ISSN 0004-0002
- Harris, A. J., & Socia, K. M. (2016). What's in a name? Evaluating the effects of the “sex offender” label on public beliefs and opinions. *Sexual Abuse: A Journal of Research and Treatment*, 28, 660–678.
<http://dx.doi.org/10.1177/1079063214564391>.
- Hatcher, R., & Noakes, S. (2010). Working with sex offenders: The impact on Australian treatment providers. *Psychology, Crime & Law*, 16(1-2), 145–167. <https://doi.org/10.1080/10683160802622030>
- Haverkamp, N., & Beauducel, A. (2017). Violation of the Sphericity Assumption and Its Effect on Type-I Error Rates in Repeated Measures ANOVA and Multi-Level Linear Models (MLM). *Frontiers in psychology*, 8, 1841.
<https://doi.org/10.3389/fpsyg.2017.01841>

- Hays, R., & Revicki, D. A. (2005). Reliability and validity (including responsiveness). In P. Fayers & R. Hays (Eds.), *Assessing quality of life in clinical trials: Methods and practice* (2nd ed., pp. 25–29). New York: Oxford University Press.
- Heaton, K. M., & Murphy, G. H. (2013). Men with intellectual disabilities who have attended sex offender treatment groups: a follow-up. *Journal of applied research in intellectual disabilities : JARID*, *26*(5), 489–500. <https://doi.org/10.1111/jar.12038>
- Heider, F. (1958). *The Psychology of Interpersonal Relations*. New York: Wiley. <https://doi.org/10.1037/10628-000>
- Helitzer, D., Hollis, C., de Hernandez, B. U., Sanders, M., Roybal, S., & Van Deusen, I. (2010). Evaluation for community-based programs: the integration of logic models and factor analysis. *Evaluation and program planning*, *33*(3), 223–233. <https://doi.org/10.1016/j.evalprogplan.2009.08.005>
- Heneghan, C., Wright, J., & Watson, G. (2014). Clinical psychologists' experiences of reflective staff groups in inpatient psychiatric settings: a mixed methods study. *Clinical psychology & psychotherapy*, *21*(4), 324–340. <https://doi.org/10.1002/cpp.1834>
- Henson, C. ann, & Lievesley, R. (2023). Understanding the ‘walk of shame’: exploring the experiences of individuals with sexual convictions who have been recalled from open conditions in England and Wales. *Psychology, Crime & Law*, 1–25. <https://doi.org/10.1080/1068316X.2023.2209261>
- Heppell, S., Jones, C., & Rose, J. (2020). The effectiveness of cognitive-behavioural therapy group-based interventions for men with intellectual disabilities and sexual offending histories: a meta-analysis. *International journal of developmental disabilities*, *68*(4), 416–429. <https://doi.org/10.1080/20473869.2020.1845933>
- Herrington, V. (2009). Assessing the prevalence of intellectual disability among young male prisoners. *Journal of Intellectual Disability Research*, *53*(5), 397–410. <https://doi.org/10.1111/j.1365-2788.2008.01150.x>
- Higgins, C., & Ireland, C. (2009). Attitudes towards male and female sex offenders: a comparison of forensic staff, prison officers and the general public in Northern Ireland. *The British Journal of Forensic Practice*, *11*(1), 14–19. <https://doi.org/10.1108/14636646200900004>
- Hill, A., Briken, P., Kraus, C., Strohm, K., & Berner, W. (2003). Differential pharmacological treatment of paraphilias and sex offenders. *International journal of offender therapy and comparative criminology*, *47*(4), 407–421. <https://doi.org/10.1177/0306624X03253847>
- HM Chief Inspector of Prisons (2022). Annual report 2021–22, London: HM Stationery Office
- HM Inspectorate of Probation and HM Inspectorate of Prisons. (2019). Management and supervision of men convicted of sexual offences’. A thematic Inspection by HM Inspectorate of Probation and HM Inspectorate of Prisons (Jan, 2019).
- HM Prison and Probation Service (2019). HMPPS Business Strategy: Shaping Our Future. Retrieved from: <https://www.gov.uk/government/publications/hmppps-business-strategy-shaping-our-future>.

- HM Prison and Probation Service (2020). National Probation Service. OASys Sexual reoffending Predictor (OSP) Guidance for Treatment Managers. Version 1.0 Interventions Services, October 2020.
- Hofmann, W., Gawronski, B., Gschwendner, T., Le, H., & Schmitt, M. (2005). A meta-analysis on the correlation between the implicit association test and explicit self-report measures. *Personality & social psychology bulletin*, 31(10), 1369–1385. <https://doi.org/10.1177/0146167205275613>
- Hogue, T. E. (1993). Attitudes towards prisoners and sexual offenders. University of Lincoln. Chapter. <https://hdl.handle.net/10779/lincoln.24365911.v1>
- Hogue, T. E. (1995). Training multi-disciplinary teams to work with sex offenders: Effects on staff attitudes. *Psychology, Crime and Law*, 1, 227-235. <https://doi.org/10.1080/10683169508411958>.
- Hogue, T. E., & Harper, C. A. (2019). Development of a 21-item short form of the Attitudes to Sexual Offenders (ATS) Scale. *Law and Human Behavior*, 43(1), 117–130. <https://doi.org/10.1037/lhb0000308>
- Hogue, T. E., & Peebles, J. (1997). The influence of remorse, intent, and attitudes toward sex offenders on judgments of a rapist. *Psychology, Crime & Law*, 3(4), 249–259. <https://doi.org/10.1080/10683169708410821>
- Holdsworth, E., Bowen, E., Brown, S., & Howat, D. (2014). Client engagement in psychotherapeutic treatment and associations with client characteristics, therapist characteristics, and treatment factors. *Clinical psychology review*, 34(5), 428–450. <https://doi.org/10.1016/j.cpr.2014.06.004>
- Holland, R.W., Aarts, H., & Langendam, D. (2006). Breaking and creating habits on the work floor: afield-experiment on the power of implementation intentions. *Journal of Experimental Social Psychology*. 42. 776-783. [10.1016/j.jesp.2005.11.006](https://doi.org/10.1016/j.jesp.2005.11.006).
- Home Office (1996). Prison statistics in England and Wales, 1994. London: HMSO.
- Home Office (2004). MAPPA Guidance. Multi-Agency Public Protection Arrangements. Protection through Partnership (Version 1.2). London: Home Office.
- Home Office. (2010). Child sex offender disclosure scheme guidance document. (<https://assets.publishing.service.gov.uk>)
- Home Office. (2012). MAPPA Guidance. Multi-Agency Public Protection Arrangements (version 4). London: Home Office.
- House of Commons Justice Committee (2021). Mental health in prison, HC 72, London: HM Stationery Office.
- Howard, M. V. A., de Almeida Neto, A. C., & Galouzis, J. J. (2019). Relationships Between Treatment Delivery, Program Attrition, and Reoffending Outcomes in an Intensive Custodial Sex Offender Program. *Sexual abuse : a journal of research and treatment*, 31(4), 477–499. <https://doi.org/10.1177/1079063218764886>
- Howe, L. C., & Krosnick, J. A. (2017). Attitude Strength. *Annual review of psychology*, 68, 327–351. <https://doi.org/10.1146/annurev-psych-122414-033600>

- Hu, X., Gawronski, B., & Balas, R. (2017). Propositional Versus Dual-Process Accounts of Evaluative Conditioning: I. The Effects of Co-Occurrence and Relational Information on Implicit and Explicit Evaluations. *Personality and Social Psychology Bulletin*, 43(1), 17-32. <https://doi.org/10.1177/0146167216673351>
- Hudson, K., Taylor, C., & Henley, A. (2015). Trends in the management of registered sexual offenders across England and Wales: a geographical approach to the study of sexual offending. *Journal of Sexual Aggression*, 21(1), 56-70. <https://doi.org/10.1080/13552600.2014.949314>
- Hulton L. J. (2007). An evaluation of a school-based teenage pregnancy prevention program using a logic model framework. *The Journal of school nursing : the official publication of the National Association of School Nurses*, 23(2), 104-110. [https://doi.org/10.1622/1059-8405\(2007\)023\[0104:AEOAST\]2.0.CO;2](https://doi.org/10.1622/1059-8405(2007)023[0104:AEOAST]2.0.CO;2)
- Hütter, M., & De Houwer, J. (2017). Examining the contributions of memory-dependent and memory-independent components to evaluative conditioning via instructions. *Journal of Experimental Social Psychology*, 71, 49-58. <https://doi.org/10.1016/j.jesp.2017.02.007>
- Hütter, M., & Rothermund, K. (2020). Automatic processes in evaluative learning. *Cognition and Emotion*, 34(1), 1-20. <https://doi.org/10.1080/02699931.2019.1709315>
- Hütter, M., & Fiedler, K. (2016). Editorial: Conceptual, theoretical, and methodological challenges in evaluative conditioning research. *Social Cognition*, 34(5), 343-356. <https://doi.org/10.1521/soco.2016.34.5.343>
- Huynh, H. & Feldt, L. S. (1976). Estimation of the Box Correction for Degrees of Freedom from Sample Data in Randomized Block and Split-Plot Designs. *Journal of Educational and Behavioral Statistics*. 1(1), 69-82. Sage Journals. [h2307/11647366https://doi.org/10.1177/1164736676010101](https://doi.org/10.1177/1164736676010101)
- Ievins, A., & Crewe, B. (2015). 'Nobody's better than you, nobody's worse than you': Moral community among prisoners convicted of sexual offences. *Punishment & Society*, 17(4), 482-501. <https://doi.org/10.1177/1462474515603803>
- Imhoff, R. (2015). Punitive attitudes against paedophiles or persons with sexual interest in children: Does the label matter? *Archives of Sexual Behavior*, 44, 35-44. <http://doi.org/10.1007/s10508-014-0439-3>.
- Imhoff, R., & Jahnke, S. (2018). Determinants of punitive attitudes towards people with pedophilia: Dissecting effects of the label and intentionality ascriptions. *Archives of Sexual Behavior*, 47, 353-361. <https://doi.org/10.1007/s10508-017-1048-8>
- Jackson, S. E., Steptoe, A., Beeken, R. J., Kivimaki, M., & Wardle, J. (2014). Psychological changes following weight loss in overweight and obese adults: a prospective cohort study. *PloS one*, 9(8), e104552. <https://doi.org/10.1371/journal.pone.0104552>
- Jahnke S. (2018). Emotions and Cognitions Associated with the Stigma of Non-Offending Pedophilia: A Vignette Experiment. *Archives of sexual behavior*, 47(2), 363-373. <https://doi.org/10.1007/s10508-017-1073-7>

