What impact does the Mental Health and Wellbeing Toolkit programme delivered online have on employee mental health and wellbeing?

A Mixed Methods Study

A thesis submitted to the University of South Wales for the degree of Doctorate in Counselling Psychology

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Abstract

Background

This study's aim was to pilot a Counselling Psychology informed workplace intervention to ascertain its efficacy in improving the mental health and wellbeing of participants. The catalyst for the study was the researcher training to be a Counselling Psychologist coupled with their Occupational Psychology training and work with many organisations as a consultant / trainer (which enabled them to also deliver the study's intervention), where they identified workplace mental health and wellbeing as an area of concern. A review of available research indicated many workplaces have a significant negative effect on their employee's mental health and wellbeing. The impact of employees reduced mental health and wellbeing on them, their organisations and in turn the economy supports the researcher's position that this is a valuable focus of research.

Methods

The current study used a mixed methods (quantitative and qualitative), randomised controlled, between-subjects experimental design with 24 participants (10 in the experimental group and 14 in the control group). The qualitative data was collected from all participants through an online pre and post intervention questionnaire and post intervention semi-structured interviews with the 10 experimental group participants. This qualitative data was then analysed using thematic analysis. The quantitative data collected from all 24 study participants through online pre and post intervention self-report questionnaires was analysed using four quantitative scales. The scales used were the Connor-Davidson Resilience Scale (Connor & Davidson, 2003), Depression, Anxiety and Stress 21 scale (Henry and Crawford, 2005), the Coping Self-Efficacy Scale (Chesney et al, 2006) and the Warwick Edinburgh Mental Wellbeing Scale, (Tennant et al, 2007). The results of the qualitative and quantitative research were triangulated to enable the results to be considered concurrently and equally.

The study participants were from two organisations, Platfform a mental health and social change charity and Hafod a provider of housing, care and support. The intervention being piloted consisted of four, two-hour sessions, delivered online to group of participants once a week for four weeks. The intervention was designed drawing on a range of psychological strategies and techniques including cognitive behavioural therapy (CBT), mindfulness and resilience research.

Results

The study findings were that the intervention has a significant effect on a range of factors that collectively indicate a positive impact on participant's mental health and wellbeing.

The quantitative measure's results (paired samples t-tests) indicated that participant's Resilience, Hardiness, Meaningfulness / Purpose, Coping / Self-Efficacy and Wellbeing all increased significantly following the intervention. There was also a marginally significant increase in participant's Regulation of Emotion and Cognition, and a decrease in their level of Stress.

The qualitative results were equally encouraging, as all participants reported that the intervention had a positive impact on their mental health and wellbeing. The four qualitative themes that emerged from the data expressed the participant's view that the intervention had a positive effect on their wellbeing, that the learning process was beneficial, the session experience positive and participants found they were able to apply the intervention's strategies widely.

Conclusion

The overwhelming positive results from both the quantitative and qualitative research indicate that the intervention has achieved its aim of having a positive impact on both participant's mental health and their wellbeing. This outcome leads the researcher to conclude that the Counselling Psychology informed intervention's pilot results indicate that is has been successful in improving participant's mental health and wellbeing. Therefore, despite the study's limitations discussed in Chapter 5 based on the pilot study's findings the intervention warrants further, larger scale research which is also discussed in Chapter 5.

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Chapter 1 Introduction

1.1 Background to this research

The levels of workplace mental health issues have steadily risen over the last decade with the Covid-19 pandemic adding significantly to the number of people suffering with work-related stress, anxiety or depression (Health and Safety Executive, 2020). As a Counselling Psychologist trainee with a background in Occupational Psychology who has worked with a wide range of organisations over the past 25 years as a workplace consultant and trainer, this research and intervention design and delivery drew on both Counselling and Occupational Psychology. In addition, an extensive knowledge of workplace leadership, management and employee development means that I (the researcher) have seen first-hand the negative impact of mental health issues on individuals and organisations. This insight and the clear statistical evidence that the level of workplace stress, anxiety and depression is increasing at an accelerating rate, was the catalyst for developing a workplace wellbeing intervention. The intervention, designed and delivered by the researcher (who is also referred to as the trainer in this study) drew on Counselling Psychology values and approaches taking as it does an integrative, humanistic, person centred and pluralist approach. The wide range of modalities, drawn on provide a toolkit of strategies and techniques that the researcher's personal experience and evidence indicated would be helpful for those already suffering with impaired mental health and wellbeing and also provide proactive protection from the negative impacts of stress.

1.2 Study Aim

At the heart of this study is the aim to empower individuals with the tools to proactively protect and enhance theirs and others mental health and wellbeing, as well as normalising and validating their experiences. By taking an integrative, humanistic, person centred and pluralist approach and drawing on a wide range of modalities, the intervention also attempts to demonstrate the contribution Counselling Psychologists can make to workplace mental health and wellbeing (Kwiakowski and Winter, 2006). The study was initially conceived before the Covid-19 pandemic; which meant that the study and the intervention were adapted to fit this unexpected situation. The negative impact of the pandemic on workplace mental health and wellbeing served to underline the relevance and need for effective workplace mental health and wellbeing interventions.

While the focus of this study's intervention is on individual employees, the research is not advocating that the responsibility for workplace mental health and wellbeing rests with the employee and their ability to manage the stress they are subjected to. It is acknowledged that this is a small-scale study and therefore its conclusions are tentative and heavily caveated, but for the researcher it represents one aspect of the researcher's wider aim to address the detrimental impact that workplaces have on many employees' mental health and wellbeing. To have an impact on this significant issue, it is believed by this researcher that employees need the tools to protect and enhance their mental health and wellbeing which in turn will enable them to recognise and actively challenge negative work practices. From an organisational perspective it is believed that employers need the knowledge, incentive and support a Counselling Psychology informed approach can provide to make their workplaces psychologically healthy environments, for their employees.

1.3 Contribution to Counselling Psychology

This study's intervention represents a genuine attempt to create something that is valuable, helpful and useful for those that take part. The statistics on mental health and wellbeing are powerful but the sheer size of the numbers could have the effect of obscuring the individual human impacts. Research indicates that an effect termed '*psychic numbing'* means that people may feel indifferent to the suffering of large numbers of people (Slovic, 2010). However, Counselling Psychologists are able to make a valuable contribution to addressing the magnitude of human suffering that the figures on workplace mental health represent by sharing their perspective, knowledge and expertise. The researcher's background in Occupational Psychology and subsequent training in Counselling Psychology has strengthened their opinion that Counselling Psychologists have a valuable and unique contribution to make to the field of workplace mental health and wellbeing beyond providing psychotherapy, for example through psychoeducation, organisational consultancy and the development of targeted interventions (Douglas et al, 2016). This intervention represents an opportunity to proactively apply counselling psychology principles and practice to workplace mental health and wellbeing informed by an integrative, humanistic, person centred and pluralist Counselling Psychology approach. The term integrative refers to the integration of different models and/or theories in order to create *'a fresh, vibrant and effective new model'* of either formulation and / or intervention (Johnstone and Dallos, 2013, p174). Humanistic is based on the concepts of individual's self-actualisation and personal choice (Douglas et al., 2016) while person-centred '*offers a radical, non-pathologising vision of how to help people heal and grow'* (Cooper et al.,2013 p2). Cooper and McLeod's (2011) pluralist approach is described by Douglas et al (2016) as *'dogmatic person-centeredness…which provides a*

coherent client-centred framework through which person-centred therapists can incorporate a wide body of practices, research findings and theories into their work' (Douglas et al., 2016 p 293).

1.4 Disordered?

The predominance of the medical model and psychiatric diagnosis is demonstrated by the terminology that the majority of research this study reviews uses, such as disorder, diagnosis and treatment. The relevance of these terms has been challenged by many, including many Counselling Psychologists. A central argument against *'diagnosis*' is that the pathologising of human experience, emotion and pain, which is then labelled as disordered, is reductive and inaccurate, and ignores both context and systemic issues (Watson et al., 2019). By using the terminology of illness and siting the expertise about mental health in the hands of psychiatrists and doctors, who then seek cures for perceived ills; individuals and their families and friends are potentially stripped of their ownership and control over their experience and their mental health problems (Johnstone, 2014). The diagnostic position of asking '*What is wrong with you?*' instead of '*What has happened to you*?' risks ignoring the individual's experience including the context and potentially the function of their mental health / distress (Watson et al., 2019). A trauma informed approach is one way that formulation, to paraphrase the Division of Clinical Psychology (2011), can move from psychiatric formulation to psychological formulation which is a cornerstone of Counselling Psychology.

At the outset of this research a pragmatic choice was made, that this study would work within the dominant medical model of research, for example utilising the methods and language of this approach. However, the intervention reflects more closely the researcher's integrative, relational, person-centred position. The intervention aims to empower individuals through the sharing of Counselling Psychology techniques and knowledge. The researcher was struck again and again during their training to be a Counselling Psychologist that the knowledge they were accessing was so valuable and powerful it should be widely shared. The challenge and aim of this research is to work towards validating this intervention and its Counselling Psychology informed approach to mental health and wellbeing, using the architecture and language of the predominant hierarchy but with the heart and ethos of an integrative, relational, person centred Counselling Psychologist.

The epistemologically position of this study, which is expanded on in the Research Methods chapter (3.1.6) is one of pragmatic pluralism. The pragmatic position fits well with the tension between the bio-medical model and a person-centred position as well as with the potential methodological tension of a mixed method study. The pluralist position enables these potentially conflicting positions to be held simultaneously, which enables the focus to be on

the study's aims whilst acknowledging, but not engaging to the study's detriment, with these wider philosophical, ontological and epistemological arguments.

1.5 Introduction to Chapter 2 - Literature Review

The literature review demonstrates the study's pragmatic approach by stating explicitly the questions that the study is seeking to answer. The questions each lead on from the previous one providing a clear pathway from the studies inception, it's aim and the rationale, the role of counselling psychology and the focus and content of the study's intervention. The literature review reveals the scale of mental health and wellbeing issues nationally and internationally and that anxiety and depression are the most prevalent disorders in terms of diagnoses and that stress has been identified as catalyst/precursor to both. The review then focuses on the workplace, finding that the same three issues; anxiety, depression and stress, are also the predominant work-related mental health and wellbeing issues. The literature then explores the impact of stress, depression and anxiety collectively, specifically in the workplace and then focuses on each factor individually. The review then shifts the focus onto the role Counselling Psychology plays in workplace mental health and wellbeing. This indicates that to maximise the contribution Counselling Psychology makes in the workplace it is beneficial to balance the reactive aspect of their role, the provision of psychotherapy, with engaging with workplaces proactively.

The review then moves to focussing on interventions that have already been developed to address stress, anxiety and depression in the workplace, specifically the focus of the interventions and their level of success. The literature identifies resilience, assertiveness and coping as three potentially effective aspects of mental health and wellbeing for this study's intervention to focus on. Finally, the review introduces the current study and provides a summary of the overall literature review's findings based on searches of a wide range of databases and journals accessed through University of South Wales library augmented with Google scholar searches.

Chapter 2 Literature Review

2.1 Introduction

There is growing recognition that workplaces can be a source of anxiety, stress and depression, with the Covid-19 exacerbating an already significant issue. This study is informed by the researcher's previous business experience and their being a person-centred, integrative Counselling Psychologist trainee whose position is informed by a relational, pluralistic, and systemic framework.

The purpose of the following chapter is to explore mental health and wellbeing in general and specific to the UK workplace. The review then looks at employers and Counselling Psychology's response to workplace mental health and wellbeing issues and the impact of existing interventions on this issue. This information informs the development of the workplace intervention which is the subject of the current study.

The sections of this chapter are structured as a series of questions that are answered by reviewing the relevant literature. The first section's (2.2) asks '*What mental health and wellbeing are'*, going on to provide the definitions of these key terms. Section 2.3 focuses on identifying what negatively impacts mental health and wellbeing. This section looks at national and international research which identifies that depression and anxiety disorders are the predominant issues that have a negative impact on mental health and wellbeing. The research also highlights stress as being a catalyst / precursor for depression and / or anxiety disorders. This section's, three sub-sections Depression, Anxiety and Stress focus on these issues in turn, providing a definition of each term and a brief overview of the treatment that is advocated for each.

Section 2.3 identifies what impacts workplace mental health and wellbeing and finds that the same three mental health and wellbeing issues of stress, depression and anxiety are predominant in the workplace. This section also provides evidence of the scale of the negative impact of mental health and wellbeing in the workplace in terms of employee and organisational effects, as well as wider effects for example, on the UK economy and the National Health Service.

The following section 2.4 reviews the impact that the Covid-19 Pandemic has had on workplace mental health and wellbeing. The review finds that the pandemic has significantly increased the levels of workplace psychological distress with this impact being magnified for those who have pre-existing mental health conditions. Based on the answers to the previous

sections questions which indicates that levels of mental health and wellbeing issues in the workplace and beyond are increasing, section 2.5 asks what employers are doing to address the workplace's negative impact on employee mental health and wellbeing. The answer is that there are a wide range of steps that employers are taking to address their employee's mental health needs, although many of these are reactive rather than proactive. It was also noted that based on the earlier sections these efforts are having limited success as even before the pandemic there was a steady yearly increase in employee mental health and wellbeing issues.

The next section, 2.6 focuses on Counselling Psychology's contribution to addressing the workplace's negative impact on employee mental health and wellbeing. This reveals that Counselling Psychologists are often perceived as reacting to mental health and wellbeing deficits through their provision of counselling, rather than taking a proactive / preventative role. This perspective is supported by the British Psychological Society's description on of Counselling Psychology as dealing 'with a wide range of mental health problems concerning life issues including bereavement, domestic violence, sexual abuse, traumas and relationship issues. They understand diagnosis and the medical context to mental health problems and work with the individual's unique subjective psychological experience to empower their recovery and alleviate distress.' (BPS, 20211) Which contrasts with their description of an Occupational Psychologist who they say aims '… to increase the effectiveness of the organisation and improve the job satisfaction of individuals.' (BPS, 20212)

Section 2.7 moves on to consider what impacts psychologically informed workplace interventions for stress, depression and / or anxiety have achieved. This insight into both the efficacy of workplace interventions and the focus of these interventions, provided useful information which informed the content of the current study's intervention. Having reviewed previous interventions the following section 2.8 focussed on what a proactive workplace intervention seeking to improve employee mental health and wellbeing informed by counselling psychology expertise would include the review identified *'Resilience',* '*Assertiveness (Internal/Intrapersonal)*' and '*Coping*' as the three key factors that research indicated could have a positive impact on workplace mental health and wellbeing. Each of these factor's subsections is the focus on the following three section 2.9, 2.10 and 2.11 entitled respectively '*Resilience', 'Assertiveness (Internal/Intrapersonal)* and *'Coping',* with each of these sections providing a definition of the term and exploring the relevant research.

The penultimate section, 2.12 entitled '*The Current Study'* draws together the information from the previous sections and clarifies the focus of the current study and the elements that informed this study's intervention. This section also details how the study managed the impact of the Covid-19 pandemic. The final section, 2.13 states the current study's research question which is *'What impact does an Mental Health and Wellbeing Toolkit programme delivered*

online have on employee mental health and wellbeing?' The section then summarises the literature review chapter and leads into the next chapter which is Chapter 3 – Research Methods.

2.2 What is Mental Health and Wellbeing?

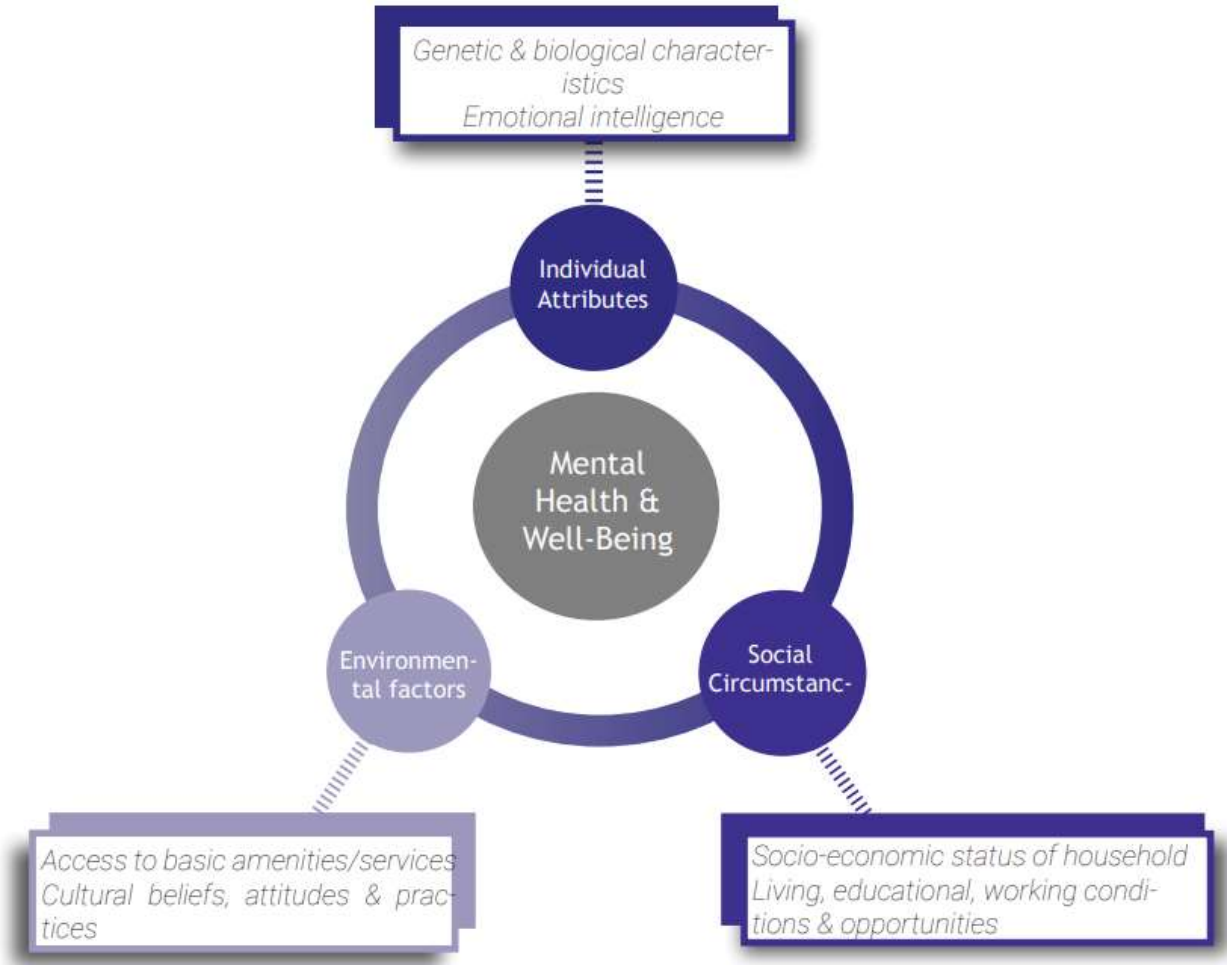
It is useful at this point to define the two key terms used in this study: '*mental health'* and *'wellbeing'.* This is a harder task than perhaps would be expected for two such familiar terms. While reviewing the literature, it became clear that there is a lack of consistency of terminology and the term 'mental health and wellbeing' is used as a single descriptor and/or the two terms are used interchangeably. It was also found that the term '*mental health'* is often used to refer to mental illness (Manwell et al, 2015).

The World Health Organisation (WHO) (2019 p1) defines health as *'… a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'* with mental health defined as '*a state of wellbeing, in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community.'* In contrast to this, the WHO defines mental disorders as representing *'disturbances to a person's mental health that are often characterized by some combination of troubled thoughts, emotions, behaviour and relationships with others'* (WHO, 2019 p1).

It is interesting that when detailing risks to mental health (Figure.2.1 on the next page), as well as in the definition of mental health provided by the WHO (above), mental health and wellbeing are inextricably linked. The WHO's position as illustrated in Figure 2.1 on the next page, is that mental health and wellbeing are contributed to by three factors, the individual's attributes which are informed by their genetic and biological characteristics and their emotional intelligence. These factors encompass the individual's social circumstances, which include the socio-economic status of their household and their living, educational, working conditions and opportunities also the individual's environmental factors such as access to basic amenities and services and their cultural beliefs, attitudes and practices. That the WHO takes this systemic position when looking at contributing risks is important as it indicates that responsibility and agency over mental health and wellbeing is not situated solely within the individual. The importance of mental health and wellbeing is underlined, in the WHO's 2012 discussion paper '*Risks to Mental Health: An Overview of Vulnerabilities and Risk Factors*' where they state that '*Mental health or psychological well-being makes up an integral part of an individual's capacity to lead a fulfilling life'* before going on to detail aspects of a fulfilling life (WHO, 2012 p3). The same document then begins to use the term mental wellbeing before reverting to the term mental health, which is contrasted with mental ill health (WHO, 2012).

An argument has been put forward that those definitions of health and mental health, including the World Health Organisation's (WHO) definitions should be changed. An example of a criticised definition is the WHO's definition of health, which has been described as '*not fit for purpose'* (Huber et al, 2011, p1). One of the key criticisms is the word '*complete*' which the study author feels '*unintentionally contributes to the medicalisation of society'* (Huber et al, 2011, p1). This position is supported by others who argue that *'normal'* human experiences, emotions, and behaviours are being medicalised in pursuit of an unrealistic goal of *'complete health'* mental health (Watson, 2019; Manwell et al, 2015). This, it is argued, is increasing the number of diagnoses, and in turn, the prescription of psychiatric drugs (Moncrieff, 2009).

Figure 2.1 WHO - Contributing Risks to Mental Health and Wellbeing



World Health Organisation, 2019 p1

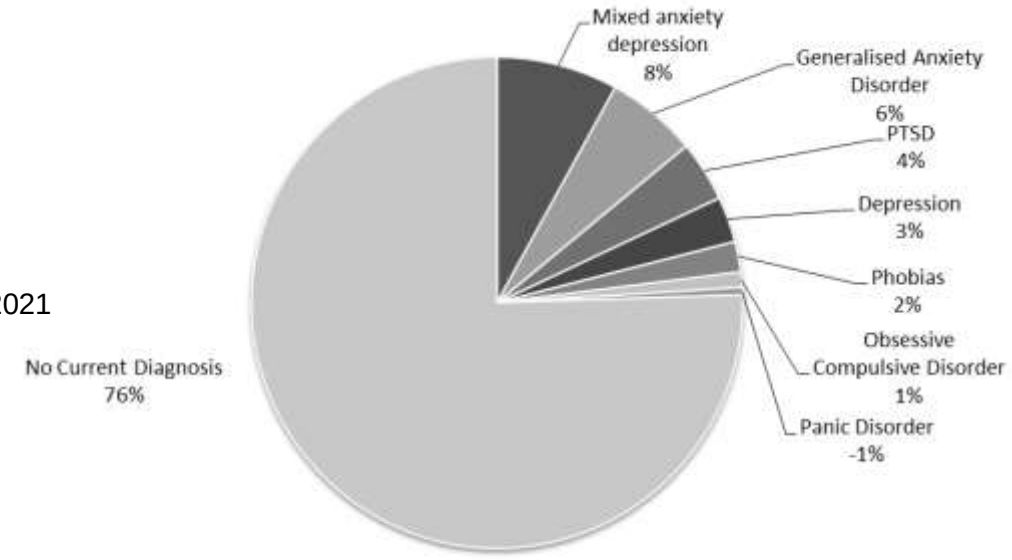
The term *'Wellbeing'* has been defined by the World Health Organisation as *"a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity"* (World Health Organisation, 2010). The Oxford English Dictionary defines wellbeing

as '"the *state of being comfortable, healthy, or happy*". The National Institute for Health and Care Excellence (NICE) quality standard on '*Healthy workplaces: improving employee mental and physical health and wellbeing*' defines in their quality statement wellbeing as *'…the subjective state of being healthy, happy, contented, comfortable and satisfied with one's quality of life. Mental wellbeing relates to a person's emotional and psychological wellbeing. This includes self-esteem and the ability to socialise and cope in the face of adversity. It also includes being able to develop potential, work productively and creatively, build strong and positive relationships with others and contribute to the community.'* (NICE, 2017). It is this NICE, (2017) definition and the WHO's position on contributing risks to mental health and wellbeing (Figure 2.1) that reflect most closely this study's position that there are multiple factors that contribute to an individual's wellbeing. This study also recognises that wellbeing itself can be broken down into three elements: evaluative wellbeing (or life satisfaction), hedonic wellbeing (feelings of happiness, sadness, anger, stress, and pain), and eudemonic wellbeing (sense of purpose and meaning in life) (Steptoe et al, 2015).

2.3 What negatively impacts Mental Health and Wellbeing?

The World Health Organization (WHO) states that worldwide, depression is the most common mental health disorder, with 264 million people estimated to be affected (WHO, 20192). The WHO goes on to state that Depression is 'a leading cause of disability worldwide and is a major contributor to the overall global burden of disease' (WHO, 20192).

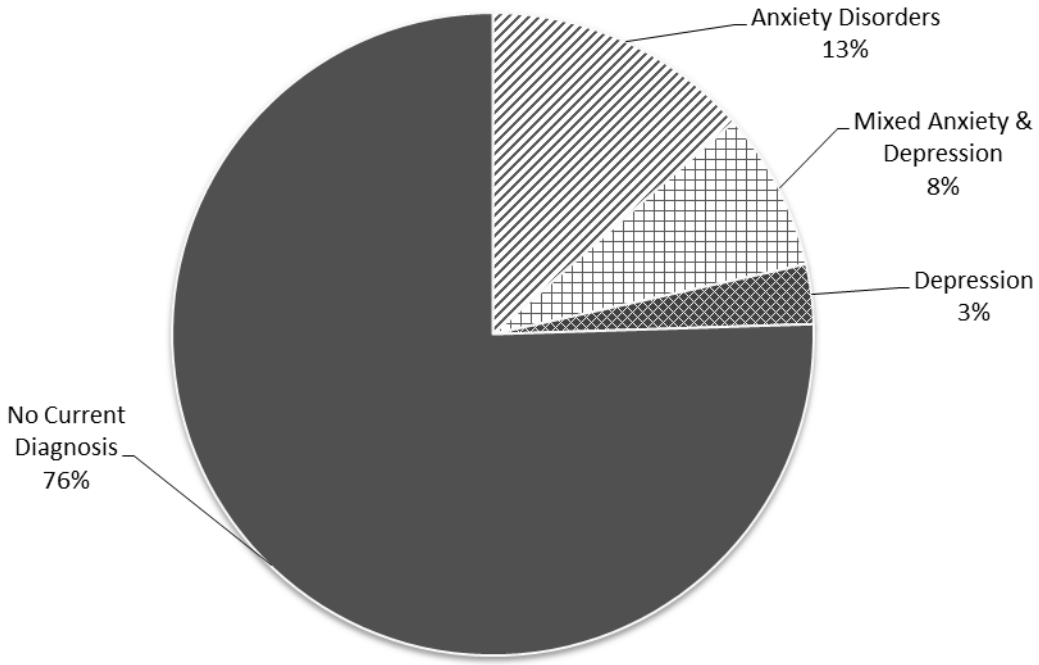
Figure 2.2 MIND statistics - In England in any given week below is the percentage of Mental Health diagnoses



MIND, 2021

If the Figures for the mental health diagnoses in Figure 2.2 are amalgamated to show Depression and Anxiety Disorders, grouped, that is Generalised Anxiety Disorder, PTSD, Phobias, Obsessive Compulsive Disorder and Panic Disorder shown together, then the prevalence of anxiety disorders, at 13% when combined exceeding even depression (including Mixed Anxiety and Depression) at 12% (Figure 2.3 below).

Figure 2.3 MIND statistics showing Depression, Mixed Anxiety & Depression and all other Anxiety Disorders together



MIND, 2021

Figure 2.3 also indicates the high level of co-morbidity between Depression and Anxiety Disorders. The Figures from MIND the mental health charity in Figure 2.2 and Figure 2.3 indicate the high prevalence of mental health problems, with based on these figures, 1 in 4 people in England experiencing some kind of mental health problem each year (MIND, 2021). In terms of common mental health problems like anxiety and depression, 1 in 6 people in England are reporting experiencing these in any given week (MIND 2021). The data from England quoted by Mind (Figure 2.2 and 2.3) appears to be similar to the worldwide experience of mental health, for example in 2013 the Global Burden of Disease study, identified the predominant mental health problem worldwide as depression, followed by anxiety, schizophrenia, and bipolar disorder (Vos et al, 2015). A worldwide study in 2017, which counted anxiety disorders together, reported that anxiety disorders were the most prevalent, with depression as the second most prevalent (Ritchie and Roser, 2018).

Whilst stress itself is not classed as a mental disorder, it is viewed as a precursor or catalyst. For example, the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) included a new diagnostic category *'Trauma and Stress-Related Disorders,'* (American Psychiatric Association, 2013). That there are non-pathological and pathological reactions to stress, indicate that it is not the stressor that is the key factor dictating the impact, rather the individual's reaction to the stressor (Kangas, 2013). This is supported by the International Classification of Diseases 11th revision (ICD-11) (WHO, 2021) which in its section *'Disorders specifically associated with Stress',* states that '*Disorders specifically associated with stress are directly related to exposure to a stressful or traumatic event, or a series of such events or adverse experiences.*' It goes on to say however that for each of the disorders in the grouping '*an identifiable stressor is a necessary, though not sufficient, causal factor. Although not all individuals exposed to an identified stressor will develop a disorder, the disorders in this grouping would not have occurred without experiencing the stressor.'* That there is individual variation in people's reaction to a stressor is highlighted with the ICD-11 (WHO, 2021) statement '*Stressful events for some disorders in this grouping are within the normal range of life experiences (e.g., divorce, socio-economic problems, bereavement). Other disorders require the experience of a stressor of an extremely threatening or horrific nature (i.e., potentially traumatic events)*.'

The relationship between stress and negative effects on mental health have been found by many studies, with several mechanisms underlying the effect and a triadic comorbidity between stress, anxiety and depression being proposed by several studies (Price et al, 2019; Fassett-Carman et al., 2020 Anderson and Hope, 2008; Gentes and Ruscio, 2011). The proposed mechanisms through which stress impacts mental health includes sleep disturbance interacting with childhood trauma to increase anxiety (Azza et al, 2019), life stress being strongly associated with onset of depression (Monroe and Harkness, 2005, Saleh et al., 2017), an increase in rumination linking stress and symptoms of depression and anxiety (Michl et al, 2013) and stress induced biological changes in the brain increasing vulnerability to depression and/or anxiety (Goh and Aguis, 2010; Duric et al., 2016).

Research indicates that anxiety and depression are the mental disorders that have the greatest negative impact on mental health and wellbeing with stress being a catalyst / precursor for some disorders directly, as well as a contributing factor for depression and anxiety disorders. If the current study is seeking to improve mental health and wellbeing, then further exploration of stress, depression and anxiety would be relevant particularly in relation to workplaces.

2.3.1 Depression

Definition / Symptoms – The DSM-5 criteria for depression states that for a diagnosis of depression '*The individual must be experiencing five or more symptoms during the same 2-week period and at least one of the symptoms should be either (1) depressed mood or (2) loss of interest or pleasure*.' (American Psychiatric Association, 2013)

Table 2.1 Depression DSM-5 Diagnostic Criteria

1. Depressed mood most of the day, nearly every day.
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day.
3. Significant weight loss when not dieting or weight gain or decrease or increase in appetite nearly every day.
4. A slowing down of thought and a reduction of physical movement (observable by others, not merely subjective feelings of restlessness or being slowed down).
5. Fatigue or loss of energy nearly every day.
6. Feelings of worthlessness or excessive or inappropriate guilt nearly every day.
7. Diminished ability to think or concentrate, or indecisiveness, nearly every day.
8. Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

It has been suggested that individuals suffering from depression experience a reduced quality of life, with the severity of the depression being associated with a reduction in their quality of life (Judd et al, 2000).

Treatment - The impact of depression on quality of life also indicates that even when depressive symptoms are reduced through medication, as indicated by clinical measures, quality of life does not always improve (Hirschfeld et al, 2002). This may be because the medication was targeting the symptoms of depression rather than the underlying cause, which continues to have a negative impact on quality of life and wellbeing (Spielmans et al, 2016). It has been argued that psychotherapy would be more effective for improving quality of life and wellbeing, with psychopharmacology focussing on treating depressive symptoms (Angermeyer and Kilian, 2006). A meta-analysis in 2017 found that a combination of Cognitive Behavioural Therapy (CBT) and selective serotonin reuptake inhibitors (SSRIs) were both associated with moderate improvements in quality of life, although the study notes that this may be through different mechanisms (Hofmann et al, 2017). The WHO recommends

psychological and/or antidepressant medication for moderate to severe depression, with psychosocial treatment the recommended approach for mild depression. This approach is mirrored by the National Institute for Health and Care Excellence (NICE) which recommends a stepped care approach, based on the severity of depression, which utilises both medication and psychological therapies (NICE, 2009).

2.3.2 Anxiety

Definition / Symptoms – Anxiety is defined by the American Psychological Association (APA) as an *'emotion characterised by feelings of tension, worried thoughts and physical changes like increased blood pressure. People with anxiety disorders usually have recurring intrusive thoughts or concerns. They may avoid certain situations out of worry. They may also have physical symptoms such as sweating, trembling, dizziness or a rapid heartbeat'* (APA 2021). Anxiety in common with low mood is a natural human state (Swift et al, 2014). It alerts us to potential danger and activates our *'Fight or Flight'* mode when a threat is perceived. Anxiety can act as a motivator but at excessive levels, or if experiencing a persistently anxious state, anxiety it has been argued, can lead to a wide range of anxiety disorders (Swift et al, 2014).

There are a number of disorders which come under the term Anxiety Disorder. The ICD-11's (WHO, 2020) category for Anxiety or Fear-related Disorders has 7 disorders detailed which are; Generalised anxiety disorder (GAD), Panic disorder, Agrophobia, Specific phobia, Social anxiety disorder, Separation anxiety disorder and Selective mutism. In addition to these there is substance-induced anxiety disorder, Hypochondriasis, Secondary anxiety syndrome, Other specified or fear related disorders and Unspecified anxiety or fear related disorders. This long list of anxiety disorders each have their own diagnostic criteria under the central theme of anxiety. There is also Mixed depressive and anxiety disorder, which is listed under the Depressive disorders category. The ICD-11's (WHO, 2021) categorisation of anxiety is similar to the DSM-5 (APA, 2021) which also breaks the term anxiety down into the main sub categories of; Generalised anxiety disorder (GAD), Panic disorder, Agrophobia, Specific phobia, Social anxiety disorder and Separation anxiety disorder. Each of these again in common with the ICD-11 (WHO, 2020) has its own diagnostic criteria and suggested treatment.

Treatment – While there are a wide range of anxiety disorders with specific treatment pathways for each, the NICE guidelines at the time of this study (2021) provide specific guidance on; Obsessive Compulsive Disorder and Body Dysmorphic Disorder, Generalised Anxiety Disorder, Social Anxiety Disorder, Panic Disorder and Post-Traumatic Stress Disorder (PTSD). For all of these disorders NICE recommendations include both psychological and/or pharmacological interventions. The psychological interventions for all disorders include

Cognitive Behavioural Therapy, with other interventions specific to the disorder such as Eye Movement Desensitisation and Reprocessing for PTSD.

A meta-analysis which looked at the results of 41 randomised placebo-controlled trials of Cognitive behavioural therapy (CBT) for anxiety and related disorders (Carpenter et al, 2018) concluded that CBT is a moderately efficacious treatment for anxiety disorders when compared to placebo. NICE's 2020 review, referred to as a Surveillance Summary, of the evidence for CBT for GAD and mixed anxiety disorders, drew together the results of six systematic reviews and reported the following –

Table 2.2 NICE 2020 Surveillance Summary of CBT for people with GAD and mixed anxiety disorders report.

CBT is superior to relaxation therapy based on pooled effects estimates across all anxiety outcomes for a mixed anxieties population but that the therapies are equivalent for outcomes in GAD and panic disorder populations.
CBT is superior to placebo tablets based on pooled effects estimates for disorder symptoms and anxiety symptoms across all anxiety outcomes for a mixed anxieties population.
CBT has significant treatment effects compared with controls on depressive and anxiety disorders treated in a primary care setting.
CBT augmented with d-cycloserine was not superior to CBT plus placebo for pooled anxiety estimates at treatment endpoint or 12 months' follow-up.

While CBT is the recommended psychological therapy for anxiety disorders there are those that challenge this position, arguing that all bona-fide treatments intended to be therapeutic are equally efficacious (Bardseth et al, 2013; Tolin 2010).

2.3.3 Depression and Anxiety…Prevention is better than Cure

The preceding sections on Depression and Anxiety illustrate the negative impact of each and indicate the recommended approach to diagnosis and treatment. There is also a large body of research on prevention, which is being considered together as the outcomes of these studies often indicate an effect on more than one issue. An example of this is a study that delivered a brief cognitive behavioural theory-based intervention targeted at preventing depression and anxiety (Seligman et al., 2007). This study indicated that the intervention was successful in having a preventative effect on depression and anxiety which had been

maintained 6 months later (Seligman et al., 2007). A review of Cognitive behavioural therapy (CBT), third-wave CBT and interpersonal therapy (IPT) based interventions for preventing depression in children and adolescents concluded that overall the results show small positive benefits of depression prevention, for both the primary outcomes of self-rated depressive symptoms post-intervention and depression diagnosis up to 12 months (Hetrick et al., 2016). The quality of the studies was identified as weakening the veracity of the conclusion, although this could arguably reflect the efficacy of applying medical model research methods to psychological interventions (Mohr et al., 2009). A systematic review and meta-analysis of eHealth interventions for the prevention of depression and anxiety in the general population reported a small but positive effect (Deady et al., 2017).