- Jahnke, S., Imhoff, R., & Hoyer, J. (2015). Stigmatization of people with pedophilia: two comparative surveys. *Archives of sexual behavior*, *44*(1), 21–34. <https://doi.org/10.1007/s10508-014-0312-4>
- Jahnke, S., Schmidt, A. F., Geradt, M., & Hoyer, J. (2015). Stigma-Related Stress and Its Correlates Among Men with Pedophilic Sexual Interests. *Archives of sexual behavior*, *44*(8), 2173–2187. <https://doi.org/10.1007/s10508-015-0503-7>
- Jeray, K. J., & Tanner, S. L. (2012). Pilot randomized trials: is there a need?. *The Journal of bone and joint surgery. American volume*, *94 Suppl 1*, 15–18. <https://doi.org/10.2106/JBJS.L.00180>
- Johnson, E. (2013). Face Validity. In F. R. Volkmar (Ed.). *Encyclopedia of Autism Spectrum Disorders* (pp. 1226–1227). New York, NY: Springer New York. https://doi.org/10.1007/978-1-4419-1698-3_308
- Johnson, H., Hughes, J. G., & Ireland, J. L. (2007). Attitudes towards sex offenders and the role of empathy, locus of control and training: A comparison between a probationer police and general public sample. *The Police Journal*, *80*(1), 28–54. <https://doi.org/10.1350/pojo.2007.80.1.28>
- Jones, E. C. (2013). An Examination of Counseling Professionals/Paraprofessionals Attitudes Toward Adolescent Sexual Offenders. *Sage Open*, *3*(3). <https://doi.org/10.1177/2158244013501330>
- Jones, E., & Chaplin, E. (2020). A systematic review of the effectiveness of psychological approaches in the treatment of sex offenders with intellectual disabilities. *Journal of applied research in intellectual disabilities : JARID*, *33*(1), 79–100. <https://doi.org/10.1111/jar.12345>
- Jones, E. E., Kannouse, D. E., Kelley, H. H., Nisbett, R. E., Valins, S., & Weiner, B. Eds. (1972). *Attribution: Perceiving the Causes of Behavior*. Morristown, NJ: General Learning Press.
- Jussim, L. (2012). Social perception and social reality: *Why accuracy dominates bias and self-fulfilling prophecy*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195366600.001.0001>
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
- Kaplan, S. A. & Garrett, K. E. (2005). The use of logic models by community-based initiatives. *Evaluation and Programme Planning*, *28*, 167-172. <https://doi.org/10.1016/j.evalprogplan.2004.09.002>.
- Karpinski, A., & Steinman, R. B. (2006). The Single Category Implicit Association Test as a measure of implicit social cognition. *Journal of Personality and Social Psychology*, *91*(1), 16–32. <https://doi.org/10.1037/0022-3514.91.1.16>
- Katz-Schiavone, S., & Levenson, J., & Ackerman, A., & Jay, M. (2008). Myths and Facts About Sexual Violence: Public Perceptions and Implications for Prevention. *Journal of Criminal Justice and Popular Culture*. *15*.
- Kaźmierczak, I., Zajenkowska, A., Rogoza, R., Jonason, P. K., & Ściagała, D. (2023). Self-selection biases in psychological studies: Personality and affective disorders are prevalent among participants. *PloS one*, *18*(3), e0281046. <https://doi.org/10.1371/journal.pone.0281046>

- Keijsers, G. P., Schaap, C. P., & Hoogduin, C. A. (2000). The impact of interpersonal patient and therapist behavior on outcome in cognitive-behavior therapy. A review of empirical studies. *Behavior modification*, 24(2), 264–297. <https://doi.org/10.1177/0145445500242006>
- Keller, J., Kwasnicka, D., Klaiber, P., Sichert, L., Lally, P., & Fleig, L. (2021). Habit formation following routine-based versus time-based cue planning: A randomized controlled trial. *British journal of health psychology*, 26(3), 807–824. <https://doi.org/10.1111/bjhp.12504>
- Kelly, B. (2007). Methodological issues for qualitative research with learning disabled children. *International Journal of Social Research Methodology* 10 (1): 21 - 35. <https://doi.org/10.1080/13645570600655159>
- Kemshall, H., Wilkinson, B., Kelly, G., & Hilder, S. (2015). What Works in work with Violent Offenders – An Overview. Published by: SOMECE (Serious Offending by Mobile European Criminals). Accessible at: www.somec-project.eu
- Kemshall, H., & Moulden, H. M. (2017). Communicating about child sexual abuse with the public: Learning the lessons from public awareness campaigns. *Journal of Sexual Aggression*, 23(2), 124–138. <https://doi.org/10.1080/13552600.2016.1222004>
- Kemshall, H., Wood, D.J., Westwood, S., Stout, B., Wilkinson, B., Kelly, G., & Mackenzie, G. (2010). *Child sex offender review (CSOR) public disclosure pilots: A process evaluation*. Home Office research report 32. London: Home Office.
- Keppel, G. (1991). *Design and Analysis: A Researcher's Handbook*. 3rd Edition, Prentice Hall, Englewood Cliffs, New York.
- Kerlin, I. N. (1858). *The Mind Unveiled; or: a Brief History of Twenty-Two Imbecile children*. Philadelphia: U. Hunt & Son. <https://wellcomecollection.org/works/wd239fsj>
- Kernsmith, P. D., Craun, S. W., & Foster, J. (2009). Public attitudes toward sexual offenders and sex offender registration. *Journal of Child Sexual Abuse*, 18(3), 290–301. <https://doi.org/10.1080/10538710902901663>
- Keselman, H. J., Algina, J., & Kowalchuk, R. K. (2001). The analysis of repeated measures designs: a review. *The British journal of mathematical and statistical psychology*, 54(Pt 1), 1–20. <https://doi.org/10.1348/000711001159357>
- Kewley, S. & Blandford, M. (2017a). 'The Development of the Active Risk Management System', *Journal of Criminal Psychology*, 7(3), 155-167. <https://doi.org/10.1108/JCP-10-2016-0034>
- Kim, T. W., Bernstein, J., Cheng, D. M., Lloyd-Travaglini, C., Samet, J. H., Palfai, T. P., & Saitz, R. (2017). Receipt of addiction treatment as a consequence of a brief intervention for drug use in primary care: A randomized trial. *Addiction*, 112(5), 818–827. <https://doi.org/10.1111/add.13701>
- Kim, J., & Shin, W. (2014). How to do random allocation (randomization). *Clinics in orthopedic surgery*, 6(1), 103–109. <https://doi.org/10.4055/cios.2014.6.1.103>

- King, L., & Roberts, J. (2015). The Complexity of Public Attitudes Toward Sex Crimes. *Victims & Offenders*, 12, 1-19. [10.1080/15564886.2015.1005266](https://doi.org/10.1080/15564886.2015.1005266).
- Kitayama, S., & Uchida, Y. (2003). Explicit self-criticism and implicit self-regard: Evaluating self and friend in two cultures. *Journal of Experimental Social Psychology*, 39(5), 476–482. [https://doi.org/10.1016/S0022-1031\(03\)00026-X](https://doi.org/10.1016/S0022-1031(03)00026-X)
- Kjelsberg, E., & Loos, L. H. (2008). Conciliation or condemnation? Prison employees' and young peoples' attitudes towards sexual offenders. *The International Journal of Forensic Mental Health*, 7(1), 95–103. <https://doi.org/10.1080/14999013.2008.9914406>
- Kjelsberg, E., Skoglund, T. H., & Rustad, A. B. (2007). Attitudes towards prisoners, as reported by prison inmates, prison employees and college students. *BMC public health*, 7, 71. <https://doi.org/10.1186/1471-2458-7-71>
- Kleban, H., & Jeglic, E. (2012). Dispelling the myths: Can psychoeducation change public attitudes towards sex offenders? *Journal of Sexual Aggression*, 18(2), 179–193. <https://doi.org/10.1080/13552600.2011.552795>
- Klein, J. L., & Cooper, D. T. (2019). Punitive Attitudes Toward Sex Offenders: Do Moral Panics Cause Community Members to Be More Punitive? *Criminal Justice Policy Review*, 30(6), 948–968. <https://doi.org/10.1177/0887403418767251>
- Klein, J. L., Bailey, D.J.S., & Cooper, D. T. (2020). “Moral Panics and the Community Attitudes Toward Sex Offenders (CATSO) Scale: Does the Perpetual Panic Over Sex Offenders Predict Participant Attitudes Toward This Group?” *Criminology, Criminal Justice, Law & Society* 21 (3): 69–86.
- Kleis, K. M. (2010). Facilitating failure: Parole, re-entry, and obstacles to success. *Dialectical Anthropology*, 34, 525–531.
- Kooijmans, R., Mercera, G., Langdon, P. E., & Moonen, X. (2022). The adaptation of self-report measures to the needs of people with intellectual disabilities: A systematic review. *Clinical Psychology: Science and Practice*, 29(3), 250–271. <https://doi.org/10.1037/cps0000058>
- Koon-Magnin, S. (2015). Perceptions of and support for sex offender policies: Testing Levenson, Brannon, Fortney, and Baker’s findings. *Journal of Criminal Justice*, 43(1), 80–88. <https://doi.org/10.1016/j.jcrimjus.2014.12.007>
- Kozar, C. J., & Day, A. (2012). The therapeutic alliance in offending behavior programs: A necessary and sufficient condition for change? *Aggression and Violent Behavior*, 17(5), 482–487. <https://doi.org/10.1016/j.avb.2012.07.004>
- Kropp, P. R., Cox, D. N., Roesch, R., & Eaves, D. (1989). The perceptions of correctional officers toward mentally disordered offenders. *International journal of law and psychiatry*, 12(2-3), 181–188. [https://doi.org/10.1016/0160-2527\(89\)90006-x](https://doi.org/10.1016/0160-2527(89)90006-x)
- Krosnick, J. A., & Petty, R. E. (1995). Attitude strength: An overview. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 1–24). Lawrence Erlbaum Associates, Inc.