A meta-analysis of randomised control trials which looked at either the preventative or treatment efficacy of the '*Coping with Depression'* course, which is a cognitive-behavioural based intervention, reported a reduced risk of developing major depression and indicated that it was also an effective treatment (Cuijpers et al., 2009). A criticism of interventions to prevent depression is that they are not targeting the strongest determinants of risk. This position views depression as a symptom of social and structural risks rather than seeing it as sited in the individual (Ormel et al., 2019). This aligns with the position of this study that while a workplace intervention can be helpful it is also important for the workplace to address the underlying issues. While this study's participants are adults applicable research on children and adolescents were considered for example a systematic review and meta-analysis of six decades of preventing and treating childhood anxiety disorders reported CBT as effective for preventing and treating childhood anxiety-across a range of ages and formats (Schwartz et al., 2019). Another study, a meta-analysis which examined the joint efficacy of universal, selective, and preventive interventions upon both depression and anxiety among children and adolescents, indicated a reduced risk of disorder onset and reduce symptom levels for internalising disorders for up to 12 months after the intervention a finding that could also be relevant to adults. While research indicates, for both depression and anxiety, that preventative interventions can have a positive impact this good news is tempered by the effect found being small and that while these interventions have been developed, they have not been widely implemented. This indicates that this study's intervention development needs to consider not only the intervention's efficacy but the factors that encourage dissemination of the intervention's content both through the participants and through employers enabling their employee's participation.

2.3.4 Stress

The NHS describes stress as *'the body's reaction to feeling threatened or under pressure'* (NHS, 2021). The NHS information goes on to explain that stress is very common and can be motivating, before cautioning that *'too much stress can affect our mood, our body and our relationships – especially when it feels out of our control. It can make us feel anxious and irritable and affect our self-esteem. Experiencing a lot of stress over a long period of time can also lead to a feeling of physical, mental and emotional exhaustion, often called burnout'* (NHS, 2021). The impact of chronic stress on health, both physical and mental, is significant. For example, chronic stress has been found to have negative impacts on the following physical systems; musculoskeletal respiratory, cardiovascular, reproductive (male and female), endocrine, gastrointestinal and nervous (American Psychological Association, 2018). The mechanism for the physiological response to stressors acknowledges the mediating effect of the psychological response in terms of categorisation and behavioural adaptions to the stressor (Tsigos et al, 2020).

The normalising rather than pathologising of reactions to extreme events or longer-term traumatic experiences, whilst still recognising that support may be required, is a significant change from earlier DSM-5 (APA, 2013) and ICD-11 (WHO, 2021) editions which were criticised for portraying *'normal'* responses to extreme situations as maladaptive (Maercker et al, 2013). Another aspect of the current categorisation of stress-related disorders is that there is a Western cultural predominance which doesn't consider other cultures *'normal'* reactions to stressors (Suzuki, 2013). For example, the length of the grieving process, which may be longer in some cultures than others, is not indicative of a maladaptive response (Suzuki, 2013).

A model that seeks to explain why different people react to stressors in different ways is the Stress-Vulnerability model (Zubin and Spring, 1977), which the American Psychological Association defines as '*the theory that a genetic or biological predisposition to certain mental disorders (e.g., schizophrenia, mood disorders) exists and that psychological and social factors can increase the likelihood of symptomatic episodes'* (American Psychiatric Association, 2021). A criticism of the stress-vulnerability model is that is places too large an emphasis on genetics, the subjectivity of stress, non-specificity of vulnerability, and is unclear in its distinction between stress and vulnerability (Rudnick and Lundberg, 2012). Two studies, Price (1999) and (Schwandt et al, (2018) which were wide ranging literature reviews, found that the Stress-Vulnerability model can be helpful for identification and treatment of mental disorders, with it being most effective when applied as an integrated multi-factorial approach, which recognises the interaction between social, psychological and biological vulnerabilities in the emergence of mental health disorders. This multifactorial perspective is a cornerstone

of this study's intervention, which provides strategies and techniques which target social, psychological and biological vulnerabilities. This approach also accommodates the group format of the intervention which lacks a formulation on individual needs and therefore compensates for that by providing a wide range of strategies and techniques enabling individuals to select those that are most relevant / appropriate for their needs.

There are also positive consequences of stress, with research showing that when individuals feel positively challenged then this can lead to growth and increased competence (Lepine et al., 2005). Further research indicates that positive stress includes elements of hope, positive affect, vigour, meaningfulness, manageability, satisfaction, and commitment, which results in a positive experience of the situation (Nelson and Simmons, 2011). This informs the inclusion of cognitive reframing techniques in the intervention which enables the individual to consider and adapt, if helpful, their categorisation and in turn response to a potential stressor (Robson and Troutman-Jordan, 2014).

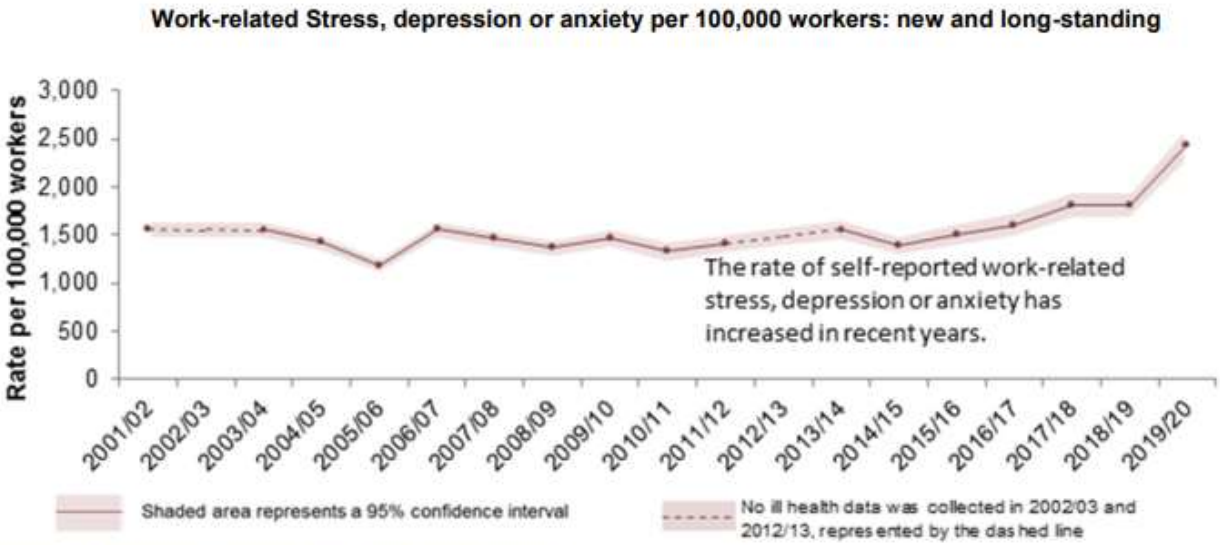
Treatment – The NHS provide a range of suggestions for individuals who are seeking support for high levels of stress which includes self-help suggestions such as; exercise, breathing exercises, time management techniques and relaxation (NHS, 2021). In the literature there is a strong link between managing stress and coping strategies (Matheny et al, 1986; Chao, 2011; Bakan and Inci, 2021). There are also many studies that echo the NHS approach of identifying a range of self-help strategies that can help in reducing stress levels (Hellebrand, 2017; Mohsin and Wahab, 2013; Linden et al., 1999).

2.4 What impacts workplace mental health and wellbeing?

Research on workplace mental health and wellbeing, has identified the same three key issues; stress, anxiety and depression as having the greatest negative impact on employees (Lelliot and Tulloch, 2008; CIPD, 2021; Stevenson, 2017). An insight into the prevalence and impact of this triad is provided by the Health and Safety Executive (HSE) whose data at the inception of this study in 2018/19 data showed 602,000 workers were off work due to stress, anxiety or depression (HSE, 2019). The latest available data, released in November 2020, based on the 2019/2020 Labour Force Survey states that 828,000 workers were suffering with stress, depression or anxiety which is an increase of 37.5% from the previous year's data. The number of working days lost due to work-related stress, depression and anxiety shows an even larger increase, of just under 40% from 12.8 million working days lost in 2018/19 to 17.9 million in 2019/20 (HSE, 2020). In 2018/19 stress, depression or anxiety accounted for 54% of all working days lost due to ill health in the UK (HSE, 2019) this had increased to 55% in 2019/20. The HSE also showed that stress, depression, or anxiety were more prevalent in public services sectors such as education, health and social care and public administration

and defence (HSE; 2020). The data provided further detail on the occupations which showed higher stress levels compared to all jobs. These were professional occupations common across public service industries, such as healthcare workers, teaching professionals and public service professionals.

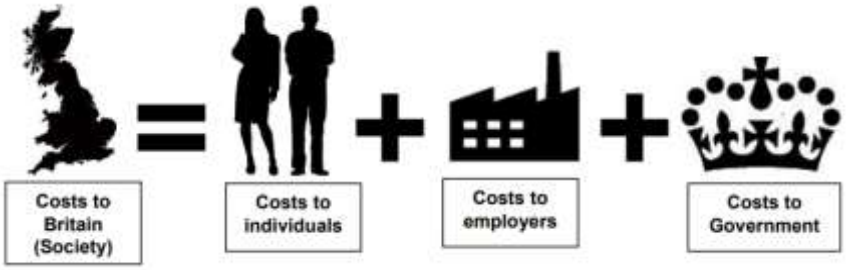
Figure 2.4 Work-related Stress, Depression or Anxiety per 100,000 workers: new and long-standing



Source: LFS annual estimate, from 2001/02 to 2019/20

In 2013/14 (the latest Figures available) the annual cost of work-related stress to British society was £5.2 billion (Stevenson, 2017). Based on the data in Figure 2.4, which shows that work related stress, depression or anxiety per 100,000 workers has increased significantly since 2013/14 it is likely that this Figure of 5.2 billion has also increased significantly. When calculating the 'Costs to Britain' of stress, depression, and anxiety, the total cost of 5.2 billion was made up of the cost to individuals, employers and the government.

Figure 2.5 'Costs to Britain' - Cost bearers included in estimate of the total cost to society (Stevenson, 2017)



The cost to individuals considered the loss of income due to their absence from work (net of benefits and compensation payments) and a monetary estimate of the effect to quality of life

and out of pocket monetary expenses. The methods used to calculate these costs were reviewed by the European Agency for Safety and Health at Work (de Weerd et al, 2014), with a variety of methods being used and their strengths and weaknesses assessed. It is perhaps noteworthy that within this report there are 25 references to potential underreporting within the data, and yet there is no mention of the potential for the figures to be inflated. This means that the likelihood is that the already high figures may in reality be higher still. The costs to employers included the cost of reorganising work due to the worker being absent. In addition, there is the cost of sickness payments, the cost of Employers' Liability Compulsory Insurance as well as the cost of administering the absence and legal costs. The cost to the government included the state benefit payments to the worker, loss of tax receipts from the worker and the cost of National Health Service (NHS) treatment. This indicates that an intervention that could mitigate some of these costs may be welcomed by employers and other parties such as government both local and national and the NHS.

The HSE Figures have been collated from the Labour Force Survey and the Health and Occupation Research network for General Practitioners (THOR-GP) across Great Britain, which is the system that GP's use to log an individual's condition and cause (HSE, 2020). Both of these data sets are based on individuals who have sought support and been signed off work sick. However, research indicates that 60% to 70% of people with common mental disorders (such as depression and anxiety) are in work (Black, 2016). This presenteeism which is defined as '*the practice of being present at one's place of work for more hours than is required, especially as a manifestation of insecurity about one's job'* (Oxford Languages, 20215) makes the potential scale of the issue even greater. As Black's (2016) research indicates that there is a significant drop in performance when employees are suffering from a mental disorder even before it reaches the clinical threshold.

While HSE grouped stress, depression and anxiety together other studies tend to focus on either stress (Patterson et al, 2014; Jacobs et al 2018; Strauss et al 2018), depression (Tan et al, 2014) or anxiety (Joyce, 2016), rather than looking at the participants overall wellbeing and viewing levels of stress, anxiety and depression as aspects of this. Grouping stress, depression and anxiety together could be viewed as a weakness in the data, as it means that the individual factors are not as clear. However, there is strong evidence of comorbidity between workplace stress, anxiety and depression (Al-Asadi et al, 2014; Lipschitz et al, 2015; Verbeek et al, 2018) which means that amalgamating the research on workplace mental health and wellbeing potentially provides a clearer view of their combined impact. Another potential weakness is that there is a complex interaction between work and home life factors related to stress, anxiety, and depression, so focussing on workplace strategies alone is unlikely to be as effective as treating the person holistically (Moffitt, 2014) something that the intervention

design takes into account by providing strategies that can be applied in any area of the participant's life.

This section has identified that stress, anxiety and depression are the three aspects of mental health most affected by workplaces. The section has also outlined the scale and impact of poor employee mental health including the significant economic impact. The next section looks at the effect of work-related stress on the employee.

2.4.1 Work Related Stress

Work related stress has been identified as a significant problem for employee mental health and wellbeing (Hassard and Cox, 2011; World Health Organisation, 2019.) Numerous studies have drawn a direct link between work stress and negative impacts on mental health (Schonfeld et al., 2017; Ahola et al., 2014; Burke et al 1996; Montgomery and Rupp, 2005). The research indicates that stress impacts employee's mental health in a number of ways. A meta-analysis which considered the results of 17 studies concluded that there was a correlation between insomnia and higher levels of job stress, effort-reward imbalance, high demand, heavy workload, and low social support (Yang et al., 2018). While the study noted that the publication's bias and heterogeneity were partially observed, its conclusion is supported by a systematic review which also concluded that high work demands, job strain, bullying, and effort-reward imbalance were related to more sleep disturbances (Linton et al., 2015). Another review and meta-analysis of longitudinal studies described a link between the impact of work-related psychosocial stressors and the onset of musculoskeletal disorders in specific body regions (Hauke et al., 2011). A 2010 study following 25 suicides in a large French company over a two-year period, which were attributed to stressful working conditions, asked the question '*Do stressful working conditions cause psychiatric disorders?*' Their results were cautious but did conclude that the evidence suggested that excessive job demands in combination with low control over work or low social support at work, the experience of imbalance between high effort spent at work and low reward received, and unfair treatment of employees by the management are particularly stressful. This is supported by several other studies and the Health and Safety Executives (HSE) guidance which states, supported by substantial research, that workplace stress is linked to the development of psychological disorders (Joosen et al, 2015; HSE, 2019; HSE 2020; HSE 20202; Rick et al, 2002; Kerr et al., 2009; Smith et al, 2002). Other studies have drawn a direct link between work stress and suicide which underlines the need for action to reduce the stress burden on employees (Milner et al., 2017; Milner et al, 20172; Mouladdam et al., 2020; Howard et al., 2021). This section has reviewed the research linking work related stress to negative physical and mental health

impacts finding that there is a wide body of research which indicates this link. The next section focusses on the impact on individuals who are effected by workplace anxiety.

2.4.2 Anxiety in the Workplace

Employees with anxiety appear to be impacted in several ways. Research has reported that anxious individuals are prone to hyper-vigilance (Beck 1979), this sensitivity to threat has been suggested to increase distractibility (Bar-Haim et al, 2007), and self-doubt (Shell and Husman, 2008). Studies have also found a negative relationship between anxiety and performance (Proost et al., 2008; McCarthy et al., 2004). A counter argument to the negative impacts of anxiety has been put forward which posits that anxiety can have a positive impact on performance (Cheng et al., 2018). With hypervigilance for example linked to being more vigilant to errors, their surroundings and themselves (Elliott and McGregor, 1999; Eysenck and Deraksham, 2011) with another study reporting a positive relationship between anxiety and performance (Mughal et al., 1996). While this positive characterisation of anxiety helps to underline how different individual responses can be, the overall weight of evidence points to anxiety's negative impact on the individual's mental health and wellbeing and several factors of work performance (Cheng et al., 2018). A systematic review of 3361 public school teachers in America reported occupational factors including years on the job, job involvement, control, and satisfaction were associated with anxiety disorders. In people with an anxiety disorder these factors combined with psychosocial factors like perceived stress resulting in comorbidity with other disorders particularly with depression (Jones-Rincon and Howard, 2019). A study which looked at the link between work anxieties and work capacity impairment / sick leave, found that different work anxieties impaired different aspects of work performance (Muschella, 2016). The study indicated that work-related social anxiety linked to clinically relevant impairment in the capacity of assertiveness. This is particularly significant when considered in the context of the evidence from Weibelzahl et al., 2021 that work related social anxiety increased post pandemic, which could potentially magnify this effect. Research has identified that training in self-efficacy (Muschalla, 2014) and endurance (Limm et al., 2011; van Ruitenbeek et al., 2013) are potentially useful to counter this issue. A 2017 study supported these findings, stating that there was an '*anxiety-mitigating effect of self-efficacy'* which they want on to say 'is *particularly strong for generating adequate performance.'* (De Clercq et al., 2018). This is an interesting result as it also indicates that anxiety can be positively affected by training.

2.4.3 Depression in the Workplace

There is large body of evidence that workplace stress is linked to both depression and anxiety and that this effect has been magnified by the Covid-19 pandemic (Zhu et al., 2020; Chew et al., 2020; Du et al., 2020; Sharif et al., 2020). A systematic review and meta-analysis reported that that in common with previous studies (Wang et al. 2009; Stansfeld et al. 2012) the effects of job strain (job stress) may accumulate, therefore chronic exposure to job strain may be related to greater risks than exposure at a single point in time (Madsen et al., 2017). The conclusion was echoed by another meta-analysis which also reported that there is substantial empirical evidence that employees, both men and women, who report lack of decision latitude, job strain and bullying, will experience increasing depressive symptoms over time (Theorell et al, 2015).

As stress has been identified as a cause of insomnia this could in turn be linked to depression for example a large-scale meta-analysis reported that insomnia is a predictor of depression (Baglioni et al., 2011). A meta-analysis of longitudinal studies reported a link between shift work and poor mental health. The study indicated that negative impacts on employee mental health and wellbeing linked to the disruption of sleep patterns increased the risk of adverse mental health outcomes with a particular increase in depressive symptoms (Torquati et al., 2019). The study implications of this are significant when it is considered that 1 in 5 people in the United States and Europe are undertaking shift work (Parent-Thirion et al, 2016; Alterman et al., 2010). The Covid-19 pandemic has had a significant impact on most areas of life in the last 18 months therefore the next section will focus specifically on the pandemic's impact on workplace mental health.

2.5 What impact has the Covid-19 Pandemic had on Workplace Mental Health and Wellbeing?

In 2019/20, there were additional factors that are likely to impact the level of employee stress, anxiety, and depression. Notably, the Covid-19 Pandemic which has had a significant impact on individuals and workplaces in 2020. The Local Government Association (LGA) and the Association of Directors of Public Health (ADPH) identified six issues that could impact working age adults' mental health (Local Government Association and Association of Directors of Public Health, 2020) during the pandemic:

- Balancing work and home
- Being out of work
- Carer stress
- Anxiety about pandemic lockdown measures and family or dependents or children

- Financial worry
- Isolation

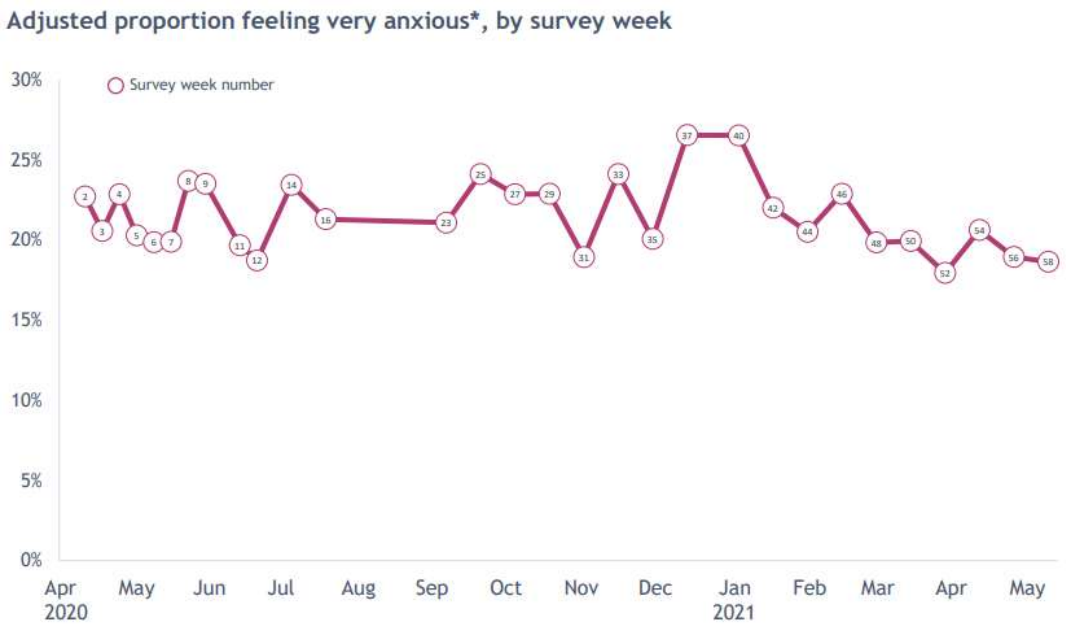
The LGA and ADPH also identified that the cumulative load of stress from factors including significant changes, traumatic incidents, loss, and isolation from work colleagues would also likely have a negative impact on mental health. These factors would be in addition to existing mental health issues or other factors that increased an individual's vulnerability to the impacts of Covid-19. It is interesting to note that the HSE report (HSE 2020) states that although the rate of self-reported work-related stress, anxiety or depression has increased significantly compared to previous years this may not wholly be related to Covid-19. They refer to a report entitled *'Potential impact of COVID-19 on HSE's main statistical data sources in 2019/20'* (HSE, 20202) which states that the data '*suggests that in the absence of COVID-19, we would still have seen an increase in rates'* (HSE2, 2020 p3) based on the established upward trend.

In 2021, the Chartered Institute of Personnel Development (CIPD) annual Health and Wellbeing at Work survey found that stress in one of the main causes of short and long-term absence, with 79% of their respondents reporting stress related absence in their organisation in the last year. For organisations with more than 250 employees this Figure rises to 91% (CIPD, 2021 p14). In 2021, perhaps unsurprisingly, Covid-19 related anxiety featured in the list of factors that caused stress, with 23% of the CIPD survey including it in their top three stressors. There were however, four factors that were more common stressors, with 59% naming workload, 32% management style, 31% stating the new work-related demands or challenges due to homeworking as a result of Covid-19 and 25% non-work factors such as relationships / family (CIPD, 2021 p14).

Both Public Health Wales and England's data shows the negative impact on public mental health of the pandemic and indicates that the effect coincides with increases in reported cases and periods of lockdown. Other research has found that the Covid-19 pandemic has had a significant negative impact on public mental health not just in the UK but across the world (Salari et al, 2020; Mukhtar, 2020; Kahn et al, 2020; Pakpour & Griffiths, 2020 and Boden et al, 2021). The negative impact has been magnified for those who had pre-existing mental health conditions (Lu and Bouey, 2020; Chatterjee et al, 2020).

The graph (Figure 2.6, next page) shows the proportion of adults feeling very anxious. Participants were asked to rate how anxious they felt that day, using a scale of 0 (not at all anxious) to 10 (completely anxious). Responses of 7-10 were categorised as 'very anxious'. This graph shows how anxiety levels have fluctuated over 13 months of the Covid-19 pandemic.

Figure 2.6 Public Health Wales 'Feeling Anxious' Data



Public Health Wales, 2021

When the Covid-19 pandemic recedes, it is expected that the negative economic impact of the pandemic will increase as there is a strong correlation between economic hardship and poor mental health (Evans-Lacko et al, 2013). A significant amount of research has been undertaken due to the scale and impact of employees who are either absent from work or their performance is impaired by stress, anxiety and depression, a situation that Covid-19 is likely to have exacerbated.

The two previous sections suggest that workplace mental health is a significant issue for the UK workforce, employers and the wider economy and that the pandemic will have further contributed to this issue. The next section explores what is currently being done to address workplace's negative impact on employee mental health and wellbeing.

2.6 What are employer's doing to address the workplace's negative impact on employee mental health and wellbeing?

In 2017, the Thriving at work - The Stevenson / Farmer Review of Mental Health and Employers, which was commissioned by the then Prime Minister, Theresa May, was published (Stevenson, 2017). The review is particularly interesting as it takes a systemic approach to mental health in the workplace providing recommendations for employers, public sector organisations and the government detailing the action they could take which they describe as *'mental health core standards – a framework for a set of actions which we believe all organisations in the country are capable of implementing quickly'* (Stevenson, 2017 p6).

For employers, they provided a 6-point plan (below) which they say is applicable and achievable for all sizes of organisation.

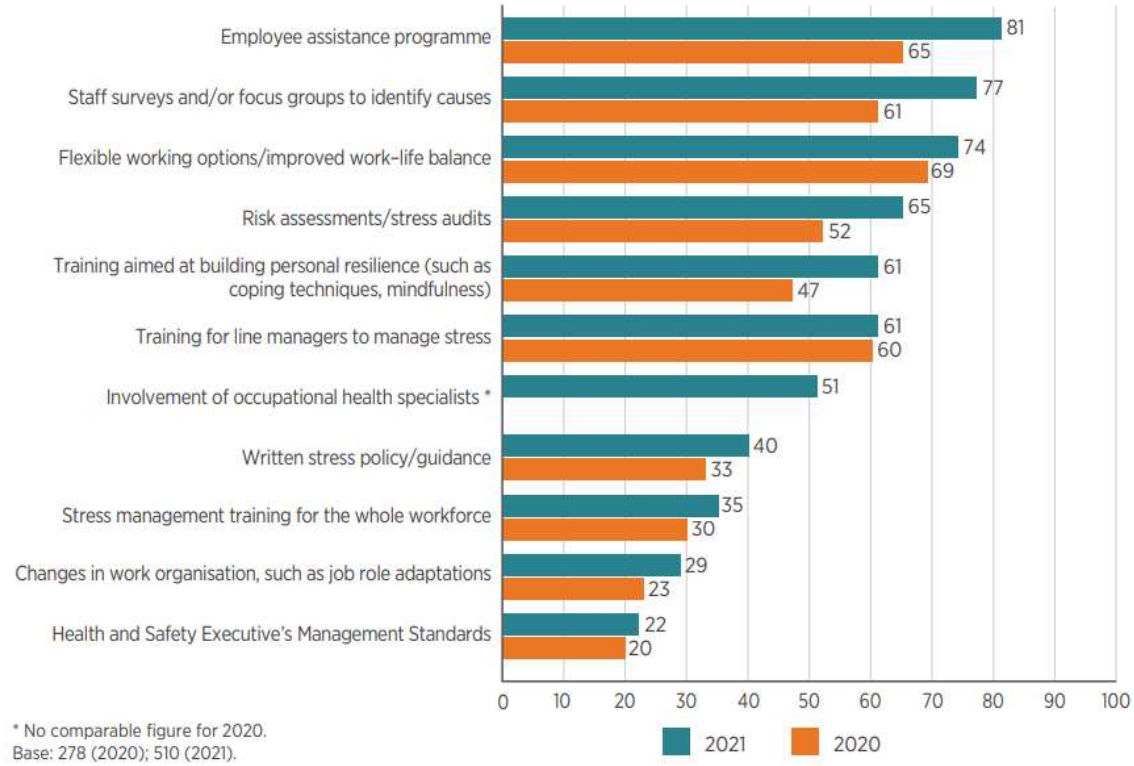
1. Produce, implement and communicate a mental health at work plan
2. Develop mental health awareness among employees
3. Encourage open conversations about mental health and the support available when employees are struggling
4. Provide employees with good working conditions
5. Promote effective people management
6. Routinely monitor employee mental health and wellbeing

The report goes on to provide recommendations for public sector organisations and Government. This *'top down'* approach to mental health contrasts with many employers' response to workplace mental health which is to primarily focus on mental health from a *'bottom up'* perspective. *This 'bottom up'* approach is illustrated by the graph on the next page (Figure.2.7) from the CIPD's Health and Wellbeing at Work Report 2021, which indicates that employee assistance programmes are the main response with training aimed at building personal resilience (such as coping techniques and mindfulness) being used by 61% of organisations.

It could be argued that the majority of employer responses to workplace mental health is therefore reactive, as the focus is on mitigating the impact once the employee's mental health has been negatively impacted, for example, by providing employee assistance programmes.

NICE Mental Wellbeing at Work guidelines (NICE[2], 2009) provide strategies for employers and identify gaps in evidence (NICE[3], 2009), which this research contributes to by being based in the UK and using validated measures. HSE and other organisations such as MIND (2018) provide organisations with advice on workplace mental health / wellbeing. However, this advice focuses on workplace systems, mental health awareness, policies, stress management training and occupational health strategies but does not specify a process for identifying and addressing existing employee stress, anxiety, depression, or wellbeing

Figure 2.7 Methods used to identify and reduce stress in the workplace. Respondents in organisations that are taking steps (%)



Source: CIPD, Health and Wellbeing at Work Report 2021 p15 (CIPD2, 2021)

The popularity of generic training such as Mental Health First Aid in the Workplace (MHFA, 2019) indicates that organisations and individuals are motivated to improve their mental health knowledge and that this benefits workplaces (Bovopoulos et al, 2009; Reavley et al, 2018). A criticism that could be levelled at workplace mental health and wellbeing related training is that it places the onus on the employee to develop their strategies in order to manage for example, the level of stress they are faced with rather than the employee being tasked with reducing this stress. If this approach was used in isolation, then this would be a valid concern. However, research indicates that in common with Health and Safety Executive's (HSE) Management Standards which are described by the HSE as *'…an organisational, preventative process for managing the risks to your employees from work-related stress...'* (HSE, 2019 p5) employers are also focussing on reducing stressors (Daniels et al., 2017)

The HSE standards cover six areas of work design which have been identified as being, if not properly managed, associated with poor health and wellbeing, lower productivity, and increased sickness absence all of which are related to stress at work.

1. **Demands** - Includes issues such as workload, work patterns and the work environment
2. **Control** - How much say do the people have over the way they work?
3. **Support** - Includes encouragement, sponsorship and resources provided by the organisation, line management and colleagues.
4. **Relationships** - Includes promoting positive working to avoid conflict and dealing with unacceptable behaviour.
5. **Role** - Do people understand their role within the organisation and does the organisation ensure roles are not conflicting?
6. **Change** - How is organisational change (large and small) managed and communicated?

Source Health and Safety Executive –
Tackling work-related stress using the Management Standards approach, 2019

Employer's responsibility for their employee's mental health is underpinned by their legal duty of care under UK health and safety legislation and common law, which includes mental health. Employees are increasingly utilising their legal right to call their employers to account of their mental health has been negatively impacted in the workplace. An indicator of this is the increase in employment tribunals citing disability discrimination related to mental health issues, which according to the Ministry of Justice latest Figures, saw an increase of 37% between 2017 and 2018 (Ministry of Justice, 2019).

This section has outlined employer's response to employee mental health and found that while efforts are being made, these could be seen as largely reactive, rather than proactive. The next section explores how psychology and specifically counselling psychologists could support workplace mental health.

2.7 What can Counselling Psychologists contribute to workplace mental health and wellbeing?

Counselling Psychology is one of the areas of psychology, with Counselling Psychologists defined by the British Psychological Society (BPS) as focussing '*on working with a tailored psychological formulation to improve psychological functioning and well-being, working collaboratively with people across a diverse range of disciplines*' (BPS, 20213). Counselling Psychology has a long tradition of working in organisations (Douglas et al, 2016; Woolfe, 1990). The focus of Counselling Psychologists was identified as the field emerged as deriving from six major sources:

1. A growing awareness among many psychologists of the importance of the helping relationship as itself a key variable in working with people.
2. A growing emphasis in the work of helpers on wellbeing as opposed to sickness.
3. A growing realisation of the value of counselling as a tool in organisational development and stress management.
4. A growing recognition of the need for a more articulated scientific basis for counselling.
5. A growing appreciation that counselling offers and appropriate form of employment for psychology graduates.
6. A growing acceptance of the humanistic value system underlying counselling psychology.

Woolfe 1990

It is interesting that these six statements were written over 30 years ago, yet they still offer a relevant insight into the role of Counselling Psychologists, reflecting as they do the humanistic / person centred value system which is one of the key differentiators between Counselling Psychologists and Occupational and Clinical Psychologists (Pugh and Coyle, 2010). This humanistic / person centred value system means taking a holistic, person- centred, non-pathologising position from which Counselling Psychologists are well placed to provide workplaces with the support they need to address the impacts of stress, anxiety and/or depression through psychotherapy which employees may access either independently, through the NHS or through an Employee Assistance Programme (EAP) (Douglas et al, 2016). Employee Assistance Programmes (EAPs) are described by the Employee Assistance Professionals Association (EAPA) as providing *'clinical and non-clinical elements designed to support employees on a broad range of personal and work-related issues'* (EAPA, 2021 p5). Employee Assistance Programmes, which are funded by employers, often provide employees with telephone, online or face to face counselling and/or mental health and wellbeing resources such as online self-directed support / advice (Kirk and Brown, 2003). The efficacy of psychotherapy / counselling is well established for example a meta-analysis of 153 randomised controlled trials (RCTs) involving 29,879 with depressive disorders found that psychotherapy improved functioning and quality of life (Kemenov et al, 2017). Another meta-analysis of RCTs, this time focussed on the long-term efficacy of psychotherapy on PTSD looked at 32 trials, with a total of 2935 participants and also found psychotherapy to be effective for treating mental health disorders and that these effects to be durable. It was noted however, that that the methodology and characteristics of the studies included in the analysis

indicated that the findings must be treated with caution (Kline et al, 2018). While Counselling Psychologists can provide psychotherapy to employees negatively impacted by their workplace which means that their input is coming only after harm has been caused, their role would ideally be more than this reactive response (Carroll, 1995). By taking a more proactive position, Counselling Psychologists can mitigate, prevent or minimise the negative effect of some workplaces by fully engaging with employers and employees through for example, training and consultancy (Attridge, 2012). One option to do this is utilising Counselling Psychologist's expertise and providing it to employers and to employees through interventions that target factors contributing to the development of, or protection from stress, anxiety and depression (Lane, 1993; Strawbridge, 2018). Counselling Psychology can provide an alternate, such as this study's integrative, humanistic, person centred and pluralist informed intervention, to the medical model of mental health that is predominant in some workplace training such as Mental Health First Aid (Douglas et al., 2014).

This section explored Counselling Psychology's approach to the workplace's negative impact on employee mental health and wellbeing. This brief review indicates that Counselling Psychology is able to make a valuable contribution to improving and protecting employee's mental health and wellbeing. The next section looks in more detail at existing psychologically informed workplace interventions for stress, depression and / or anxiety

2.8 What has been the impact of psychologically informed workplace interventions for stress, depression and / or anxiety?

A systematic meta-review of 5179 articles identified 140 studies which met the inclusion criteria of which 20 were deemed to be of moderate or high quality (Joyce et al, 2016). This meta-review found strong support for CBT based stress management and support for the efficacy of workplace psychologically informed interventions in aiding the prevention of common mental illness, as well as facilitating the recovery of employees diagnosed with depression and/or anxiety (Joyce et al, 2016). An issue that this study highlighted was the dearth of studies in this area that were categorised as of moderate or high quality. This could reflect the approach taken by the meta-review in deeming the characteristics of a moderate or high-quality study. In this case the review reserved its high rating to RCT studies. This is indicative of an issue in psychological research, specifically the expectation that in common with other areas of physiological research RCTs are the gold standard. This position appears to be taken by many reviews and meta-analyses despite research that indicates the structure of RCTs as being unsuited, in many circumstances, to the type of research that provides the insight psychologists are seeking (Phillips and Falkenström, 2021; Kazdin, 2021; Deaton and

Cartwright, 2018). Therefore, alternate approaches should be explored for example quasi-experimental design (Pavolovich et al., 2015) or qualitative research (Carey et al., 2016).

The majority of studies on improving resilience in adults have focussed on populations in high stress environments such as nurses in a hospital (Foster et al 2018), policewomen (Chitra and Karunanidhi, 2018) and sports competitors (Shoenfelt, 2016). An Australian study looked at the impact of an intervention which focussed on increasing resilience in mental health nurses (Foster et al, 2018). This found that by including a range of psychological techniques there was a significant positive impact on the participant's resilience, coping and their overall wellbeing. Another study which drew on cognitive behaviour therapy, mindfulness, emotional regulation, and stress management techniques and was delivered online, also indicated a significant increase in participant resilience (Joyce et al, 2018).

The additional impact of Covid -19 on employee's mental health and wellbeing indicates that training that has a positive impact on mental health and wellbeing could be particularly timely. Programmes that seek to optimise resilience and wellbeing have been found to be particularly effective in supporting those negatively impacted by the pandemic (Wald, 2020; Brooks et al, 2018).

A meta-analytic review of the Penn Resiliency programme indicates that a programme that targets resilience can have a positive impact on depressive symptoms (Brunwasser, Gillham, and Kim; 2009). The Penn Resiliency programme is a cognitive - behavioural group intervention designed for young people aged between ten and fourteen years. Another CBT based programme the Resourceful Adolescent Programme (RAP) which focuses on building resilience in young people was also found to reduce symptoms of depression (Stallard et al, 2013; Shochet and Ham, 2004). The success of these programmes indicates that a group approach, utilising CBT, that targets resilience can be effective and that improving levels of resilience can reduce depressive symptoms.

The efficacy of group CBT for depression is indicated to be applicable and effective in adults (Cuijpers et al., 2016; Okumura and Ichikura, 2014). Based on participant feedback, the secondary gains could include strengthening social skills and self-esteem (Neilsen, 2015). A meta-analysis indicates that workplace mental health interventions can reduce the level of employee depressive symptoms and that the effect was greater for interventions which were based on CBT as compared to mental health literacy or exercise – based interventions (Tan et al, 2014). An earlier meta-analysis looked specifically at workplace interventions impact on depression and anxiety this suggested that the interventions achieved a small positive impact on anxiety and depression (Martin, Sanderson and Cocker, 2009). This finding is challenged by a systematic review of interventions for depression in the workplace which concluded that

none of the interventions reviewed were sufficiently effective to be recommended as a method of managing depression in the workplace (Furlan et al, 2012).

A number of studies have indicated that the inclusion of techniques to increase assertiveness, in addition to improving resilience, would enable participants to proactively seek the appropriate support from their wider environment in order to reduce stressors (Begley, 2004; Warland et al, 2014; Yoshinaga et al 2018).

The efficacy of group interventions is supported by the National Institute for Health and Clinical Excellence (NICE) guidelines which provide the National Health Service (NHS) with clinical guidelines which recommends group therapy for mild and moderate depression (NICE, 2012). Bhui's 2012 synthesis of the evidence for managing stress at work from existing systematic reviews reported that cognitive-behavioural programmes produced larger effects at the individual level compared with other interventions such as fitness, wellness and relaxation programmes, although the study acknowledged that further research is needed to target gaps in the evidence. Another synthesis, Wagner et al., 2016 which was a synthesis of systematic reviews, looked at 3363 titles, from which they found 14 articles that met their inclusion criteria. These articles indicated that there was moderate evidence that workplace interventions, targeted at anxiety disorders, had a greater level of effectiveness. Group CBT is a recommended option for depression (NICE[4], 2009) and Generalised anxiety disorder (NICE[5], 2011). Whilst this is for clinical levels of depression and anxiety, CBT within workplace groups has also had good results when targeted at specific aspects of mental health, such as insomnia (Schiller et al, 2018). Combining CBT strategies with other workplace skills has also produced positive results (Bowie et al, 2017; Kimura et al, 2015). An issue with these studies is that subjective improvements didn't result in measurable impacts on job performance, such as a decrease in sickness absence (SA). SA requires a longitudinal study design which can be undermined by confounding variables. In addition, it has been argued that, as a measure of intervention success SA is flawed, as the success of the programme could actually increase SA by decreasing presenteeism linked to work related stress, where the individual attends work even when their performance is impaired due to ill health (Stromberg et al, 2017; Hemp, 2004).

There is also support for the inclusion in this study's intervention of positive psychology strategies and techniques. Positive psychology, as defined by Seligman and Csikszentmihalyi (2000 p5), '*is a movement in Psychology that seeks to increase the focus of research and interventions in the area, including the study of concepts related to healthy and positive individuals. The psychological aspects evaluated according to this perspective are both psychological traits and states, including strengths and virtues, optimism, resilience, self-efficacy, and others'.* The positive psychology approach has been used as part of workplace

interventions to either reduce stress and / or enhance wellbeing and has been found to achieve good results (Seligman et al., 2005; Park et al., 2004; Sin and Lyubormirsky, 2009; Seligman & Csikszentmihalyi, 2014). The focus of these interventions was to increase positive thinking and behaviours often through brief self-administered exercises, a strategy drawn on for this study's intervention (Layous et al., 2011; Quick and Henderson, 2016). There is strong evidence that psychological wellbeing can be improved using these types of interventions, although a wide range of aspects of wellbeing have been targeted by these interventions using a wide range of methods (Weiss et al., 2016; WHO, 2004; Hone et al., 2015; Bolier et al., 2013; Robertson et al., 2015).

The section has looked at the content of interventions that is suggested to have a positive impact on mental health and wellbeing, and / or reducing stress, depression or anxiety. The evidence provides a range of potential elements which could be included in this study's intervention, such as strategies to increase resilience and coping, CBT techniques and Mindfulness, as well as including aspects of positive psychology which could have a beneficial impact on workplace mental health and wellbeing. The next section explores the potential intervention content in more depth.

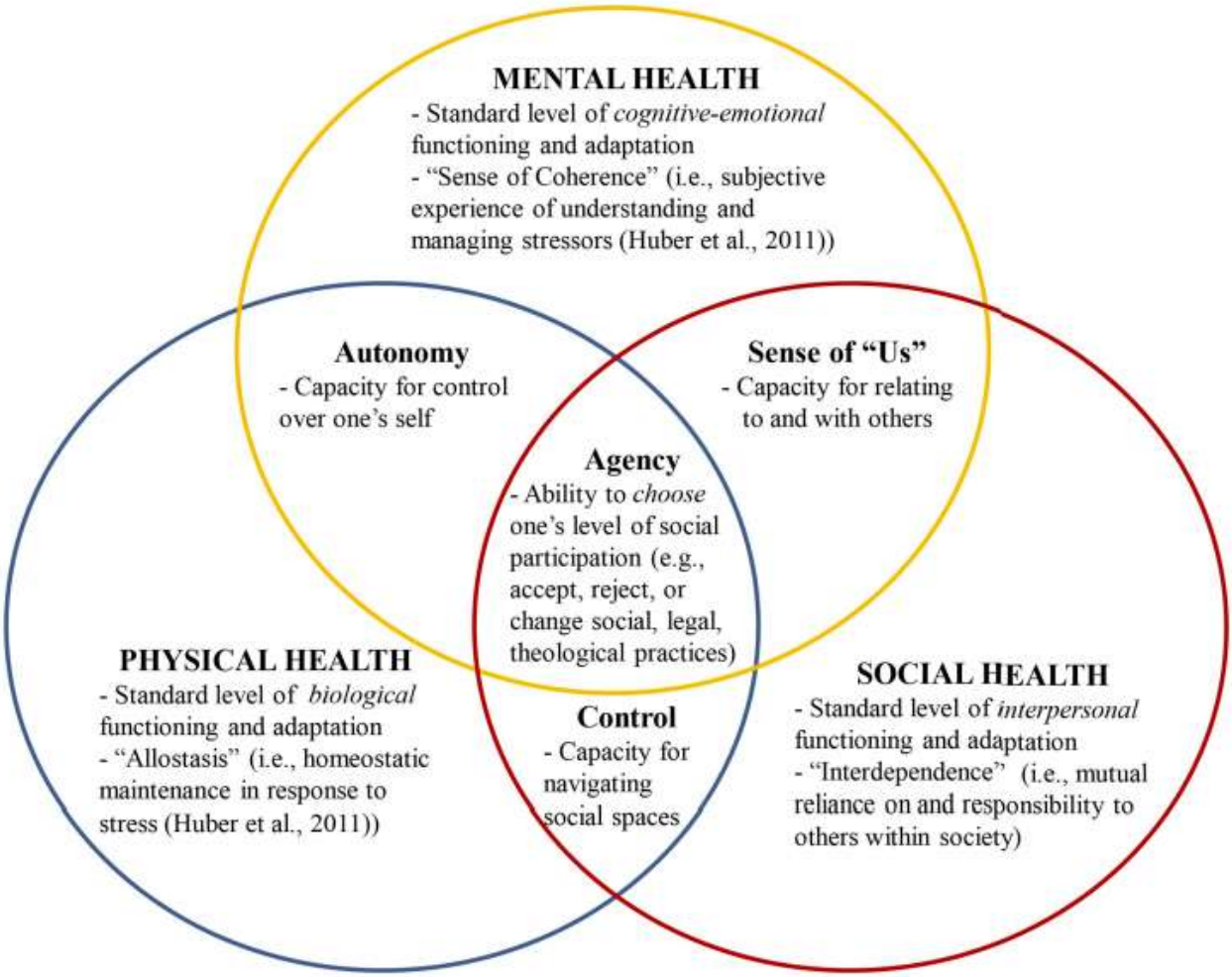
2.9 What would a proactive workplace intervention seeking to improve employee mental health and wellbeing informed by counselling psychology expertise include?

A useful starting point for this is Huber et al's (2011) study of the Transdomain Model of Health (see Figure 2.8) which builds on the WHO definition of health to provide four dynamic areas of integration: *'Autonomy', 'Sense of 'Us'', 'Control'* and *'Agency'* (Figure 2.8 next page). Huber et al's model puts forward a multi-domain model of health with wellbeing arguably being an individual's subjective experience of these domains (Huber et al, 2011). This viewpoint draws on Vaillant's criteria for mental health which Vaillant *'conceptualised as above normal'* and defined in terms of *'multiple human strengths rather than the absence of weaknesses'* (Vaillant, 2012 p94). The strengths Vaillant identified included maturity, resilience, positive emotionality, and subjective well-being (Vaillant, 2012).

Whilst a definitive definition of mental health is not readily available the exploration of the available definitions indicates that the Huber et al's Transdomain Model (2011) provides a useful perspective for informing this study's intervention design. This model sees mental health as having within its domain the need for a standard level of cognitive - emotional functioning and adaptation and a sense of coherence. In addition to this, mental health overlaps with the social health domain requiring a *'Sense of Us'* and the physical health

domain with a requirement for '*Autonomy*'. The central domain shared by Mental, Physical and Social health is the need for agency

Figure 2.8 Transdomain Model of Health



Huber et al, 2011

There is a wide range of research that supports Huber et al's (2011) position that self-agency is important in the enhancement and protection of mental health and wellbeing (Salloum et al, 2019; Brown and Westway, 2011; Masten et al, 2021). In terms of the current study, the perspective that mental health is dynamic and transdomain, provides support for the inclusion of a range of techniques and strategies that participants can select and/or tailor to their individual needs. Based on this section and the previous section the three areas that the research indicates the intervention could focus on are resilience, coping and internal assertiveness with the intervention ideally including positive psychology and being informed by the Transdomain model (Huber et al., 2011).

2.9.1 Resilience

The word resilience original meaning in the 1620's was *'the act of rebounding'* which was derived from the Latin word 'resiliens' which meant to *'recoil or rebound'* (Macmillan Dictionary, 2021). The definition that is offered by a contemporary dictionary, '*able to quickly become healthy, happy, or strong again after an illness, disappointment, or other problem*' is a meaning that only emerged and was applied to people in the mid 1800's (Macmillan Dictionary, 2021). While the various dictionary definitions such as Oxford Languages' '*the capacity to recover quickly from difficulties; toughness'* (Oxford Languages', 2021[2]) and the Cambridge Dictionary '*the ability to be happy, successful, etc. again after something difficult or bad has happened'* (Cambridge Dictionary, 2021) are very similar. A potential challenge when conducting research which includes the construct of resilience is that the psychological definition is more varied. In fact, resilience has been defined as a trait, a process and / or an outcome (Fletcher et al.,, 2013). Table 2.3 below illustrates the challenge for researchers as it provides some of the many definitions of resilience which are to be found in research.

Table 2.3 Definitions of Resilience

''Protective factors which modify, ameliorate or alter a person's response to some environmental hazard that predisposes to a maladaptive outcome'' (Rutter, 1987, p. 316).
''The process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances'' (Masten, Best, & Garmezy, 1990, p. 426).
''A dynamic process encompassing positive adaptation within the context of significant adversity'' (Luthar et al., 2000, p. 543).
''A class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development'' (Masten, 2001, p. 228).
''The personal qualities that enables one to thrive in the face of adversity'' (Connor & Davidson, 2003, p. 76).
''The ability of adults in otherwise normal circumstances who are exposed to an isolated and potentially highly disruptive event such as the death of a close relation or a violent or life-threatening situation to maintain relatively stable, healthy levels of psychological and physical functioning, as well as the capacity for generative experiences and positive emotions'' (Bonanno, 2004, pp. 20–21).

"Complex repertoire of behavioural tendencies" (Agaibi & Wilson, 2005, p. 197).
"The capacity of individuals to cope successfully with significant change, adversity or risk" (Lee & Cranford, 2008, p. 213).
"An individual's stability or quick recovery (or even growth) under significant adverse conditions" (Leipold & Greve, 2009, p. 41)

Table from Fletcher and Sarkar (2013 p13)

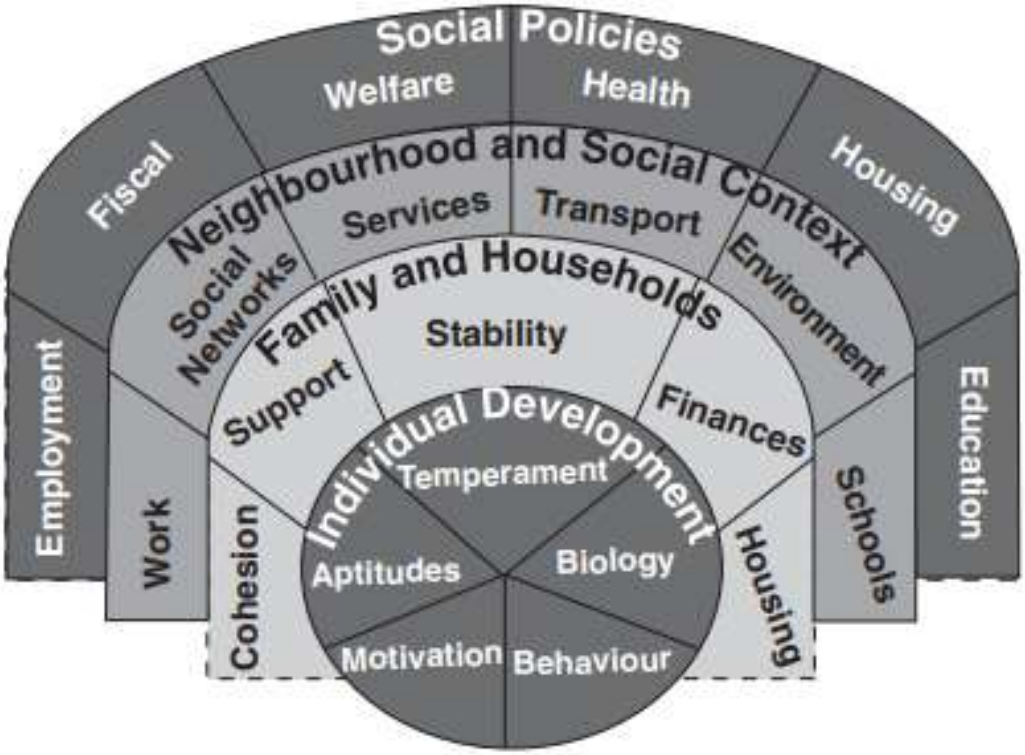
Whilst the definitions vary, a consistent factor is that resilience is manifest in the individual's response to what could be perceived as a negative situation. The word '*could'* is important when focussing on resilience, as how the person perceives a situation / event is a key factor in the impact that the event / situation has on them (Fletcher and Sarkar, 2013). The definition favoured by this study is Windle's, which has taken a multi-disciplinary approach to defining resilience. *'Resilience is the process of effectively negotiating, adapting to, or managing significant sources of stress or trauma. Assets and resources within the individual, their life and environment facilitate this capacity for adaptation and 'bouncing back' in the face of adversity. Across the life course, the experience of resilience will vary.'* (Windle, 2011 p152). This approach to defining resilience has taken into account the complexity of resilience as viewed as a dynamic interaction between external and internal factors, as detailed in Figure.2.9 (next page). It also applies the concept of resilience beyond the individual to the systems the individual is embedded with, which will in turn impact the individual's resilience. The Wimble definition positions resilience as a dynamic process which within the research paper, the notion that resilience is a trait is rejected as traits are described as being stable, whereas resilience is viewed as being dynamic as it changes across an individual's lifespan.

It is noteworthy that much of the research undertaken on resilience has viewed the positive adaption aspect of resilience from a Western psychological discourse (Ungar and Liegenberg, 2011). This position emphasises individual and relational capacities, for example a healthy relationship or work/academic success, which may not reflect how resilience would be manifested in different cultures.

Figure 2.9 on the next page provides a useful illustration of the layers of resources and assets that facilitate resilience. This systemic perspective situates the individual and their temperament, biology, behaviour, motivation and aptitudes within a much wider context. This multi-layered wider context includes first their family and household, then their wider neighbourhood and social context and finally the wider social policies that impact them. This

view of resilience recognises that resilience doesn't reside just within the individual rather the wider context the individual is subject to (Dahlgren & Whitehead, 1991, in Windle, 2011 p7).

Figure 2.9 Example of the layers of resources and assets that facilitate resilience



From A. Sacker, personal communication, September 2009;
adapted from Dahlgren & Whitehead, 1991, in Windle, 2011 p7

Fletcher and Sarkar (2013) provide a useful conceptual distinction between resilience and coping. They suggest the definition of resilience should incorporate the behavioural and the trait aspects of resilience. They see resilience as consisting of an interaction between how stressors are appraised, the metacognitive response to this, the emotions that are experienced, and the coping strategies (both behavioural and emotional) that are selected in order to protect the individual from any potential stressor negative impact. They contrast this with coping, which is viewed as only the individual's response to the stressor. The coping response could vary in its level of effectiveness in managing the stressor. The coping response could also potentially be maladaptive which in itself could result in negative outcomes (Thompson, 2010). The *'contextual severity'*, as Davydov et al described it (2010 p.479), of the challenge the individual is facing may, they speculated, call on different resilience mechanisms depending where on the spectrum of severity the challenge, for example, a *'mild adversity such as low-level work stress, to strong adversity such as a bereavement'*. Another aspect to resilience is its potential to be needed for circumstances that aren't necessarily negative, such as a job promotion, but still require the characteristics of resilience to navigate the situation (Fletcher and Sarkar, 2013).

There are differing views within the literature in terms of whether resilience is a trait or a process (Windle, 2011). One element of resilience has been linked to the feeling of self-efficacy (Judge et al, 2002). Research has found that improved resilience has a positive impact on mental health (Farber and Rosendahl, 2018) and that resilience can be improved by training (Joyce et al, 2018). When designing the Connor-Davidson Resilience Scale (Connor and Davidson, 2003), which was one of the scales used in this study, the developers drew up a list based on research of the characteristics of resilient people (Table 2.4 below). The list provides a useful resource when developing an intervention which seeks to improve resilience, as it breaks the construct of resilience down into its component parts enabling the intervention to integrate strategies and techniques that fit with and enhance these characteristics (Connor and Davidson, 2003).

The research, on the impact of workplace training on employee stress (Richardson and Rothstein, 2015), depression, anxiety (Joyce et al, 2016) and wellbeing (Strauss et al, 2018, Johnson and Wood, 2017), indicates that resilience is an important aspect of employee wellbeing and performance in the workplace (Robertson et al, 2015; Cooke et al, 2019; Foster2 et al, 2018; Nadeem et al, 2019).

Table 2.4 Characteristics of Resilient People

Reference	Characteristic
Kobasa, 1979	View change or stress as a challenge/opportunity
Kobasa, 1979	Commitment
Kobasa, 1979	Recognition of limits to control
Rutter, 1985	Engaging the support of others
Rutter, 1985	Close, secure attachment to others
Rutter, 1985	Personal or collective goals
Rutter, 1985	Self-efficacy
Rutter, 1985	Strengthening effect of stress
Rutter, 1985	Past successes
Rutter, 1985	Realistic sense of control/having choices
Rutter, 1985	Sense of humor
Rutter, 1985	Action oriented approach
Lyons, 1991	Patience
Lyons, 1991	Tolerance of negative affect
Rutter, 1985	Adaptability to change
Current	Optimism
Current	Faith

From Connor, K.M. and Davidson, J.R., 2003. Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). Depression and anxiety, 18(2), pp.77

There is evidence that resilience training specifically is effective, for example, Joyce's meta-analysis in 2018 (Joyce, 2018) which looked at resilience focussed programmes which drew

on CBT and Mindfulness techniques, concluded that interventions which were a combination of CBT *and* Mindfulness did appear to have positive impact on individual's resilience. Another meta-analysis which looked specifically at workplace resilience building programmes, found evidence that programmes were effective in improving personal resilience and had wider benefits on mental health and subjective well-being in employees but, the wide range of study design and implementation made drawing firm conclusions challenging (Robertson et al, 2015). Resilience has also been found to mediate the relationship between perceived stress and stress reaction (Fishman, 2012). This is important as the previous sections outlined the significant negative impact of stress in the workplace, therefore if levels of resilience can be increased by the intervention, this is likely to reduce stress levels, and in turn increase wellbeing. There has been a wide range of research on resilience with emergency service personnel. The results of this have been positive with clear benefits of resilience training for these high-pressure jobs being found (Chitra and Karunanidhi, 2021; Henderson, 2015). This brief review of resilience has informed the inclusion of strategies to improve resilience in this study's intervention. The next section looks at the impact of intrapersonal assertiveness on mental health and wellbeing.

2.9.2 Intrapersonal (Internal) Assertiveness

The definition of assertiveness is *'confident and forceful behaviour'* (Oxford Languages, 20214). The term is often used in the context of interpersonal communication, however, in this study the term was in the context of intrapersonal communication. The focus within the intervention was on the internal assertiveness which draws on the concept of negative automatic thoughts (NATs) from the cognitive behavioural therapy (CBT) perspective. The British Association for Behavioural & Cognitive Psychotherapies (BABCP) describes CBT as '*a family of talking therapies, all based on the idea that thoughts, feelings, what we do, and how our bodies feel, are all connected. If we change one of these we can alter all the others.'* CBT is based on the cognitive model which hypothesises the people's emotions, behaviours and physical response are influenced by their perception of events (Beck, 2011[2]). A specific aspect of CBT that the present intervention included was the concept of negative automatic thoughts and how to challenge them. The American Psychological Association defines *'automatic thoughts'* as '*thoughts that are instantaneous, habitual, and nonconscious. Automatic thoughts affect a person's mood and actions'* (APA 2021[2]). Automatic thoughts were described by Beck in 1964 *as 'a stream of thinking that coexists with a more manifest stream of thought'* (Beck 1964 in Beck 2011[3]p 137). While these automatic thoughts are believed to be common to everyone it is when these automatic thoughts are negative that the CBT approach is to evaluate and respond to these thoughts in an alternate way, for example by testing or challenging these thoughts. This noticing and challenging of negative automatic

thoughts was termed in the intervention as '*internal assertiveness'* and within the intervention strategies provided to participants as '*Challenging the Poison Parrot'.*

Workplace interventions using CBT are consistently found to be effective (Furlan, 2012; Martin et al 2009; Hopkinson, 2018). However, many studies omit the participant '*voice'* in terms of their subjective experience of the intervention (Bhui, 2012; Bartlett, 2019). This has been touched on in the earlier section's consideration of RCT studies, which are often focussed on quantitative rather than qualitative measures. This means that participant's subjective experience is not captured and therefore important information on the real-world impacts of an intervention are missed (Moller, 2011).

Negative automatic thoughts have been linked to both depression and anxiety disorders (Breznoscakova, 2017). An analysis of research published between 1990 and 2011 concluded that multi-modal interventions which included CBT resulted in the most consistent and significant results for reductions in workplace stress and its impacts on anxiety, depression and absenteeism (Bhui et al, 2012). Another study which focussed specifically on reviewing randomised controlled trials and controlled before and after studies which aimed to prevent or reduce occupational stress in healthcare workers, also identified interventions with CBT as having the most significant effect. However, they concluded that the quality of the evidence was low (Ruotsalainen et al, 2016). CBT has also been found to assist people in changing their thoughts and/or behaviour by increasing their level of motivation (Ryder, 1999). Based on this brief review this study's intervention integrated CBT strategies including those that utilised intrapersonal assertiveness to mitigate the impact of negative automatic thoughts.

2.9.3 Coping

'Coping is the effort to manage psychological stress', this was the short description of coping provided by leading researchers Lazarus and Folkman, in their 1984 (p13) seminal work *'Stress, Appraisal, and Coping'.* They went on to define coping *as 'constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person'* (Lazarus and Folkman, 1984 p13). This definition was later augmented by adding that cognitive and behavioural efforts are constantly changing *'as a function of continuous appraisals and reappraisals of the person–environment relationship'* (Folkman and Lazarus, 1991 p208). When categorising a situation's level of stress two core forms of appraisal have been described, primary appraisal and secondary appraisal (Lazarus and Folkman, 1984). The primary appraisal decides if the situation is benign-positive, irrelevant or stressful. If the primary appraisal categorises the situation as stressful then the secondary appraisal decides what can be done to manage the stressor and any subsequent distress. At this stage the individual identifies and evaluates the

coping resources they have, their previous coping style and the specific situation's variables (Dewe and Cooper, 2007). These factors then form the individual's response to the stressor, with the aim of either managing the stressor, which is problem focused coping or, regulating the emotions elicited by the stressor, which is emotion focused coping (Lazarus and Folkman, 1984[2]). How successful the coping strategy applied is, in responding to the stressor, then informs the individual's response to future stressors. An emotion focussed response has often been viewed as a maladaptive coping strategy, as these strategies include escape or avoidance, which are viewed as negative strategies associated with adverse outcomes (Folkman and Moskowitz, 2004). This view has been challenged with the alternate perspective that no strategy is intrinsically effective or ineffective. Instead, the strategies effectiveness is determined by its fit and context to the appraisal and situational conditions (Dewe and Cooper, 2007; Cooper and Quick, 2017).

If having coping strategies that best fit the situation / context is optimum, then having a wide range of coping resources would seem ideal. This is supported by research as having a mix of coping resources has been found to be positively related to wellbeing (Petru and Jarosova, 2019). The Petru and Jarosova, 2019 study also found that an extensive range of coping resources provided better life satisfaction and improved physical and mental health as well as acting as a mitigating factor against stress and burnout (Petru and Jarosova, 2019). This finding was also supported by research undertaken to explore the protective role of, coping strategies and defence mechanisms on participants perceived life satisfaction and level of stress during the Covid-19 pandemic. This research found that coping strategies, positive attitude, and mature defences partially mediated the negative impacts on life satisfaction and perceived stress (Gori, Topino and Di Fabio, 2020).

Thomson and Gomez's, 2014 study found that the interaction between an individual and their work environment is the best predictor of subsequent strain (stress). The moderators for this effect were self-esteem and self-efficacy. Their results indicated that self-efficacy, moderated the relationship between role ambiguity and depression and between performance role ambiguity and stress. Self-esteem was found to act as a moderator between role ambiguity and anxiety and between performance role ambiguity and anxiety and stress (Thomson and Gomez, 2014).

The British Psychological Society's division of Occupational Psychology produced a white paper in 2010 which stated that evidence indicated three main levels of workplace intervention to improve mental health: work context, work content and individual (BPS, 2010). At the individual level the suggested intervention was '*Training in resilience, stress management and psychological flexibility'* (BPS, 2010 p5).

This section's review of coping related research indicates that including strategies for increasing coping would be a valuable addition to this study's intervention. The preceding sub-sections, drawing on research up to the current day have identified resilience, internal assertiveness and coping, as areas for this study's intervention to target in order to improve levels of stress, anxiety and/or depression. The next section expands on how the previous sections insights informed the current study's intervention.

2.10 The Current Study

This research is a pilot study testing the efficacy of an eight hour live online Assertive Resilience training programme (delivered in four two-hour sessions by the researcher (also referred to in this study as the trainer), once a week for four weeks). The training provides participants with a range of skills and strategies inspired by cognitive behaviour therapy, mindfulness, emotional regulation and stress management techniques to proactively protect and enhance their resilience and assertiveness with the aim of this having a positive impact on their wellbeing and performance.

This study focuses on two workplaces whose staff, whilst undoubtedly subject to stress, would not be classed either as high risk for example the police, high pressure for example nursing or highly competitive for example sport. The intervention, due to Covid-19 restrictions, was delivered online to small groups of participants. This study's UK based participants work in low to moderate stress environments. The intervention is aiming to have a measurable positive impact, as indicated by the measures and the participant qualitative feedback on the participant's mental health and wellbeing. The negative impact of workplace mental health issues means that a short online training programme that aims to improve mental health and wellbeing for individuals working in a low to moderate stress workplace, by building resilience, coping strategies and internal assertiveness would provide employers with a useful tool.

When designing the intervention, a different approach was taken to psychoeducation interventions in Welsh primary care, where the interventions are tailored to the specific mental health issue such as stress, anxiety, or depression (National Psychological Therapies Management Committee, 2017). This intervention, whilst including strategies and techniques which applied to managing stress, reducing anxiety and alleviating depression, took the position that the information was useful to everyone as it could be applied proactively or reactively, as they were useful life skills / knowledge. To be effective the intervention is not simply imparting information rather it is seeking to elicit change. There has been extensive research on the efficacy of various methods of changing health behaviour for example exercise (Carron, Hausenblas and Mack, 2007), older adult activity (Husebø et al, 2013) and blood donation (Bednall et al, 2013). A meta-analysis of these health-related intentions and

behaviours found that attitude, norm, and self-efficacy change will promote health-related intentions and behaviour (Sheeran et al, 2016). If this study's intervention is to be successful in improving mental health and wellbeing, then changing participant's negative attitudes, the norms that are applied to their mental health, and wellbeing and promotion of their self-efficacy would seem to be important (Arthur et al., 2003).

Due to the impact of Covid-19 on training delivery, specifically social distancing requirements this intervention was delivered live online through Microsoft Teams. Prior to the Covid-19 pandemic the research on the efficacy of training delivery online versus face to face offered a complex picture as definitions of types of online training delivery varied. Some analysis indicated little difference in learner outcome (Richmond et al, 2017, Isfahani and Moghadas, 2018) or equivalent outcomes (Power et al., 2020), others indicated face to face training had better learning outcomes (DuPaul et al, 2018). A consequence of the Covid-19 pandemic and the subsequent lockdown is the significant increase in individuals using online communication, this has been shown to have an effect on the participant's experience of live online training delivery as some participants may have become more familiar and comfortable with online communication (Wei and Chou, 2020). A question on participant's experience of the training delivery mode was included in the post intervention interview to explore this further.

Based on the finding of the literature review the study's research question is *'What impact does the Mental Health and Wellbeing Toolkit programme delivered online have on employee mental health and wellbeing?*' This research focus is informed by the potential for Counselling Psychology expertise to be applied in order to counter the significant negative impacts of poor workplace mental health and wellbeing. The study seeks to assess the efficacy of the counselling psychology derived intervention in improving employee mental health and wellbeing by developing employee's resilience, coping and internal assertiveness.

2.11 Summary

The literature review indicates that Depression, Anxiety and Stress are having a significant negative impact on the mental health and wellbeing of UK employees and that this negative impact has been further magnified by the Covid-19 pandemic.

Research on workplace interventions indicates that Resilience, Intrapersonal Assertiveness and Coping are factors which are linked to workplace health and wellbeing that these factors can be improved through workplace interventions. These findings have informed the content of this study's intervention which includes strategies and techniques targeted specifically at Resilience, Intrapersonal Assertiveness and Coping.

The research indicates that Counselling Psychology has an important proactive role to play in workplace mental health and wellbeing beyond the reactive role of supporting employees through psychotherapy who have already been negatively impacted by their workplace. This intervention's application of Counselling Psychologies approaches, knowledge and expertise is an example of Counselling Psychology proactively engaging with workplace mental health and wellbeing. This enables the Counselling Psychology *'voice'* to be heard in an area of practice which arguably has been more dominated by Occupational and Clinical psychologists (Douglas, 2016).

As levels of workplace mental health and wellbeing continue to decline, although there are many workplace interventions, research indicates that the development of a Counselling Psychology informed, proactive online workplace intervention would be a valuable contribution. The next chapter will detail the research methods employed to answer this study's research question *'What impact does the Mental Health and Wellbeing Toolkit programme delivered online have on employee mental health and wellbeing?'*

Chapter 3 Research Methods

In the previous Literature Review chapter, the background to this study was explored from the broader context of the need for a workplace mental health and wellbeing intervention, the impact of the Covid-19 pandemic on the workplace and this study and the individual mental health and wellbeing factors that inform the study's intervention content.

The Research Methods chapter provides an explanation of the theoretical framework used by this study. The chapter also details the design of the study, provides information on participants both their recruitment and the sample strategy. The chapter includes the materials and measures used in the quantitative research and why these were selected as well as the process for collecting and analysing qualitative data. There is also, a detailed explanation of the procedure the study followed and the actions taken to ensure the study maintained the appropriate ethical standards.

3.1 Design

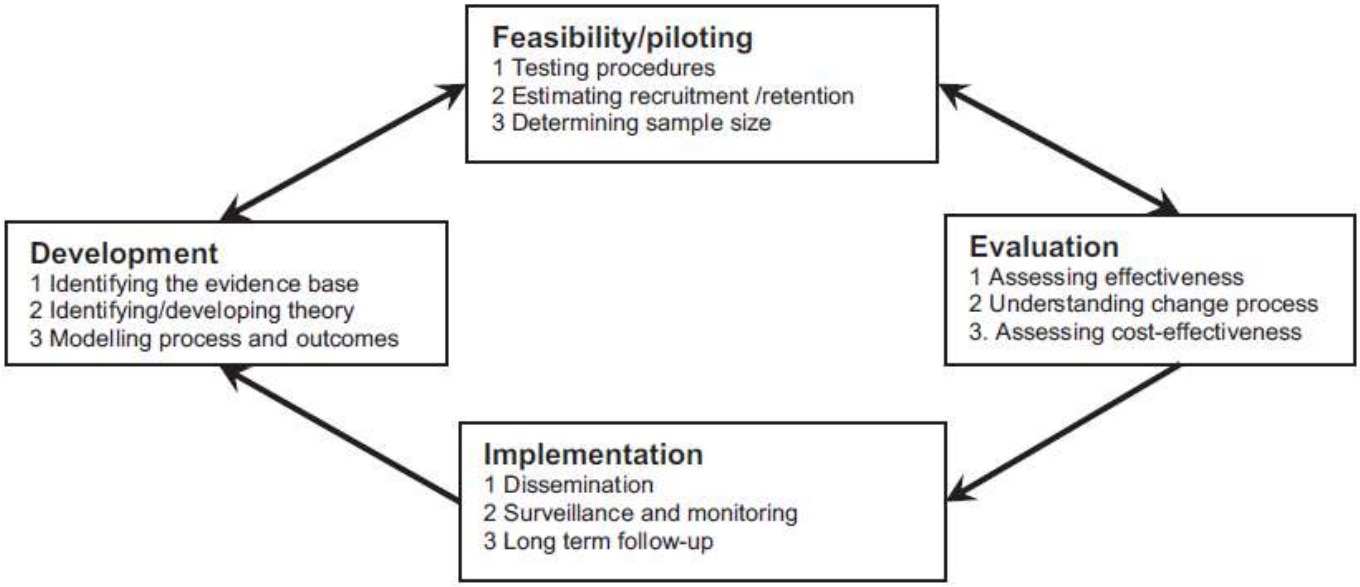
3.1.1 Theoretical Framework

The theoretical framework for this study has been informed by the two latest versions (2008 and 2013) of the Medical Research Council (MRC) guidelines, which provide guidance on the design and evaluation of complex interventions (Craig et al., 2008; Craig et al., 2013). The description of a complex intervention within the guidelines is "interventions that contain several interacting components, but they have other characteristics that evaluators should take into account" (Craig et al., 2013 p588). The guidance suggests that it is useful to view the development, evaluation and implementation of an intervention as phases (Figure.3.1, next page), whilst bearing in mind that the phases *'may not follow a linear or even a cyclical sequence'* (Craig et al., 2013 pp588).

This study applies the MRC guidelines at two levels. The study is a pilot study, so fits within the feasibility/piloting element with the function of reviewing the outcomes of the pilot to inform subsequent studies. The study also refers to the guideline within its structure, although as a pilot study some elements of the process for example assessing cost effectiveness and long-term follow-up are outside of the parameters of this study.

In the MRC's Development Phase, the identifying the evidence base, element of the process, seeks to identify similar interventions and how these have been evaluated (Craig et al, 2013). This process has been undertaken as part of Chapter 2, the literature review study section which includes a review of a range of interventions.

Figure 3.1 Medical Research Council's Development and Evaluation of Complex Interventions Framework



Craig et al., 2013 pp589

The Identifying / developing theory phase details the rationale for the complex intervention, what changes are expected and how these are to be achieved (Craig et al, 2013). The Modelling process and outcomes phase of the process informs a potential future study based on this pilot study's outcomes and has informed this study's intervention design (Craig et al, 2013).

As the study is a pilot study the Feasibility / Piloting phase of the MRC Development process, which includes testing procedures, estimating recruitment / retention and determining sample size is an outcome of this study and is therefore reviewed and reflected on as part of the future recommendations section (Craig et al, 2013). It is recognised that as a pilot with a small sample size the results must be *'interpreted cautiously'* (Craig et al, 2013 pp590) a factor that is reflected as part of the analysis and reflection in Chapter 6, the conclusion chapter of this study.

In the evaluation phase of the Medical Research Council (MRC) guidelines the study design is decided considering three elements. The first is assessing the effectiveness of the study, the second element is understanding the change process and the third is assessing cost effectiveness (Craig et al, 2013). Within this study the guidelines will be referred to when selecting the design that is best suited to assessing the effectiveness of the intervention. This includes, as the guidelines recommend, considering the study design options, issues such as selection bias, the appropriate experimental approach, how to measure outcomes and identifying the most appropriate statistical analysis. The study will also include in its evaluation, reflection on the change process and the implications of this both for the intervention design

and delivery and future studies of the intervention. It is beyond the scope of this pilot study to assess cost effectiveness.

Aspects of the MRC Implementation phase which includes dissemination, surveillance and monitoring and long-term follow-up will be, as the framework suggests, *'nested'* as a process evaluation within the findings section of the study. The process evaluation will *'assess fidelity and quality'* of the study's implementation, *'clarify causal mechanisms, and identify contextual factors associated with variation in outcomes'* (Oakley, 2006 in Craig et al 2013, pp591). How the study results and the intervention itself will be disseminated is included within the conclusion section. The study does not include a long-term follow-up, a consideration that is reflected on in the discussion section of this study.

3.1.2 Study Design including Quantitative and Qualitative Method Selection

This study is a mixed method, randomised controlled, between-subjects experimental design. Quantitative measures and qualitative data were collected concurrently with equal priority. The qualitative data was analysed using thematic analysis. The quantitative data was analysed using mean, standard deviation, and t-tests. The quantitative and qualitative results have been triangulated in order to consider the degree of consistency between the results obtained using these two separate methodologies (Bryman, 2012).