- Kubrin, C.E., & Stewart, E.A. (2006). Predicting who reoffends: The neglected role of neighbourhood context in recidivism studies. *Criminology*, 44(1), 165-197. <http://dx.doi.org/10.1111/j.1745-9125.2006.00046.x>.
- Kurdi, B., Carroll, T. J., & Banaji, M. R. (2021). Specificity and incremental predictive validity of implicit attitudes: studies of a race-based phenotype. *Cognitive research: principles and implications*, 6(1), 61. <https://doi.org/10.1186/s41235-021-00324-y>
- Kyonka E. G. E. (2018). Tutorial: Small-N Power Analysis. *Perspectives on behavior science*, 42(1), 133–152. <https://doi.org/10.1007/s40614-018-0167-4>
- Lambert, M. J. (1983). Comments on "a case study of the process and outcome of time-limited counseling." *Journal of Counseling Psychology*, 30(1), 22–25. <https://doi.org/10.1037/0022-0167.30.1.22>
- Landsberger, H. A. (1958). *Hawthorne revisited: Management and the worker: its critics, and developments in human relations in industry*. Cornell University.
- Landwehr, J. R., Golla, B., & Reber, R. (2017). Processing fluency: An inevitable side effect of evaluative conditioning. *Journal of Experimental Social Psychology*, 70, 124–128. <https://doi.org/10.1016/j.jesp.2017.01.004>
- Lane, K. A., Banaji, M. R., Nosek, B. A., & Greenwald, A. G. (2007). Understanding and using the Implicit Association Test: IV. What we know (so far). In B. Wittenbrink & N. S. Schwarz (Eds.). *Implicit measures of attitudes: Procedures and controversies* (pp. 59 –102). New York: Guilford Press.
- Laub, J. H., & Sampson, R. J. (2003). *Shared beginnings, divergent lives: Delinquent boys to age 70*. Cambridge, MA: Harvard University Press.
- LeBel, T. P. (2012). Invisible stripes? Formerly incarcerated persons' perceptions of stigma. *Deviant Behavior*, 33(2), 89-107. <https://doi.org/10.1080/01639625.2010.538365>
- LeBel, T. P., Burnett, R., Maruna, S., & Bushway, S. (2008). The 'Chicken and Egg' of Subjective and Social Factors in Desistance from Crime. *European Journal of Criminology*, 5(2), 131-159. <https://doi.org/10.1177/1477370807087640>
- Lemm, K. M., Lane, K. A., Sattler, D. N., Khan, S. R., & Nosek, B. A. (2007). *Assessing implicit cognitions with a paper-format Implicit Association Test*.
- Lemm, K., Sattler, D. N., Khan, S., Mitchell, R. A., & Dahl, J. (2002). *Reliability and validity of a paper-based Implicit Association Test*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Savannah, GA.
- Leonard, S. J., Webb, R. T., & Shaw, J. J. (2020). Service transitions, interventions and care pathways following remittal to prison from medium secure psychiatric services in England and Wales: national cohort study. *BJPsych open*, 6(5), e80. <https://doi.org/10.1192/bjo.2020.62>
- Levenson, J. S., D'Amora, D. A., & Hern, A. L. (2007). Megan's Law and its impact on community re-entry for sex offenders. *Behavioral sciences & the law*, 25(4), 587–602. <https://doi.org/10.1002/bsl.770>

- Levenson, J. S., & Cotter, L. P. (2005). The Effect of Megan's Law on Sex Offender Reintegration. *Journal of Contemporary Criminal Justice*, 21(1), 49–66. <https://doi.org/10.1177/1043986204271676>
- Levenson, J.S., Brannon, Y.N., Fortney, T., & Baker, J. (2007). Public perceptions about sex offenders and community protection policies. *Analyses of Social Issues and Public Policy (ASAP)*, 7(1), 137–161.
- Levenson, J. S., Willis, G. M., & Prescott, D. S. (2016). Adverse Childhood Experiences in the Lives of Male Sex Offenders: Implications for Trauma-Informed Care. *Sexual abuse : a journal of research and treatment*, 28(4), 340–359. <https://doi.org/10.1177/1079063214535819>
- Levitt, S. D., & List, J. A. (2011). Was there really a Hawthorne effect at the Hawthorne plant? An analysis of the original illumination experiments. *American Economic Journal: Applied Economics*, 3 (1), 224-38.
- Liebling, A. (2014). ‘Moral and Philosophical Problems of Long-Term Imprisonment’, *Studies in Christian Ethics*, 27(3), 258-269.
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22 140, 55.
- Lin, W.L., & Yao, G. (2014). Criterion validity. In: Michalos AC, ed. *Encyclopedia of Quality of Life and Well-Being Research*. Springer, Dordrecht; 2014. doi:10.1007/978-94-007-0753-5_618
- Lin, W.L., & Yao, G. (2014). Concurrent validity. In: Michalos AC, ed. *Encyclopedia of Quality of Life and Well-Being Research*. Springer, Dordrecht; 2014. doi:10.1007/978-94-007-0753-5_516
- Lindsay, W. R. (2017). Theoretical approaches for sexual offenders with intellectual and developmental disabilities. In: Beech AR, Ward T, editors. *The Wiley Handbook on the Theories, Assessment, and Treatment of Sexual Offenders*. Hoboken, NJ: John Wiley & Sons; (2017). p. 473–96. 10.1002/9781118574003.wattso023
- Lindsay, W. R., Elliott, S. F., Astell, A. (2004). Predictors of sexual offence recidivism in offenders with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*. 17. 299 - 305. <https://doi.org/10.1111/j.1468-3148.2004.00217.x>.
- Linehan, M. (2020). *Building a life worth living: a memoir*. First edition. New York, Random House.
- Link, B. G., Cullen, F. T., Struening, E., Shrout, P. E., & Dohrenwend, B. P. (1989). A modified labeling theory approach to mental disorders: An empirical assessment. *American Sociological Review*, 54(3) 400– 423. doi:10.2307/2095613.
- Lofthouse R, Totsika V, Hastings RP, Lindsay WR. (2018). Dynamic risk assessment for offenders with intellectual and developmental disabilities. In: Lindsay W, Taylor J, editors. *The Wiley Handbook on Offenders with Intellectual Disabilities: Research, Training, and Practice*. first ed: Wiley; 2018.

- Lösel, F. and Schmucker, M. (2005). 'The Effectiveness of Treatment for Sexual Offenders: a Comprehensive Meta-Analysis', *Journal of Experimental Criminology*, 1, 117–46. <https://doi.org/10.1007/s11292-004-64667>.
- Lösel, F., Link, E., Schmucker, M., Bender, D., Breuer, M., Carl, L., Endres, J., & Lauchs, L. (2020). On the Effectiveness of Sexual Offender Treatment in Prisons: A Comparison of Two Different Evaluation Designs in Routine Practice. *Sexual abuse : a journal of research and treatment*, 32(4), 452–475. <https://doi.org/10.1177/1079063219871576>
- Lowe, G., & Willis, G. (2020). "Sex Offender" Versus "Person": The Influence of Labels on Willingness to Volunteer with People Who Have Sexually Abused. *Sexual abuse: a journal of research and treatment*, 32(5), 591–613. <https://doi.org/10.1177/1079063219841904>
- Lussier, P., & McCuish, E. (2020). A developmental life-course view of sexual offending: Taking stock of research on the life-course development of antisocial and criminal behavior. In J. Proulx, F. Cortoni, L. A. Craig, & E. J. Letourneau (Eds.), *The Wiley handbook of what works with sexual offenders: Contemporary perspectives in theory, assessment, treatment, and prevention* (pp. 39–70). Wiley Blackwell.
- Macdonald, K., Germine, L., Anderson, A., Christodoulou, J., & McGrath, L. M. (2017). Dispelling the Myth: Training in Education or Neuroscience Decreases but Does Not Eliminate Beliefs in Neuromyths. *Frontiers in psychology*, 8, 1314. <https://doi.org/10.3389/fpsyg.2017.01314>
- MacKenzie, K. R. (1983). The clinical application of a Group Climate measure. In R. R. Dies & MacKenzie (Eds.), *Advances in group psychotherapy: Integrating research and practice* (pp. 159-170). New York Universities International Press.
- Maio, G., Haddock, G., & Verplanken, B. (2019). *The psychology of attitudes & attitude change*. Sage Publications.
- Malinen, S., & Johnston, L. (2013). Workplace ageism: discovering hidden bias. *Experimental aging research*, 39(4), 445–465. <https://doi.org/10.1080/0361073X.2013.808111>
- Malinen, S., Willis, G. M., & Johnston, L. (2014). Might informative media reporting of sexual offending influence community members' attitudes towards sex offenders? *Psychology, Crime & Law*, 20(6), 535–552. <https://doi.org/10.1080/1068316X.2013.793770>
- Mann, R. (2019). Rehabilitative culture part 2: an update on evidence and practice. *Prison Service Journal*, 224, 3-10.
- Mann, R. E. and Carter, A. J. (2012). Organising principles for the treatment of sexual offending. In B. Wischka, W. Pécher and H. van der Boogaart (eds). *Behandlung von Straftätern: Sozialtherapie, Maßregelvollzug, Sicherungsverwahrung* [Offender treatment: Social Therapy, Special Forensic Hospitals, and Indeterminate Imprisonment]. Fribourg: Centauras.
- Mann, R. E., Hanson, R. K., & Thornton, D. (2010). Assessing risk for sexual recidivism: some proposals on the nature of psychologically meaningful risk

- factors. *Sexual abuse : a journal of research and treatment*, 22(2), 191–217.
<https://doi.org/10.1177/1079063210366039>
- Mann, R., Howard, F.F. & Tew, J. (2018). What is a rehabilitative prison culture?
Prison Service Journal, 235, 3-9
- Marotta P. L. (2017). A Systematic Review of Behavioral Health Interventions for Sex Offenders with Intellectual Disabilities. *Sexual abuse: a journal of research and treatment*, 29(2), 148–185. <https://doi.org/10.1177/1079063215569546>
- Marquardt, N., Hoebel, M., & Lud, D. (2021). Safety culture transformation-The impact of training on explicit and implicit safety attitudes. *Human factors and ergonomics in manufacturing*, 31(2), 191–207.
<https://doi.org/10.1002/hfm.20879>
- Marshall, W. L., & Marshall, L. E. (2010). Attachment and intimacy in sexual offenders: an update. *Sexual and Relationship Therapy*, 25(1), 86–90.
<https://doi.org/10.1080/14681991003589568>
- Marshall, W. L., & Marshall, L. E. (2007). The utility of the random controlled trial for evaluating sexual offender treatment: the gold standard or an inappropriate strategy?. *Sexual abuse : a journal of research and treatment*, 19(2), 175–191.
<https://doi.org/10.1177/107906320701900207>
- Marshall, W. L., Marshall, L. E., Serran, G. A., & O'Brien, M. D. (Eds.). (2011). *Rehabilitating sexual offenders: A strength-based approach*. American Psychological Association. <https://doi.org/10.1037/12310-000>
- Marshall, W. L., Serran, G. A., Fernandez, Y. M., Mulloy, R., Mann, R. E., & Thornton, D. (2003). Therapist characteristics in the treatment of sexual offenders: Tentative data on their relationship with indices of behaviour change. *Journal of Sexual Aggression*, 9(1), 25–30. <https://doi.org/10.1080/355260031000137940>
- Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 68(3), 438–450. <https://doi.org/10.1037/0022-006X.68.3.438>
- Maruna, S., LeBel, T. P., Mitchell, N., & Naples, M. (2004). Pygmalion in the reintegration process: Desistance from crime through the looking glass. *Psychology, Crime & Law*, 10(3), 271–281. <https://doi.org/10.1080/10683160410001662762>
- Mason. M. (2007). Critical Thinking and Learning. *Educational Philosophy and Theory*, 39(4), 339-347 <https://doi.org/10.1111/j.1469-5812.2007.00343.x>
- Mast, M. S. (2004). Men are hierarchical, women are egalitarian: An implicit gender stereotype. *Swiss Journal of Psychology*, 63, 107-111.
<https://doi.org/10.1024/1421-0185.63.2.107>
- McCambridge, J., Witton, J., & Elbourne, D. R. (2014). Systematic review of the Hawthorne effect: New concepts are needed to study research participation effects. *Journal of Clinical Epidemiology*, 67(3), 267–277.
<https://doi.org/10.1016/j.jclinepi.2013.08.015>