Mixed methods was chosen for this study as it allows a robust experimental design without losing the richness of participant subjective experience which is an essential aspect of mental health and wellbeing (McKim, 2017; Howitt and Cramer, 2014; Dewberry, 2004). The quantitative approach has been described as having strengths including accurately operationalising and measuring constructs, conducting group comparisons, examining the strength of association between variables and for testing hypotheses (Castro et al, 2010). A criticism that has been levelled at quantitative methods is that it decontextualises the focus of the study as it doesn't take into account the ecological context (Viruel-Fuentes, 2007 in Castro et al 2010; Moghaddam, Walker & Harre, 2003 in Castro et al 2010). The qualitative approach contrasts with the quantitative in terms of contextualisation, as it takes a holistic perspective within the participant's natural environment (Gelo, Braakman, Gerhard, & Benetka, 2009). Strengths of the qualitative approach have been identified as the depth of analysis of complex cultural, human and family systems (Plano Clark et al, 2008). In addition this approach can generate detailed insight into individual's behaviours, emotions and beliefs which would not be captured as richly by measurement scales or multivariate models (Plano Clark et al, 2008). There are also limitations of the qualitative approach, they often have small samples and have been criticised that unlike quantitative, they lack generalisability, replication, reliability and

validity (Castro et al 2010). This is countered by the argument that these aspects of *'scientific'* research are not relevant to qualitative research as it is accessing information that is different but equally valuable (Smith, Denzin & Lincoln, 1994). The benefit of combining quantitative and qualitative methods in a mixed methods study has been described as enabling the research to *'sensitively and systematically address the complexity of a health-related research question.'* (McKenna et al, 2021 p582). The specific mixed methods approach taken in this study is the concurrent design, with both quantitative and qualitative data collected at the same time, with data collection both before and after the intervention.

There have been debates about whether the differing paradigms of quantitative and qualitative research approaches meant that it would not be possible to combine the two successfully (Hanson et al, 2005; Bazeley, 2004; Malterud, 2001). A counter argument to this is that pragmatism, the perspective that we can acquire only acquire knowledge through *'the combination of action and reflection'* is the paradigm best adopted for mixed methods research (Tashakkori and Teddlie, 2010 p113). From this perspective the research question and which method/s are best suited are of primary importance as this perspective views the objects of knowledge as constructions which come from the relationships between actions and consequences (Tashakkori and Teddlie, 2010).

Triangulation sits well within a pragmatist paradigm (Johnson & Onwuegbuzie, 2004; Onwuegbuzie & Leech, 2005) and fits with this study's rationale, which is based on the position that quantitative and qualitative data complement each other, and when they are considered in combination this allows for more robust analysis (Johnson & Onwuegbuzie, 2004). Creswell and Plano Clark (2017) declare that the quantitative data should not just add to the qualitative (or vice versa) but instead both data sets should be integrated in a meaningful, complementary way that extends and clarifies each. This process also enables the context of participant's position to be more fully understood (Banister et al, 2011).

In relation to Bryman's (2012 p14) suggestion that there are three critical decisions that need to be on *'prioritisation', 'implementation'* and '*integration of data'*, in this study the following decisions were made.

- The weighting to be given to quantitative and qualitative data (prioritizing) was equal
- The sequence of data collection and analysis (implementation) was concurrent
- The stages at which the quantitative and qualitative data are integrated (integration) was at the results analysis stage through triangulation

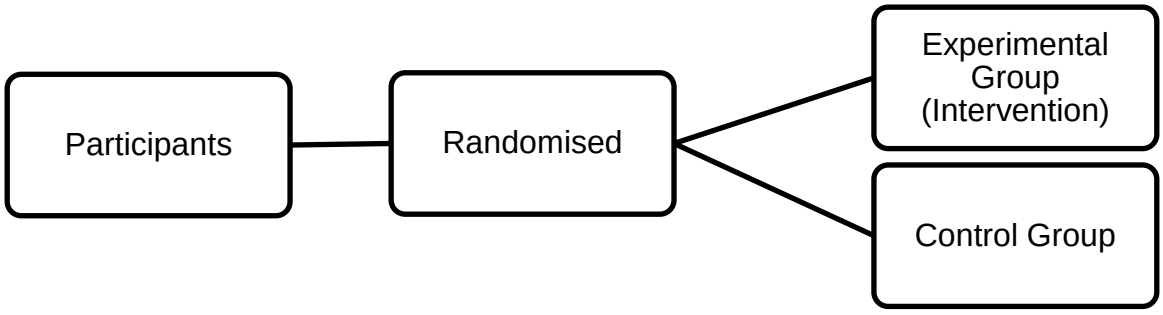
The giving of equal priority to both qualitative and quantitative data was at all stages of data collection throughout the study. The convergence aspect was enacted by both the qualitative and quantitative data being collected almost simultaneously and concurrently. The

convergence model is used when *researchers 'want to compare results or to validate, confirm, or corroborate quantitative results with qualitative findings'* (Creswell & Plano Clark, 2007, p. 65) The data was then compared and contrasted and integrated at the end of the study.

3.1.3 Randomised Controlled Trial Between – Subjects Study Design

The mixed method design approach selected for this research is a randomised controlled trial, between-subjects, also termed a parallel study design. Randomised controlled trials (RCT) have been described as the gold standard for evaluating efficacy (Speith et al, 2016). An RCT is when the study sample from the target population is randomly assigned to their group. In this study the two groups were those that participated in the intervention, the experimental group and those that did not, the control group (Speith et al, 2016). This study design has the advantage of investigating whether there is a cause-effect relationship (Speith et al, 2016).

Figure 3.2 Illustration Randomised Controlled Trial Between – Subjects Study Design



In this study all participants allocated to the experimental or control group completed both the quantitative and qualitative pre and post intervention measures. The only exception to this was the only the experimental group completed the post intervention qualitative semi-structured interview and some additional qualitative questions in the online questionnaire which were specific to the intervention.

Epistemologically, the integrative mixed methods design of this research mitigates the potential of tension between the quantitative and qualitative methods. This is achieved by viewing the difference between approaches as a positive aspect of this methodology, with the differences welcomed as enriching the *'whole'* rather than fragmenting it. This perspective has also been termed dialectical pluralism (Johnson, 2017) an ontological approach set within a pragmatism paradigm.

3.1.4 Quantitative Data

Quantitative data analysis was undertaken of the four measures completed which were the Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003), the Depression Anxiety Stress Scale 21 (DASS-21) (Lovibond & Lovibond, 1995), Coping self-efficacy (CSE) scale (Chesney et al., 2006) and the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (Tennant et al., 2007). SPSS statistics software was used for the quantitative analysis.

3.1.5 Qualitative Data

The semi-structured online interviews were recorded and transcribed. The purpose of the semi-structured interviews was to enable participants to describe the impact of the training. This provided a level of richness in terms of their behavioural and emotional response to the intervention that the quantitative measures may not have identified.

All experimental group participants participated in the interviews. The interviews were analysed using thematic analysis which followed the Braun and Clark (2006) approach, specifically the data led approach which complements the integrative mixed method design as detailed by Castro et al (2010).

There were a number of qualitative approaches this study could have taken. These include Thematic Analysis (TA), Interpretative Phenomenological Analysis (IPA), Grounded Theory (GT) and Pattern-Based Discourse Analysis.

Thematic analysis (TA) enables themes and patterns of meaning to be identified across the dataset which are related to the research question. Braun and Clark (2013) state that thematic analysis can be approached from four different positions: inductive, theoretical, constructionist and experiential. Inductive TA generates the analysis from the bottom up, which means that the analysis is not shaped by any existing theories instead it emerges from the data itself. This approach acknowledges that even if the analysis is not shaped by a theory, it will be shaped by the researcher's standpoint, epistemology and existing knowledge. Theoretical TA is, as the name suggests is influenced and guided by an existing theory and/or theoretical concept. In addition, in common with Inductive TA, the researcher's standpoint, epistemology and existing knowledge are recognised as impacting the analysis. Constructionist TA focuses on how topics are constructed and how these accounts in turn construct the world (Braun and Clark, 2013).

Interpretative Phenomenological Analysis (IPA) as a phenomenological approach focuses on how people make sense of their lived experience. This approach is interpretative, as the researcher interprets how participants make sense of their lived experience, generating themes from this interpretation (Braun and Clark, 2013). The aim, as Conrad put it in 1987, is

to get the '*insider's perspective'* (Conrad, 1987). While this approach provides rich information on individuals lived experience it was not selected for this study as it was felt it was not wholly suited to exploring the participant's semi-structured interview responses specifically in relation to the research question. One drawback identified was that IPA requires the participants to be self-reflexive in order to tell their story. To do this well interviews tend to be longer and more in depth than the planned interviews, with the resulting analysis being a '*joint product of the reflection by both participant and researcher'* (Smith, Flowers and Osborn; 2013). The term interpretative phenomenological analysis reflects the dual aspects of this approach in terms of being a dynamic process between the participant's personal world view and the researcher's own perspective. This perspective will inform how the researcher makes sense of the information, which is the interpretative aspect of the process (Smith, Flower, Osborn and Yardley, 1997). Due to the depth of analysis, it has been suggested that for an IPA study between 4 and 10 interviews are optimum for a professional doctorate (Smith, Flowers and Larkin, 2009 p52). As this study has 10 experimental participants and is mixed methods the study's researcher recognised that this approach would involve a greater depth of analysis than the study required to answer the research question. IPA was also a mode of qualitative research that the researcher did not feel familiar enough with to complete within the available timeframe.

Grounded Theory has been defined by Strauss and Corbin as *'theory that was derived from data, systematically gathered and analysed thorough the process. In this method, data collection, analysis and eventual theory stand in close relationship to one another'* (Corbin and Strauss, 1998 p12). With its origins in sociology, this method focuses on building a theory from the data often with an emphasis on social processes. There are different options available in this approach, for example GT-lite, which has many similarities to TA, as it generates categories which are similar to TA themes. The full GT process takes the categories and from these generates a theory. The Positivist GT is aiming to represent reality, with the Contextualist Constructivist approach, acknowledging that the researcher is shaping the analysis, which means that what is produced cannot represent the *'truth'* as the analysis was constructed by the researcher. The radical constructionist shifts the focus fully onto constructionism both the researchers, by acknowledging that this is their perception rather than the truth, and the participants who constructs, for example with the language, meaning and emphasis used (Charmaz, 2000). This approach offers another rich qualitative analysis but was rejected by the researcher as the focus of the qualitative analysis in this study was not to develop a theory based on the participant's interviews, but instead, the focus was to answer the research question.

Pattern-based Discourse Analysis (DA) is often focused on the patterns of language and how these are linked to how reality is socially produced and objects and events constructed. The thematic discourse analysis approach is very similar to constructionist TA as it identifies themes and patterns but with more of a focus on the discursive features and patterns of language. Poststructuralist DA focuses on how discourses constitute objects and manifest different subject positions, in turn there is a focus on the operation of power both in and through discourse. Interpretative repertoires DA focuses on the patterned resources used when talking about an object and the functions of use which these repertoires provide. Four prominent themes identified in DA are that the discourse is a topic, which means that the discourse itself is the focus rather than the participant's interviews purpose being to reveal their views on a specific topic (Gill, 2000). Another theme is that language is constructive; this means that the discourse represents the participant's social reality which reflects their disposition (Gill, 2000). A third theme is that discourse is a form of action, which put the language '*as a practice in its own right'* (Gill, 2000 p175). The final theme is that discourse is rhetorically organised, which the researcher recognises as being concerned with '*establishing one version of the world in the face of competing versions'* (Gill, 2000 p176). This means that the researcher recognises that discourse is seeking to persuade by how events etc. are presented (Gill, 2000). This approach was rejected as it focuses on analysing the participant discourse itself, which did not fit with the research focus of viewing the interview data in terms of what it revealed about the participant's views in relation to the research question.

TA only provides the method of data analysis; it does not specify the theoretical framework, research focus, methods of data collection or sample size. This meant that the researcher was free to select the method of data collection as well as the theoretical position and epistemological or ontological framework which best fitted their experience and the research question. They were also able to undertake a small-scale study which balanced quantitative and qualitative requirements equally (Creswell, Plano Clark, Gutmann, and Hanson, 2003). Based on this the researcher took a pragmatic position and selected the Inductive TA approach, due to its flexibility to fit with the aim of exploring participant's feedback specifically in relation to the research question.

3.1.6 Epistemological Position

Epistemology is defined as *'the theory of knowledge, especially with regard to its methods, validity, and scope, and the distinction between justified belief and opinion'* (Oxford Languages, 2021[3]) By stating an epistemological position a researcher is stating what they believe is the nature of knowledge, what they are therefore counting as knowledge and how knowledge is generated. This is helpful at the outset of a study as this position will be informing

how the study data is interpreted and the conclusions drawn. This study is approached from the position of pragmatism which has been mooted as the optimum paradigm for mixed methods for example by Tashakkori and Teddlie who stated *"the paradigm of pragmatism can be employed as the philosophical underpinning for using mixed methods and mixed models'* (Tashakkori and Teddlie, 1998, p. 167). This position selects the methodology based on its suitability to the research question. This selection process identified that quantitative and qualitative methods when combined provided a greater depth and breadth of information from which to consider the research question. Their differences are not viewed as a conflict between the two, rather a strength, as together they provide a wider depth and breadth of data. From a pragmatic stance the focus is on context and practicality rather than philosophical frameworks and this guides the study, as the aim is to contribute workable solutions to important problems (Tashakkori and Teddlie, 2010). The research also takes a dialectical pluralist approach which when the term was originally coined was described as '*not liberal toleration of opposing views from a neutral ground but [rather] transformation, conversation, or, at least, the kind of communication which clarifies exactly what is at stake in any critical conflict'* (Mitchell, 1982, p. 614). The pragmatic approach fits with dialectical pluralism as it embraces different methodologies, theories, perspectives and paradigms which are all viewed equally and respectfully without the need to favour one over another, regardless of their differences. In this research this position resulted in the decision to embrace quantitative and qualitative methods as providing the optimum mix of data to answer the research question. It has been argued that dialectical pluralism is a metaparadigm '*because the dialectical approach or "logic" allows and thrives on conflicting positions and offers a strategy for dynamically "merging" or combining ideas into new broader/thicker viewpoint.'* (Johnson and Onwuegbuzie, 2004 p159). The pragmatic, pluralist epistemological approach fits with the researcher's own position as an integrative, relational counselling psychologist. The integrative position focuses on drawing together the mix of the approaches that best fit the specific client. This approach which could be described as pragmatic, also embraces the pluralist position as it focuses on what is the best option and embraces, sometimes contradictory options, such as quantitative and qualitative and integrates them as exemplified by this mixed methods research.

3.2 Participants

3.2.1 Participating Organisations

Study participants were from two organisations Hafod and Platfform. Hafod is provider of housing care and support and Platfform is a mental health and social change charity.

Hafod is a not-for-profit company and one of the largest providers of housing, care and support in South Wales. They were established over 50 years ago and currently work across nine local authority areas in Wales helping over 16,000 people each year, employing over 1,300 staff and having a turnover in excess of £50 million.

Platfform (previously Gofal) was established over 30 years ago. Platfform work with people who are experiencing challenges with their mental health through a range of projects including crisis prevention, supported housing as well as championing a trauma informed, healing focussed and asset-based approach to mental health and wellbeing. Platfform has an annual turnover of £9 million, employs 300 people and supports over a thousand people every year.

These specific organisations were invited to participate as the researcher had worked with personnel from both companies previously and was therefore aware of their commitment to the health and wellbeing of their staff, so felt they would be supportive of the research.

3.2.2 Participant Recruitment Process

Both participating organisations were provided with information on the study and the nature of the intervention being provided. Following meetings with both organisations to present the research study process and aims, the executive board of both Hafod Housing and Platfform agreed to take part. A study summary was shared with the main contact, who disseminated this to all staff within the departments identified by the organisations to take part in the study. The decision on which departments were selected was reported to be based on their ability and willingness to release staff to take part in the study. The information was disseminated to the staff in the selected departments who were then invited to take part. Participation was optional so participants self-selected whether they wished to be part of the study. No screening of participant's mental health was undertaken during the recruitment process. Participants were provided with detailed information on the study and the study's intervention and informed that they could opt out at any time in the study. This meant that participants were able to self-determine whether they felt the study was appropriate for them.

3.2.3 Sample Strategy and Size

The study had a total of twenty-four participants. This total was made up of thirteen staff from Platfform and eleven from Hafod (see table 3.2).

The sample method used was probability sampling from a convenience sample of potential participants. The convenience sample was informed by the On PAR: A feasibility study of the Promoting Adult Resilience programme with mental health nurses (Foster et al, 2018) which had similarities to this study for example its original study had twenty four participants who completed a training intervention. As the impact of Covid-19 were being felt by both

organisations the number of employees the organisations were able to release was reduced. It was recognised that in terms of the four elements referred to when calculating sample size; significance level, power, effect size and variability this study would need to be cautious when interpreting, particularly quantitative results, as the sample size was small for a RCT study (Field, 2013).

The original calculation for this study's optimum sample size was based on the PAR study (Foster et al, 2018) results for anxiety with the DASS-21 scale, which this study is also using. The optimum study size for this study based on the below data would have been 122 participants split equally between the experimental and control group. This sample size calculation is based on the PAR study results and parameters as detailed in the Table below (Field, 2013).

Table 3.1 Study Sample Size Calculation Parameters

Study Parameters from PAR Study Anxiety Mean Scores Pre and Post Intervention	
Mean Experimental Group DASS-21 Anxiety score pre intervention	**8.1**
Mean Experimental Group DASS-21 Anxiety score post intervention	**3.9**
Alpha (probability of type 1 error)	**0.05**
Beta (probability of type 2 error)	**0.02**
Power (80%)	**0.8**

The participants were originally to be split equally between the experimental and control groups however two participants after completing the initial measures were unable to take part in the intervention so moved from the experimental group to the control group. This resulted in 10 participants in the experimental group and 14 participants in the control group.

3.3 Materials and Measures

3.3.1 Qualitative

Demographic questions were asked for example the participant's gender and age at the beginning of the study (See table 3.2) Additional qualitative questions were included in the questionnaire these are detailed on the next page.

Table 3.2 Participant Demographics at Study Start

Participant Number	**Control / Experimental**	**Sex**	**Age**
1	Experimental	Female	51

2	Experimental	Female	36
3	Experimental	Male	32
4	Experimental	Female	30
5	Experimental	Male	55
6	Experimental	Male	42
7	Experimental	Female	48
8	Experimental	Female	44
9	Experimental	Female	43
10	Experimental	Female	56
11	Control	Male	41
12	Control	Female	46
13	Control	Male	34
14	Control	Female	35
15	Control	Female	43
16	Control	Female	42
17	Control	Male	53
18	Control	Male	50
19	Control	Female	24
20	Control	Female	34
21	Control	Female	39
22	Control	Male	37
23	Control	Female	43
24	Control	Female	32

Open ended questions were also included to check participants self-perceived level of wellbeing and assertiveness. (see table 3.3 next page).

Table 3.3 Pre - Intervention Questionnaire Qualitative Questions

Qualitative questions asked in the pre intervention questionnaire
How would you describe your current level of resilience?
How would you describe your current level of workplace stress?
How would you describe your current level of wellbeing?

The questionnaire completed after the training had additional questions to enable experimental group participants to comment on their experience (see table 3.4 below).

Table 3.4 Post - Intervention Questionnaire Qualitative Questions

Qualitative questions asked in the post intervention questionnaire – all participants
How would you describe your current level of resilience?
How would you describe your current level of workplace stress?
How would you describe your current level of wellbeing?
Qualitative questions asked in the post intervention questionnaire – experimental group only
What difference (if any) has the online training made to your level of resilience and /or assertiveness?
What aspect of the online training have you found most useful? How?
How have you used the information in the training?
Which of the training topics have found most beneficial to your mental health and wellbeing?

The results of the pre and post qualitative questions are detailed in the Chapter 4 – Results.

3.3.2 Quantitative Measures

The study pre and post intervention questionnaire for all participants used four validated measures; the Connor-Davidson Resilience Scale (Connor & Davidson, 2003; Burns and

Anstey, 2010), Depression, Anxiety and Stress 21 scale (DASS-21) (Henry and Crawford, 2005), Coping Self-Efficacy Scale (Chesney et al, 2006) and the Warwick Edinburgh Mental Wellbeing Scale, (Tennant et al, 2007),

3.3.2.a *Connor-Davidson Resilience Scale - Connor & Davidson, 2003*

The Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) is a 25 item self-report scale which assesses components related to the construct of resilience. Each item statement is rated by participants on a 5-point scale (0-4) to indicate how much that particular statement applies to them over the last month. If the situation portrayed in the item statement has not occurred over the last month, then participants are instead encouraged to answer based on how they think they may have felt. The total score ranges from 0-100, with a higher score reflective of an individual with greater resilience and lower scores indicating less resilience. The scale's items incorporate measures of Hardiness (i.e. commitment/challenge/control), score range 0 to 28, Coping which has a score range of 0 to 20, Adaptability/ Flexibility which has a score range of 0 to 12, Meaningfulness/ Purpose which has a score range 0 to 20, Optimism which has a score range of 0 to 8, Regulation of Emotion and Cognition which has a score range of 0 to 8 and Self-Efficacy which has a score range of 0 to 8.

Table 3.5 Examples of Connor-Davidson Resilience Scale statements and Scale Scoring

CD-Risc Statement Examples	Scale Scoring
I am able to adapt when changes occur.	0 = not true at all
I tend to bounce back after illness, injury, or other hardships.	1 = rarely true
During times of stress/crisis, I know where to turn for help.	2 = sometimes true
I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	3 = often true
I take pride in my achievements.	4 = true nearly all the time

The participants are asked to select the appropriate response which best indicates how much they agree with the 25 statements as they apply to them over the last month. If a particular situation has not occurred recently, they are asked to answer according to how they think they would have felt.

The CD-RISC items were selected based on rigorous searchers of the available resilience literature (Connor & Davidson, 2003). It has been validated by the authors across five populations, including psychiatric patients, primary care outpatients, participants experiencing generalised anxiety disorder and PTSD who were engaging in study trails, and also the general population.

The reliability of the scale has been measured indicating that it has a strong internal consistency (Cronbach's $\alpha = 0.89$) being identified for the full scale for the general population group. The test-retest reliability was also assessed by the authors using the participants experiencing generalised anxiety disorder and PTSD who were engaging in study trials. The mean (SD) CD-RISC scores collected at time 1 [52.7 (17.9)] and time 2 [52.8 (19.9)] showed little variation, thus advocating for the reliability of the CD-RISC.

In terms of the scale's convergent validity, using Pearson's r, Connor and Davidson (2003) found the scale to positively correlate significantly with the Kobasa Hardiness Scale (Kobasa, 1979) ($r = 0.83$), demonstrating that both scales a measuring the same construct. Furthermore, the CD-RISC was found to negatively correlate significantly with the Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983) ($r = -0.76$) and the Stress Vulnerability Scale (Sheehan et al., 1990) ($r = -0.32$). This demonstrated that higher levels of resilience are related to lower levels of perceived stress and stress vulnerability, which is expected.

The CD-RISC has since been validated across a wide range of diverse populations, including Chinese adolescents, Korean frontline workers, and Indian students (Baek et al., 2010; Singh & Yu, 2010; Yu et al., 2011). Using exploratory factor analysis (EFA) on data obtained from the general population sample, Connor and Davidson (2003) identified a five-factor structure that was reflective of a multi-dimensional resilience scale. This five-factor structure has since been reproduced by Singh and Yu (2010) among Indian students.

The general population scores for the CD-Risc 25 were obtained from the United States. For this group the mean score for all participants in the sample was 79 which is in the second highest quartile indicating a moderately high level of resilience. The scores ranges when split into quartiles were for the lowest quartile (i.e. from 1-25% of the general population), 0 to 73. For the second quartile (i.e. from 26 to 50%) the scored ranged from 74 to 82. For the third quartile (51-75% of the population) the score ranged from 83 to 90. For the highest quartile (76-100% of the population) the score ranged from 91 to 100.

The mean scores for the CD-Risc 25- Item scale in general populations from 22 different studies conducted in 10 different countries ranges from 60 in a study from China to 83 in a study from the USA. Of the 22 studies all of the highest mean scores (76.1 to 83) were from American studies (5 studies) (Connor, 2003). The lowest mean scores were from the 7 studies with participants from China, these studies mean scores ranged from 60 to 71. Of the 3 European studies Sweden, Italy and Portugal the mean scores were 68.8, 66.7 and 73.4 respectively. This indicates that the CD-Risc-25 mean scores vary between study populations and potentially between countries.

Due to the sound psychometric properties reported for the CD-RISC across various population samples, including a non-clinical general population sample which is similar to that of the current study, the CD-RISC was employed as a suitable outcome measure of resilience.

3.3.2.b *Depression Anxiety Stress Scale 21 - Lovibond & Lovibond, 1995*

The Depression Anxiety Stress Scale 21 (DASS-21; Lovibond & Lovibond, 1995) is a 21-item self-report measure of the constructs of depression, anxiety, and stress. The scale consists of three sub-scales of anxiety, stress, and depression, each consisting of seven items. Participants read each item statement and respond using a 4-point scale to indicate how much the statement applies to them over the past week.

The DASS-21 is an abbreviated version of the full length DASS-42, which is supported by a large body of research as a valid and reliable measure of anxiety, stress and depression in both non-clinical and clinical populations (Henry & Crawford, 2005; Lovibond & Lovibond, 1995; Taylor et al., 2005). The DASS-21 has been chosen for use in the study due to a range of advantages over the full length DASS. Namely, the DASS-21 is shorter and therefore takes less time to complete, making it suitable for reducing participant fatigue and loss of attention (Henry & Crawford, 2005). Furthermore, it has been found to be comparable to the DASS-42 in terms of its internal reliability and construct validity (Clara et al., 2001; Daza et al., 2002; Henry & Crawford, 2005).

The DASS-21 total scale has been found to demonstrate good internal consistency for the total scale (Cronbach alpha =.93) and each of the sub-scales (Depression =.88; Anxiety =.82; Stress =.90) among non-clinical samples (Henry & Crawford, 2005), which is comparable with more recent research (Sinclair et al., 2012). The DASS-21 scale has also been found to achieve adequate item-scale convergence (Sinclair et al., 2012) and good construct validity (Henry & Crawford, 2005). Furthermore, Lovibond & Lovibond (1995) found the convergent and discriminant validity of the DASS-21 with other measures of health and wellbeing was found to be adequate, strongly correlating with the Beck Anxiety Inventory (BAI) (Beck2 et al., 1988) and the Beck Depression Inventory (BDI; Beck, Steer & Carbin et al., 1988). Therefore,

the DASS-21 has been identified as a suitable screening tool for targeting non-specific aspects of psychological distress within non-clinical populations (Chin et al., 2019; Sinclair et al., 2012). In addition, it has been promoted as useful in informing clinicians of particular treatment outcomes and assessing the effectiveness of specific interventions (Sinclair et al., 2012). Thus, the DASS-21 has been deemed as a suitable measure of psychological distress in this study.

The DASS-21 has 21 items split equally between Depression, Anxiety and Stress (7 per axes) which are scored on a 4-point scale from 0 to 3. The scale's items measures of Depression score range 0 to 21, Anxiety score range 0 to 21 Stress score range 0 to 21.

Higher scores indicate higher levels of Depression. Anxiety or Stress as table 3.6 below indicates.

Table 3.6 Interpretation of Depression Anxiety Stress Scale scores

	Depression	Anxiety	Stress
Normal	0-4	0-3	0-7
Mild	5-6	4-5	8-9
Moderate	7-10	6-7	10-12
Severe	11-13	8-9	13-16
Extremely Severe	14+	10+	17+

Table 3.7 Examples of Depression Anxiety Stress Scale statements including the subscale category

Question	Questions Subscale Category	Scale Scoring
I found it hard to wind down	Stress	0 = Did not apply to me at all - NEVER
I was aware of dryness of my mouth	Anxiety	1 = Applied to me to some degree, or some of the time - SOMETIMES
I couldn't seem to experience any positive feeling at all	Depression	2 = Applied to me to a considerable degree, or a good part of time - OFTEN
I found it difficult to relax	Stress	3 = Applied to me very much, or most of the time - ALMOST ALWAYS
I felt I was close to panic	Anxiety	

I felt that life was meaningless	Depression	

Due to the sound psychometric properties reported for the DASS-21 across various population samples and its successful use in other similar studies for example the On PAR: A feasibility study of the Promoting Adult Resilience programme with mental health nurses (Foster et al, 2018), the DASS-21 was employed as a suitable outcome measure for Stress, Anxiety and Depression.

3.3.2.c *Coping self-efficacy scale - Chesney et al., 2006*

The coping self-efficacy (CSE) scale (Chesney et al., 2006) is a 26-item measure of self-perceived ability to perform coping behaviours when faced with life threats and challenges. Participants are asked when things aren't going well for them, or when they're having problems, how confident or certain are they that they can do 26 statements which are then scored from on an 11-point scale from 0 to 10.

The score range is from 0 to 260 with the higher the score indicating the higher level of coping self-efficacy. The scale splits into three subscales which are *'Stop unpleasant emotions and thoughts'*, *'Get support from friends and family'* and *'Use problem-focused coping'.*

Table 3.8 Examples of Coping Self-Efficacy Scale Statements and Scale Scoring

Coping Self-Efficacy Scale Statement Examples	**Scale Scoring**
When things aren't going well for you, how confident are you that you can -	0 = Cannot do at all
Sort out what can be changed, and what cannot be changed.	5 = Moderately certain can do
Make a plan of action and follow it when confronted with a problem.	10 = Certain can do
Do something positive for yourself when you are feeling discouraged.	
Keep yourself from feeling lonely.	
Resist the impulse to act hastily when under pressure.	

Confirmatory (CFA) and exploratory factor analyses (EFA) have been conducted to assess the construct validity of the scale (Chesney et al., 2006). These analyses confirmed the three factor subscales including 'Stop unpleasant emotions and thoughts' (4 items, α = .91), 'Get support from friends and family' (3 items, α = .80) and 'Use problem-focused coping' (6 items, α = .91). Reliability for the CSE scale has been measured using internal consistency coefficient alpha (Cronbach, 1951). Strong internal consistencies between α = 0.73 and α = 0.84 for the subscales have been identified, which were deemed as satisfactory (Mahmoudi et al., 2015). Furthermore, test–retest reliability was deemed strong for all three sub-scales (Chesney et al., 2006).

Content validity of the instrument has been evaluated using both quantitative and qualitative measures (Mahmoudi et al., 2015). The content validity index (CVI) and the content validity ratio (CVR) were calculated from the opinions of a panel of 20 experts who reviewed the individual items of the CSE scale. Most items were deemed to have acceptable CVI and CVR scores. The subscales have been found to moderately correlate; however analyses of concurrent validity indicate that the individual sub-scales assess different types of coping which are all aspects of coping self-efficacy, thus supporting the three-factor structure identified in the CFA and EFA analyses (Chesney et al., 2006). Finally, predictive validity was analysed and demonstrated that changes in emotion-focussed and problem-focussed coping skills was predictive of increased psychological well-being and psychological distress at baseline and at a 3-month post-intervention follow up (Chesney et al., 2006).

Although the CSE scale was developed within a sample that was a clinical population, and which therefore may limit its generalisability to non-clinical groups, the authors have encouraged its use across other populations (Chesney et al., 2006). Therefore, the CSE scale was determined to be a suitable scale for measuring the construct of coping self-efficacy pre-and-post intervention.

3.3.2.d *Warwick-Edinburgh Mental Well-being Scale - Tennant et al., 2007*

The Warwick-Edinburgh Mental Well-being Scale (WEMWBS; Tennant et al., 2007) is a 14 item self-report scale of mental well-being including positive affect, positive functioning and satisfying interpersonal relationships. Participants read each item statement and respond using a 5-point Likert scale to indicate how much the statement applies to their experience over the past two weeks.

The WEMWBS was developed by an expert panel applying academic literature, psychometric testing of existing scales and qualitative data from focus groups (Tennant et al., 2007). As a result, the scale has demonstrated good content validity, internal consistency (Cronbach's α = .91) and high test-retest reliability at one week follow up (ICC = 0.83) among a representative

population sample. Furthermore, confirmatory factor analysis has provided support for the single construct of the scale, suggesting good validity (Tennant et al; 2007). The WEMWBS also showed significantly high correlations with other scales of mental well-being, such as the Positive and Negative Affect Schedule- Positive Affect (Watson & Tellegen, 1985) (r = 0.71) and the Scales of Psychological Well-Being (Ryff, 1989) (r = 0.74), supporting the criterion validity of the scale. It has also been found to be fairly unsusceptible to the effects of social desirability bias (Tennant et al., 2007).

As the WEMWBS has been supported as a short and meaningful scale among general populations that is relatively free from bias, it has been chosen as an appropriate outcome measure for mental well-being among this sample.

The WEMWBS is a 14-item scale which is scored on a 5 point scale from 1 to 5. Participants are asked to select which of the score statements best describes their experience over the last two weeks. The score range is from 14 to 70 with the higher the score indicating a higher level of wellbeing.

Table 3.9 Examples of Warwick-Edinburgh Mental Well-being Scale Statements

WEMWB Scale Statement Examples	Scale Scoring
I've been feeling optimistic about the future	1 = None of the time
I've had energy to spare	2 = Rarely
I've been feeling good about myself	3 = Some of the time
I've been able to make up my own mind about things	4 = Often
I've been feeling cheerful	5 = All of the time

Based on the above information the Warwick-Edinburgh Mental Well-being Scale was deemed to have good psychometric properties reported and be a suitable measure of mental wellbeing for this study

3.3.3 Qualitative Data

In addition to the quantitative measures and demographic information, the questionnaire includes opportunity for narrative responses to questions on subjective mental health and

wellbeing status and how participant's feel the intervention has impacted these. This section also invites opinion on the intervention content and the opportunity to add further suggestions.

Qualitative data was analysed using thematic analysis. Thematic Analysis as described by Braun and Clarke (2006 p175) is a *'method for identifying themes and patterns of meaning across a dataset in relation to a research question'* in this case *'What impact does the Mental Health and Wellbeing Toolkit programme delivered online have on employee mental health and wellbeing?'* By using the inductive thematic analysis approach the aim is to generate an analysis from the bottom up, rather than being shaped by an existing theory. This approach acknowledges that the researcher's epistemology, knowledge (as detailed in section 3.1.6) and standpoint are a factor. The inductive approach provides flexibility and enables the data to be analysed to answer the research question and identify any other themes that emerge.

The interview questions (Table 3.10, next page) were designed to link directly to the research question *'What impact does the Mental Health and Wellbeing Toolkit programme delivered online have on employee mental health and wellbeing?*' The questions in addition to asking whether the intervention had an impact asked for examples of the participant's experience during the programme and of the strategies / techniques. This has enriched the thematic analysis as it has enabled the exploration of the specific impact on individuals. The questions also sought to identify the topics that were useful as this is a study's information will enable future iterations of the intervention to be adapted based on the participant's feedback.

Table 3.10 Interview Questions

How (if at all) have you used the information and strategies within the online training?
Have you any examples of where you have noticed a change in your level of assertiveness or resilience?
Has the online training had an impact on your mental health and/or wellbeing?
Have you any examples of where you have noticed a change in your level of mental health and/or wellbeing?
Was there any specific topic or topics that you found most helpful? In what way were they helpful?
How did you find participating in the training online?
Are there any other comments about the training you'd like to make?

The interview questions were developed by the researcher to provide insight into three aspects of the participant's experience. The first was whether the information from the study was being used and if so, how? The second was whether they had experienced and impact on or change to their level of mental health and wellbeing. The third was how the participants had felt about the online training. The training being delivered online was a change made in response to Covid-19 restrictions and the researcher was interested to know how this had been experienced by the participants. The final question was to enable the participants to make any additional comments about any aspect of the study that they had not previously had the opportunity to express.

The process used in this study's thematic analysis is based on Braun and Clarke's (2006) suggested phases of thematic analysis detailed in the table below.

Table 3.11 Phases of Thematic Analysis

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.

4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Table from Braun and Clarke, 2006 p87

This small-scale pilot study's coding was completed by the researcher. Having a single person complete the coding has the benefit of maintaining consistency of coding and analysis across the full data set (Braun and Clarke, 2013). It has also had the benefit of the researcher being familiar with all of the participant's data which has aided the process of coding but also the process of identifying themes across the dataset as they emerged.

The qualitative analysis has used gender neutral pronouns they, them and their throughout. The study has not focussed on gender differences between participant's responses to the intervention when completing the study. Therefore, the gender of the participants is not relevant to the qualitative analysis and a gender-neutral approach has been taken (Bada and Genc, 2018). The gender-neutral approach also has the effect of increasing the level of anonymisation of participants, providing an additional element of confidentiality.

Braun and Clarke's (p175) recommended 'Phases of Thematic Analysis' were applied as follows-

1. Familiarizing yourself with your data: Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.

Microsoft Teams records and transcribes the interviews. However, the transcription provided does not specify who is speaking and there were many errors. To finalise the transcripts a process of editing and correcting the transcript by repeatedly listening to the interviews and reading and rereading the transcript was undertaken. This process also provided the opportunity to become immersed in the data and to begin noting initial ideas.

2. Generating initial codes: Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.

The initial coding was done by the researcher systematically reviewing the data for each participant in turn and identifying initial codes that were relevant to the research question. These initial codes were noted and added to with each progressive participant. The approach taken at this stage was to identify semantic or explicit level themes (Boyatzis, 1998) and to take a data driven position.

3. Searching for themes: Collating codes into potential themes, gathering all data relevant to each potential theme.

Once all the data was coded the researcher reviewed the codes to identify potential subthemes / themes. The codes began to be allocated using a spreadsheet to provisional subthemes / themes which evolved as the codes were reviewed in order for the themes to better reflect their codes. At this stage a more latent level of analysis was employed with the underlying ideas, assumptions and conceptualisation informing the subthemes and themes.

4. Reviewing themes: Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.

Once all the codes were allocated to subthemes and these nested within themes these were reviewed again which resulted in the themes being revised to better reflect the codes. A thematic map was then created to illustrate how the subthemes linked to the themes and how themes overlapped (Figure 1 in the Results Chapter).

5. Defining and naming themes: Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.

The themes continued to be reviewed and their titles adjusted to ensure that they represented the data and that were distinct themes each with a clear definition.