- McCartan, K. F. (2010). Student/trainee-professional implicit theories of pedophilia. *Psychology, Crime, & Law*, *16*(4), 265-288. <https://doi.org/10.1080/10683160802614144>.
- McCartan, K. F. (2013). From a lack of engagement and mistrust to partnership? Public attitudes to the disclosure of sex offender information. *International Journal of Police Science and Management*, *13*, 219–236.
- McCartan K., Gotch K. (2020). International approaches to the management of perpetrators of sexual Harm policy. In Proulx J., Cortoni F., Craig L., Letourneau E. (Eds.), *The Wiley Handbook of what works with sexual offenders: Contemporary perspectives in theory, assessment, treatment, and prevention*. (pp. 441 – 454). Wiley. <https://doi.org/10.1002/9781119439325.ch25>
- McCartan, K.F., Hoggett, J., Kemshall, H. (2018). Risk Assessment and Management of Individuals Convicted of a Sexual Offence in the UK. *Sexual Offender Treatment, Volume 13* (2018), Issue 1/2
- McCartan, K., Kemshall, H., & Hudson, K. (2012). Public understandings of sexual abuse and sexual abusers. *ATSA Forum*, *24*(3)
- McCartan, K. F., Kemshall, H., & Tabachnick, J. (2015). The construction of community understandings of sexual violence: Rethinking public, practitioner, and policy discourses. *Journal of Sexual Aggression*, *21*, 100–116. <http://dx.doi.org/10.1080/13552600.2014.945976>.
- McCartan, K.F. and Richards, K. (2021). ‘The Integration of People Convicted of a Sexual Offence Into the Community and Their (Risk) Management’, *Current Psychiatry Reports*, *23*(52). <https://doi.org/10.1007/s11920-021-01258-4>
- McConnell, A. R., & Rydell, R. J. (2014). The systems of evaluation model: A Dual-systems approach to attitudes. In J. W. Sherman, B. Gawronski, & Y. Trope (Eds.), *Dual-process theories of the social mind* (pp. 204–218). The Guilford Press.
- McDonagh, L. K., Saunders, J. M., Cassell, J., Curtis, T., Bastaki, H., Hartney, T., & Rait, G. (2018). Application of the COM-B model to barriers and facilitators to chlamydia testing in general practice for young people and primary care practitioners: a systematic review. *Implementation science : IS*, *13*(1), 130. <https://doi.org/10.1186/s13012-018-0821-y>
- McGrath, R. J., Cumming, G. F., Burchard, B. L., Zeoli, S., & Ellerby, L. (2010). *Current practices and emerging trends in sexual abuser management: The Safer Society 2009 North American survey*. Brandon, VT: Safer Society Press.
- McLeod, S. (2019). What’s the difference between qualitative and quantitative research? <https://www.simplypsychology.org>
- McNeill, F. (2012). Four forms of ‘offender’ rehabilitation: Towards an interdisciplinary perspective. *Legal and Criminological Psychology*, *17*: 18-36. <https://doi.org/10.1111/j.2044-8333.2011.02039.x>
- Melnikoff, D. E., & Bailey, A. H. (2018). Preferences for Moral vs. Immoral Traits in Others Are Conditional. *Proceedings of the National Academy of Sciences of the United States of America*, *115*, E592-E600. <https://doi.org/10.1073/pnas.1714945115>

- Melvin, K. B., Gramling, L. K., & Gardner, W. M. (1985). A scale to measure attitudes toward prisoners. *Criminal Justice and Behavior*, *12*(2), 241–253. <https://doi.org/10.1177/0093854885012002006>
- Mental Health Act 1983, c. 20, Parliament of Great Britain. (1983).
- Mental Health Act 2007, Parliament of Great Britain. (2007).
<https://www.legislation.gov.uk>
- Messick, S. (1989). Validity. In R. L. Linn (Ed.), *Educational measurement* (3rd ed., pp. 13–103). Macmillan Publishing Co, Inc; American Council on Education.
- Metropolitan Police Service (2012). Operation Yewtree.
<http://researchbriefings.files.parliament.uk/documents/LLN-2016-0033/LLN-2016-0033.pdf>
- Mews, A., Bella, L., & Purver, M. (2017). Impact evaluation of the prison-based Core Sex Offender Treatment Programme. *Ministry of Justice Analytical Series*. London: Ministry of Justice.
<https://assets.publishing.service.gov.uk/media/5a82d169ed915d74e6237c91/so-tp-report-web-.pdf>
- Meyer I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological bulletin*, *129*(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Mezey, G., Youngman, H., Kretschmar, I., & White, S. (2016). Stigma and discrimination in mentally disordered offender patients—A comparison with a non-forensic population. *Journal of Forensic Psychiatry & Psychology*, *27*(4), 517–529. <https://doi.org/10.1080/14789949.2016.1172658>
- Michie, S., Atkins, L., West, R. (2014). *The Behaviour Change Wheel: A Guide to Designing Interventions*. UK: Silverback Publishing; 2014
- Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science : IS*, *6*, 42. <https://doi.org/10.1186/1748-5908-6-42>
- Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (2nd ed.). New York, NY, US: Guilford Press.
- Mingus, W., & Burchfield, K. B. (2012). From prison to integration: Applying modified labelling theory to sex offenders. *Criminal Justice Studies*, *25*, 97–109. <http://dx.doi.org/10.1080/1478601X.2012.657906>
- Ministry of Justice (2021) Correctional Services Accreditation and Advice Panel (CSAAP) Currently Accredited Programmes.
<https://assets.publishing.service.gov.uk>
- Ministry of Justice. Home Office. An Overview of Sexual Offending in England and Wales. Ministry of Justice, Home Office & the Office for National Statistics. Statistics bulletin. Published 10 January 2013.
- Ministry of Justice. National Offender Management Service, Service Development Directorate. Suitability for Accredited Interventions. Risk, Need & Responsivity Targeting Criteria for Offender Managers and Treatment

- Managers and HMPS Therapy Managers. June 2010.
<https://assets.publishing.service.gov.uk>
- Ministry of Justice, National Statistics, Criminal Court Statistics, quarterly, England and Wales, 2018.
- Ministry of Justice, Offender Management Statistics Bulletin, England and Wales, 2018.
- Ministry of Justice, Offender management statistics: Restricted patients 2022, London: Ministry of Justice, 2022.
- Ministry of Justice, Prisons Strategy White Paper, 2021. December 2021, London: Ministry of Justice, 2021.
- Ministry of Justice, Safety in custody statistics quarterly update to December 2022, London: Ministry of Justice, 2023.
- Mitchell, G. and Tetlock, P.E. (2015). Implicit Attitude Measures. In *Emerging Trends in the Social and Behavioral Sciences* (eds R.A. Scott and S.M. Kosslyn). <https://doi.org/10.1002/9781118900772.etrds0177>
- Moos, R. H. (1974). *Ward atmosphere scale manual*. Palo Alto, CA: Consulting Psychologists Press.
- Moos, R. H. (1975). *Evaluating correctional and community settings*. Wiley-Interscience.
- Moos, R. H., & Houts, P. S. (1968). Assessment of the social atmospheres of psychiatric wards. *Journal of Abnormal Psychology*, 73(6), 595–604. <https://doi.org/10.1037/h0026600>
- Mori, K., Uchida, A., & Imada, R. (2008). A paper-format group performance test for measuring the implicit association of target concepts. *Behavior Research Methods*, 40(2), 546–555. <https://doi.org/10.3758/BRM.40.2.546>
- Morin K. H. (2013). Value of a pilot study. *The Journal of nursing education*, 52(10), 547–548. <https://doi.org/10.3928/01484834-20130920-10>
- Morrison, D., Wang, H., Hahn, A. C., Jones, B. C., & DeBruine, L. M. (2017). Predicting the reward value of faces and bodies from social perception. *PloS one*, 12(9), e0185093. <https://doi.org/10.1371/journal.pone.0185093>
- Mpofu, E., Athanasou, J. A., Rafe, C., & Belshaw, S. H. (2018). Cognitive-Behavioral Therapy Efficacy for Reducing Recidivism Rates of Moderate- and High-Risk Sexual Offenders: A Scoping Systematic Literature Review. *International journal of offender therapy and comparative criminology*, 62(1), 170–186. <https://doi.org/10.1177/0306624X16644501>
- Munro, E. (2011). *The Munro Review of Child Protection, Final Report: A Child-Centred System*, London: DfE. <https://www.gov.uk/government/collections/munro-review>
- Munro, E. (2012). *Progress Report: Moving Towards a Child-Centred System*, London: DfE. <https://www.gov.uk/government/collections/munro-review> 49
- Munro, E. and Turnell, A. with Devine, M. and Cunliffe, J. (2020). *You can't grow roses in concrete Part 2: Action Research Final Report, Signs of Safety* England Innovation Programme, Elia International Ltd.