6. Producing the report: The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

The Chapter 4, the Results chapter illustrates, with quotes, the participant's comments that relate to the subthemes which are in turn nested within the themes. In the discussion chapter (Chapter 5) the quantitative and qualitative results are triangulated and linked to the research question and relevant research.

3.4 Procedure

3.4.1 Data Collection

Two weeks before the intervention all participants were invited to complete an online questionnaire which included demographic, quantitative measures and qualitative questions. Once all measures were completed the participants were randomly allocated to either the experimental or control group. Participants from both organisations were provided with an anonymised login code which was used as the only identifier when they completed the online questionnaires.

The process for selecting a representative sample from the participants put forward by their companies to take part in the study, was to collate and combine each participant's responses to this study's online questionnaires, to produce a single *'Mental Health and Wellbeing Score'.* The process followed was to rank each scale results from high to low or low to high depending whether a higher or lower score corresponded with better or worse mental health / wellbeing. The participants were then allocated a score relative to their position i.e., the participant in first place scored 1, the participant in 5th place scored 5. The score for all the scales combined was termed their mental health and wellbeing score. The participants from each organisation were then stratified according to gender. The males and females' participants were split into separate columns on a spreadsheet and ordered according to their *'Mental Health and Wellbeing Score'.* The rationale for including gender as a sampling criterion is that some research indicates gender differences in resilience in relation to mental health (Portnoy et al, 2018; Limura and Taku, 2018; Zhang et al, 2018). A systematic sampling method was then used to randomly allocate the participants to either the control or experimental group. The systematic sampling method used was to start at a random point on the stratified sample and then selecting every other participant (Etikan and Bala, 2017). Using this method, the participants were randomly assigned, to Group A and Group B, a coin was then flipped to decide which group was the experimental or control group.

Participants were then contacted and advised which group they were in. Individuals allocated to the control group were contacted and advised they would be contacted again in approximately six weeks to recomplete the study's online measures. The experimental group were contacted and invited to take part in the intervention and their Microsoft Teams invitations for each of the four sessions were sent. The experimental group were also advised that they would be contacted two weeks after the final session to recomplete the initial measures and then be invited to take part in a short online interview.

The gap between the training completion and recompleting the questionnaire was reduced to two weeks as the Covid-19 pandemic was having a significant impact on both workplaces and a lengthier gap between the intervention completion and outcome measures would have the potential to increase the range of variables impacting the participant's mental health and wellbeing.

3.4.2 Intervention

The participants from each organisation randomly allocated to the experimental group were invited to complete an eight-hour programme which was delivered as four, two-hour online sessions. The intervention was delivered on the same day and at the same time every week for the four weeks. Participants who were selected to the control group were advised that they would be contacted by email in six weeks (two weeks after the intervention completed) to recomplete the online measures.

Due to the impact of Covid-19 on training delivery in terms of social distancing requirements, the intervention was delivered live online through Microsoft Teams which is an encrypted secure online platform. Prior to the Covid-19 pandemic the research on the efficacy of training delivery online versus face to face offered a complex picture as definitions of types of online training delivery varied. Some analysis indicated little difference in learner outcome (Richmond et al, 2017), others indicated face to face training had better learning outcomes (DuPaul et al, 2018) or no significant difference (Isfahani and Moghades, 2018). A consequence of the Covid-19 pandemic and the subsequent lockdown is the significant increase in individuals using online communication, this may have an effect on the participant's experience of live online training delivery as some participants may have become more familiar and comfortable with online communication. An adaption made to the programme following the switch to online delivery, was the reduction in the group size to a maximum of six participants. The maximum of six was chosen as this meant on Microsoft Teams all participants could be on the screen simultaneously during discussions. This number also meant that there was time within each session for everyone to participate something that was actively encouraged by the researcher who delivered the intervention. A question on participant's experience of the training delivery mode was included in the post intervention interview.

The intervention's four session content drew on cognitive behavioural therapy, neuroscience and psychological research to provide participants with psychoeducation and a *'toolkit'* of strategies and techniques designed to have a positive impact on their mental health and wellbeing.

Each of the four sessions had a specific theme which informed all of the session content. The trainer (the researcher) encouraged discussion within the group on each topic and on each

technique introduced. Prior to the sessions the trainer had not met any of the participants and had no knowledge of their current level of mental health and / or wellbeing. At the outset of the sessions participants were provided with clear information on the approach the sessions would be taking and a contracting process was undertaken, that set out clearly how the sessions would manage self-disclosure. The contracting with the participants included that the discussions within the sessions were kept confidential to the sessions. Participants were reminded that they were responsible for their self-care, for example by only sharing what they felt was appropriate within their peer group, not participating with any exercise that they felt would not be comfortable or helpful to them and leaving the session at any time if they were uncomfortable with the content. The contracting also included where they could seek support if the sessions did elicit any negative response and/or if the session were a catalyst for them feeling they would like to address any issues in more depth. The trainer clearly stated that at no time would any participant be asked directly to share their thoughts, experiences, or any exercises they had been completed, rather the group as a whole would be asked if anyone had anything they would like to share.

The sessions had a 10-minute break after the first hour. The participants were invited to keep their cameras on throughout the sessions but with the option of turning them off and/or leaving the session at any time. Participants were also encouraged to speak freely but reminded, when appropriate, that they needed to manage their self-care and only share what they were comfortable with.

Table 3.12 Intervention contents summary per session

1. Thoughts	2. Resilience	3. Anxiety	4. Action Plan
Explore locus of control	Review last session	Review last session	Review last session
Strategy to manage worry	Exploring concept of resilience	Explore anxiety	Review programme
Introduction to vicious cycle	Strategies to increase resilience	Strategies to reduce / manage anxiety	How to maintainiand continue progress
Benefit of gratitude	Introduction to cognitive reframing	Grounding technique	Create personal action plan

The session content summarised in Table 3.12 enabled the participants to gain an understanding of concepts and provided strategies that they could use. The strategies

included in the sessions were selected through a combination of research and the researcher / trainer's personal and professional experience. The researcher listed the strategies and techniques that they had used successfully throughout their career drawing on both occupational and counselling psychology. These were then reviewed with reference to the research and the researcher's own experience of using these techniques both personally and with their therapy clients.

In Session 1 This session the topic was Thoughts, specifically a focus on managing your own thoughts. This session opened with a discussion with participants exploring this concept and how improving our ability to manage our own thoughts could be helpful. An example where managing our thoughts could be beneficial was the introduced, reducing worrying. The impact of worry was discussed and participants sharing their experiences. The strategy provided to reduce worrying was the Worry Tree (Butler, 2007). This is a CBT technique the trainer had been introduced to in the course of their Counselling Psychology training which they personally felt was effective. This conclusion was supported by the trainer's therapy clients who had fed back that they found the technique useful, based on this the strategy was included in the intervention.

In Session 2 - Resilience, the content was structured in common with the other sessions, as initially introducing and opening a discussion with participants on the session's topic. The topic, the concept of resilience was explained in detail by the trainer and then factors that impacted resilience were discussed with reference to participant's own experiences. The trainer then introduced a range of actions that research, and experience indicated could have a positive impact on resilience for example Cognitive Reframing which research indicates is a strategy that increases resilience (Robson,2014; Rutter 1985 and Rutter 1987). The trainer explained in detail Cognitive Reframing supported by a range of examples the participants were then invited to reframe situations provided and then these were discussed drawing on both the examples provided, and participants own examples where they had or could reframe a situation.

Session 3 – Anxiety, initially discussed the impact of anxiety with participant's sharing the impact of their own anxiety. The session then introduced the concept of negative automatic thoughts which were termed the 'Poison Parrot'. The session introduced strategies to be assertive with this 'Poison Parrot' by for example recognising that what it said were 'Thoughts Not Facts' and that it could be challenged. The session also provided relaxation and mindfulness techniques including a grounding technique that the researcher had found again personally and when used with clients very useful to both reduce anxiety and as a method of practicing mindfulness.

Session 4 – Action Plan, reviewed the content of the previous sessions with participants sharing their experience over the previous weeks of trying the different strategies. The session focus then moved to the role of motivation in applying the strategies introduced in the future. By identifying a couple of strategies that each participant felt were particularly relevant and/or helpful for them. How to maintain these strategies was discussed with individual participants who, with the support of the group and the trainer, then developed their own individual action plan.

A summary of the intervention activities is provided in Appendix 22.

3.4.3 Post Intervention Semi Structured Interview – Experimental Group Participants

After the experimental group participants had completed the intervention, they were contacted by email to invite them to take part, as agreed in the pre intervention consent form, to the short online semi-structured interview (Appendix 2 and Appendix 7). The email included the Interview Information Sheet (Appendix 11) which reiterated the background of the study. The semi-structured questions (Appendix 7) were also provided to participants on the interview invitation email. The seven questions were open questions in order to elicit as much information as possible. The interviewer asked further questions to elicit additional information in response to participant answers when appropriate. See Appendix 10 for diagram of participants study participation journey.

The interview was not anonymous initially as it was necessary to link participant's comments with their quantitative measures. At the point of transcription, the participants were identified using only their participant identifier. Any identifiable material was excluded from the transcript. The interview was recorded on Microsoft Teams. When the recording was transcribed, each participant was only identified using their unique identifier allocated at the beginning of the study. This unique identifier was used as the participant's data needs to be linked to their identity, in the case for example, of withdrawal from the study. Participants could then contact the researcher if they wish to withdraw from the study and the researcher could use this identifier to locate and withdraw their data. The recordings were saved on a password protected computer in a locked office. The anonymous identifiers will be kept separately from the participant data these precautions are in line with GDPR recommendations. The data was held for the duration of the study to enable the option of follow up research. At the end of the study period the audio recordings were deleted and only the anonymised transcriptions retained indefinitely in accordance with GDPR.

3.4.4 Post Intervention Online Questionnaire – All study participants

On completion of the intervention both the experimental and control group were contacted to recomplete the study questionnaire. Once again, all participants were issued with an anonymised login code which was then used as the only identifier on the assessments. All participants again received the information sheet (Appendix 1) reminding participants that they had the right to end their participation at any time and to withdraw their data from the study if they wished. This ensured fully informed consent. After completion of the Pre (Appendix 3), Post (Appendix 6) questionnaires and the online training participants were provided with debrief information (Appendix 6) which included the mental health support provided by their organisation. In addition, signposting to their organisation's employee support, their GP and external support for mental health issues including Mind.

3.4.5 End of Study

Each workplace will be provided with a copy of a summary report of the completed research, no individual feedback is provided to participants. Following completion of each stage of the study (pre and post questionnaire, training and interview), participants were provided with the debrief form. The debrief form included the aims and purpose of the study. The information also included signposting to their organisation's employee support, their GP and external support for mental health issues including Mind.

3.4.6 Online Security

As previously mentioned for the pre and post questionnaires each participant was allocated a unique identifier at the beginning of the study. This unique identifier was used if the participant's data needs to be linked to their identity, as in the case of withdrawal of their data. Participants could then contact the researcher if they wished to withdraw from the study and the researcher would then use this identifier to locate and withdraw their data up to two weeks after their participation in the interview as this is the point that data is anonymised.

Microsoft Teams was used to deliver the training and the interview. Microsoft Teams is an encrypted online platform. Participants have individual logins and enter an online waiting room before joining the group to ensure group security.

3.4.7 Duty of Care to the Participants

Participants in both the control and experimental group were provided with detailed information regarding the content of the questionnaire and the training topics and interview questions in order to enable informed consent. Signposting information was included in both post questionnaires and post training debrief forms and the interview information sheet which

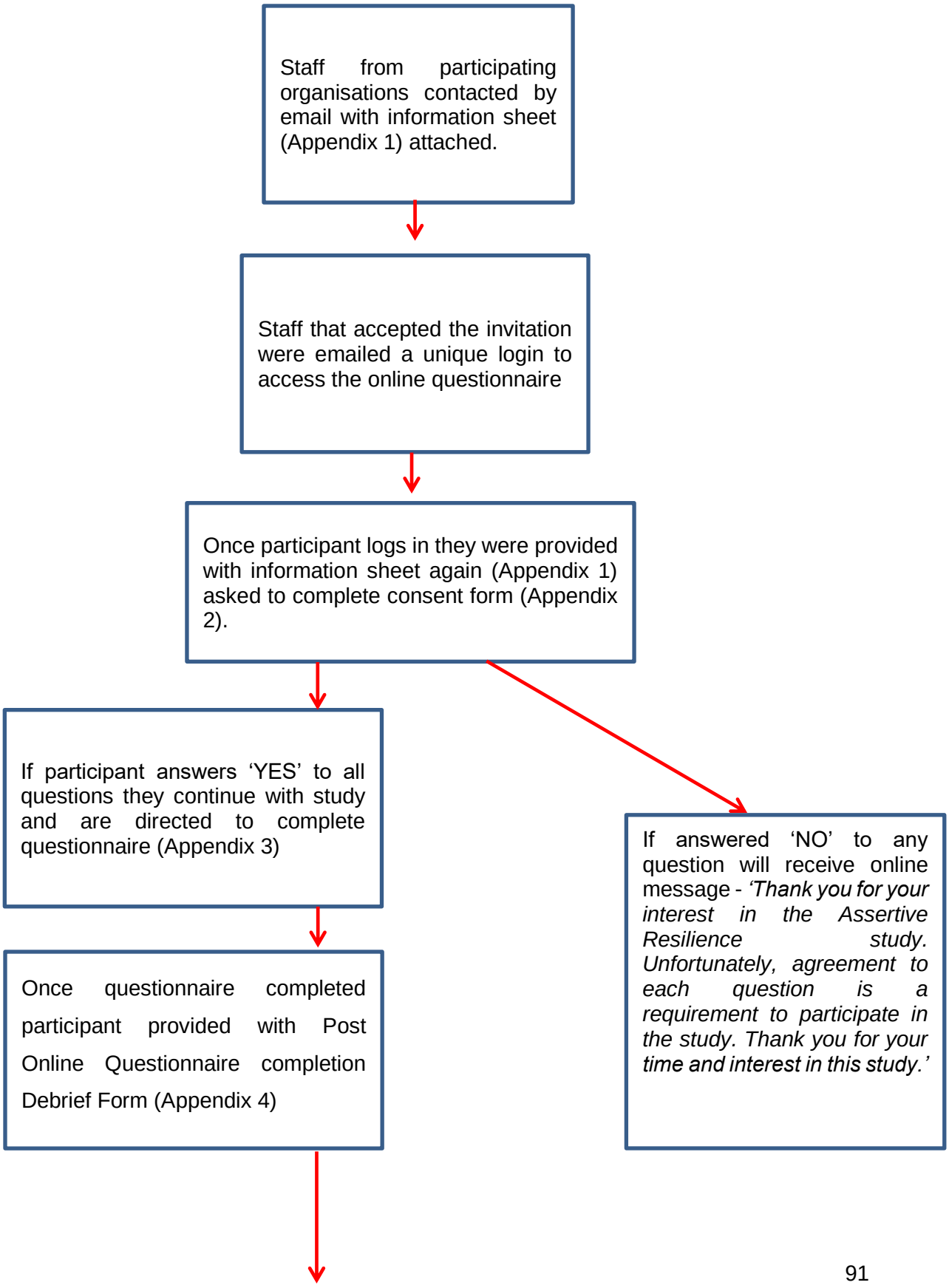
enabled participants who required support with their mental health and wellbeing to access appropriate support both within their workplace or external. Participant's participation was completely voluntary, and they were advised at every stage that they were able to leave the study at any time.

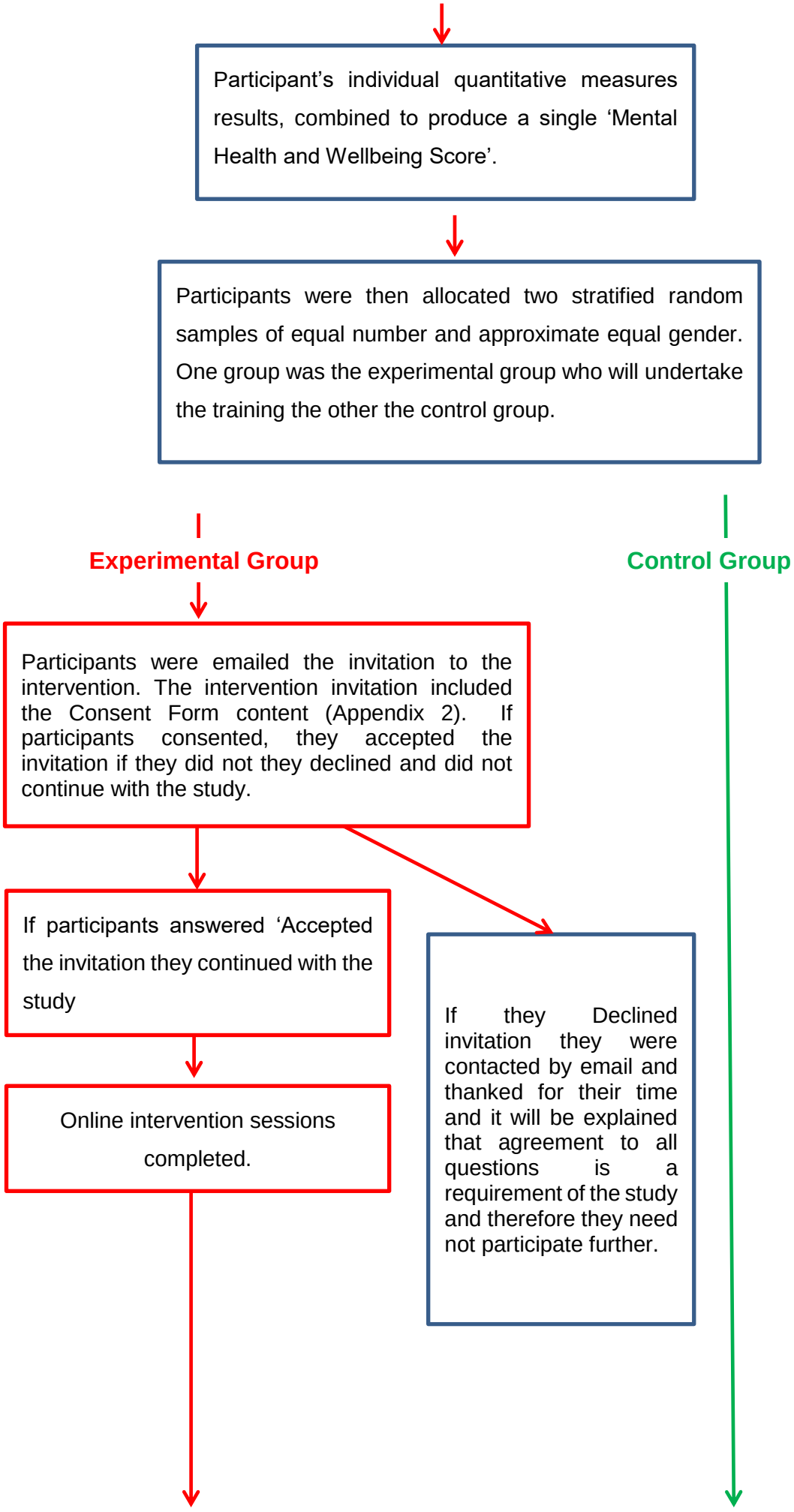
3.4.8 Data Management

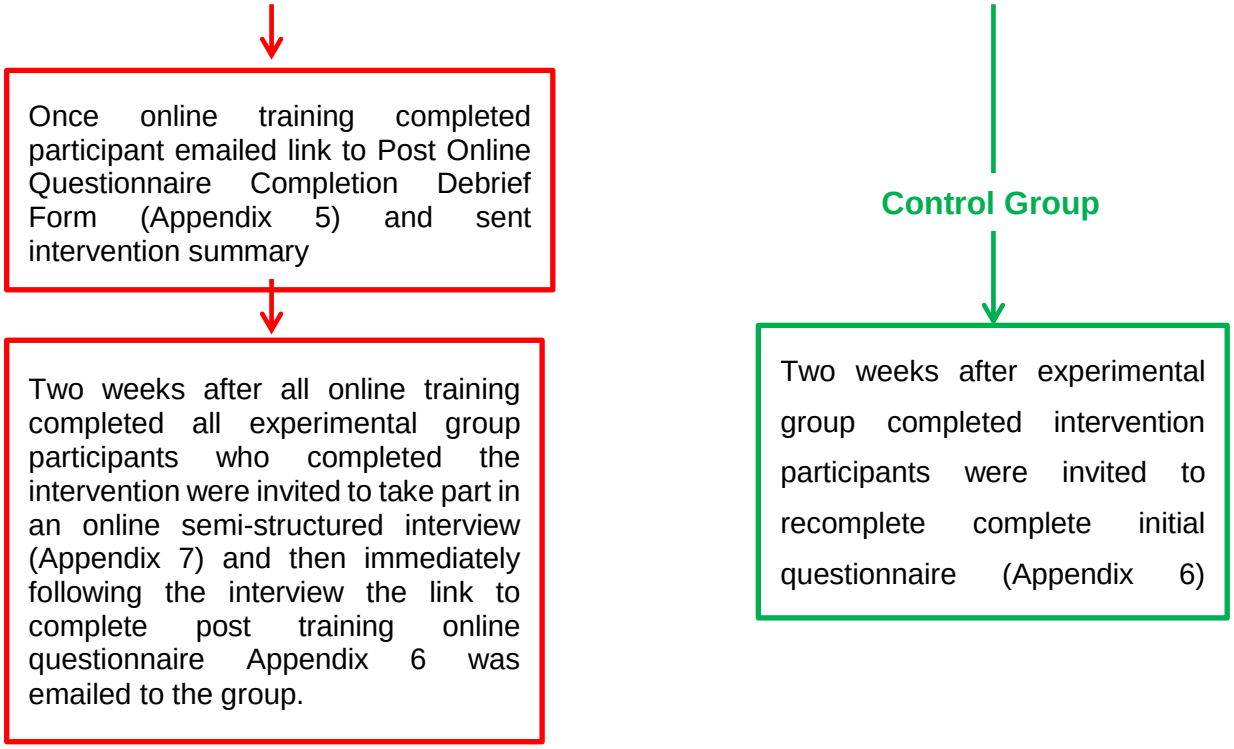
The online questionnaires were completed on the University of South Wales approved Jisc Online Surveys https://www.onlinesurveys.ac.uk/ (formerly Bristol Online Surveys) which is fully GDPR compliant, certified to ISO 27001 standard, meets UK accessibility requirements and is used by approximately 130 UK universities plus other public bodies and companies. The data has been kept confidential by the researcher and stored securely in in a password protected computer. The anonymous identifiers are kept separately from the participant data these precautions are in line with GDPR recommendations. The data will be held for the duration of the study to enable the option of follow up research. At the end of the study period the data will be anonymised and retained in accordance with GDPR.

3.4.9 Participant's Study Participation Journey

All participants followed the same process. The intervention was delivered as two groups, one for each organisation's participants.




Participant's individual quantitative measures results, combined to produce a single 'Mental Health and Wellbeing Score'.
Participants were then allocated two stratified random samples of equal number and approximate equal gender. One group was the experimental group who will undertake the training the other the control group.
Experimental Group
Control Group
Participants were emailed the invitation to the intervention. The intervention invitation included the Consent Form content (Appendix 2). If participants consented, they accepted the invitation if they did not they declined and did not continue with the study.
If participants answered 'Accepted the invitation they continued with the study
Online intervention sessions completed.
If they Declined invitation they were contacted by email and thanked for their time and it will be explained that agreement to all questions is a requirement of the study and therefore they need not participate further.


Once online training completed participant emailed link to Post Online Questionnaire Completion Debrief Form (Appendix 5) and sent intervention summary
Two weeks after all online training completed all experimental group participants who completed the intervention were invited to take part in an online semi-structured interview (Appendix 7) and then immediately following the interview the link to complete post training online questionnaire Appendix 6 was emailed to the group.
Control Group
Two weeks after experimental group completed intervention participants were invited to recomplete complete initial questionnaire (Appendix 6)

3.5 Ethical Considerations

3.5.1 Code of Ethics

The ethical code followed in this study was the British Psychological Society Code of Human Research Ethics (BPS 2014). This code has four principles –

- Respect for the autonomy, privacy and dignity of individuals and communities
- Scientific integrity
- Social responsibility
- Maximising benefit and minimising harm

The principle to respect for the autonomy, privacy and dignity of individuals and communities was upheld by ensuring that procedures enabled participants to provide valid consent, maintain confidentiality and anonymity as detailed in the Voluntary Informed Consent sub-section (3.5.2). That the content of the intervention sessions were confidential was reiterated at the beginning of the first session, with the researcher explaining to participants that nothing that was said within the sessions would be shared unless the information disclosed indicated intent to harm themselves or others or any unprofessional or illegal activity. The researcher explained that in that case they would have a duty to act and report this to the appropriate authority. At this point the group also agreed their level of confidentiality with each other. The study also ensured that all participants were treated fairly by providing all individuals information as detailed in the previous procedure section. The processes followed (as detailed in the procedure section) were consistent with an individual's moral rights, including cultural and role differences, those involving age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race (including colour, nationality, ethnic or national origin), religion and belief, sex, sexual orientation, education, language and socio-economic status.

Scientific integrity was ensured by thorough research of previous well-regarded studies for example the On PAR: A feasibility study of the Promoting Adult Resilience programme with mental health nurses (Foster et al, 2018) and the original pilot study Being on PAR: Outcomes of a pilot trial to improve mental health and wellbeing in the workplace with the Promoting Adult Resilience (PAR) program (Millear et al, 2008). All study decisions were discussed with study supervisors before being implemented and the study researcher referred to best practice guidelines from both the British Psychological Society (BPS, 2014) and the University of South Wales (USW, 2019).

The terms rigour for quantitative data and trustworthiness for qualitative data are how each method evaluates research, using appropriate criteria for the method (Bryman, 2012). The

term rigour is applied to quantitative research most often under three criteria: reliability, replication and validity (Bryman, 2012). Reliability refers to the degree a measure of a concept is stable. Replication refers to whether the research results can be reproduced. Validity is overall concerned with the integrity of the conclusions that the research has drawn. The criteria of validity can be further broken down to include measurement validity (does the measure truly reflect the concept), internal, validity (if a causal relationship between variables is proposed is this valid), external validity (can the results be generalised beyond the context of the research) and ecological validity (are social scientific findings applicable in people's everyday natural social settings). While qualitative studies are also concerned about quality it has been argued that the quantitative criteria do not map directly onto qualitative research and that alternative ways of assessing qualitative research is more applicable (Lincoln and Guba, 1985). Lincoln and Guba (1985) proposed an alternative to quantitative rigour for qualitative research termed trustworthiness. Trustworthiness has its own criteria, credibility, transferability, dependability and confirmability. Credibility refers to whether the findings are believable which has parallels with internal validity. Transferability is concerned with whether the findings apply in different context, which has parallels with external validity. Dependability asks whether the findings are likely to apply at other times, which parallels reliability. Confirmability asks to what extent the researcher's own values / views have intruded on the study, which parallels objectivity. The rationale for their qualitative criteria was that the quantitative approach is seeking the *'truth'* whereas from a qualitative position there are multiple accounts that are all valid. There are however, areas of common ground, for example it has been argued that the quantitative term ecological validity is something that is also relevant to qualitative research (Bryman, 2012).

As this study is mixed methods both rigour and trustworthiness standards needed to be upheld. To ensure the rigour of the data quantitative data, measures used were thoroughly assessed to ensure their quality and suitability. Data was collected following clear procedures for example using an online secure research platform with the data then downloaded as excel spreadsheets and analysed using SPSS. To ensure trustworthiness of the qualitative data, again clear procedures and methods of analysis which had been selected as a best fit for the data and the research question were followed. Data collection was completed as part of the combined qualitative questionnaire on the secure online platform as described previously. The semi structured interviews were recorded, and the initial transcript produced by the Microsoft Teams system, this initial transcript was then checked and corrected by the researcher using the recordings to ensure that the transcript was accurate.

Social responsibility was fulfilled by the researcher ensuring at all times that they worked in partnership with the University, participating organisations, supervisors and participants to

deliver all aspects of the research in a manner that was positive for all stakeholders and maintained ethical standards.

The principle of maximising benefit and minimising harm was upheld by the researcher being sensitive to participant's response to all elements of the research. The option to opt out of the research at any time was reiterated regularly throughout the research. The research was deemed as low risk based on USW research criteria and the BPS guidance. Participants were signposted at every stage of the study to appropriate organisations and support provided by their respective organisations. The research also met the standards of independence specified by the British Psychological Society (BPS, 2014) as there was no conflict of interest between the researcher and either the study reviewers or the two organisation's employees (Platfform and Hafod) who participated in the study.

3.5.2 Voluntary Informed Consent

Voluntary Informed Consent was ensured as each potential participant was provided with an information sheet which detailed all relevant study information including the study's purpose, process and confidentiality procedures (Appendix 1). The research was completed by adults over the age of 18 years who could provide voluntary consent. Right to withdraw was included at every stage of programme and within all the guidance provided to participants, for example the information sheet (Appendix 1) consent forms (Appendix 2 and 5), initial questionnaire, prior to programme delivery and on follow up questionnaire. The cut-off date for withdrawal was two weeks after the completion of the post training questionnaire or two weeks after their participation in the interview, as this was the point that data was anonymised.

The pre intervention information sheet and at every stage of the study the participants were reminded of their right to withdraw. Once participants had indicated to their organisation study contact that they were willing to take part, their details were provided to the researcher. Participants were emailed the study information and the link to the online questionnaire which included an Online Consent Form (Appendix 2) to be completed prior to the measures. Participants who answered 'YES' to all of the statements on the online consent form (Appendix 2), were invited to continue with the study. If they select 'NO' on any question they were directed to a message thanking them for their time and explaining that agreement to all questions was a requirement of the study. The questionnaire online message if participants do not provide consent was - *'Thank you for your interest in the Mental Health and Wellbeing Toolkit study. Unfortunately, agreement to each question is a requirement to participate in the study. Thank you for your time and interest in this study.*'

The participants were provided with the rationale for the study and the timeline of study participation which detailed for both the experimental and control group the complete study process and timing.

3.6 Reflexivity

The interpretive thematic analysis approach to qualitative research recognises that it is the researcher's interpretation of the participant's words that informs the resulting analysis. Beyond this it is the researcher who has chosen the research question, a process that itself will have been motivated by their previous knowledge, experience and will be informed by their interests, values and goals. This research is no different, is has been born from my previous experience, for example of occupational and counselling psychology and leadership and management development which drew me to a workplace study. When designing an intervention, it is understandable that this will have been done with the goal of creating something that fulfils its purpose and therefore the study to establish whether this is the case will not realistically be approached from a wholly objective standpoint. This study was designed as a mixed methods randomised control study partly to counter the risk of confirmation bias, that is the tendency to favour, view, recall or attend to information that confirms one's prior values or beliefs. The epistemological position taken is also likely a reflection on personal characteristics as all decisions will inevitably be at least in part informed by personal heuristics and biases (Buchanan and Huczynski, 2019). There is a question as to how to be reflexive within research reports, as a cursory level of self-disclosure is potentially neither helpful nor informative (Braun and Clarke, 2013). In this study whilst it is felt useful to acknowledge that the research reflects personal interests, beliefs and values in this case that there is the potential in to improve an individual's mental health and wellbeing through the format of this study's intervention and if this is the case this should be explored. Beyond this disclosure there is the risk that statements on gender, ethnicity and social class for example will serve not to illuminate a researcher's perspective but instead these general labels could activate the readers own heuristics and biases. Therefore, personal reflections, where appropriate will be included in the relevant sections (Braun and Clarke, 2013).

3.7 Summary

This chapter has provided an overview of this study's research methods including the background to the study design and the participants who participated in the study. The chapter has also detailed the material and measures used within the study and the procedures the study followed. There is also a section which considers how the study has met its ethical responsibilities.

The next chapter details the study's results from both the quantitative and qualitative research.

Chapter 4 Results

4.1 Introduction

The hypothesis this study was seeking to test was '*What impact does an Mental Health and Wellbeing Toolkit programme delivered online have on employee mental health and wellbeing?'* The null hypothesis was that Mental Health and Wellbeing Toolkit programme delivered online will have no impact on participant mental health and wellbeing. This chapter presents the quantitative and qualitative results of the study as detailed in the previous chapter. The results will form the basis of the conclusions drawn in relation to the hypothesis. As a mixed methods study the results are split into two sections to present the quantitative and qualitative results which will then be brought together in the following discussion section.

4.2 Quantitative Results

The study uses both continuous and categorical data. The continuous data in the study includes the age of participants and the quantitative scales used within the pre and post intervention questionnaires. These measures use Likert scales which enable the participants to rate their level of agreement with a statement for example the Connor-Davidson Resilience Scale ranges from 0, not true at all to 4, true nearly all of the time. The categorical data, which is data which has been allocated to a specific category, within this study includes, gender and participant employer.

4.2.1 Data Considerations and Methods of Analysis

To describe and analyse the data statistics are divided into two areas, descriptive statistics and inferential statistics. The initial analysis used descriptive statistics which, as the name suggests, presents numerical data which provides a useful summary of the initial study results (table 4.1). The next step was to use inferential analysis which allows conclusions to be drawn from the statistical analyses completed (Dewberry, 2004). The study data includes the descriptive statistics, mean scores and standard deviation. The mean score is the measure of central tendency which was used as this was appropriate for data which does not have any extreme scores (outliers) (Field, 2013). Standard deviation was also presented as this provides a measure of dispersion around the mean. A small standard deviation, relative to the mean indicates that the data points are close to the mean. Whereas, a large standard deviation indicates that the data points are distant from the mean. A standard deviation of 0 would indicate that all the scores were the same (Field, 2013).

Parametric statistical tests were used to analyse this data (Table 4.2 and 4.3). Parametric tests are considered to be more powerful and thereby more able to detect a statistically significant effects than non-parametric tests. However, there are three key assumptions that need to be met for a parametric test to be considered appropriate as outlined by Field (2013).

1. The data needs to be interval or ratio, e.g., there is equal distance between points on the scale used to measure a variable.

2. The data is normally distributed, i.e., variable measurements are distributed as a bell curve and are not skewed.

3. The samples being compared have equal variance, i.e., the data from each group is similar in the way it is spread.

The current data meets these three assumptions for a parametric test. The data can be considered interval level, as is usually the case with Likert scale questionnaires, the data is largely normally distributed as indicated by a Kolmogorov-Smirnov test (see Appendix 13), and the data has largely equal variance as shown by the Levene's test (see Appendix 14).

There are two types of t-tests, the independent-samples t-test and the paired-samples t-test. The independent-samples t-test is used when there are two experimental conditions and different participants have been assigned to each condition (Field, 2013). In this study the independent samples t-test has been used to compare the means of the control and experimental groups pre intervention scores to identify if the groups are equivalent at the beginning of the study (equivalence at baseline). An independent t-test has also been used to compare the two groups (experimental and control) pre and post intervention scores to identify if there is a significant difference between the two group's scores.

A paired-samples t-test is when there are two experimental conditions, and the same participants are taking part in both experimental conditions (Field, 2013). In this study a paired samples t-test is used when there is one variable under investigation and the, the data is continuous. The paired samples t-test results table includes the degrees of freedom Figure which is the number of observations that are free to vary; in this test the degree of freedom is one less than the total number of scores. The paired sample t-test enables the change in the experimental groups pre and post score to be tested to see if any change is significant.

The level of statistical significance is set at $p = \leq 0.05$ which gives the probability of obtaining a difference between the sample means if the null hypothesis is true of 5%. A marginal significance will be described when the statistical significance is $p = \geq 0.05$ but $p = \leq 0.08$. The

term marginal significance (borderline significance) has been criticised as increasing the possibility of a Type 1 statistical error, which is reporting a false positive conclusion (Pritschet, Powell and Horne, 2016). Whilst this level of significance does not in isolation enable the null hypothesis to be rejected, due to the study's small sample size, it provides a useful insight into the study's results (Rosnow and Rosenthal, 1992).

4.2.2 Participant Demographic Information

The total number of participants was 24. The mean age for all participants was 41 years (SD 8.319). The total group age range was 24 years to 56 years. The gender split of participants was 16 female participants (66%) and 8 male participants (34%). The female's average age was 40 years and the males' average were 43 years.

4.2.3 Quantitative Data Results

The 24 participants were split into the experimental group with 10 participants and the control group with 14 participants.

4.2.3.a *Equivalence at Baseline*

It is important at the beginning of the study to establish that the two groups (experimental and control) are equivalent at baseline, which means that none of the variables differ at the outset of the study. If the two groups are found to be equivalent at baseline any change to the dependent variables, in this study the scale scores, can be attributed to the independent variable, which in this study is the attendance or not, of the intervention.

To test whether the two groups were equivalent at baseline an independent samples t-test was completed on all the dependent variables.

The results show that there were no statistically significant differences at baseline on any demographic or psychological variables, and all p values were ≥ 0.05 (Table 4.1, next page). This means that as the experimental and control groups were equivalent on all measures at the start of the study any post intervention change in the experimental group results post study could be attributed to the intervention.

Table 4.1 Equivalence of Groups at Baseline

Measure – Pre-Intervention	Experimental / Control Group	Mean (SD)	T (DF)	P
Age	Experimental	43.80 (8.89)	1.220 (22)	0.610
	Control	39.64 (7.74)		
CD-Risc –Total	Experimental	67.80 (14.05)	0.003 (22)	0.555
	Control	67.79 (11.93)		
CD-Risc - Hardiness	Experimental	20.00 (4.57)	0.247 (22)	0.776
	Control	19.57 (3.90		
CD-Risc - Coping	Experimental	13.60 (3.03)	-0.640 (22)	0.349
	Control	14.29 (2.23)		
CD-Risc – Adaptability / Flexibility	Experimental	9.40 (1.96)	0.294 (22)	0.427
	Control	9.14 (2.21)		
CD-Risc – Meaningfulness / Purpose	Experimental	7.60 (2.27)	-1.422 (22)	0.661
	Control	9.00 (2.45)		
CD-Risc - Optimism	Experimental	5.40 (1.43)	0.274 (22)	0.558
	Control	5.21 (1.76)		
CD-Risc – Regulation of Emotion and Cognition	Experimental	5.00 (1.56)	0.209 (22)	0.756
	Control	4.86 (1.70)		
CD-Risc – Self Efficacy	Experimental	6.80 (1.23)	1.934 (22)	0.733
	Control	5.71 (1.44)		
DAS21 - Depression	Experimental	5.20 (3.36)	0.037 (22)	0.394
	Control	5.14 (3.96)		
DAS21 - Anxiety	Experimental	3.70 (3.16)	-0.400 (22)	0.837
	Control	4.29 (3.77)		
DAS21 - Stress	Experimental	6.50 (2.32)	-1.291 (22)	0.020
	Control	8.64 (4.85)		
Coping Self-Efficacy Scale	Experimental	148.80 (27.86)	-0.472 (22)	0.207
	Control	155.29 (36.39)		
Warwick Edinburgh Wellbeing Scale	Experimental	47.50 (4.25)	0.718 (22)	0.019
	Control	45.50 (8.01)		

Means and Standard Deviation of Variables Pre-Intervention for Experimental Group (Completed Intervention) and Control Group (Did Not Complete Intervention) indicating Equivalence at Baseline

Data - Appendix 15 and Appendix 16

4.2.3.b *Comparison Experimental and Control Group Pre and Post Intervention*

At the end of the study the analysis is seeking to identify if there have been any changes in the experimental group who completed the intervention scores compared to the control group who did not.

In order to identify any change, separate paired sample t-test were completed, one for the experimental group and one for the control group (Table 4.2). To do this the means and standard deviation of variables for experimental group (completed intervention) and control group (did not complete intervention) pre and post intervention were calculated (Table 4.2). A paired samples t-test was then completed on each to see if there was a statistically significant change in the scale results from the beginning of the study to the end of the study for the two groups; control and experimental (Table 4.3).

The results, (Table 4.2 below with further details in each scale's following subsection), showed that between baseline and post intervention the experimental group has improved significantly ($p = \leq 0.05$) on three variables and there was marginal significance ($p = \leq 0.08$) on two. The control group did not show any significant change ($p = \geq 0.05$) on any variable. The three variables where there was significant improvement were the CD-Risc Total score, CD-Risc Hardiness subscale score and the CD-Risc Meaningfulness / Purpose subscale score. The variables where there was marginally significant improvement were the Coping Self- Efficacy Scale score and CD-Risc Regulation of Emotion and Cognition subscale score.

Table 4.2 Means and Standard Deviation of Variables for Experimental Group (Completed Intervention) and Control Group (Did Not Complete Intervention) Pre and Post Intervention

Measure	Experimental / Control Group	Pre-Intervention Mean (SD)	Post Intervention Mean (SD)	t (df)	Significance (2 tailed)
CD-Risc -Total	Experimental	67.80 (14.05)	71.80 (13.64)	-2.724 (9)	**0.023**
	Control	67.79 (11.93)	68.86 (11.87)	-1.304 (13)	0.215
CD-Risc - Hardiness	Experimental	20.00 (4.57)	21.40 (4.43)	-2.941 (9)	**0.016**
	Control	19.57 (3.90)	19.86 (3.61)	-0.694 (13)	0.500
CD-Risc - Coping	Experimental	13.60 (3.03)	13.80 (2.82)	-0.429 (9)	0.678
	Control	14.29 (2.23)	14.43 (2.59)	-0.694 (13)	0.500
CD-Risc – Adaptability / Flexibility	Experimental	9.40 (1.96)	9.70 (1.83)	-0.635 (9)	0.541
	Control	9.14 (2.21)	9.29 (2.16)	-1.472 (13)	0.165
CD-Risc – Meaningfulness / Purpose	Experimental	7.60 (2.27)	8.80 (2.97)	-2.571 (9)	**0.030**
	Control	9.00 (2.45)	9.00 (2.42)	0.000 (13)	1.000

CD-Risc - Optimism	Experimental	5.40 (1.43)	5.70 (1.25)	-1.406 (9)	0.193
	Control	5.21 (1.76)	5.43 (1.40)	-0.898 (13)	0.385
CD-Risc – Regulation of Emotion and Cognition	Experimental	5.00 (1.56)	5.50 (1.35)	-2.236 (9)	**0.052**
	Control	4.86 (1.70)	4.93 (1.73)	-0.366 (13)	0.720
CD-Risc – Self Efficacy	Experimental	6.80 (1.23)	6.90 (1.10)	-1.000 (9)	0.343
	Control	5.71 (1.44)	5.93 (1.44)	-1.385 (13)	0.189
DASS21 - Depression	Experimental	5.20 (3.36)	4.50 (3.03)	1.655 (9)	0.132
	Control	5.14 (3.96)	5.00 (3.68)	0.563 (13)	0.583
DASS21 - Anxiety	Experimental	3.70 (3.16)	2.30 (2.79)	1.769 (9)	0.111
	Control	4.29 (3.77)	4.21 (3.81)	0.249 (13)	0.807
DASS21 - Stress	Experimental	6.50 (2.32)	5.30 (1.42)	1.857 (9)	0.096
	Control	8.64 (4.85)	8.64 (4.68)	0.000 (13)	1.000
Coping Self-Efficacy Scale	Experimental	148.80 (27.86)	173.00 (26.67)	-2.241 (9)	**0.052**
	Control	155.29 (36.39)	155.21 (33.52)	0.015 (13)	0.989
Warwick Edinburgh Mental Wellbeing Scale	Experimental	47.50 (4.25)	49.90 (5.32)	-1.734 (9)	0.117
	Control	45.50 (8.01)	44.36 (8.03)	1.963 (13)	0.071

CD-RISC - Connor-Davidson Resilience Scale, DASS21 - Depression Anxiety Stress Scale
Significance of Difference between Experimental Group (Completed Intervention) and Control Group (Did Not Complete Intervention) Pre and Post Intervention Scores. Paired Samples t – test including df (degrees of freedom) and 2-tailed significance.
Significance ($p = \leq 0.05$) and marginally significant ($p = \leq 0.08$) results are in bold.
Data Appendix 17 and Appendix 18.

4.2.3.c *Comparison of Change Scores Pre and Post Intervention per Variable for the Experimental and Control Group*

By exploring the degree of change between the control and experimental group at the first data point (pre intervention) and again at the second data point (post intervention) if the intervention had led to significant change in scale scores, this could be identified.

To test this independent samples t-tests comparing the difference between scale results pre intervention (Test A - Table 4.3) and again post intervention (Test B - Table 4.3) were completed.

The results show that the mean difference between the control and experimental group pre intervention, was not significant for any variable (Test A - Table 4.3,). Post intervention there were 3 variables where the mean difference between the control and experimental group was significant CD-Risc subscale – Meaningfulness / Purpose, Coping Self-Efficacy Scale score and the Warwick Edinburgh Mental Wellbeing Scale (Test B – Table 4.39).

Table 4.3 Comparison of Difference Scores Per Variable for Experimental and Control Group

	Test A - Independent Samples t-test Pre-Intervention between experimental and control			Test B – Independent Samples t-test Post Intervention between experimental and control		
Measure	Mean Difference	t (df)	Significance (2-tailed)	Mean Difference	t (df)	Significance (2-tailed)
CD-Risc –Total	0.01	0.003 (22)	0.998	2.93	1.864 (22)	0.076
CD-Risc - Hardiness	0.43	0.247 (22)	0.807	1.11	1.763 (22)	0.092
CD-Risc - Coping	-0.69	-0.640 (22)	0.529	0.06	0.0124 (22)	0.903
CD-Risc – Adaptability / Flexibility	0.26	0.294 (22)	0.771	0.16	0.381 (22)	0.707
CD-Risc – Meaningfulness / Purpose	-1.40	-1.422 (22)	0.169	1.20	2.278 (22)	**0.033**
CD-Risc - Optimism	0.19	0.274 (22)	0.786	0.09	0.255 (22)	0.801
CD-Risc – Regulation of Emotion and Cognition	0.14	0.209 (22)	0.836	0.43	1.436 (22)	0.165
CD-Risc – Self Efficacy	1.09	1.934 (22)	0.066	-0.11	-0.565 (22)	0.578
DAS21 - Depression	0.06	0.37 (22)	0.971	-0.56	-1.197 (22)	0.244
DAS21 - Anxiety	-0.59	-0.400 (22)	0.693	-1.33	-1.782 (22)	0.089
DAS21 - Stress	-2.14	-1.291(22)	0.210	-1.20	-1.857 (22)	0.077
Coping Self-Efficacy Scale	-6.49	-0.472 (22)	0.641	24.27	2.257 (22)	**0.034**
Warwick Edinburgh Mental Wellbeing Scale	2.00	0.718 (22)	0.480	3.54	2.623 (22)	**0.016**

Test A – Independent Sample t-test - Pre-Intervention for Experimental Group (Completed Intervention) and Control Group (Did Not Complete Intervention) indicates equivalence of groups at baseline. Equal variances assumed.

Test B – Independent Sample t - test – Measure Difference between Post Intervention for Experimental Group (Completed Intervention) and Control Group (Did Not Complete Intervention). Equal variances assumed
Significant and marginally significant scores are in bold

Data – Appendix 19 and Appendix 20

4.2.3.d *Connor-Davidson Resilience Scale (CD-Risc) Results*

The CD-Risc Total mean scores (Table 4.1, Figure 4.1 - Bar Chart) indicates that there was a significant change ($p = \leq 0.05$) between the experimental group's pre and post intervention mean scores of level of resilience as $t = -2.724$ (9) $p = 0.023$ (Table 4.1). In comparison there was no significant change between the control group's pre and post intervention mean score of level of resilience as indicated by the CD-Risc Total scores $t = -1.304$ (13) $p = 0.215$ (Table 4.1 and Figure 4.1- Bar Chart – next page). In terms of the comparison of change scores pre and post intervention per variable for the experimental and control group the experimental groups was marginally significant $t = 1.874$ (22) $p = 0.76$.

Within the Connor-Davidson Resilience sub scales which measure Hardiness (i.e. commitment / challenge / control), Coping, Adaptability/ Flexibility, Meaningfulness/ Purpose, Optimism, Regulation of Emotion and Cognition and Self-Efficacy there were 2 significant results ($p = \leq 0.05$) (Hardiness and Meaningfulness/Purpose) and one marginally significant result ($p = \leq 0.08$) (Regulation of Emotion and Cognition) (Figure 4.1 - Bar Chart – next page).

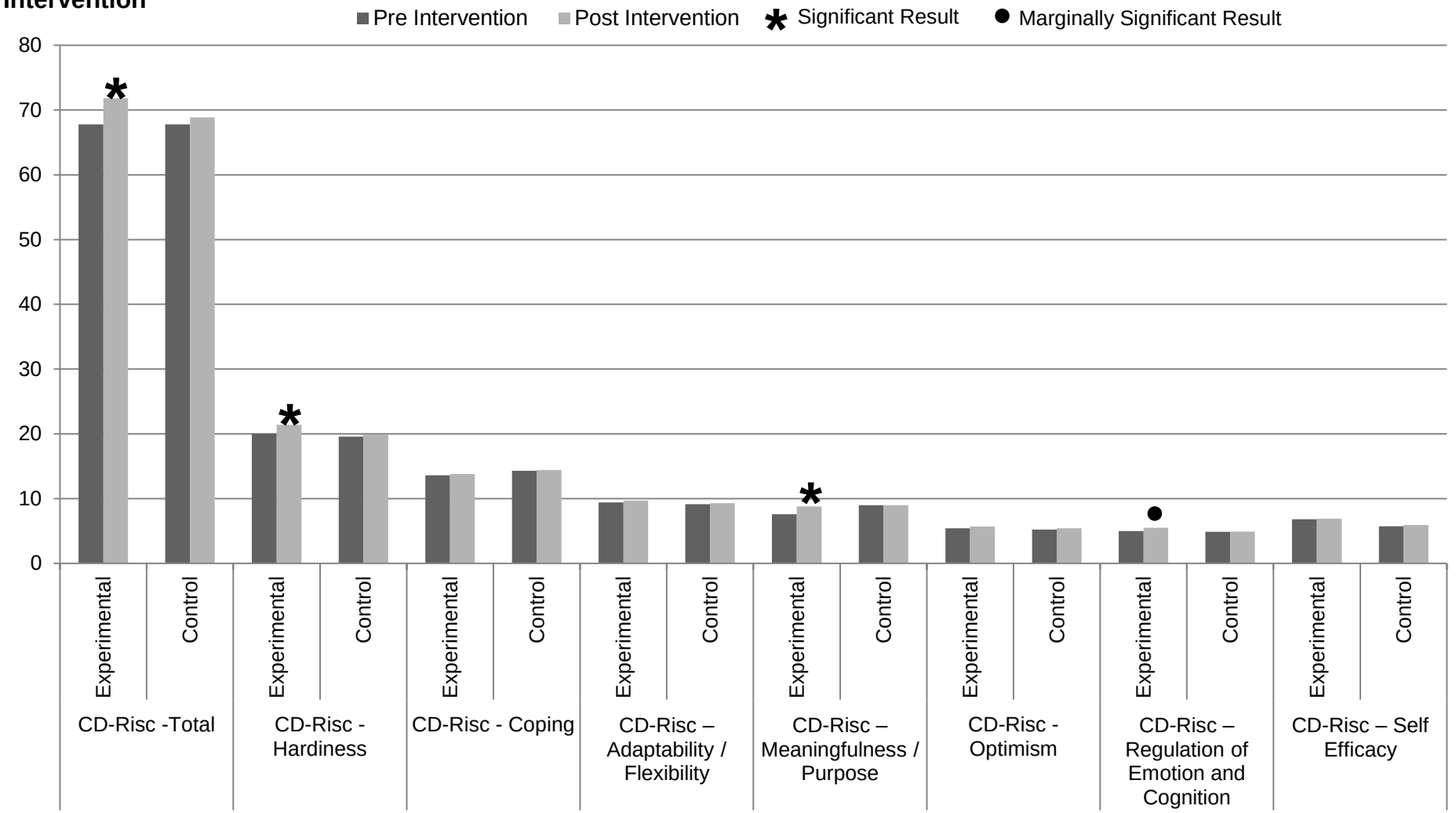
The subscale Hardiness results for the experimental groups change between pre and post measures was significant $t = -2.941$ (9) $p = 0.016$, compared to the control group's pre and post measures which showed no significant change $t = -0.694$ (13) $p = 0.500$.

The subscale Meaningfulness/Purpose also showed a significant change between pre and post measures with $t = -2.571$ (9) $p = 0.030$, compared to the control group's pre and post measures which showed no significant change $t = 0.000$ (13) $p = 1.000$.

The difference between the CD-Risc subscale Regulation of Emotion and Cognition pre and post measures, showed a marginally significant result $t = -2.236$ (9) $p = 0.052$. This compares with the control group pre and post measures which showed there was not a significant change $t = -0.366$ (13) $p = 0.720$.

These results indicate that the experimental group participant's level of overall resilience and their level of hardiness and meaningfulness/ purpose increased significantly post intervention. There was also a marginally significant increase in participant's regulation of emotion and cognition post intervention when compared to their pre intervention scores.

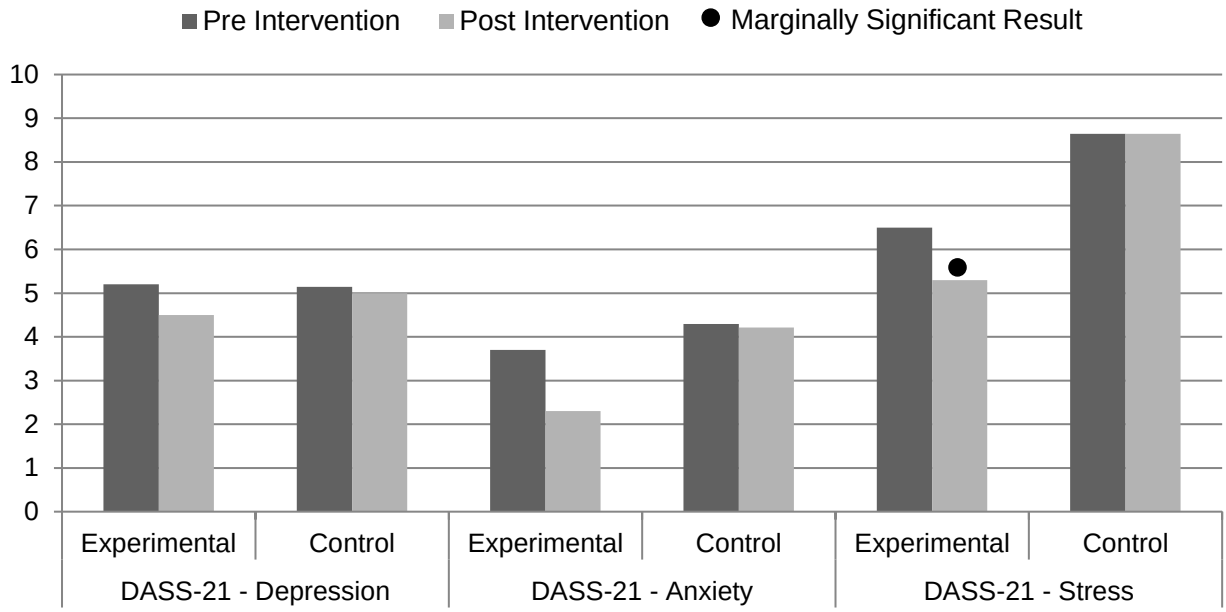
Figure 4.1 All CD-Risc Means (Total & Sub Scales from Table 4.1) for Experimental and Control Groups Pre and Post Intervention



The CD Risc scale has 25 items scored on a 5-point scale from 0 to 4, giving a score range of 0 to 100. Lower scores indicate less resilience and higher scores indicate greater resilience. The scale's items incorporate measures of Hardiness (i.e. commitment/challenge/control), score range 0 to 28, Coping which has a score range of 0 to 20, Adaptability/ Flexibility which has a score range of 0 to 12, Meaningfulness/ Purpose which has a score range 0 to 16, Optimism which has a score range of 0 to 8, Regulation of Emotion and Cognition which has a score range of 0 to 8 and Self-Efficacy which has a score range of 0 to 8.

4.2.3.e *Depression, Anxiety and Stress Scale Results*

Figure 4.2 DASS-21 Means for Experimental and Control Groups Pre and Post Intervention

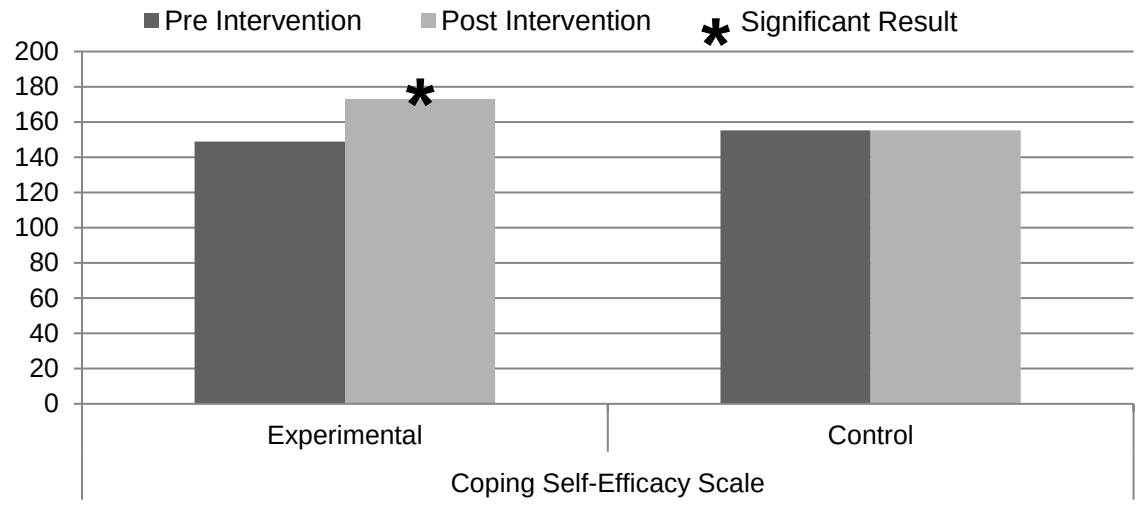


The DASS-21 has 21 items split equally between Depression, Anxiety and Stress scored on a 4 point scale from 0 to 3 giving each, a score range from 0 to 21. The higher the score the higher levels of Depression. Anxiety or Stress (see table 3.6 in Research Methods chapter).

The Depression, Anxiety and Stress Scale (DASS-21) results (Table 4.2, Figure 4.2 - Bar Chart for the experimental group's change in their depression score from pre to post intervention was t = 1.655 (9) p = 0.132. The control groups pre to post intervention score change was t = 0.563 (13) p = 0.583. The change between the pre and post intervention in both the experimental and control groups was not significant ($p = \leq 0.05$). The difference in the anxiety or stress score for both the experimental and control groups was also not significant with the experimental group anxiety score being t = 1.769 (9) p = 0.111 and their stress score being t = 1.857 (9) p = 0.096. In comparison the control group's score for anxiety were t = 0.249 (13) p = 0.807 and for stress were t = 0.000 (13) p = 1.000. For the DASS-21, therefore whilst there was a difference between the control and experimental groups mean scores pre and post intervention, with a greater reduction in scores in depression, anxiety and stress in the experimental group, as illustrated in Bar Chart B (Data in Table B). There was no significant change between the group's pre and post intervention results for depression and anxiety (Table C). The change between the groups pre and post intervention results for stress was marginally significant, t = -1.857 (22) p = 0.077 (Table 4.3). This indicates that there was a slight reduction in the experimental groups stress post intervention.

4.2.3.f *Coping Self-Efficacy Scale Results*

Figure 4.3 Coping Self-Efficacy Scale Means for Experimental and Control Groups Pre and Post Intervention



The CSE Scale has 26 items scored on an 11-point scale from 0 to 10. The score range is from 0 to 260 with the higher the score indicating the higher level of coping self-efficacy.

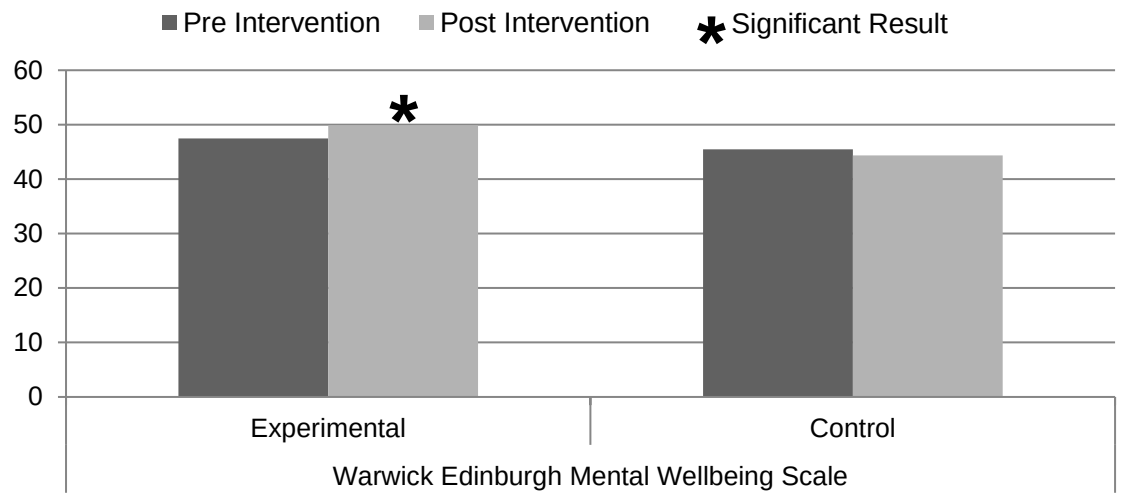
The Coping and Self-Efficacy Scale means for the experimental and control groups pre and post intervention (Table 4.2, Figure 4.3 - Bar Chart) show an increase between the level of self-efficacy for the experimental group's pre intervention scale scores compared to the post intervention scale scores t = -2.241 (9) p = 0.052. This contrast with the control group where there was no significant difference between the control group's pre and post intervention level of self-efficacy t = 0.015 (13) p = 0.989. The comparison of the Coping Self-Efficacy change scores pre and post intervention (Table 4.3) show a significant change difference t = 2.257 (22)p = 0.034. The Coping Self-Efficacy Scale (CSES) results indicate that participants in the experimental group's level of coping and self-efficacy increased significantly following their participation in the intervention.

4.2.3.g *Warwick Edinburgh Wellbeing Scale Results*

The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) results show that the experimental groups mean scores increased after the intervention and the control groups scored decreased (Table 4.2, Figure 4.4 - Bar Chart – next page).

While the experimental groups increase in wellbeing was not significant t = -1.734 (9) p = 0.117, the controls groups decrease in wellbeing was marginally significant t = 1.963 (13) p = 0.071 (Table 4.2).

Figure 4.4 Warwick Edinburgh Mental Wellbeing Scale Experimental and Control Means Groups Pre and Post Intervention



WEMWBS is a 15-item scale scored on a 5-point scale from 1 to 5. The score range is from 14 to 70 with the higher the score indicating a higher level of wellbeing.

The independent samples t-test measuring the difference between the post – intervention scores for experimental group (completed intervention) and control group (did not complete intervention) shows a significant difference in the change in wellbeing score $t = 2.623$ (22) $p = 0.016$. This indicates that the participants in the experimental group's level of wellbeing were significantly different from the control group after participating in the intervention.

4.3 Summary

This chapter details the statistical methods used and the rationale for their selection. The results indicate that there are a number of statistically significant and marginally statistically significant results.

The CD Risc -25 total results indicate that the experimental group's resilience increased following the intervention. The subscales results indicate that after the intervention there was a significant increase in participant's levels of Hardiness, Meaningfulness/ Purpose and a marginally significant increase in their Regulation of Emotion and Cognition.

The DASS-21 results indicate that whilst there was not a significant change in the experimental group's level of depression or anxiety there was a marginally significant decrease in their level of stress post intervention compared to the control group.

The Coping and Self-Efficacy Scale results show that post intervention, the experimental group's level of self-efficacy increased significantly compared to the control group.

The Warwick-Edinburgh Mental Well-being Scale results showed that the experimental group's level of wellbeing compared to the control group, increased significantly after participating in the intervention.

This section has detailed the quantitative results from the four measures used in this study. The quantitative results indicate that participation in the study intervention had a positive impact on a number of aspects of participant's mental health and wellbeing which indicates that the null hypothesis can be rejected. In the next section the qualitative data which has been subject to thematic analysis to provide the qualitative results will be explored.

4.4 Qualitative Results

4.4.1 Introduction

This section details the outcomes of the Thematic Analysis of the qualitative data collected. Qualitative data was collected from post intervention semi structured interviews completed by the experimental group participants. There were also qualitative questions included in the online questionnaires, with all participants completing three questions pre and post intervention and the experimental group only, completing an additional five questions post intervention. The term trainer refers to the researcher who delivered the study's intervention.

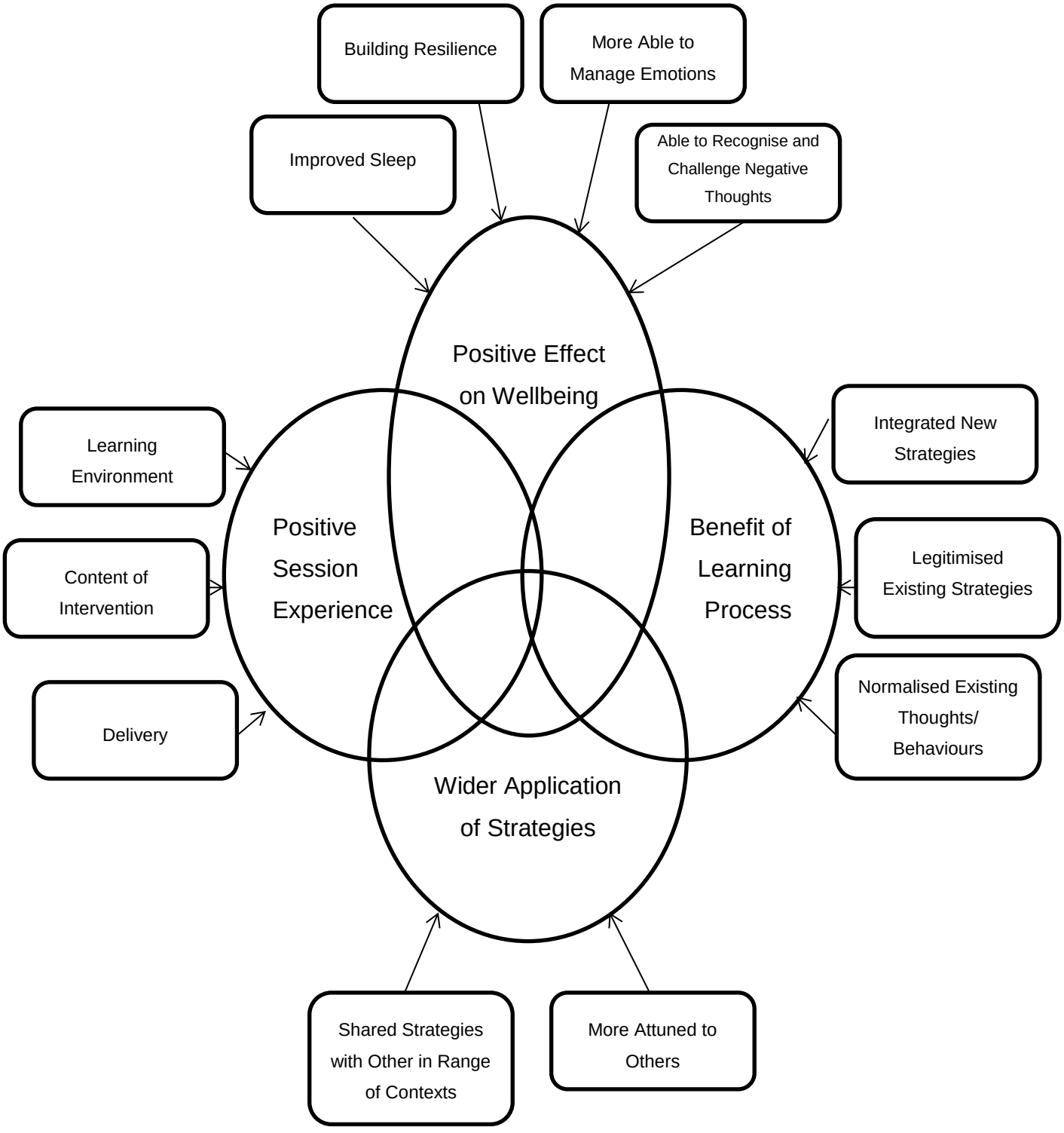
4.4.2 Interview Thematic Analysis results

This section details the outcomes of the thematic analysis of the post intervention semi-structured interview. The table below details the Themes and their Subthemes which emerged from the data.

Table 4.4 List of Themes with Subthemes

Theme 1: Positive Effect on Wellbeing
Subtheme 1.1: Building Resilience
Subtheme 1.2: Improved Sleep
Subtheme 1.3: More able to manage emotions
Subtheme 1.4: Able to recognise and challenge negative thoughts
Theme 2: Benefit of learning process
Subtheme 2.1: Integrated New Strategies
Subtheme 2.2: Legitimised Existing Strategies
Subtheme 2.3: Normalised existing thoughts / behaviours
Theme 3 : Wider Application of Strategies
Subtheme 3.1: Shared strategies with others in range of contexts
Subtheme 3.2: More attuned to others
Theme 4: Positive Session Experience
Subtheme 4.1: Learning Environment
Subtheme 4.2: Content of Intervention
Subtheme 4.3: Delivery

Figure 4.5 Visual Map of Themes and Subthemes



4.5 Theme 1: Positive Effect on Wellbeing

This theme focuses on the aspects of wellbeing that participants identified as being positively impacted by the programme. The subthemes each reflect an aspect of wellbeing that individually and/or collectively would be likely to have a positive impact on wellbeing. The theme *'Positive Effect on Wellbeing'* has four subthemes; '*Building Resilience', 'Improved Sleep', 'More able to manage emotions'* and '*Able to recognise and challenge negative thoughts'*. Each of the subthemes focuses on an aspect of the interventions effect that is likely to have had a positive effect on their wellbeing.

4.5.1 Subtheme 1.1: Building Resilience

The first subtheme *'Building Resilience'* which in this study is taken to be the ability to bounce back, adapt or cope with challenges, draws together participant's comments that indicate that the intervention has contributed to building their resilience either in a specific situation or as an aspect of their wellbeing.

There were several changes to participants that appeared to contribute to increases to their resilience / coping and in turn their wellbeing.

For example, participant 1 responded -

Participant 1 – *'Definitely yeah, um, I think it's a given me time and obviously, Um, I don't like to say the word permission, but it's obviously give me sort of permission to sort of stop and think before sometimes rushing in.'*

The application of the strategies seems to have changed the level of self-care that Participant 1 was *'allowing'* themselves, as typified by their comment below.

Participant 1 *'…allowing myself time before and saying it's OK to have that time and being my own best friend.*

This change in perspective in terms of what level of self-care is *'allowed'* seems to have had an impact on wellbeing by enabling the participant to feel more relaxed and able to step back from work. A key phrase that Participant 1 uses is *'I'm doing a good job'* this shows another of the strategies in action and supports the interventions encouragement of participants to recognise and acknowledge their successes and strengths.

This same strategy is referred to as part of the change that Participant 4 has experienced. This participant's response provides a useful insight into how the change has occurred; in this case the participant seems to have found that by applying the strategy when they notice that

they are feeling low they are able to lift their mood. As the Participant has tried the strategy and found it effective it seems to have been adopted as their go to response to their low mood which may have the effect of lifting their mood more quickly that perhaps they have experienced in the past. Participant 4 described another aspect of resilience that has been impacted by the intervention. For them the recognition that connecting to other people is a key factor in their wellbeing has not only increased their self-knowledge but provided the motivation to seek out other people in order to raise their mood when they notice it is falling.

Participant 4: *'The main thing that I uh, that it's made me change in myself is trying to connect with people more often um, in a more meaningful way.'*

As an aspect of resilience is the importance of not just knowing what may help your mental health and wellbeing in any given situation, but, also having the motivation to apply the appropriate strategy.

The positive impact of this approach is illustrated by the effusive praise from Participant 1 who describes the change in their thinking as *'very very useful'* going on to say, when asked about whether the intervention has had a positive impact on their mental health and wellbeing that -

Participant 1 *'Yes, most definitely. Yes. Most definitely a positive impact.'*

It is then noteworthy that participants described how the sessions boosted their level of motivation, for example. It is also interesting that it seems that the strategies themselves were not always new but while they knew what to do, previously they had not been sufficiently motivated to do it for themselves although they advocated it to others.

For Participant 4 (below) the programme seemed to have resulted in an increase in their level of self-confidence. This has enabled them *to 'feel more assertive'*, as instead of second guessing themselves they are now saying what they think, as they have more confidence in what they think.

Participant 4: *'I guess I don't question myself so much anymore. … I just feel more confident in why I wanted to say what I did or why I wanted to do what I did. So in that sense I feel more assertive.'*

Participant 10 also describes how they are now more assertive in meetings by putting themselves forward more rather than '*just sitting there'.*

Participant 10: '*I have been more assertive with things and…, putting myself forward then more, maybe just instead of joining the meeting and just sitting there.'*

Participant 6 linked their increased assertiveness to being able to stay away from emotionally engaging. This in turn links with the '*More able to manage emotions'* theme and indicates how the sub themes and themes are interlinked and how the programme's impact is both different for each participant, but their overall experiences are remarkably similar.

Participant 6: *being able to kind of like be more assertive because I'm staying away from the emotional engaging in the emotional elements*

Participant 9 describes how now that the programme has not only enabled them to '*name all the things that I do'* they now also have the '*coping mechanisms'* and '*measures in place'* to help them manage these. Having these mechanisms and measures is likely to increase their level of resilience and potentially their wellbeing which is indicated (below) by their comments that the intervention has helped them massively.

Participant 9: *'I felt like I could name all the things that I do, I felt that I had coping mechanisms. I felt I had… I could put measures in place to help me. So the sessions of most definitely helped me massively.'*

4.5.2 Subtheme 1.2: Improved Sleep

A number of participants mentioned that the programme had improved their sleep. There seems to be two different aspects to this effect. For Participant 8 for example the strategies enabled them to reduce their level of worry which in the past would have escalated to the point of affecting their sleep.

Participant 8 – 'I encountered a situation last week where I probably would have over worried to the point of losing sleep over a work-related situation and I know I can get quite, I'm my own worst enemy. However, by doing some of the methodology's I didn't ...It didn't progress…the worry had kind of subsided.'

Participant 9's sleep has benefitted from them not lying in bed and '*catastrophising'* as they recognised that they were focussing their thoughts on things that nobody had said or were likely to say. Now that they can recognise what they were doing they used the strategies to shift their focus onto where they think it would be more beneficial for them.

Participant 9 – 'I'm certainly sleeping better. And I think, like I say, is just being able to, to give names to things to know to when you're laying there in at night, in bed, catastrophising and you're thinking, actually, that's what I'm doing.

4.5.3 Subtheme 1.3: More able to manage emotions

Several participants gave examples of the techniques that they used in specific situations and the impact that this had on their ability to manage their emotions. Participant 3 (below), who described how having a conscious awareness of what was happening, in terms of their thoughts, enabled them to focus and think logically rather than getting caught up in emotional thinking.

Participant 3: *'Just having that mind and thinking, um, thinking logically about things, that's that's been probably the most crucial for me, really. Just being aware of it. But being able to point it out to myself almost.'*

Another participant described how they used one of the techniques to manage their impatience which appeared to enable them to deescalate that emotion. They described that this meant that their *'cool'* was improved which seems to indicate that they were now less likely to become agitated.

Participant 5 – 'I think more positive. You know, sometimes I'm really impatient and I'm just using a tool and I think, you know, it's OK you know too. Yeah, in a positive way it has improved my err cool.'