- <https://knowledgebank.signsofsafety.net/ArticleDocuments/2123/You%20Can't%20Grow%20Roses%20in%20Concrete%20Part%202.pdf.aspx>
- Murphy, L., Denis, R., Ward, C. P., & Tartar, J. L. (2010). Academic stress differentially influences perceived stress, salivary cortisol, and immunoglobulin-A in undergraduate students. *Stress (Amsterdam, Netherlands)*, *13*(4), 365–370. <https://doi.org/10.3109/10253891003615473>
- Murre, J. M., & Dros, J. (2015). Replication and Analysis of Ebbinghaus' Forgetting Curve. *PloS one*, *10*(7), e0120644. <https://doi.org/10.1371/journal.pone.0120644>
- Mustaine, E. E., & Tewksbury, R. (2011). Residential Relegation of Registered Sex Offenders. *American Journal of Criminal Justice*. 36. 44-57. 10.1007/s12103-010-9102-2.
- National Health Service England (2015). Building the right support. *A national plan to develop community services and close inpatient facilities for people with a learning disability and/or autism who display behaviour that challenges, including those with a mental health condition*. <https://www.england.nhs.uk/wp-content/uploads/2015/10/ld-nat-imp-plan-oct15.pdf>
- National Health Service England (2024). Culture of care standards for mental health inpatient services. Including those for people with a learning disability and autistic people. Retrieved from <https://www.england.nhs.uk/long-read/culture-of-care-standards-for-mental-health-inpatient-services/>
- National Institute for Clinical Excellence (NICE). (2021). What to expect during assessment and care planning. 2021. <https://tinyurl.com/63hm5vvp>
- National Health Service (NHS) England. (2024). Commissioning framework for mental health inpatient services. <https://www.england.nhs.uk/long-read/commissioning-framework-for-mental-health-inpatient-services/>
- Nelson, M., Herlihy, B., & Oescher, J. (2002). A survey of counsellor attitudes towards sex offenders. *Journal of Mental Health Counseling*, *24*, 51–67. <http://www.biomedsearch.com/article/survey-counsellor-attitudes-towardssex>
- Neter, J., Wasserman, W. and Kutner, M.H. (1989). *Applied Linear Regression Models*. 2nd Edition, Richard D. Irwin, Inc., Homewood.
- Newton, P. E., & Shaw, S. D. (2013). Standards for talking and thinking about validity. *PsycholMethods*. *18*(3), 301-19. <https://doi.org/10.1037/a0032969>
- Nosek, B. A., Greenwald, A. G., & Banaji, M. R. (2007). The Implicit Association Test at Age 7: A Methodological and Conceptual Review. In J. A. Bargh (Ed.), *Social psychology and the unconscious: The automaticity of higher mental processes* (pp. 265–292). Psychology Press.
- Nunes, K. L., Hermann, C. A., & Ratcliffe, K. (2013). Implicit and explicit attitudes toward rape are associated with sexual aggression. *Journal of interpersonal violence*, *28*(13), 2657–2675. <https://doi.org/10.1177/0886260513487995>

- Oates, J., Topping, A., Ezhova, I., Wadey, E., & Rafferty, M. A. (2020). An integrative review of nursing staff experiences in high secure forensic mental health settings: Implications for recruitment and retention strategies. *Journal of advanced nursing*, 76(11), 2897–2908. <https://doi.org/10.1111/jan.14521>
- Offender Management Statistics Bulletin, England and Wales, Quarter 1, 2018. Prison population 30 June 2018, MoJ, published 26 July 2018.
- Office for National Statistics. (2018). Crime in England and Wales: year ending December 2017. <https://www.ons.gov.uk/releases/crimeinenglandandwalesyearendingdecember2017>
- Olson, M. A., & Fazio, R. H. (2004). Reducing the influence of extrapersonal associations on the Implicit Association Test: personalizing the IAT. *Journal of personality and social psychology*, 86(5), 653–667. <https://doi.org/10.1037/0022-3514.86.5.6530>
- Olver, M. E., & Barlow, A. A. (2010). Public attitudes toward sex offenders and their relationship to personality traits and demographic characteristics. *Behavioral sciences & the law*, 28(6), 832–849. <https://doi.org/10.1002/bsl.959>
- Ortet-Fabregat, G., Pérez, J., & Lewis, R. (1993). Measuring attitudes toward prisoners: A psychometric assessment. *Criminal Justice and Behavior*, 20(2), 190–198. <https://doi.org/10.1177/0093854893020002006>
- Orsmond, G. I., & Cohn, E. S. (2015). The distinctive features of a feasibility study: Objectives and guiding questions. *OTJR: Occupation, Participation and Health*, 35(3), 169–177. <https://doi.org/10.1177/1539449215578649>
- Oyserman, D. & Swim, J. (2001). Stigma: An Insider's View. *Journal of Social Issues*. 57(1), 1-14. <https://doi.org/10.1111/0022-4537.00198>.
- Paluck, E. L., Porat, R., Clark, C. S., & Green, D. P. (2021). Prejudice Reduction: Progress and Challenges. *Annual review of psychology*, 72, 533–560. <https://doi.org/10.1146/annurev-psych-071620-030619>
- Patterson, C. (2018). Does the adapted sex offender treatment programme reduce cognitive distortions? A meta-analysis. *Journal of Intellectual Disabilities and Offending Behaviour*. 9. 00-00. 10.1108/JIDOB-08-2017-0018.
- Payne, B., & DeMichele, M. (2008). Warning: Sex Offenders Need to be Supervised in the Community. *Federal Probation Volume 72(1)* 37-42
- Payne, B. K., Tewksbury, R., & Mustaine, E. E. (2010). Attitudes about rehabilitating sex offenders: Demographic, victimization, and community-level influences. *Journal of Crime and Justice*, 38(4), 580–588.
- Perrin, C., & Blagden, N. (2014). Accumulating meaning, purpose and opportunities to change ‘drip by drip’: the impact of being a listener in prison. *Psychology, Crime & Law*, 20(9), 902–920. <https://doi.org/10.1080/1068316X.2014.888429>
- Perrin, C., Blagden, N., Winder, B., & Dillon, G. (2018). “It’s Sort of Reaffirmed to Me That I’m Not a Monster, I’m Not a Terrible Person”: Sex Offenders’ Movements Toward Desistance via Peer-Support Roles in Prison. *Sexual Abuse*, 30(7), 759–780. <https://doi.org/10.1177/1079063217697133>

- Peters, K. R., & Gawronski, B. (2011). Mutual influences between the implicit and explicit self-concepts: The role of memory activation and motivated reasoning. *Journal of Experimental Social Psychology*, 47, 436-442. <https://doi.org/10.1016/j.jesp.2010.11.015>.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65–85. <https://doi.org/10.1146/annurev.psych.49.1.65>
- Pettigrew, T.F., & Tropp, L.R. (2011). *When Groups Meet: The Dynamics of Intergroup Contact* (1st ed.). Psychology Press. <https://doi.org/10.4324/9780203826461>
- Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology*, 38(6), 922–934. <https://doi.org/10.1002/ejsp.504>
- Pettigrew, T. F. (1997). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, 23(2), 173–185. <https://doi.org/10.1177/0146167297232006>
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751–783. <https://doi.org/10.1037/0022-3514.90.5.751>
- Petty, R. E., & Briñol, P. (2008). Persuasion: From Single to Multiple to Metacognitive Processes. *Perspectives on Psychological Science*, 3(2), 137-147. <https://doi.org/10.1111/j.1745-6916.2008.00071.x>
- Petty, R. E., & Briñol, P. (2015). Processes of social influence through attitude change. In M. Mikulincer, P. R. Shaver, E. Borgida, & J. A. Bargh (Eds.), *APA handbook of personality and social psychology, Vol. 1. Attitudes and social cognition* (pp. 509–545). American Psychological Association. <https://doi.org/10.1037/14341-016>
- Petty, R. E., Briñol, P., & DeMarree, K. G. (2007). The Meta-Cognitive Model (MCM) of attitudes: Implications for attitude measurement, change, and strength. *Social Cognition*, 25(5), 657–686. <https://doi.org/10.1521/soco.2007.25.5.657>
- Petty, R. E., Cacioppo, J. T., & Goldman, R. (1981). Personal involvement as a determinant of argument-based persuasion. *Journal of Personality and Social Psychology*, 41(5), 847–855. <https://doi.org/10.1037/0022-3514.41.5.847>
- Petty, R. E., Tormala, Z. L., Briñol, P., & Jarvis, W. B. G. (2006). Implicit ambivalence from attitude change: An exploration of the PAST model. *Journal of Personality and Social Psychology*, 90(1), 21–41. <https://doi.org/10.1037/0022-3514.90.1.21>
- Philippas, D. (2014). Analysis of Covariance (ANCOVA). In: Michalos, A.C. (eds) *Encyclopedia of Quality of Life and Well-Being Research*. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0753-5_82
- Pittam, J. F., & Gallois, C. (2000). Malevolence, stigma, and social distance: Maximizing intergroup differences in HIV/AIDS discourse. *Journal of Applied Communication Research* 28(1), <https://doi.org/10.1080/00909880009365552>

- Price-Jones, D. W., & Barrowcliff, A. (2010). Attitudes towards sex offenders regarding competency, liability, voluntariness of offence, and disposal: the influence of being classified as having a learning disability. *Psychology, Crime & Law*, 16(3), 251–263. <https://doi.org/10.1080/10683160802672613>
- Prisons and Probation Ombudsman. (2017). Corporate report. Prisons and Probation Ombudsman Annual Report 2016 to 2017. <https://www.gov.uk/government/publications/prisons-and-probation-ombudsman-annual-report-2016-to-2017>
- Prison Reform Trust. (2007). *No One Knows: prevalence and needs of offenders with learning disabilities and difficulties*. London: Prison Reform Trust.
- Prison Reform Trust (2019). *Prison: the facts. Bromley Briefings*. London: Prison Reform Trust.
- Prison Reform Trust (2023). *Prison: the facts. Bromley Briefings*. London: Prison Reform Trust.
- Proeve, M. J., & Howells, K. (2006). Effects of remorse and shame and criminal justice experience on judgements about a sex offender. *Psychology, Crime & Law*, 12(2), 145–161. <https://doi.org/10.1080/10683160512331316271>
- Puzzo, I., Aldridge-Waddon, L., Bush, E., & Farr, C. (2019). The relationship between ward social climate, ward sense of community, and incidents of disruptive behavior: A study of a high secure psychiatric sample. *The International Journal of Forensic Mental Health*, 18(2), 153–163. <https://doi.org/10.1080/14999013.2018.1532972>
- Puzzo, I., Aldridge-Waddon, L., Morley, E., Vacher, J., Mitchell, J., Murphy, D., & Farr, C. (2023). Developing ward social climate and sense of community within a high security forensic psychiatric service: Evaluating a sense of community and social climate intervention, *The Journal of Forensic Psychiatry & Psychology*, 34(1), 20-36, <https://doi.org/10.1080/14789949.2023.2168205>
- Quarmby, K. (2008). *Getting away with murder: Disabled people's experiences of hate crime in the UK*. London: SCOPE.
- Quarmby, K. (2011). *Scapegoat: Why we are failing disabled people*. Portobello Books: London
- Radley, L. (2011). Attitudes toward sex offenders. *Forensic Update*, 66,5-9.
- Ratcliff, R., Spieler, D., & McKoon, G. (2000). Explicitly modelling the effects of aging on response time. *Psychonomic Bulletin & Review*, 7(1), 1–25. <https://doi.org/10.3758/BF03210723>
- Ricciardelli, R., & Moir, M. (2013). Stigmatized among the stigmatized: Sex offenders in Canadian penitentiaries. *Canadian Journal of Criminology and Criminal Justice*, 55(3), 353–385. <https://doi.org/10.3138/cjccj.2012.E22>
- Rice, B. (1982). The Hawthorne defect: Persistence of a flawed theory. *Psychology Today*, 16 (2), 70-74.
- Richards, K. (2018). Born this way? A qualitative examination of public perceptions of the causes of pedophilia and sexual offending against children. *Deviant Behavior*, 39(7), 835–851. <https://doi.org/10.1080/01639625.2017.1335526>

- Robertson, P., Barnao, M., & Ward, T. (2011). Rehabilitation frameworks in forensic mental health. *Aggression and Violent Behavior*, 16(6),472-484, <https://doi.org/10.1016/j.avb.2011.03.003>.
- Robinson, J., Craig, L. A., & Tonkin, M. (2018). Perceptions of Social Climate and Aggressive Behavior in Forensic Services: A Systematic Review. *Trauma, Violence, & Abuse*, 19(4), 391-405. <https://doi.org/10.1177/1524838016663936>
- Rocha, I. C. O., & Valença, A. M. (2023). The efficacy of CBT based interventions to sexual offenders: A systematic review of the last decade literature. *International journal of law and psychiatry*, 87, 101856. <https://doi.org/10.1016/j.ijlp.2022.101856>
- Rodwell, D., & Frith, H. (2024). 'A ward full of emotional, aggressive people': Social climate and interpersonal relationships in forensic settings caring for patients with borderline personality disorder. *International journal of mental health nursing*, 33(4), 1049–1061. <https://doi.org/10.1111/inm.13308>
- Rogers, D. L., & Ferguson, C. J. (2011). Punishment and rehabilitation attitudes towards sex offenders versus nonsexual offenders. *Journal of Aggression, Maltreatment, & Trauma*, 20, 395-414. <http://doi:10.1080/10926771.2011.570287>.
- Ros, N., Van der Helm, P., Wissink, I., Stams, G. J., & Schaftenaar, P. (2013). Institutional climate and aggression in a secure psychiatric setting. *The Journal of Forensic Psychiatry & Psychology*, 24(6),713–727. <https://doi.org/10.1080/14789949.2013.848460>
- Rothwell, M., Fido, D., Heym, N. (2021). Perceptions around adult and child sex offenders and their rehabilitation as a function of education in forensic psychology independent of traditionalism and perpetrator sex. *Forensic Science International: Mind and Law*, 2, <https://doi.org/10.1016/j.fsiml.2020.100039>.
- Royal College of Psychiatrists. (2013). People with learning disability and mental health, behavioural or forensic problems: The role of in-patient services. <http://www.rcpsych.ac.uk/pdf/FR20ID200320for20website.pdf>
- Royal College of Psychiatrists' Faculty of Psychiatry of Intellectual Disability and Faculty of Forensic Psychiatry London (2014). Forensic care pathways for adults with intellectual disability involved with the criminal justice system: *Royal College of Psychiatrists' Faculty of Psychiatry of Intellectual Disability and Faculty of Forensic Psychiatry London*
- Rubin, D. B. (1976). Inference and Missing Data. *Biometrika* 1976; 63(3), 581-592.
- Rydell, R. J., & McConnell, A. R. (2006). Understanding implicit and explicit attitude change: A systems of reasoning analysis. *Journal of Personality and Social Psychology*, 91(6), 995–1008. <https://doi.org/10.1037/0022-3514.91.6.995>
- Sapouna, M., Bisset, C., Conlong, A., Matthews, B. (2015) *What Works to Reduce Reoffending: A Summary of the Evidence*. Edinburgh: Scottish Government
- Safran, J. D., & Kraus, J. (2014). Alliance ruptures, impasses, and enactments: a relational perspective. *Psychotherapy (Chicago, Ill.)*, 51(3), 381–387. <https://doi.org/10.1037/a0036815>

- Safran, J. D., & Segal, Z. V. (1990). *Interpersonal process in cognitive therapy*. Northvale, NJ: Jason Aronson. Inc
- Salerno, J. M., Najdowski, C. J., Stevenson, M. C., Wiley, T. R. A., Bottoms, B. L., Vaca, R., & Pimentel, P. S. (2010). Psychological mechanisms underlying support for juvenile sex offender registry laws: Prototypes, moral outrage, and perceived threat. *Behavioral Sciences and the Law*, 28(1), 58-83. <https://doi.org/10.1002/bsl.921>
- Sampson, H. (2004). *Navigating the waves: the usefulness of a pilot in qualitative research*. *Qualitative Research* 4 (3) 383 - 402. <https://doi.org/10.1177/1468794104047236>
- Sanghara, K. K., & Wilson, J. C. (2006). Stereotypes and attitudes about child sexual abusers: A comparison of experienced and inexperienced professionals in sex offender treatment. *Legal and Criminological Psychology*, 11, 229–244. <http://dx.doi.org/10.1348/135532505X68818>.
- Sarason, S. B. (1974). *The psychological sense of community: Prospects for a community psychology*. Jossey-Bass.
- Scheela, R. (2002). Sex Offender Treatment: Therapists' Experiences and Perceptions. *Issues in mental health nursing*. 22. 749-67. <https://doi.org/10.1080/01612840152713009>.
- Schimmack, U. (2021). The Implicit Association Test: A method in search of a construct. *Perspectives on Psychological Science*, 16(2), 396–414. <https://doi.org/10.1177/1745691619863798>
- Schmucker, M., & Lösel, F. (2015). The effects of sexual offender treatment on recidivism: An international meta-analysis of sound quality evaluations. *Journal of Experimental Criminology*, 11(4), 597–630. <https://doi.org/10.1007/s11292-015-9241-z>
- Schneider, W., Eschman, A., & Zuccolotto, A. (2002). *E-Prime Reference Guide*. Pittsburgh, PA Psychology Software Tools.
- Schultz, C. (2014). The stigmatization of individuals convicted of sex offenses: Labeling theory and the sex offense registry. *Themis: Research Journal of Justice Studies and Forensic Science*, 2(1), 64-81. <https://doi.org/10.31979/THEMIS.2014.0204>
- Secretary of State for Health and Social Care, Lord Chancellor and Secretary of State for Justice. *Reforming the Mental Health Act (CP 355)*. TSO (The Stationery Office), 2021. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951398/mental-health-act-white-paper-web-accessible.pdf.
- Sekaquaptewa, D., Vargas, P., & von Hippel, W. (2010). A practical guide to paper-and-pencil implicit measures of attitudes. In B. Gawronski & B. K. Payne (Eds.), *Handbook of implicit social cognition: Measurement, theory, and applications* (pp. 140–155). The Guilford Press.
- Sexual offence. (n.d.) Collins Dictionary of Law. (2006). <https://legal-dictionary.thefreedictionary.com/sexual+offence>

- Shackley, M., Weiner, C., Day, A., & Willis, G. M. (2014). Assessment of public attitudes towards sex offenders in an Australian population. *Psychology, Crime & Law*, 20(6), 553–572. <https://doi.org/10.1080/1068316X.2013.793772>
- Shahsavari, H., Matourypour, P., Ghiyasvandian, S., & Nejad, M. R. G. (2020). Medical Research Council framework for development and evaluation of complex interventions: A comprehensive guidance. *Journal of education and health promotion*, 9, 88. https://doi.org/10.4103/jehp.jehp_649_19
- Sharf, J., Primavera, L. H., & Diener, M. J. (2010). Dropout and therapeutic alliance: A meta-analysis of adult individual psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, 47(4), 637–645. <https://doi.org/10.1037/a0021175>
- Shaver, K. G., & Drown, D. (1986). On causality, responsibility, and self-blame: A theoretical note. *Journal of Personality and Social Psychology*, 50(4), 697–702. <https://doi.org/10.1037/0022-3514.50.4.697>
- Sheeran, P., Maki, A., Montanaro, E., Avishai-Yitshak, A., Bryan, A., Klein, W. M., Miles, E., & Rothman, A. J. (2016). The impact of changing attitudes, norms, and self-efficacy on health-related intentions and behavior: A meta-analysis. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*, 35(11), 1178–1188. <https://doi.org/10.1037/hea0000387>
- Shelton, L., Stone, J., & Winder, B. (2013). Evaluating the factor structure and reliability of the Community Attitudes Toward Sex Offenders (CATSO) scale. *Journal of Criminal Psychology*. 3(2),115-126. <https://doi.org/10.1108/JCP-10-2012-0014>.
- Shepherd, A., Doyle, M., Sanders, C., & Shaw, J. (2016). Personal recovery within forensic settings--Systematic review and meta-synthesis of qualitative methods studies. *Criminal behaviour and mental health : CBMH*, 26(1), 59–75. <https://doi.org/10.1002/cbm.1966>
- Simon, S., & Arnaut, G. (2011). Psychologists' attitudes toward sex offenders, In: Poster presented at the International Congress of Psychology and Law, 2011, March, Hyatt Regency; Miami, FL.
- Sinason, V. (1992). *Mental Handicap and the Human Condition: New Approaches from the Tavistock*. London: Free Association Books.
- Sinason, V. (ed.) (1998). *Memory in Dispute*. London: Karnac Books.
- Sinason, V., & Conway, A. (Eds.). (2021). *Trauma and Memory: The Science and the Silenced* (1st ed.). Routledge. <https://doi.org/10.4324/9781003193159>
- Singh, N., Lancioni, G., Manikam, R., Winton, A., Singh, A., Singh, J., & Singh, A. (2011). A mindfulness-based strategy for self-management of aggressive behaviour in adolescents with Autism. *Research in Autism Spectrum Disorders – RES., AUTISM SPECTR DISORD*. 5. 1153-1158. [10.1016/j.rasd.2010.12.012](https://doi.org/10.1016/j.rasd.2010.12.012).
- Sinnott, C., Mercer, S. W., Payne, R. A., Duerden, M., Bradley, C. P., & Byrne, M. (2015). Improving medication management in multimorbidity: development of the Multimorbidity Collaborative Medication Review And Decision Making (MY COMRADE) intervention using the Behaviour Change