Participant 6 described how they were now handling it when something was playing on their mind. The strategies seem to have enabled them to manage the issue and their emotions better, as the shift from the emotional response to a practical response indicates that they were consciously able to deescalate their emotions.

Participant 6: *'…kind of taking something that is kind of playing on your mind and having some sort of action plan to deal with those things and then sort of like dealing with it… I'm taking it from the emotional response to kind of like looking through it and then having a practical response to it.'*

This interpretation is supported by their later comment (below) when they describe how they have been able to reframe people's comments as opinions not facts. This combined with being able to resist emotional engagement has enabled them to manage the situation better which they have found to be really helpful.

Participant 6: *… that these are people's opinions, it is not factual and kind of again taking it from there.'*

By feeling and then consciously acknowledging their achievement there was potentially a twofold effect, first the successful use of the de-escalation strategy was likely reinforced its

future use as the resulting positive impact was noted. The secondary potential effect, which links to another strategy, is the conscious acknowledgment of their achievement. This has the potential of lifting their mood and increasing their confidence in their ability to cope in stress inducing situations which the phrase '*But I was just me'* (Participant 7) supports as this may indicate a boost in their level of self-confidence.

Participant 7's experience of the strategies boosting their confidence is further supported by their response to being asked if the online training had an impact on their mental health and / or wellbeing. They answered that they felt more positive and that they have regained an aspect of themselves '*I feel I've gained something and given myself a pat on the back and saying you know you've done amazing*' which was linked to them now recognising and praising themselves for what they have achieved. The phrase '*I am complimenting myself now'* is also a strong indication that the programme has elicited a positive change in their self-talk which may in turn be linked to an increase in their level of wellbeing. Participant 10 is also using the strategies to refocus their thoughts on to the '*good things that are happening'* and to reduce their worry by using the techniques to *'park'* the worry rather than dwelling on it.

Participant 10: *'I do try to look at things more positively and try to think about the good things that are happening. So, but I have, I have taken that further and have used the worry tree and think, well, we'll park that now we can't do anything with it.'*

4.5.4 Subtheme 1.4: Able to recognise and challenge negative thoughts

The subtheme *'Able to recognise and challenge negative thoughts'* draws on the cognitive behavioural therapy's concept of automatic thoughts and how by noticing negative automatic thoughts and challenging them can have a positive impact on mental health and wellbeing. Participant 3 described how they had failed at a task, which had been a blow to them. They recognised that whilst this triggered negative automatic thoughts, by using the techniques, in this case distraction techniques, they were able to keep the negative thoughts at bay.

Participant 3: *'I failed …Which was a blow and actually, what that kind of did is bring up all that stuff… So what I noticed when we talked about things like you know the poison parrot and all that sort of stuff was that if, as long as I generally, as long as I was filling my mind with other things, whether that be family, friends, things the I enjoyed it kind of kept it at bay.'*

Participants were also able to recognise negative automatic thoughts in others which may be an indication that rather than simply applying techniques to their own thinking the intervention had changed their perception of their and others thinking processes. Participant 7 is also now able to recognise and challenge their negative automatic thoughts. Initially it seems that they

were sceptical that the technique could work but after trying it they are now have found that it does work. This seems to have had quite a profound effect, as thoughts that they have previously struggled with which were very self-critical, they are now able to *'bat off'* and reframe their thinking by recognising that things are now better.

Participant 7: *'I have been batting off that poison parrot as well. How is this gonna work? How is this gonna work? But it does.*

This recognition that things are now better in conjunction with their acknowledgement of their achievements and use of self-praise all indicate that the programme is likely to have had a significant impact on their resilience, their ability to cope and their overall wellbeing. Participant 9's description (below) of their use of the strategies is strikingly similar to Participant 7's (above). They also describe how as soon as they notice their own negative automatic thoughts, they are able to challenge them. They do this by noting that they are not helpful and figuratively and literally shaking the negative thoughts off and refocussing their attention on something else.

Participant 9: *'So as soon as my negative poison parrots starts chirping up I, I give it the, you know, the old, that's not helpful, shake your head, and focus on something else, and that just… that is helped me so much.*

Participant 9's comments also convey how significant an effect using the strategy has had on them '*It's been massive, massive for me.'* As their negative automatic thoughts were something that they recognised they had been struggling with having a technique that enabled them to address this may mean that the massive effect they describe alludes to a significant positive effect on their level of wellbeing.

Participants have also provided specific examples of how the strategies were being used as illustrated in the quotes below. The first quote from Participant 4 indicates that since the programme they are no longer questioning themselves as they do not doubt themselves as they were before. This may indicate that an increase in their self-confidence, as it also seems that by applying the techniques, they are able to notice when their mood is lowering and take action to lift their mood.

Participant 4 – 'I don't question myself so much anymore. I think there was a lot of doubt I had before.' 'When I'm down I have techniques now that I can try to go back up and I do see that change.'

Participant 5 (below) has found the psychoeducation aspect of the programme useful as the recognition that their thoughts are not facts has proved positive.

Participant 5 – 'Because it's really good. You know your thoughts they're thoughts, they're not facts.'

4.6 Theme 2: Benefit of learning process

The theme '*Benefit of learning process'* draws together three subthemes; *'Integrated New Strategies'*, *'Legitimised Existing Strategies'* and *'Normalised existing thoughts / behaviours'*. These three subthemes can be viewed as three facets of the learning process benefit as they reflect distinctly different ways the learning has been applied. '*Integrated New Strategies'* is based on participant's comments on how they have integrated the new information into their lives. This contrasts with '*Legitimised Existing Strategies'* which reflects the impact of participant's existing knowledge being included in the programmes content. '*Normalised existing thoughts / behaviours'* emerged from participants comments on how it felt to both understand what and why they think / behave and that this is entirely normal.

4.6.1 Subtheme 2.1: Integrated New Strategies

The subtheme *'Integrated New Strategies'* focuses on participants descriptions of how they have integrated the information, strategies and techniques into their lives. Participant 1 when talking about how the programme has positively impacted their wellbeing detailed changes, they have made to their self-care routine for example

Participant 1: *'…going for a swim or you know being a bit more conscientious about having some downtime and spending time perhaps in the garden or relaxing.'*

Based on participant 1's responses it seems that the strategies have become fully integrated into their regular routine. Participant 9 talks about how they're implementing specific strategies and how their everyday thinking has now changed, for example, they describe how they are now aware of what they are grateful for everyday as they put it *'It's in my mind'.* That the strategy has become so embedded that it is in their mind daily, may be because the new way of thinking has been found to be beneficial, hence it is being maintained.

Participant 9: *'I've started implementing the strategies, I'm thinking more I suppose as well every day about what I'm grateful for.*

This is echoed by participant 4 who describes how they think about the techniques daily.

Participant 4: *'I think about many of them daily. It's definitely, I remembered a lot more than I thought I would take from the four weeks.'*

The participants stating that the new strategies have become their new normal may indicate that the impact of the intervention is more likely to be sustained, as they have become part of their regular routine. Participant 7 explained when asked whether they were using the techniques responded that they were using them all of the time and had adapted them into their everyday life.

Participant 7: *'All the time. I've adapted them into my daily life really and use them accordingly. I've gone back to them so many times…Yes it's helped amazingly.'*

This integration again appears to have been supported by the participant noticing the positive impact of using the strategies which may contribute to them being maintained enabling the new strategies to become habitualised. Another factor in the strategies being maintained and embedded is the participants having the confidence to try the strategies and then feeling the positive impact of their use.

Participant 1 – *'…and again about being your own best friend that is such a, it's such a small sort of thing when you read it but it has such a massive impact.'*

For the intervention to achieve an impact it was essential that the strategies and techniques were transferable to the real world. The participants all reported that they were using the techniques as the comments below illustrate.

Participant 2 – 'I have definitely used them.'

While all the participant's responses indicate that they are using the techniques several participants also stated that that they are using the techniques regularly with some stating that they were using them daily for example

Participant 4 – *'I think about many of them daily.*

4.6.2 Subtheme 2.2: Legitimised Existing Strategies

Several participants said that there were strategies and techniques that they recognised as ones they already used, with the intervention having the effect of legitimising these strategies and techniques. Participant 3 comments that there were a lot of the strategies and techniques that once brought to her conscious attention in the programme they recognised as things they already used.

Participant 3: *'A lot of what we talked about is probably stuff that I sort of do without realising it.'*

This recognition that the strategies and techniques were already being used seemed to have a number of effects. It legitimised participants existing strategies, seeming to reinforce their continued use, as they could underpin their self-taught strategies with research and an understanding of why and how they worked.

Participant 8 – 'Which were ones I was already using but didn't know they had a terminology based behind them.' 'I was already doing them without realizing they were a thing.'

Another effect was that being made consciously aware of using the strategies seemed in itself to be beneficial, this may be because the underpinning knowledge was validating and potentially confidence building.

Participant 3: *'being more mindful of the fact I'm doing it has been the most important… being a being a bit more self-aware about it as being the best part,'*

The participants existing knowledge both of the strategy and through personal experience that it worked also had the effect of legitimising the strategies and in turn the programme itself as it corroborated their usefulness in the real world.

Participant 1 'and you did actually feel well, actually, I'm actually doing these things so that reinforced what we were talking about'

4.6.3 Subtheme 2.3: Normalised existing thoughts / behaviours

A factor in the content being so well received seems to be that participants have appreciated the programme's approach of explaining in depth the cognitive and behavioural processes that the strategies and techniques targeted and how and why the strategies / techniques were likely to be effective. This approach seemed to engage participants in self-discovery and normalise their experience which seemed to have the effect of destigmatising these aspects of their mental health. The result of this was that it enabled them to feel comfortable in sharing their experiences. This had a compound effect within the group as participant's sharing their experiences meant that it magnified the programme's message that these thoughts / behaviours were completely normal.

Participant 4: '…it was really nice to understand why our bodies react like they do. Why our mind reacts like it does and it helps. It normalizes it almost.'

This link between normalising and destigmatising is exemplified by Participant 5 who expresses that they had felt they were *'a nut' 'a bit weird'* but through participating in the programme they have realised that it's normal for them to think the way they do.

Participant 9 expands on this theme as for them being able to name the things that they do has made them realise that they are '*not alone in all of this'.* The impact of this realisation seems, for this participant, to be substantial as they put it '*that helps me massively'.* The positive impact seems to have been magnified by being able to discuss their experience in the group and finding that not only were they not alone, as their personal experience was similar to others.

For each of the participants their previous negative self-perception would seem to have had the potential to have a corrosive effect on their wellbeing. This may mean that that the change in their perspectives, in terms of the normality of their own experience could have a positive impact on their wellbeing.

4.7 Theme 3: Wider Application of Strategies

This theme has two subthemes, '*Shared strategies with others in range of contexts'* and '*More attuned to others'.* The subtheme *'Shared strategies with others in range of contexts'* emerged from participants comments on the range of contexts, for example work, home and personally, within which they were sharing and applying the strategies and techniques. The subtheme '*More attuned to others'* describes how participants extended the information from knowledge about themselves to recognising thought and behavioural patterns in others. The theme also includes the impact that this new insight had.

4.7.1 Subtheme 3.1: Shared strategies with others in range of contexts

It seems that as participants have felt the benefit of the strategy personally this has given them the impetus and confidence to share the strategies with others. For example, Participant 1 describes the impact of the Covid-19 on their team as '…*challenging for the staff team and it's very challenging for the individuals that we work with'* and has shared the strategies that they have found helpful, for example increasing self-care. The fact that the participant found the strategies easy to use both in the workplace and their personal life may also have been a factor in their eagerness to share them.

Participant 1 – *'…very easy to use, not just in work but also in my personal life as well.'*

As the participant's integrated the intervention into their own thoughts and behaviours they described how -

(Participant 1) '*I could filter in personally and in work and with the team and with everybody really. And I think anybody can sort of get that.'*

The participant's enthusiasm for the strategies is clear but to be able to share the strategies it also seems important that they have confidence in the strategies relevance. This confidence seems to have been informed by how much the strategies had resonated with them. Another aspect of sharing is that it requires the participant to have a clear understanding of it themselves as it is necessary to have a sufficient depth of understanding to be able to communicate the strategy effectively to others.

Participant 1 – '*I found that was brilliant. I really could understand that.'*

Participant 6 is another good example of this as they indicated that their depth of understanding enabled them to confidently explain the strategies to their colleagues and also adapt the strategy to their own needs. For this participant their knowledge and confidence were such that they were adapting the strategies to a range of different situations with the strategies in turn changing their own way of coaching their team.

Participant 6: *'understanding the theory behind it as it helped me to explain it better. I guess to my guys and not only explaining it better, but then because I have understood it better. I'm able to adapt that as well.'*

The usefulness of the strategies extends from the individual to their interpersonal relationships with their colleagues and then potentially to having a positive impact on their colleagues as well.

Participant 2 – 'I genuinely found it useful, useful for me personally, but also I think useful for my relationship with my team and helping them with their resilience.'

The three quotes below indicate the range of sharing that has occurred. Participant 1 has shared with their family, Participant 6 has shared with their team and Participant 7 is sharing the techniques with *'everyone'*.

Participant 1 – 'I can encourage them to take part and myself really and my family'

Participant 6 – 'I felt like kind of like share with the team immediately.'

Participant 7 – 'I'm telling everybody.' 'Yeah, yeah with everyone, everyone.'

This level of sharing is very positive for the intervention, as this dissemination of the techniques may mean that the intervention is achieving a wider impact. This may mean that the techniques are being used and/or having an impact on more people than the study participants. Participant 2 details below, that as well as enjoying the intervention and finding it

useful personally they also felt that it was having a positive impact on both their relationship with their team and potentially on their team's resilience as well.

Participant 2: *'…it was, you know, really, really enjoyable, and I genuinely found it useful… useful for me personally, but also I think useful for my relationship with my team… and helping them with their resilience.*

The way the participant is approaching sharing the knowledge is also interesting as they seem to be bringing it into everyday interactions rather than approaching its dissemination in a formal way.

Participant 2: '*I've not sat down and gone 'right, we're doing this for resilience, but just little, little things like I mentioned about bringing them back into the now...'*

This everyday use is likely to reinforce the techniques as the more they are used or shared, the more they will become integrated into the participant's behaviour. The positive perspective of the programme is further supported by the participant's willingness to recommend the programme to others. Participant 1 for example (below) expresses that in their opinion the programme would be useful for everyone within their organisation.

Participant 1 – 'I think it's something that could be really rolled out to lots of, to everybody. I think in the organisation I think everybody could get something from there.'

The genuine enthusiasm and belief in the programme, beyond the boundaries of the study, was also indicated by the fact that following the completion of the study both organisations who participated, based on the feedback from their respective participants, enrolled further staff on to the programme.

4.7.2 Subtheme 3.2: More attuned to others

Participants described how following the intervention they were more attuned to others. An example of this is how Participant 1 described that by recognising their own level of stress and now having strategies to manage this better they were noticing this in others. This resulted in them not just sharing the strategies but actively encouraging others both at home and in work to use them.

Participant 1 – *'I can encourage them to take part and myself really and my family.'*

Participant 2 echoes this as they explain how they are now noticing that people, particularly in relation to Covid-19, are focussing on issues that Participant 2 recognises, from the study content, are out of their control.

Participant 2 – 'I've noticed more about other people and kind of going on about things outside of their control.'

Participant 2 below moves further than just noticing other's situation as they also identify which intervention strategy would potentially be helpful and shares this. It is noteworthy how confidently Participant 2 describes what the *'answer'* is to other individual's unhelpful response to the Covid-19 situation. The word *'just'* in the quote below indicates that Participant 2 not only feels confident in knowing the appropriate strategy but feels confident in both when and how it could be applied. This confidence enables them to share the strategy with others and also indicates that they have confidence in the strategy's efficacy.

Participant 2: *'it's just about bringing people back into the now.*

This confidence is underlined by the frequency of sharing for example participant 2 indicates that they are making an active effort to share the techniques, which again indicates their confidence in the techniques value.

Participant 2: *'I've been sharing those techniques a bit really, and I'm trying to make you know, kind of share it with the wider team.'*

The intervention provided strategies and techniques in addition to psychoeducation explaining the processes that underpin them. This depth of knowledge combined with the strategies themselves may be a factor in what appears to be a change in the way participants view some thoughts and behaviours. An example of this is from Participant 2 below, who since the intervention seems to be viewing things from a new perspective and then using their new knowledge to inform their behaviour, in this case in the workplace.

Participant 2: *'I have noticed now, particularly since those kind of workshops that, I've notice more about other people and kind of going on about things outside of their control.*

4.8 Theme 4: Positive Session Experience

This theme has three subthemes; '*Learning Environment', 'Content of Intervention'* and '*Delivery'*. Collectively these subthemes draw together different aspects of the session experience which based on participants feedback they found positive. The subtheme '*Learning Environment'* emerged from participant's comments on both the logistical aspects of the programme for example the online environment and group size. This theme also encompassed the group environment for example the emotional landscape, interpersonal relationships and communication. The subtheme '*Content of the Intervention'* focussed on the topics covered within the intervention and how participants viewed them. The final subtheme, '*Delivery'*, emerged from participant's comments about the way the session was delivered including their views on the trainer's approach, knowledge and communication style.

4.8.1 Subtheme 4.1: Learning Environment

Participants were asked specifically how they felt about the online delivery. While a few mentioned that they would have preferred face to face no one felt that the intervention was less impactful or effective because it was delivered online. In fact the majority of participant's responses when asked how they felt about the online delivery were positive as in the three quotes below.

Participant 4 – *'I thought it was a really good use of technology.'*

Participant 3 expressed, in common with others, that they had concerns at the outset that the programme may be hindered by the online delivery. This concern was clearly quashed as they commented that the discussions, despite their initial concerns, had in fact gone well and that the experience was such that they felt positively about the programme and the group of participants.

Participant 3: *'I thought it went really well.'*.'

Participant 6 also held initial reservations, as their preference was for face-to-face programme delivery but they felt that there were a number of factors that made the programme experience positive. The factors that they listed included the small group size, the trainer's session management, the content, the speed and duration of the delivery.

Participant 6: '*I think that was right that there was just a small group of us. I think the content was right. I think that the speed of delivery was good as well … It may be that the online format provided a good balance between being able to interact without feeling exposed.'*

Other participant's comments support the conclusion that the group size was the optimum for the programme. When participants described how they felt about the sessions the group size seemed to be an important factor in enabling the group to communicate openly. In addition, how the participants felt when participating in the group appears to also be important. The effusive praise of the programme from all participants indicates that the overall programme experience was very positive.

Participant 2 – *'Really good, I really enjoyed it.'*

A contributory factor to this enjoyment seems to be how *'comfortable'* they felt within the group.

Participant 4 – 'it was a really comfortable session.'

The label *'comfortable'* appears to be made up of a number of factors which seemed collectively to have had an important impact on the interventions delivery as it enabled participants to engage with the session content by for example, as Participant 2 puts it –

'It was a really kind of comfortable session that you could participate, ask questions.'

Another aspect of *'comfortable'* based on participant's comments, seems to relate to their feeling of safety within the session. This was likely to be due to them not feeling at risk from either the content or the interactions within the sessions. This could be because they were confident that the sessions would not pose any threat to their wellbeing, despite the content touching on potentially sensitive aspects of mental health and wellbeing which could have been challenging. A factor in the establishment of the safe learning space may have been the contracting with the group which took place at the beginning of the first session. This provided the participants with guidance on how the sessions would be managed for example that the trainer would never ask any individual a direct personal question instead inviting them to share only what they were comfortable to with this environment. The trainer also underlined the importance of self-care within the sessions, empowering participants to participate as much or as little as they felt comfortable with. The contracting process enabled the group to set their own rules for example agreeing to maintain the session's confidentiality, to respect others and to consider the feeling both of themselves and others when sharing information.

All participants also reported that the sessions were enjoyable, which may be a factor in the positive outcomes that all the participants described. The participant's enjoyment is likely to be linked to their level of engagement in both the content and the group. The level of group cohesion is indicated by participant's use of the word *'we'* when speaking not just from their own point of view but speaking for the group as a whole.

Participant 9 –. "We really did benefit from it.'

Participants all strongly expressed that they had enjoyed being part of the programme. There high level of enjoyment is indicated by the way they have effusively expressed this enjoyment as the quotes below demonstrate with Participant 5's comments being typical of the feedback

Participant 5 – *'I really enjoyed the training.'*

4.8.2 Subtheme 4.2: Content of Intervention

The content of the intervention was given consistent positive feedback from the participants. There were several factors about the content of the intervention that participants specifically mentioned as being important to its positive impact. One factor was the techniques being used, with participants reporting that they found them easy to use. This supports the interventions approach, of providing examples and analogies, with the intention of making it easy for participants to transfer and apply the techniques to real world situations.

Participant 1 – 'very easy to use not just in work but also in my personal life as well'

This approach seems to have enabled have been successful as Participant 1 for example, describes this ease of use in addition to how achievable and transferrable they found the content.

Participant 1 - … *There's so much on there that was really, really achievable, and you did actually feel well, actually, I'm actually doing these things so that reinforced what we were talking about. … I found lots of this I could actually, you can literally pick it up and it can go into like your sort of virtual as I call it like a virtual toolbox.'*

This ease of transferring the learning was reiterated by Participant 1 indicating that for them, this was an important strength of the programme.

Participant 1 – *'It's very easy to sort of pick it up and go with it.'*

Another factor mentioned by participants was that the techniques were useful / being used for example Participant 1 who said *'I have found that very, very useful'* a view expressed by all participants, in varying levels of detail. The participants went on to provide insight not only that the intervention's impact was positive but also provide information on what specific aspect of the intervention was positive and/or how it was positive. This is particularly interesting as it also indicates that the beneficial impact varies for different participants. This supports the *'toolkit'* approach as it seems that participants have taken from the range of techniques those which are most relevant / appropriate for them. Another frequently mentioned factor was how

helpful all the participants found the programme. For the strategies and techniques to be described as helpful, it indicates that participants were both using the techniques and noting their positive impact.

Participant 1 – '*I found the training really, really helpful'*

The descriptor *'helpful'* is a strong indication that the content of the intervention was relevant to participants particularly as the descriptor *'helpful'* as well as the term *'useful'* were consistently used by participants when describing the strategies within the intervention and the intervention as a whole. When the term *'helpful'* was used by the participants it was often followed by examples of how specifically the intervention was helpful. These excerpts which are typical of all the transcripts indicate how participants have communicated the strength of their positive feeling. They have often used adverbs for example *'really'*, *'amazingly'* and *'so much'* which have also been repeated for even greater emphasis. When extrapolating meaning from the transcripts examples like these are particularly useful as they start to indicate the potential degree of, in this case *'helpfulness'*. As participants have indicated a significant depth of feeling when expressing how helpful they found the intervention there is the potential that the use of the techniques will be maintained as it seems that the outcomes from them are being noted and valued, Participant 6 comment is typical pf the participants feedback ''*really, really good, really helpful'*.

It is notable that over the four weeks of the intervention no participants missed any sessions despite significant changes to working patterns due to the imposition of a second Covid-19 pandemic lockdown during the intervention delivery. This could be related to the participant's comments about the sessions being helpful / useful. It could also be related to their comments which indicate that they were enjoying the sessions and that they were looking forward to the sessions, which supports that they were finding value in the content as well as the sessions themselves.

Participant 10 – 'I really look forward to Thursday mornings. I really did I thoroughly enjoyed them all and I took something away from all of it.'

4.8.3 Subtheme 4.3: Delivery

An aspect of the Delivery subtheme that emerged from the data links to the earlier subtheme of learning environment where participants described the session as comfortable. The participant's comments indicate the importance of feeling safe within the sessions which seems to extend to the participants confidence in the trainer and that the sessions would be delivered in a way and at a level of competence that enabled them to relax.

Participant 6 – 'The way that (trainer) kind of like managed the interactions of everybody, so everybody had a chance to kind of like talk and to kind of like feedback and to participate in the training.'

This sense of being safely held by the trainer within the sessions includes having the space to ask questions or explore the techniques being presented in order to take the information on board and make it their own. This appears to be an important aspect of the intervention and a strong indication that the competence of the trainer, not just in their knowledge of the techniques but their ability to manage a group environment is a key factor in the interventions impact.

Participant 5 – 'Trainer kept it very interesting, the way Trainer presented the training.'

Participant 6 expressed that they felt the trainer was key to the programme's delivery as they felt that the content was enriched by the trainer's depth of knowledge which meant they were able to explain the content in a way that aided the participants understanding.

Participant 6: *'So the person delivering it definitely does have a big impact on the value of the training when it's delivered.'*

A factor in the positive feedback both in terms of enjoyment of the sessions and the trainer seems to be how the content was communicated. The trainer used real world examples and analogies to bring to life the information and this approach seems to be a factor in the information resonating with participants. An example of this is participant 2 who stated that an explanation provided by the trainer resonated strongly, resulting in them relating the information to an aspect of their own life. Their identification was so strong that it resulted in them changing their behaviour which they described as having a positive impact on their wellbeing and their child's wellbeing.

Participant 2: *'since we had that discussion on that session, I walk at leisure now and I let her take as long as she likes. That makes me feel better. She feels better.'*

Participant 2 went on to describe how the change had been applied in that specific situation and in other contexts. The change seemed to provide a way of managing the challenges they were facing maintaining a work / life balance when working from home. The participant went on to quote specifically what the trainer had said, before listing a range of the strategies and techniques that they were now using. The fact that the trainer's words were memorable indicates the importance of how the programme was delivered particularly how the information was communicated which appears to an important factor in achieving the programmes impact. The depth of response that the trainer's communication style elicited is also likely to be a factor

in the level of motivation it engendered. An example of this is the participants describing how powerfully the information resonated with them as they put it *'…it hit home'* (Participant 2).

The importance of how the trainer explained the strategies and the type of examples that they provided was also highlighted by Participant 8 who describes the trainer and the examples they provided as *'relatable'* which seems to link with by Participant 2's descriptor of the training resonating. These aspects of the delivery may be important factors in the participant's applying the strategies in their own lives. The relatable context provided for the information seemed to have the effect of creating a bridge between the session and the participant's lives, with the examples enabling them to model their own behaviour. The trainer's approach to the training being an important factor, is further supported by other participant's comments for example Participant 4 seems to link the trainer's approach or as they describe it *'nature'*, as being a factor in the sessions being comfortable. They go on to comment that how the information was explained was really useful to them.

Participant 7 also comments on the approach of the trainer, indicating again that the trainer's approach was an important aspect of both their enjoyment of, and engagement with, the training. Another aspect of the trainer's approach was that it seemed to engender confidence as participant 7 puts it '*I believed in (Trainer).'* This may be another factor in the transfer of learning as the participant's belief in the trainer, coupled with the trainer's belief in both the strategies as participant 7 puts it '*The passion'* and the trainer's belief in the participants '*look you can do this'* seems to have created a positive cycle of motivation. This motivation was then further reinforced when the participant's tried the strategies and found them effective. Maintaining participant's attention and engagement may also have contributed to the information being retained. In addition, they may have contributed to their positive evaluation of the programme and it being perceived as being of benefit to people's self-esteem and resilience.

Participant 5: *'You know some training. You get some bit, you can feel it tired and but I was just constantly listening and listening. I found it really interesting and I really recommend this to other people and also to people who've got low self-esteem or low resilience.'*

4.9 Pre and Post Intervention Online Questionnaire Qualitative Questions

Qualitative questions were included in the online pre and post intervention questionnaires.

Three questions were asked to all participants both pre and post intervention.

1. How would you describe your current level of resilience?
2. How would you describe your current level of workplace stress?
3. How would you describe your current level of wellbeing?

The experimental group were asked a further 5 questions in the post intervention questionnaire –

4. What difference (if any) has the online training made to your level of resilience and /or assertiveness?
5. What aspect of the online training have you found most useful? How?
6. How have you used the information in the training?
7. Which of the training topics have found most beneficial to your mental health and wellbeing?
8. Are any further comments regarding the online training or its impact on you that you'd like to share?

Questions to ALL participants' pre and post intervention

Below are detailed the responses to the three questions that were asked to all participants pre and post intervention. While qualitative data would not normally be presented numerically in this instance due to the narrow nature of the questions and the type of responses from participants this was selected as the most appropriate way to present the results. In these questions as participants typed their answers into an online form many of the responses were one-word responses. This made the coding of the response straightforward as for example a participant answered 'Good' pre intervention and 'Good' to the same question post intervention they were coded as 'No Change'. Due to the nature of the codes, it was appropriate to present the frequency of the responses, as the data had been collected non-interactively unlike most qualitative data and the tables are representing the occurrences of the subtheme to indicate its prevalence across this specific data corpus (Braun & Clarke, 2013). Where participants had answered with a longer narrative this often clarified any change for example when asked about their level of resilience Participant 3 from the experimental group responded pre intervention '*I think my resilience is quite low…'*. Their response post intervention was *'Medium - I think my understanding of resilience has changed since taking part in the study.'* This was coded as Positive Change as the participant's commented indicated clearly that there had been an

increase in their resilience from low to medium. An example of a typical response which was categorised as Negative Change was from Participant 23 from the control group who responded to the pre intervention question on their level of stress with *'Pretty good'*. Their end of study response to the same question was *'I have been struggling with this recently.'*

In terms of thematic analysis themes and subthemes, the theme for these questions was the degree of change with the subthemes being either no change, increased or decreased.

4.9.1 Question 1 - How would you describe your current level of resilience?

Table 4.5 Responses to - How would you describe your current level of resilience?

Theme – Degree of Resilience Level Change	Control Group	Experimental
Subtheme – No Change in Resilience	8	5
Subtheme – Positive Change	2	5
Subtheme – Negative Change	1	

In answer to this question the experimental group's answers were split equally between there being no change to their level of resilience and there being a positive change, meaning that their resilience level had increased. An example of a participant in the experimental group who was coded as having expressed a positive change in their resilience was Participant 3. In their pre intervention questionnaire they responded that

'I think my resilience is quite low - I'm not a particularly assertive person in the workplace.'

This contrasted with their post intervention response where they stated

'Medium - I think my understanding of resilience has changed since taking part in the study. While certain specific events can damage my resilience, overall I think it's better than I first thought.'

The control group responses indicated that the majority (72%) of participant's responded that there had been no change in their level or resilience. For two participants their response indicated an increase in resilience (18%) and for one participant (10%) there was a drop in their level of resilience. This was based on their pre intervention comment that their resilience

was *'Pretty good'* compared to their post study comment *'I have been struggling with this recently'.* Overall, the feedback seems to indicate that there was a greater increase in experimental group members reporting an increase in their level of resilience than the control group.

4.9.2 Question 2 'How would you describe your current level of workplace stress?'

For the majority (90%) of the Experimental group participants stated that their level of stress was the same pre and post intervention, with only one reporting post intervention that their stress had decreased and was now *'Lower than normal'* (Participant 10). For the control group the results were more mixed pre and post intervention. In common with the experimental group the majority (64%) of the control group reported the same level of stress with the rest of the group evenly split (18%) between those that felt their stress level had increased for example Participant 20 who responded at the start of the study *'Currently I would describe this as medium to high'* their response post study was one word *'High'*. and those that reported a decrease (18%) for example Participant 17 who initially responded *'High'* and at the end of the study responded *'Average'*.

Table 4.6 Responses to - How would you describe your current level of workplace stress?

Theme – Degree of Workplace Stress Level Change	Control Group	Experimental
Subtheme – No Change in Stress Level	7	9
Subtheme – Stress Level Negative Change (Increased)	2	0
Subtheme – Stress Level Positive Change (Decreased)	2	1

Overall the analysis results for this question indicate that the experimental group's stress level for the majority were unchanged with one experiencing a decrease in their stress level. The control group were more variable with some experiencing an increase in stress and others a decrease although in common with the experimental group the majority experienced no change.

4.9.3 Question 3 - How would you describe your current level of wellbeing?

To this question many participants mentioned the lockdown specifically as having an impact on their wellbeing for example Participant 2's comments were typical when they said in their post intervention response *'Good but impacted by effects of lockdowns'*. The experimental group was split 50% / 50% between their wellbeing remaining unchanged pre and post intervention and their wellbeing changing positively post intervention. The control group results were more varied with 46% responses indicating their wellbeing had remained unchanged and the rest equally split between their wellbeing having change positively (27%) and changed negatively (27%).

Table 4.7 Responses to - How would you describe your current level of wellbeing?

How would you describe your current level of wellbeing?		
Theme – Level of Wellbeing	**Control Group**	**Experimental**
Subtheme – No Change in Wellbeing	5	5
Subtheme – Positive Change in Wellbeing	3	5
Subtheme – Negative Change in Wellbeing	3	

Looking at the results of these three questions overall there does seem to be a slight difference between the experimental and control groups. This is illustrated if the results are combined which was calculated by summing the scores for the No Change results positive change and negative change (Table 4.8).

Based on the analysis the experimental group didn't show any negative change i.e. reduced resilience / wellbeing or increased stress, compared to the control group whose response indicate that 18% had experienced a negative change between the first application of the questionnaire and the second. This could indicate that the intervention mitigated some of the impact of the second lockdown which all participants were experiencing between the first and second questionnaires.

Table 4.8 Combined Results for previous three questions

Combined Results		
Overarching theme – Level of Change	**Control Group**	**Experimental**
No Change	20 (61%)	19 (63%)
Positive change	7 (21%)	11 (37%)
Negative change	6 (18%)	

4.10 Experimental group participants only, post intervention qualitative questions

The experimental group were asked an additional 5 questions in the post intervention questionnaire. These questions related directly to their experience of the intervention.

4.10.1 Question 4 - What difference (if any) has the online training made to your level of resilience and /or assertiveness?

Table 4.9 Responses to - What difference (if any) has the online training made to your level of resilience and /or assertiveness?

Participant Number	What difference (if any) has the online training made to your level of resilience and /or assertiveness?
1	It has made such a difference to me not just in work but in my personal life, I am far more aware of my levels of resilience.
2	It has provided me with a variety of tools that I can use to help me cope with situations and improved my wellbeing
3	I think it has helped me recognise behaviours to manage my resilience and understand that they have more effect than I realised. I don't feel that my assertiveness has changed externally (ie how I deal with others) but perhaps it has improved internally as I can now recognise and adjust my behaviours which have a negative impact on me.
4	It's certainly improved my assertiveness and helped remove any self-doubt. When I feel low I understand why my body reacts the way that it does, and I feel that I've gained some tools that I can use to help me move passed those feelings. I think it's too early to tell if it's been fully embedded but whereas before I may find myself feeling a way and not knowing how to remedy it - I now have tangible actions I can take to help regain control. I'm not sure that my level of resilience has improved - as I think it was always pretty good - but when I'm down it is a quicker return back up than before.

5	I believe I have developed a good technique for maintaining my resilience over the years from a very young age. The study made me aware that the techniques I used personally I used to build up my resilience are recognised methods, so with this knowledge it allows me legitimately to use this in my daily interactions with staff, the people we work with and my friends etc.
6	I feel my level of resilience has improved & more confident in being assertive
7	It has helped me recognize the signs of becoming overwhelmed with workload and the same in my personal life. It has helped me gain knowledge and understanding of how I can manage stressful situations on the spot and stopped me from becoming feeling out of control. I had many vicious circles of unhelpful learned behaviour and the training has help enormously with gaining control with making simple changes that I now include daily.
8	It has made me structure my thoughts and feelings more.
9	A lot, the techniques have provided me with tools to manage my resilience levels
10	It has helped. I have used the techniques to put some prospective on things. I had become very disillusioned in work due to a number of things. I still feel strongly about some things now but I have learned to step back and let it go. Being removed from the office has helped with this.

A thematic analysis of the question responses reflects the themes and subthemes found in the interview analysis. The themes that emerged from the resilience question above were; Positive Effect on Wellbeing for example Participant 2 stated that '*use to help me cope with situations and improved my wellbeing'.* This positive impact was echoed by Participant 4 who commented *'when I'm down it is a quicker return back up than before'.* Another theme was Benefit of the Learning Process, for example Participant 7 stating that *'It has helped me recognize the signs of becoming overwhelmed'* and Participant 9 stated that the programme had *'provided me with tools to manage my resilience levels.'* The themes mentioned *Wider Application of Strategies* was evident from participants either stating that they were using the strategies at work and at home for example Participant 1 saying that the programme had made a difference *'not just in work but in my personal life'* and Participant 5 saying they are using the techniques with '*people we work with and my friends etc'.*

The answers to this question from all participants indicate that all those in the experimental group have experienced a positive impact to their resilience and/or assertiveness (internal) from the intervention.

4.10.2 Question 5 - What aspect of the online training have you found most useful? How?

Table 4.10 Responses to - What aspect of the online training have you found most useful? How?

Participant Number	What aspect of the online training have you found most useful? How?
1	The training was very enjoyable the structure, setting and pace made me feel very comfortable to undertake the training, the Trainer used resources which were easy to understand -the on line power point was great .
2	Focusing on what is within my control. This has made me focus on what I can realistically achieve and impact both in work and in my personal life
3	By outlining behaviours and ways to mitigate them, it's allowed me to 'step back' and observe myself when I may be irrational or creating a negative impact to myself. Doing so has allowed me to correct or adjust them.
4	The Trainer providing the science behind physical and mental feelings. Knowing this produces a tangible 'thing' that has a name and can be dealt with. Also having an open conversation with others was helpful to recognise either shared experiences (to know you're not on your own), or to open up to other ideas.
5	Session 1 - Thoughts Session 3 - Poison Parrot
6	Several aspects that all fundamentally relate to moving from an emotional mindset to engaging with cognitive response - such as worry tree, opinion not fact, grounding technique. Its enabled me to practically help others, I have benefited from having more composed rational engagements in work setting & personally challenging own thoughts/internal dialogue
7	Absolutely all of it and I thoroughly enjoyed the weekly sessions that made absolute sense and the tools/ techniques really worked. Poison Parrot - I have batted this away and miraculously I don't hear it us much. Be your own kind friend- I felt I was beating myself up daily prior to training. 7/11 Breathing- used this at a recent hospital appointment, I sailed through and it helped listen to important information, to oppose to thinking I just want to get out of here! Progressive Muscle Relaxation- I used this daily even when getting into bed. No more tension and headaches. Gratitude Attitude - Use this when I felt I haven't been as productive as I would have liked or when I felt I haven't done achieved anything - but I had.
8	Session 3 was the most relatable and found this was easy to apply to current lifestyle
9	The Poison Parrot

10	Locus of control, worry tree. I have always used the gratitude attitude and more now during these unsettled time. It is difficult but I think it's the way to put things into perspective. I try and join in more on virtual meetings instead of just listening. I attend meetings weekly of 10+ members sometimes in excess of 50. But I now always say hello and try to talk to one or two people.