- Wheel. *Implementation science : IS*, 10, 132. <https://doi.org/10.1186/s13012-015-0322-1>
- Slevin, E., & Sines, D. (1996). Attitudes of nurses in general hospital towards people with learning disabilities: influences of contact, and graduate-non-graduate status, a comparative study. *Journal of Advanced Nursing*, 24(6): 1116-1126. PMID: [8953346](https://pubmed.ncbi.nlm.nih.gov/8953346/)
- Spoo, S., Kaylor, L. E., Schaaf, S., Rosselli, M., Laake, A., Johnson, C., & Jeglic, E. L. (2018). Victims' Attitudes Toward Sex Offenders and Sex Offender Legislation. *International journal of offender therapy and comparative criminology*, 62(11), 3385–3407. <https://doi.org/10.1177/0306624X17740537>
- SPSS- version 24, IBM Corp. Released 2016. IBM SPSS Statistics for Windows, Version 24.0, Armonk, NY: IBM Corp).
- Stasch, J., Yoon D., Sauter J., Hausam J., Dahle, K. (2018). Prison climate and its role in reducing dynamic risk factors during offender treatment. *International Journal of Offender Therapy and Comparative Criminology*, 62(14), 4609–4621. [10.1177/0306624X18778449](https://doi.org/10.1177/0306624X18778449)
- Steans, J., & Duff, S. (2020). Perceptions of sex offenders with intellectual disability: A comparison of forensic staff and the general public. *Journal of applied research in intellectual disabilities : JARID*, 33(4), 711–719. <https://doi.org/10.1111/jar.12467>
- Stier, A., & Hinshaw, S. P. (2007). Explicit and implicit stigma against individuals with mental illness. *Australian Psychologist*, 42(2), 106-117. <https://doi.org/10.1080/00050060701280599>
- Stoffelen, J. M. T., Herps, M. A., Buntinx, W. H. E., Schaafsma, D., Kok, G., & Curfs, L. M. G. (2017). Sexuality and individual support plans for people with intellectual disabilities. *Journal of intellectual disability research : JIDR*, 61(12), 1117–1129. <https://doi.org/10.1111/jir.12428>
- Streiner, D. L. & Norman, G. R. (2008). Health Measurement Scales (Ch.8). 4th edn. Oxford University Press: Oxford. 2008.
- Sukhera, J., Wodzinski, M., Rehman, M., & Gonzalez, C. M. (2019). The Implicit Association Test in health professions education: A meta-narrative review. *Perspectives on medical education*, 8(5), 267–275. <https://doi.org/10.1007/s40037-019-00533-8>
- Sullivan, G. M., & Artino, A. R., Jr (2013). Analyzing and interpreting data from likert-type scales. *Journal of graduate medical education*, 5(4), 541–542. <https://doi.org/10.4300/JGME-5-4-18>
- Susman J. (1994). Disability, stigma and deviance. *Social science & medicine* (1982), 38(1), 15–22. [https://doi.org/10.1016/0277-9536\(94\)90295-x](https://doi.org/10.1016/0277-9536(94)90295-x)
- Tabachnick, J., & Klein, A. (2011). A reasoned approach: Reshaping sex offender policy to prevent child sexual abuse. Oregon: Association for the Treatment of Sexual Abusers
- Talò, C., Mannarini, T., & Rochira, A. (2014). Sense of community and community participation: A meta-analytic review. *Social Indicators Research*, 117(1), 1–28. <https://doi.org/10.1007/s11205-013-0347-2>

- Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. Guilford Press. <https://doi.org/10.4135/9781412950664.n388>
- Tannenbaum, F. (1938). *Crime and the Community*, New York Chichester, West Sussex: Columbia University Press, 1938. <https://doi.org/10.7312/tann90782>
- Taylor, J. L., Lindsay, W. R., & Willner, P. (2008). CBT for people with intellectual disabilities: emerging evidence, cognitive ability, and IQ effects. *Behavioural and Cognitive Psychotherapy*;36(6), 723–33. <http://doi.org/10.1017/S1352465808004906>
- Taylor, J. L., & Lindsay, W. R. (2018). Offenders with intellectual and developmental disabilities: Future directions for research and practice. In W. R. Lindsay & J. L. Taylor (Eds.), *The Wiley handbook on offenders with intellectual and developmental disabilities: Research, training, and practice* (pp. 453–471). Wiley Blackwell. <https://doi.org/10.1002/9781118752982.ch25>
- Taylor, J. L., Keddie, T., & Lee, S. (2003). Working with sex offenders with intellectual disability: Evaluation of an introductory workshop for direct care staff. *Journal of Intellectual Disability Research*, 47(3), 203–209. <https://doi.org/10.1046/j.1365-2788.2003.00471.x>
- Teachman, B. A., & Brownell, K. D. (2001). Implicit anti-fat bias among health professionals: is anyone immune?. *International journal of obesity and related metabolic disorders : journal of the International Association for the Study of Obesity*, 25(10), 1525–1531. <https://doi.org/10.1038/sj.ijo.0801745>
- Teige-Mocigemba, S., Klauer, K. C., & Sherman, J. W. (2010). *A practical guide to implicit association tests and related tasks*. In B. Gawronski & B. K. Payne (Eds.), *Handbook of implicit social cognition: Measurement, theory, and applications* (p. 117–139). The Guilford Press.
- Tewksbury, R., & Mustaine, E. E. (2013). Law-Enforcement Officials' Views of Sex Offender Registration and Community Notification. *International Journal of Police Science & Management*, 15(2), 95-113. <https://doi.org/10.1350/ijps.2013.15.2.305>
- Tewksbury, R., Mustaine, E. E., & Payne, B. K. (2012). Community corrections professionals' attitudes about sex offenders: Is the CATSO applicable? *Criminal Justice Studies: A Critical Journal of Crime, Law & Society*, 25(2), 145–157. <https://doi.org/10.1080/1478601X.2012.699733>
- Thakker, J. (2012). Public attitudes toward sex offenders in New Zealand. *Journal of Sexual Aggression*, 18, 149–163. <http://doi.org/10.1080/13552600.2010.526245>.
- The Wiley Handbook on Offenders with Intellectual and Developmental Disabilities: Research, Training, and Practice, edited by William R. Lindsay, and John L. Taylor, John Wiley & Sons, Incorporated, 2018. ProQuest Ebook Central, <https://ebookcentral.proquest.com/lib/cardiffmet/detail.action?docID=5491898>
- Thompson, J. A., & Dempsey, H. L. (2010). Implicit Attitudes as a Cause of Cognitive Dissonance. Conference: Southeastern Psychological Association. At: Chattanooga, TN. <https://doi.org/10.13140/RG.2.2.16085.22246>

- Thornicroft, G., Rose, D., Kassam, A., & Sartorius, N. (2007). Stigma: ignorance, prejudice or discrimination?. *The British journal of psychiatry : the journal of mental science*, *190*, 192–193. <https://doi.org/10.1192/bjp.bp.106.025791>
- Thornton, D., Mann, R., Webster, S., Blud, L., Travers, R., Friendship, C., & Erikson, M. (2003). Distinguishing and Combining Risks for Sexual and Violent Recidivism. *Annals of the New York Academy of Sciences*. *989*. 225-35; discussion 236. 10.1111/j.1749-6632.2003.tb07308.x.
- Timko, C. & Moos, R.H. (2004). Measuring the therapeutic environment. In P. Campling, S. Davies & G. Farquharson (Eds.) *From toxic institutions to therapeutic environments*. London: Gaskell/ Royal College of Psychiatrists.
- Tonkin M. (2016). A Review of Questionnaire Measures for Assessing the Social Climate in Prisons and Forensic Psychiatric Hospitals. *International journal of offender therapy and comparative criminology*, *60*(12), 1376–1405. <https://doi.org/10.1177/0306624X15578834>
- Tonkin, M., Howells, K., Ferguson, E., Clark, A., Newberry, M., & Schalast, N. (2012). Lost in translation? Psychometric properties and construct validity of the English Essen Climate Evaluation Schema (EssenCES) social climate questionnaire. *Psychological assessment*, *24*(3), 573–580. <https://doi.org/10.1037/a0026267>
- Tovey, L., Winder, B., & Blagden, N. (2022). ‘it’s ok if you were in for robbery or murder, but sex offending, that’s a no no’: A qualitative analysis of the experiences of 12 men with sexual convictions seeking employment. *Psychology, Crime & Law*. Advance online publication. <https://doi.org/10.1080/1068316X.2022.2030736>
- Tropp, L., & Pettigrew, T. F. (2005a). Differential relationships between intergroup contact and affective and cognitive dimensions of prejudice. *Personality and Social Psychology Bulletin*, *31*(8), 1145-1158.
- Tropp, L., & Pettigrew, T. F. (2005b). Relationships between intergroup contact and prejudice among minority and majority status groups. *Psychological Science*, *16*, 651-653
- Turner, R. N., Hewstone, M., & Voci, A. (2007). Reducing explicit and implicit prejudice via direct and extended contact: The mediating role of self-disclosure and intergroup anxiety. *Journal of Personality and Social Psychology*, *93*(3): 369-388. PMID: [17723054](https://pubmed.ncbi.nlm.nih.gov/17723054/)
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, *185*, 1124–1131. <http://dx.doi.org/10.1126/science.185.4157.1124>.
- Van Dessel, P., Eder, A. B., & Hughes, S. (2018). Mechanisms underlying effects of approach-avoidance training on stimulus evaluation. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *44*(8), 1224–1241. <https://doi.org/10.1037/xlm0000514>
- Van Overwalle, F., & Siebler, F. (2005). A connectionist model of attitude formation and change. *Personality and social psychology review : an official journal of the Society for Personality and Social Psychology, Inc*, *9*(3), 231–274. https://doi.org/10.1207/s15327957pspr0903_3

- Vargas, P. T., Sekaquaptewa, D., and von Hippel, W. (2007). Armed only with paper and pencil: “Low-tech” measures of implicit attitudes. In B. Wittenbrink and N. Schwarz (Eds.), *Implicit measures of attitudes* (pp. 103-124). New York: Guilford Press.
- Vaughan, B. (2007). The Internal Narrative of Desistance. *British Journal of Criminology*, 47(3), 390-404, <http://doi.org/10.1093/bjc/azl083>
- Vaughn, D., Thomas, A., Cox, B. D., & Doyle, A. (2009). A Psychometric Re-Analysis of the Multiple Disability Implicit Association Test. Paper presented at the Academy of Management Meeting, Chicago, IL
- Velasco, I., & Harder, M. (2014). From Attitude Change to Behaviour Change: Institutional Mediators of Education for Sustainable Development Effectiveness. *Sustainability*. 6(10), <https://doi.org/10.3390/su6106553>
- Verplanken, B., & Orbell, S. (2022). Attitudes, Habits, and Behavior Change. *Annual review of psychology*, 73, 327–352. <https://doi.org/10.1146/annurev-psych-020821-011744>
- Viki, G. T., Fullerton, I., Raggett, H., Tait, F., & Wiltshire, S. (2012). The role of dehumanization in attitudes toward the social exclusion and rehabilitation of sex offenders. *Journal of Applied Social Psychology*, 42(10), 2349–2367. <https://doi.org/10.1111/j.1559-1816.2012.00944.x>
- Visser, P. S., & Krosnick, J. A. (1998). Development of attitude strength over the life cycle: surge and decline. *Journal of personality and social psychology*, 75(6), 1389–1410. <https://doi.org/10.1037//0022-3514.75.6.1389>
- Walsh, A., Wells, J., Gann, S.M. (2020). The Sex Offender. In: Correctional Assessment, Casework, and Counseling. Springer, Cham. https://doi.org/10.1007/978-3-030-55226-8_16
- Walton, J. (2018). Random assignment in sexual offending programme evaluation: The missing method. *The Journal of Forensic Practice*. 20(1), 1-9, <https://doi.org/10.1108/JFP-08-2017-0032>
- Ward, T. (2002). ‘Good Lives and the Rehabilitation of Offenders: Promises and Problems’, *Aggression and Violent Behavior*, 7(5): 513–528.
- Ward, T., & Beech, A.R. (2005). An Integrated Theory of Sexual Offending. *Aggression and Violent Behaviour*, 11, 44-63.
- Ward, T., & Maruna, S. (2007). *Rehabilitation: Beyond the risk assessment paradigm*. London, UK: Routledge. <https://doi.org/10.4324/9780203962176>
- Ward, T., & Stewart, C. A. (2003). The treatment of sex offenders: Risk management and good lives. *Professional Psychology: Research and Practice*, 34(4), 353–360. <https://doi.org/10.1037/0735-7028.34.4.353>
- Ware, J. (2011). The Importance of Contextual Issues within Sexual Offender Treatment. In *International Perspectives on the Assessment and Treatment of Sexual Offenders* (eds D.P. Boer, R. Eher, L.A. Craig, M.H. Miner and F. Pfäfflin). <https://doi.org/10.1002/9781119990420.ch15>
- Ware, J., Galouzis, J., Hart, R., & Allen, R.(2012). Training correctional staff in the management of sexual offenders: Increasing knowledge and positive attitudes.

- Sexual Abuse in Australia and New Zealand: An Interdisciplinary Journal. 23-30.
- Ware, J., Hart, R., & Fragaki, P. (2008). Training Non-Psychological Staff in the Management of Sexual Offenders. *Australasian Journal of Correctional Staff Development*. 3.
- Watson, R., Thomas, S., & Daffern, M. (2017). The Impact of Interpersonal Style on Ruptures and Repairs in the Therapeutic Alliance Between Offenders and Therapists in Sex Offender Treatment. *Sexual abuse : a journal of research and treatment*, 29(7), 709–728. <https://doi.org/10.1177/1079063215617514>
- Weaver, C., Lee, J., Choi, H., Johnson, W. W., & Clements, C. (2019). Offenders living with mental illness: How are they perceived by future professionals? *Journal of Social Work*, 19(1), 83-101. <https://doi.org/10.1177/1468017318757383>
- Weiner, B. (1974). *Achievement motivation and attribution theory*. Morristown, N.J.: General Learning Press.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4), 548–573. <https://doi.org/10.1037/0033-295X.92.4.548>
- Weiner, B. (2010). Attribution Theory. In *The Corsini Encyclopedia of Psychology* (eds I. B. Weiner and W. E. Craighead). <https://doi.org/10.1002/9780470479216.corpsy0098>
- Weir, K. (2015). Life on the outside. *Monitor on Psychology*, 46(11), 66. <http://www.apa.org/monitor/2015/12/cover-outside.aspx>.
- Welkowitz, J., Cohen, B. H., and Lea, R. B. (2012). *Introductory Statistics for the Behavioral Sciences*. Hoboken, N.J.: Wiley
- Welsh Government. *Statistics for Wales: Statistical First Release*. 2019. 27 November 2019 SFR 114/2019
- Welsh Health Specialised Services Committee *Specialised Services Commissioning Framework January 2024*. whssc.nhs.wales/publications/corporate-policies-and-procedures/2-4-1-appendix-1-whssc-commissioning-framework-approved/
- West, M., Eckert, R., Steward, K., & Pasmore, B. (2014). Developing collective leadership for health care. London: *The King's Fund/Center for Creative Leadership*. Available at: www.kingsfund.org.uk/collectiveleadership (accessed on 12 May 2014).
- West R. (2006). Tobacco control: present and future. *British medical bulletin*, 77-78, 123–136. <https://doi.org/10.1093/bmb/ldl012>
- Westen, D., & Rosenthal, R. (2003). Quantifying construct validity: Two simple measures. *Journal of Personality and Social Psychology*, 84(3), 608–618. <https://doi.org/10.1037/0022-3514.84.3.608>
- Wicker, A. W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects. *Journal of Social Issues*, 25(4), 41–78. <https://doi.org/10.1111/j.1540-4560.1969.tb00619.x>

- Widman, L., & Olson, M. (2013). On the relationship between automatic attitudes and self-reported sexual assault in men. *Archives of sexual behavior*, 42(5), 813–823. <https://doi.org/10.1007/s10508-012-9970-2>
- Wiers, R. W., & de Jong, P. J. (2006). Implicit and Explicit Alcohol, Smoking and Drug-Related Cognitions and Emotions. In J. A. Arlisdale (Ed.), *Advances in social psychology research* (pp. 1–35). Nova Science Publishers.
- Wigboldus, D. H. J., Holland, R. W., & van Knippenberg, A. (2006). Single target implicit associations. (Unpublished manuscript).
- Willis, G. M. (2018). Why call someone by what we don't want them to be? The ethics of labeling in forensic/correctional psychology. *Psychology, Crime & Law*, 24(7), 727–743. <https://doi.org/10.1080/1068316X.2017.1421640>
- Willis, G. M., Yates, P. M., Gannon, T. A., & Ward, T. (2013). How to integrate the good lives model into treatment programs for sexual offending: an introduction and overview. *Sexual abuse: a journal of research and treatment*, 25(2), 123–142. <https://doi.org/10.1177/1079063212452618>
- Willis, G. M., Malinen, S., & Johnston, L. (2012). Demographic Differences in Public Attitudes Towards Sex Offenders. *Psychiatry, Psychology and Law*, 20(2), 230–247. <https://doi.org/10.1080/13218719.2012.658206>
- Willis, G. M., Levenson, J. S., & Ward, T. (2010). Desistance and attitudes towards sex offenders: Facilitation or hindrance? *Journal of Family Violence*, 25(6), 545–556. <https://doi.org/10.1007/s10896-010-9314-8>
- Wilson, M. C., & Scior, K. (2015). Implicit attitudes towards people with intellectual disabilities: Their relationship with explicit attitudes, social distance, emotions and contact. *PLoS ONE*, 10(9), <https://doi.org/10.1371/journal.pone.0137902>
- Wilson, T. D., Lindsey, S., & Schooler, T. Y. (2000). A model of dual attitudes. *Psychological Review*, 107(1), 101–126. <https://doi.org/10.1037/0033-295X.107.1.101>
- Wittenbrink, B., Judd, C. M., & Park, B. (1997). Evidence for racial prejudice at the implicit level and its relationship with questionnaire measures. *Journal of Personality and Social Psychology*, 72(2), 262–274. <https://doi.org/10.1037/0022-3514.72.2.262>
- Wnuk, D., Chapman, J. E., & Jeglic, E. L. (2006). Development and Refinement of a Measure of Attitudes Toward Sex Offender Treatment. *Journal of Offender Rehabilitation*, 43(3), 35–47. https://doi.org/10.1300/J076v43n03_03
- Wolfe, B. E. (2013). The value of pilot studies in clinical research: a clinical translation of the research article titled 'In search of an adult attachment stress provocation to measure effect on the oxytocin system'. *J Am Psychiatry Nurses Assoc* 19 (4): 192 – 4. doi: 10.1177/1078390313493248
- Woessner, G., & Schwedler, A. (2014). Correctional treatment of sexual and violent offenders: Therapeutic change, prison climate, and recidivism. *Criminal Justice and Behavior*, 41(7), 862–879. <https://doi.org/10.1177/0093854813520544>
- Wood, D. J., Bruner, J. S., & Ross, G. (1976). The Role of Tutoring in Problem Solving. *Journal of Child Psychiatry and Psychology*, 17, 89-100.

- Wood, R. M., Grossman, L. S., & Fichtner, C. G. (2000). Psychological assessment, treatment, and outcome with sex offenders. *Behavioral sciences and the law*, *18*(1), 23–41. [https://doi.org/10.1002/\(sici\)1099-0798\(200001/02\)18:1<23::aid-bsl375>3.0.co;2-d](https://doi.org/10.1002/(sici)1099-0798(200001/02)18:1<23::aid-bsl375>3.0.co;2-d)
- Wormald, C., & Melia, Y. (2021). How effective are interventions at enhancing empathy for service users with an intellectual disability who engage in sexually abusive behaviour? A review of the literature. *Journal of applied research in intellectual disabilities : JARID*, *34*(6), 1373–1392. <https://doi.org/10.1111/jar.12883>
- Yazbek, M., McVilly, K., & Parmenter, T. R. (2004). Attitudes toward people with intellectual disabilities: An Australian perspective. *Journal of Disability Policy Studies*; *15*(2): 97-111.
- Ho, Y. Y., Tsai, H. T., & Day, J. der. (2010). Using the theory of planned behaviour to predict public sector training participation. *The Service Industries Journal*, *31*(5), 771–790. <https://doi.org/10.1080/02642060902960776>
- York, J. R. (2006). Therapeutic and communication skill adaptations for working with developmentally delayed forensic service users. In: Blasingame G, editor. *Practical Treatment Strategies for Forensic Service users with Severe and Sexual Behavior Problems Among Persons with Developmental Disabilities*. Oklahoma City: Wood ‘N’ Barnes/Safer Society Press.
- Yu, Z., Wang, F., Wang, D., & Bastin, M. (2012). Beyond reaction times: Incorporating mouse-tracking measures into the implicit association test to examine its underlying process. *Social Cognition*, *30*(3), 289–306. <https://doi.org/10.1521/soco.2012.30.3.289>
- Zanna, M. P., & Rempel, J. K. (1988). Attitudes: A new look at an old concept. In D. Bar-Tal & A. W. Kruglanski (Eds.), *The social psychology of knowledge* (pp. 315–334). Cambridge University Press; Editions de la Maison des Sciences de l'Homme.

Appendices (Available Upon Request)