When reviewing these responses, it was interesting to note the range of aspects of the training that participants identified as being useful. Managing negative automatic thoughts which participants referred to as either Session 3 or Poison Parrot was the aspect of the training that 60% mentioned either directly (Participant 5, 7 and 9) or indirectly for example when Participant 6 says *'personally challenging own thoughts/internal dialogue.'* It is also striking how much participants had remembered, as there were no prompts on this question to remind participants, each session's content. Participants selected a wide range of session content which they found useful which potentially offers support to the toolkit approach of the intervention.

This question's responses also aligned with the identified interview themes. An example of this are the comments which fit the theme Positive Session Experience from Participant 1 who said when referring to the sessions *'…very enjoyable, the structure, setting and pace made me feel very comfortable'* that the sessions were enjoyable was also commented on by Participant 7 who said *'I thoroughly enjoyed the weekly sessions.'* The theme Positive Effect on Wellbeing was evident in participant's answers to these questions for example Participant 3 who said the programme had *'allowed me to step back'* and Participant 2 said that they are now able to *'focus on what I can realistically achieve'.* There were also a number of mentions of the subtheme Able to Recognise and Challenge Negative Thoughts which was exemplified above through Participant 6's comment and Participants 5, 7 and 9 comments.

4.10.3 Question 6 - How have you used the information in the training?

Table 4.11 Responses to - What aspect of the online training have you found most useful? How?

Participant Number	What aspect of the online training have you found most useful? How?
1	YES! both in the workplace and in my personal life
2	I've found myself using the tips / tools in meetings with my team when they are showing signs of not feeling resilient of overwhelmed
3	As above (previous question) - by observing and noting the way I behave in order to improve my internal resilience.
4	Certain tools and topics I have shared with others, and many that I use regularly myself.
5	I use this in my daily interactions with staff, the people we work with and my friends and family/partner. I also use this with myself.
6	I have shared grounding technique with staff to aid in risk management, I have avoided emotional based discussions by focusing on factual comments & not opinions & I have challenged some long held beliefs that have never sat comfortably with me but has always been part of my inner dialogue.
7	I have used so much of the training information for myself, family and people who I work with. I am so grateful for having this training. I now have a tool bag by my side to use to help others and myself.
8	When I have been anxious or stressed I have tried to apply the mechanisms discussed during the training
9	I use them daily to quieten the poison Parrot, distraction techniques and be your own best friend
10	I found the information very interesting and enjoyed our weekly meetings. It has helped me to attempt to relax more and build up my resilience with the coping strategies.

In common with the previous question, participants were positive about the intervention with all participants relating they were using the aspects of the intervention that they found most useful. Participant 5 said that that they are using the information *'in my daily interactions'* with Participant 7 saying that they *'have used so much of the training information for myself, family and people who I work with.'* These comments fit respectively with the theme '*Benefit of learning process',* specifically the subtheme '*Integrated New Strategie'* and the theme '*Wider*

Application of Strategies', specifically the subtheme '*Shared strategies with others in range of contexts'.* In answer to these questions the theme '*Wider Application of Strategies'* came through strongly with participants providing examples of the different ways and different contexts that they were using the training, for example Participant 1 stated that they were using the information in '*the workplace and in my personal life'* which was echoed by Participants 4, 5, 6 and 7.

4.10.4 Question 7 - Which of the training topics have found most beneficial to your mental health and wellbeing?

Table 4.12 Which of the training topics have found most beneficial to your mental health and wellbeing?

	Participant Responses										
Intervention Topic	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Total**
Thoughts are not Facts	1	1	1		1	1	1	1	1	1	**9**
Locus of Control		1	1	1		1	1			1	**6**
Poison Parrot			1	1	1		1	1	1		**6**
Gratitude Attitude	1	1			1		1			1	**5**
Be your own kind Friend	1						1	1	1	1	**5**
Distraction Techniques		1				1	1	1	1		**5**
Jumping to Conclusions		1	1				1	1		1	**5**
Mind Reading / Fortune Telling		1	1				1	1		1	**5**
Worry Tree						1	1	1		1	**4**
Motivation Techniques	1						1			1	**3**
Action Planning	1					1	1				**3**
Grounding Technique		1				1	1				**3**
Vicious Cycle			1				1	1			**3**
Magnification / Minimisation							1	1	1		**3**
Managing Emotions							1		1	1	**3**
Achieve/Connect/Enjoy				1			1				**2**
Relaxation Techniques							1			1	**2**
Coping Strategies							1		1		**2**
Mental Filter							1			1	**2**
Building Resilience							1			1	**2**
Problem Solving							1			1	**2**
7/11 Breathing				1							**1**

Nine of the ten participants named *'Thoughts are not Facts'* as the topic that they found most beneficial. This is part of the programme focussed on challenging Negative Automatic Thoughts which represent three of the top five responses; *'Thoughts are not Facts', 'Poison Parrot'* and *'Be your own kind Friend'*. This reiterates the responses to the question on which topics were most useful (Table 4.11) which also highlighted the techniques and strategies focussed on negative automatic thoughts. None of the topics were excluded completely from the list with some of the topics which scored lower being linked to, or part of other items listed for example 7/11 breathing in one of the Relaxation Techniques.

4.10.5 Question 8 - Are any further comments regarding the online training or its impact on you that you'd like to share?

Table 4.13 Responses to - Are any further comments regarding the online training or its impact on you that you'd like to share?

Participant Number	Are any further comments regarding the online training or its impact on you that you'd like to share?
1	An excellent training opportunity would strongly recommend this to my work colleagues. I felt having the one - one session very beneficial
2	Learning about the techniques was really enjoyable and informative. I would recommend the training to others if available.
3	It's fair to say that coming in to this I anticipated more of a focus on external resilience and assertiveness (eg being more assertive with colleagues/managers) - while I still feel I'd benefit with more on that subject, this training has certainly helped me.
4	I really enjoyed looking at the grid sharing all the different parts to having a fulfilled life. e.g. Noticing, Volunteering etc. I think of this regularly. As somebody who finds I feel 'pent up' at the end of a busy day, I have tried relaxing techniques and they don't always work. Through the training I shared this and was recommended exercise and since this I have been going for a run when I feel like that. It's been really helpful to remove the energy that has been building.
5	As already mentioned for me personally the study made me aware that the techniques I used personally I used to build up my resilience are recognised methods, so with this knowledge it allows me legitimately to use this
6	The course content was sufficient to feel like I've learnt & developed from it, the group size felt right, the speed of delivery was spot on & the ability of the tutor to expand beyond training material to pad out knowledge/understanding was very beneficial
7	I thoroughly enjoyed the training and looked forward to the weekly sessions. The trainer was fantastic delivering the training, it made

	absolute sense, interesting and I'm so glad I participated; it has made such a difference to my daily life. Thank you very much.
8	
9	I felt the training was excellent, I felt the benefits from the first session. The trainer was amazing, relatable, approachable and certainly knew her topic
10	The trainer's enthusiasm was infectious, she made the training very enjoyable. I looked forward to the meetings on a Thursday morning. It brightened my mood learning about the positivities.

The final question enabled the participants to add any further comments. Again, these themes reflected the interview themes. A theme that emerged from these responses was the *'Positive Session Experience'* particularly the subtheme about the session *'Delivery'.* Participant 7 comments were typical of the participants' comments about the trainer, when they said, *'trainer was fantastic delivering the training'*. Another theme from this question was that participants would recommend the training *'strongly recommend this to my work colleagues'* (Participant 1) which again features in the interview themes. Overall, this question feedback, in common with the other questions, indicates a high level of parity with the interview themes and subthemes.

4.11 Chapter Summary

This chapter has detailed the quantitative and qualitative results which have indicated that the intervention has had a range of positive impacts on participants which is reflected by both sets of data. The next chapter '*Chapter 5, Discussion'* presents the results of triangulating the quantitative and qualitiative results. This chapter discusses, this study's findings with reference to existing research, draws tenative conclusions and considers potential next steps.

Chapter 5 Discussion

5.1 Introduction

This chapter considers the results of both the qualitative and quantitative data in relation to this study's objective which was to research the impact on employee mental health and wellbeing of an online intervention entitled the Mental Health and Wellbeing Toolkit programme. The qualitative analysis themes and subthemes as illustrated in Figure 5.1 on the next page have been used as the headings in this chapter. This structure was selected as it utilises the Post Triangulation Visual Map of Quantitative and Qualitative Results (Figure 5.2) to provide a visual reference point for the chapter's exploration of the study's results.

The Quantitative and Qualitative research were triangulated, as described in the research methods section, in order to identify whether the two corroborated each other (Bryman 2012) and if so how they linked together. This study's approach informed by Bazeley (2004) uses triangulation not only to corroborate / validate the data, but also to provide a deeper level of understanding of the study's results. In order to reflect the integrated approach to the study's data (Bryman, 2012; Cresswell and Plano, 2007) within the discussion, the study results are considered concurrently following the triangulation process. Figure 5.2 provides the 'map' of the data integration which is the result of the triangulation process and clearly illustrates how the qualitative and quantitative data have been brought together and how well they fit together. A pragmatic decision has been made to organise the first sections of the discussion chapter using the qualitative themes as headings based on the results of triangulation as illustrated in Figure 5.2.

A notable aspect of the qualitative and quantitative data was the overwhelmingly positive response to the intervention with no negative feedback from any of the experimental group participants, all of whom identified aspects of the intervention that they had found helpful. The participant feedback is interwoven within each section enabling it to add the participant's voice throughout the discussion. The qualitative themes, while distinct with their own definitions, showed areas of overlap, particularly the theme '*Positive Effect on Wellbeing'* which, as an individual theme, was also found to be a component of the other themes which is described by Braun and Clarke as an *'overarching theme'* (2013 p231). There was also overlap between the other themes which made the process of coding complex as the majority of participant's comments could fit comfortably within more than one theme. The study's results from both the quantitative and qualitative data led to the conclusion explored in this discussion, that the intervention had a positive impact on participant's mental health and wellbeing.

Figure 5.1 Visual Map of Qualitative Themes and Subthemes

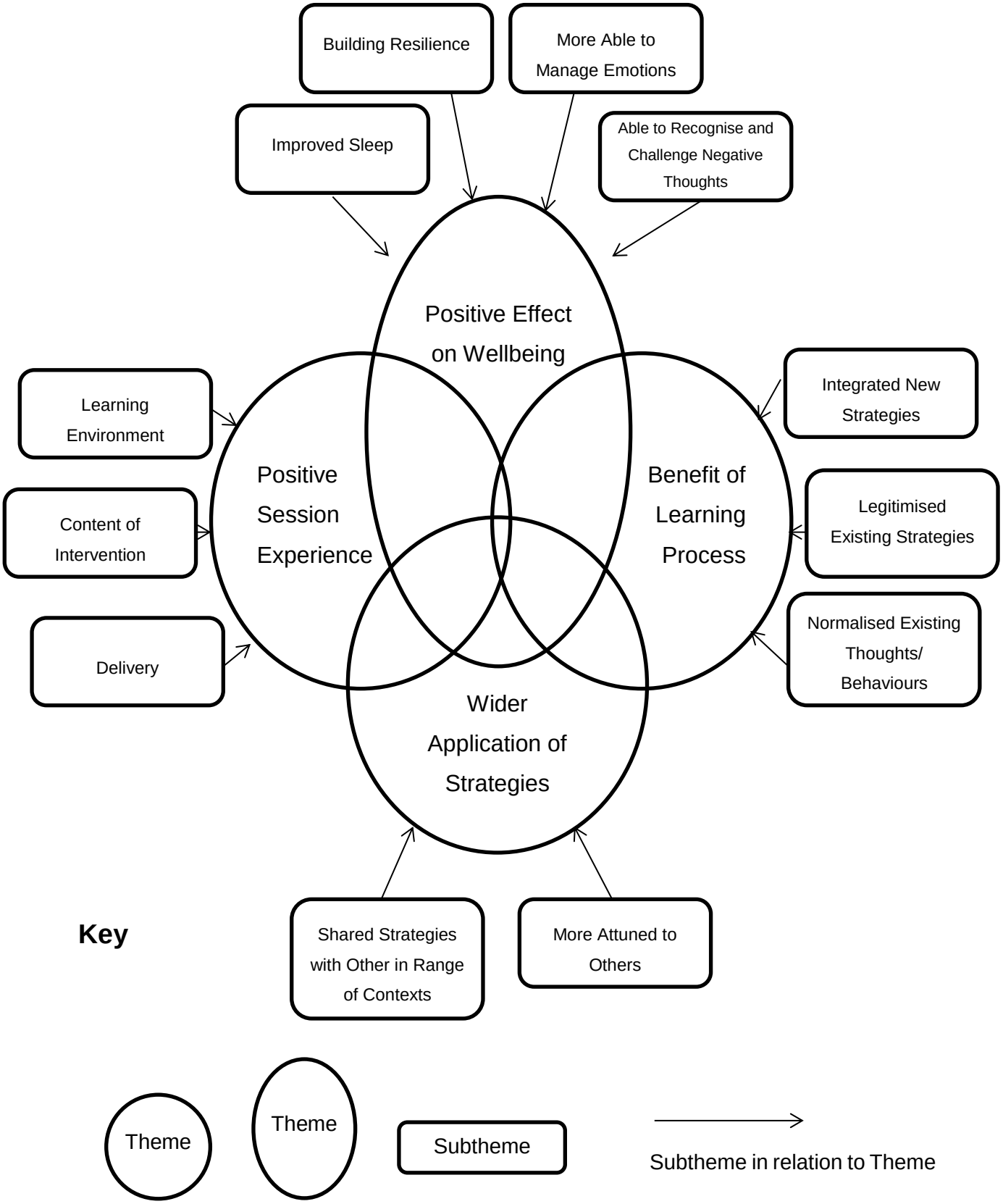
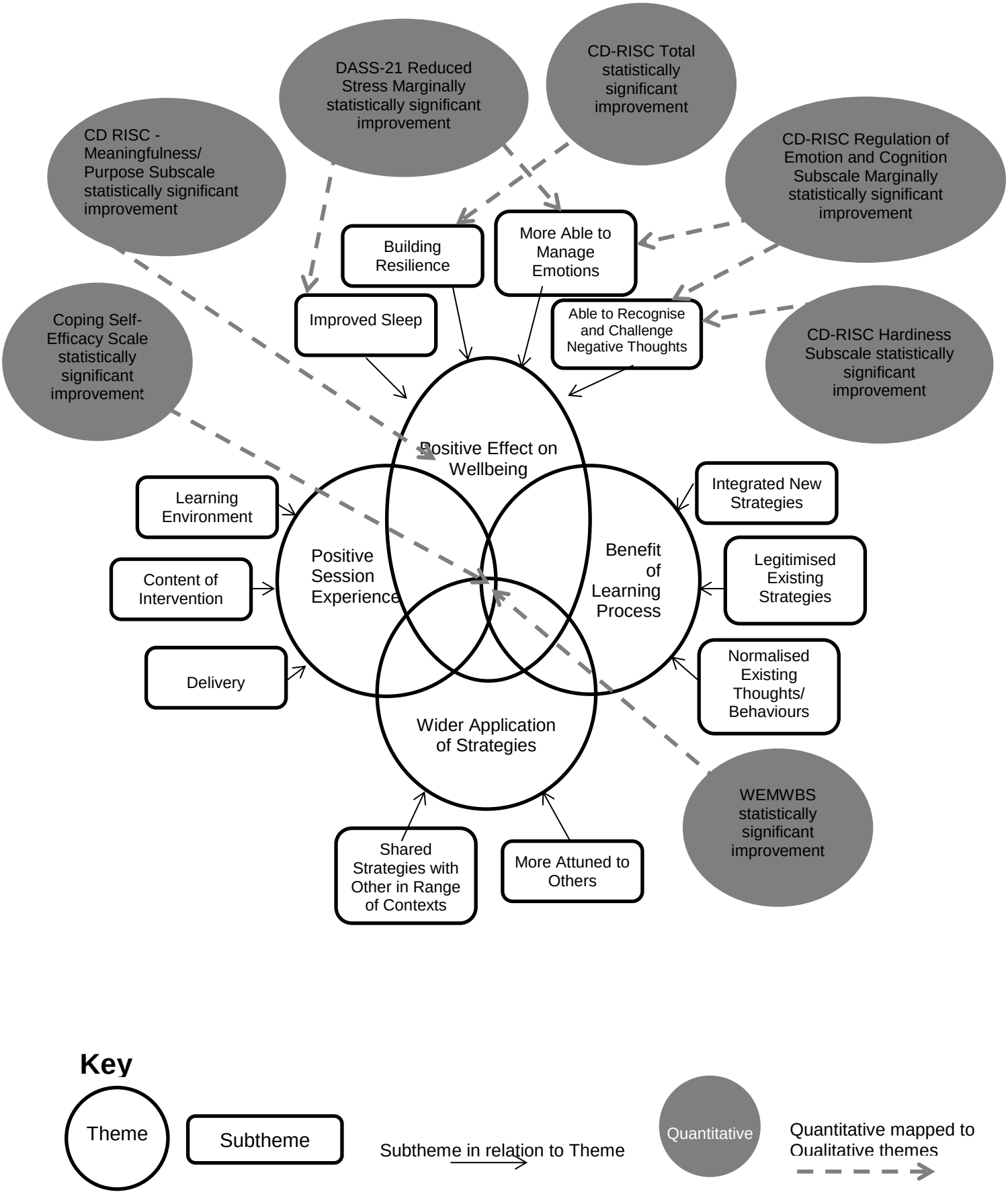


Figure 5.1 on the previous page illustrates the four themes identified through the qualitative research which were; *'Positive effect on wellbeing', 'Benefit of learning process', 'Wider application of strategies'* and '*Positive session experience'* (Figure 5.1) and their respective subthemes. The diagram illustrates the significant overlap between the themes and that the theme 'Positive Effect on Wellbeing' overlaps all of the other themes.

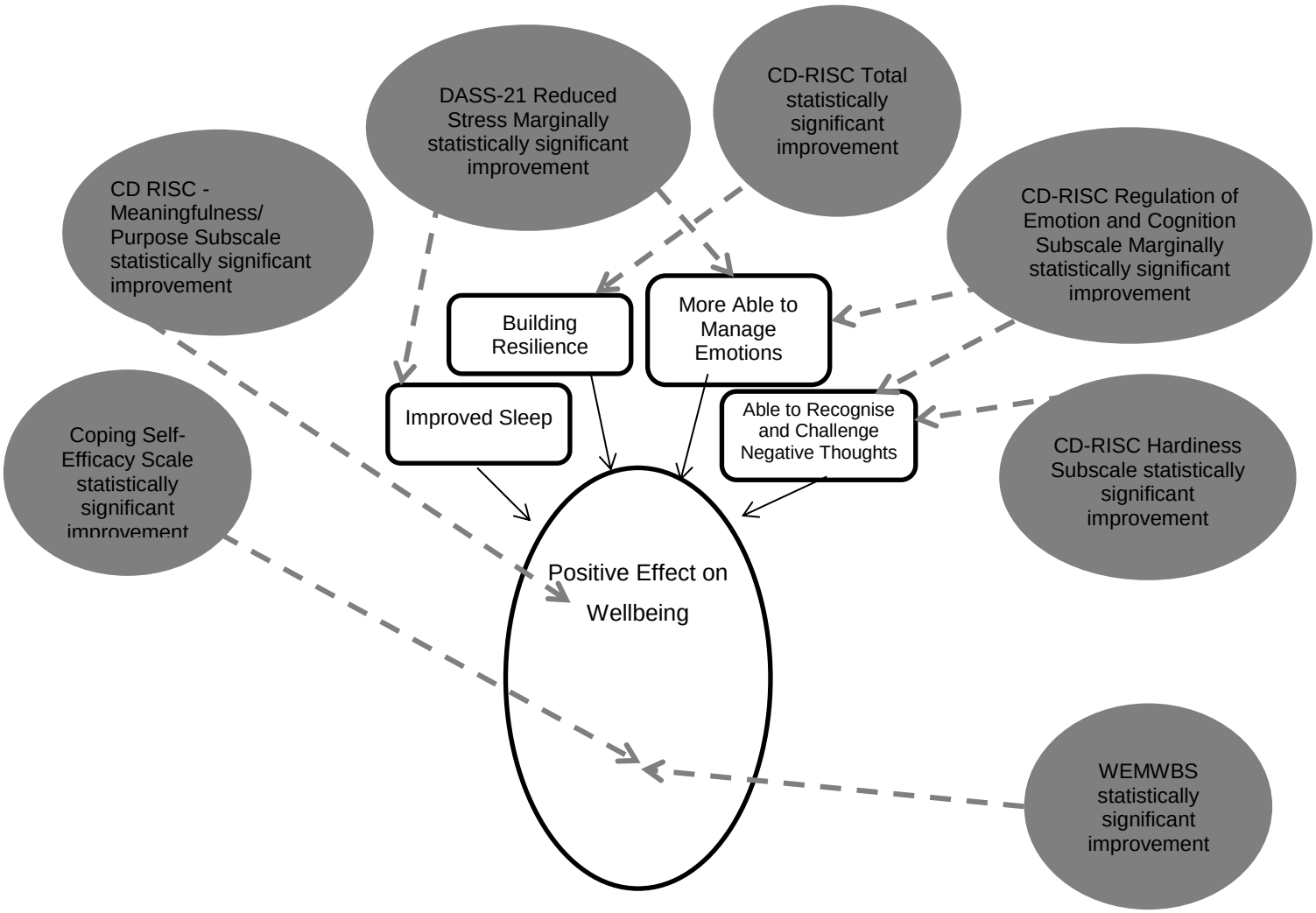
Figure 5.2 is a visual map of the qualitative and quantitative and results post triangulation. This visual map shows how the study's quantitative and qualitative results fit together. This map is referred to throughout the discussion, with the relevant parts of the map used at the beginning of each section to provide a visual point of reference which shows clearly how the qualitative and quantitative data, within that section, have been linked together through the triangulation process. These relevant sections of Figure 5.2 are helpful at the opening of this chapter as they show the triangulated results which are being specifically discussed on that section. Figure (5.2) reflects the study and the discussion chapter's approach which is to explore the qualitative and quantitative data concurrently and equally.

Figure 5.2 Post Triangulation Visual Map of Quantitative and Qualitative Results.



5.2 Positive Effect on Wellbeing

Figure 5.3 Excerpt from Post Triangulation Visual Map of Quantitative and Qualitative Results (Figure 5.2) specific to - Positive Effect on Wellbeing



This section *'Positive Effect on Wellbeing'* explores both the qualitative themes and subthemes linked to the quantitative results through the triangulation process as illustrated in the Figure 5.3 which is a section of the complete triangulation visual map - Figure 5.2. This excerpt above (Figure 5.3) shows how the qualitative and quantitative study results link together specifically under the heading *'Positive Effect on Wellbeing'.* The '*Positive Effect on Wellbeing'* theme (as illustrated in the Figure 5.1 and Figure 5.2) overlaps all of the other qualitative themes. This indicates that all of the qualitative themes contribute to the positive effect on wellbeing as do the quantitative results.

All the intervention participants reported in their qualitative responses that their wellbeing had improved. The quantitative research which are based on the statistical significance of the change between pre intervention results and post intervention results, echoes this for example, the CD-Risc meaningfulness / purpose subscale shows a significant increase following participation in

the intervention. Meaningfulness / Purpose have been found to be associated with emotional wellbeing (Steptoe and Fancourt, 2020). It has also been identified as one of the three aspects of wellbeing, termed eudemonic, so a significant increase in this measure is a good indicator of an improvement in wellbeing (Steptoe, Deaton and Stone, 2015). That the programme has achieved a positive impact on wellbeing is also supported by the Warwick Edinburgh Mental Health and Wellbeing scale which reported a significant improvement in wellbeing in the experimental group post intervention. In addition, the Coping Self-Efficacy Scale also reported a significant improvement which, as ability to cope has been found to have a protective effect on mental health and wellbeing further supports the conclusion that the programme's effect on mental health and wellbeing has been positive (Aldwin and Revenson, 1987; Dawson and Golijani-Moghaddam, 2020).

5.2.1 Building Resilience

Participant's qualitative feedback in both the semi-structured interview and the qualitative questionnaire questions strongly indicated that they felt their level of resilience had increased since completing the intervention. Typical examples of these comments are from Participant 6 and 9 respectively who said

'I feel my level of resilience has improved & I'm more confident in being assertive', '…the techniques have provided me with tools to manage my resilience levels.'

The quantitative data mirrors this, as the Connor–Davidson Resilience Scale's (CD-Risc) results indicated a significant improvement in the level of resilience for the experimental group who completed the intervention compared to the control group where there was no change in their post intervention scores compared with the beginning of the study. As being resilient has been found to be positively correlated with self-efficacy, optimism, social support and wellbeing and negatively with depressive symptoms and trait anxiety (Rutter, 1985; Petros et al, 2013) the intervention resulting in an increase in resilience is an extremely positive result. An interesting result from the quantitative data was that the change in the experimental group's wellbeing score post intervention on the Warwick Edinburgh Mental Wellbeing Scale was not significant, the control group's decrease in wellbeing at the end of the study was only marginally significant. The change between the pre and post scores was significant. As described in the literature review the study took place during the Covid-19 pandemic restrictions with the post intervention qualitative and quantitative taking place as lockdown restrictions were reintroduced. A wide range of research has indicated that the Covid-19 pandemic has had a negative impact on mental health and wellbeing (Chandola et al, 2020; Burn et al, 2020). A possible explanation for this current study's results could be that the intervention provided the experimental group with some protection from the broader negative impact of the pandemic, an explanation which is supported by the online questionnaires qualitative questions responses which indicated that control group

participants level of wellbeing had fallen compared to the experimental group. This could be from the cumulative effect of the interventions content and could also be linked to the interventions impact on resilience which is aligned to existing research which aligns with studies that indicated that higher levels of resilience mitigate the negative impact of the pandemic (Plomecka, 2020; Paredes, 2021)

The Promoting Adult Resilience (PAR) program studies (Millear et al., 2008; Liossis et al., 2009 and Foster et al., 2018) provide a useful reference point as the Australian studies were researching the impact of an intervention which was seeking to improve adult resilience. The initial PAR pilot trial in 2008 (Millear et al., 2008) post intervention results, in common with this study, found improvements in participant resilience, coping self-efficacy and lower levels of stress, which in contrast to the PAR studies are viewed as factors of overall wellbeing rather than aspects of resilience. The results differed from this study's results as they also found lower levels of depression, which in this study was not significant and a greater work-life fit than their comparison group which was not measured in this study. The second PAR study (Liossis et al., 2009) again found increased self-efficacy in common with this study. In addition, their results showed more family satisfaction, greater work-life fit and balance and less negative family-work spillover, which were not factors measured in this study. The third PAR study (Foster et al., 2018) which is the one most closely aligned to this study, found in common with this study a significant improvement in coping self-efficacy scores, and a reduction in stress and anxiety but not at a significant level. All the PAR studies used the Workplace Resilience Inventory which showed an improvement described as meaningful but not at a significant level. This contrasts with this study which used the CD-Risc–25 scale to measure resilience and found a significant increase in overall resilience and the subscales hardiness and meaningfulness / purpose and marginally significant results for the CD-Risc–25 subscale Regulation of Emotions and Cognition. Overall, there are similarities between the results of this study and the PAR studies. All resulted in an increase in coping self-efficacy and had an impact in the specific study's measures of factors related to mental health and wellbeing. However, this provides a useful example of the difficulties faced when comparing studies. Differences in methodology, the measures used and the intervention itself mean that direct comparison and inferences based on this are challenging.

Research has shown that resilience can be improved through training programmes and that increased resilience is also linked to an improvement in wellbeing and reduction in stress (Chitra and Kurunanidhi, 2018). As well as variation in the programme content there is variation in the length of the programmes for example the PAR programmes were all delivered face to face and ranged from the initial study's intervention which was one hour per week for 11 weeks (total 11 hours) (Millear et al., 2008), the second PAR intervention was 90 minutes per week for 7 weeks (total 10.5 hours) (Liossis et al., 2009) and the third was two full day workshops delivered 3 weeks apart (approximately 13 hours in total) (Foster et al., 2018). Current research indicates that an

optimum programme structure has not been identified with studies using a wide range of intervention structures (Millear et al., 2008; Liossis et al., 2009 and Foster et al., 2018).

The challenge of comparing workplace programmes efficacy has been highlighted by other research which found that, for example, successful resilience training needs to be theoretically based, with the trainer being critical in the success of the programme (Baker et al., 2021). The Baker et al study, also found that connecting to participants' motivation to change, their values and goals enhanced the impact of the training. In addition, the opportunity for participants to reflect on successes and challenges was found to be key to their development of new resilience skills which in turn strengthens these skills and builds their confidence which supports the skills future use (Baker et al., 2021). These findings resonate with this study's results as all of these key components were either intrinsic to the intervention and/or emerged from this data analysis. This is helpful as it supports this study's conclusions.

5.2.2 Improved sleep

A subtheme that emerged from the qualitative analysis was that participants in the experimental group reported their sleep had improved following the intervention. The decrease in experimental group participant's level of stress indicated by the quantitative Depression, Anxiety and Stress Scale, although only marginally statistically significant, may be linked to the improvement in sleep as increased stress leading to poor sleep has been found by many studies (Kalmbach et al, 2018; Åkerstedt et al, 2012; Martire et al, 2020). The intervention included relaxation techniques, strategies for managing anxiety and worry which referenced improving sleep, plus a number of techniques specifically for improving sleep (Lee et al, 2018; Eisenbeck et al, 2018). Several participants, in their qualitative responses, mentioned that they were using these techniques for example Participant 9 said

'I'm certainly sleeping better. And I think, like I say, is just being able to, to give names to things to know to when you're laying there in at night, in bed, catastrophising and you're thinking, actually, that's what I'm doing.'

It is interesting that the participant's comments echo the findings of a study mentioned in the literature review which found that rumination was linked to both symptoms of depression and anxiety (Michl et al, 2013). If the intervention is improving sleep, then research indicates (Azza et al, 2019; Linton et al., 2015; Torquati et al., 2019) that this would potentially be a factor in the interventions wider positive impact, such as the improvement in overall wellbeing indicated by the significant improved level of the quantitative measure of wellbeing (Warwick Edinburgh Mental Wellbeing Scale). This interpretation is supported by research which indicates that poor sleep has a negative impact on mental health and wellbeing (Short et al, 2019; Reimann et al, 2011; João et al, 2018). Improved sleep therefore could be an important factor in the intervention having an overall positive impact on mental health and wellbeing.

5.2.3 More able to manage emotions

The subtheme which emerged from the qualitative analysis of '*More able to manage emotions'* potentially links to two results from the quantitative research, the first is the Depression, Anxiety and Stress Scale result indicating that the experimental group reported a marginally lower level of stress post intervention. The ability to manage emotions or to use an alternate psychological term '*emotionally regulate'* has been found by Extremera and Rey, 2015 and Prakash et al, 2015 to enable individuals to manage their level of stress more effectively, which not only reduces the level of stress but also its negative impact. The second CD-Risc sub scale '*Regulation of emotion and cognition'* result showed a marginally significant increase in participant's ability to regulate their emotion and cognition. Emotional regulation has been found to be important in maintaining mental health and wellbeing with low levels of emotional regulation being associated with impaired mental health and lower levels of happiness and life satisfaction, i.e., subjective wellbeing (Saxena et al, 2011). The intervention introduced techniques drawn from attention bias modification which based on participant feedback and the quantitative results seem to have been a valuable inclusion in the intervention's toolkit (Beard et al, 2012). This approach enables participants to recognise what they are paying attention to and shift their attention onto something else if this is helpful, using distraction techniques. This study's findings are aligned with the positive affect of this approach, which is widely used, with good outcomes, when managing anxiety and anxiety related disorder such as PTSD (Bardeen et al., 2016; Bardeen, 2015; Derryberry and Reed, 2002; Jha et al., 2007). As being able to manage emotions has also been identified as a factor in resilience by for example Joyce et al's systematic review and meta-analysis of resilience training programmes and interventions in 2018 the increase in resilience indicated by this study's results fits with this conclusion and supports the benefit of including the emotional regulation strategies in the intervention.

5.2.4 Able to recognise and challenge negative automatic thoughts.

In therapy, particularly Cognitive Behavioural Therapy (CBT) achieving cognitive change to bring about '*enduring emotional and behavioural change'* (Beck and Beck, 1995 p2) is the objective. The intervention included elements of CBT and there is evidence that the intervention has enabled participants to achieve cognitive and / or behavioural change which indicate the intervention's efficacy in improving mental health and wellbeing and supports the further development of this and other interventions which use this approach. A focus of the intervention was recognising and challenging negative automatic thoughts which were characterised as a Poison Parrot, which the strategies aimed to challenge. The participant's feedback indicated that they found this aspect of the intervention particularly useful and that by utilising these techniques, they experienced a positive change. An example of this is Participant 3's comments on how, when they were faced with what they perceived as a failure, they were able to change the way

they responded which resulted in them avoiding the negative thought processes that in the past would have triggered negative thoughts.

'I failed …Which was a blow and actually, what that kind of did is bring up all that stuff… So what I noticed when we talked about things like you know the poison parrot and all that sort of stuff was that if, as long as I generally, as long as I was filling my mind with other things, whether that be family, friends, things the I enjoyed it kind of kept it at bay.'

The effectiveness and positive impact of these strategies was mentioned by many of the participants with another example of this being Participant 9 who said -

'So as soon as my negative poison parrots starts chirping up I, I give it the, you know, the old, that's not helpful, shake your head, and focus on something else, and that just… that is helped me so much.'

The qualitative feedback is again echoed by the quantitative results. The CD-Risc Hardiness subscale reported a significant increase in experimental group participant's level of hardiness. Hardiness has been found to be a construct related to resilience (Maddi and Khoshaba, 1994) and has been substantially correlated with measures of higher well-being and lower stress, including lower scores on measures of depression and traumatic stress (Alarcon et al, 2009; Adriaenssens et al, 2015; Eschleman et al., 2010; Matthews et al, 2019). The construct of hardiness has been conceptualised as consisting of three subfacets; commitment, control and challenge (Kobasa, 1979; Eschleman et al., 2010). However, hardiness, unlike resilience, has been described as a personality trait (Bonanno, 2004). Hardiness and it's subfacets have been found to play a significant role in managing stress for example by playing a moderating role in the relationship between emotional demands and exhaustion (Preti et al., 2020) as well as being a protective factor for stress and trauma (Eschleman et al., 2010). The key difference between Hardiness and Resilience is that resilience results in an improved or enhanced adaptive outcome, whereas hardiness allows individuals to endure significant adversity but there is not necessarily a positive change in outcome (Earvolino-Ramirez, 2007). It is likely that both increased hardiness and resilience are having a positive impact on participants within this study, the significant increase in hardiness, in the CD-Risc subscale being posited to be linked to the overall increase in resilience which is supported by the qualitative feedback that indicated positive change had been achieved. Increased hardiness is also likely to be linked to the reduction in stress (DASS-21) (Fishman, 2012) and the significant increase in Coping (Coping Self-Efficacy Scale) (Mayordomo et al., 2016) and Wellbeing (Tonkin, 2018).

5.2.5 Section Summary

This section has focussed on how the qualitative and quantitative results as illustrated by Figure 5.3 link together and how they in turn have a positive effect on wellbeing. The section details

some of the ways, based on research that the improved sleep, increased resilience, ability to manage emotions and negative automatic thoughts is linked to a positive effect on wellbeing. It is striking how the quantitative and qualitative data fits together and how collectively it provides a cohesive explanation of the positive impact on wellbeing that participants experienced. The quantitative data when viewed concurrently with the qualitative data helps build the clear impression that the intervention has achieved a positive impact on participant's wellbeing through a range of factors. The marginal reduction in stress post intervention (DASS-21 Reduced Stress subscale marginally statistically significant improvement) is likely to have a direct impact on wellbeing as well as potentially being a factor in the participant's improved sleep and their reported increased ability to manage their emotions. This positive effect on their emotion management is also reflected in the significant positive change in the level of emotional regulation (CD-RISC Regulation of Emotion and Cognition Subscale marginally statistically significant improvement) which would also potentially be linked to their increased ability to recognise and challenge negative thoughts which in turn could also be linked to increase in hardiness indicated by the CD-RISC Hardiness Subscale which reported a statistically significant improvement post intervention. The statistically significant positive change in Meaningfulness / Purpose (CD-Risc subscale) and Coping / Self-Efficacy (Coping Self-Efficacy Scale) have all be found to be potential factors in the increase in wellbeing expressed by participants in their qualitative data responses and reported by the Warwick Edinburgh Mental Wellbeing Scale. While this section and the following discussion chapter sections review the discrete mechanisms and connections between the study results it is noteworthy that the specific mix of factors that have collectively resulted in the positive outcomes reported by the participants will be individual to each participant. Therefore, while it is useful to explore the potential links between the study's data it is, as when reviewing a jigsaw, equally important to consider the whole picture that the data presents which in this case is an intervention that has for every participant had a positive impact which in itself is a valuable and significant achievement.

In the next section explores how the qualitative and quantitative data collectively relate to the *'Benefits of Learning Process'* expressed by participants. This section focuses on the links between the significant improvement in wellbeing and coping / self-efficacy reported by the quantitative results and the qualitative subthemes; *'Integrated New Strategies', 'Legitimised Existing Strategies'* and '*Normalised Existing Thoughts/ Behaviours'.*

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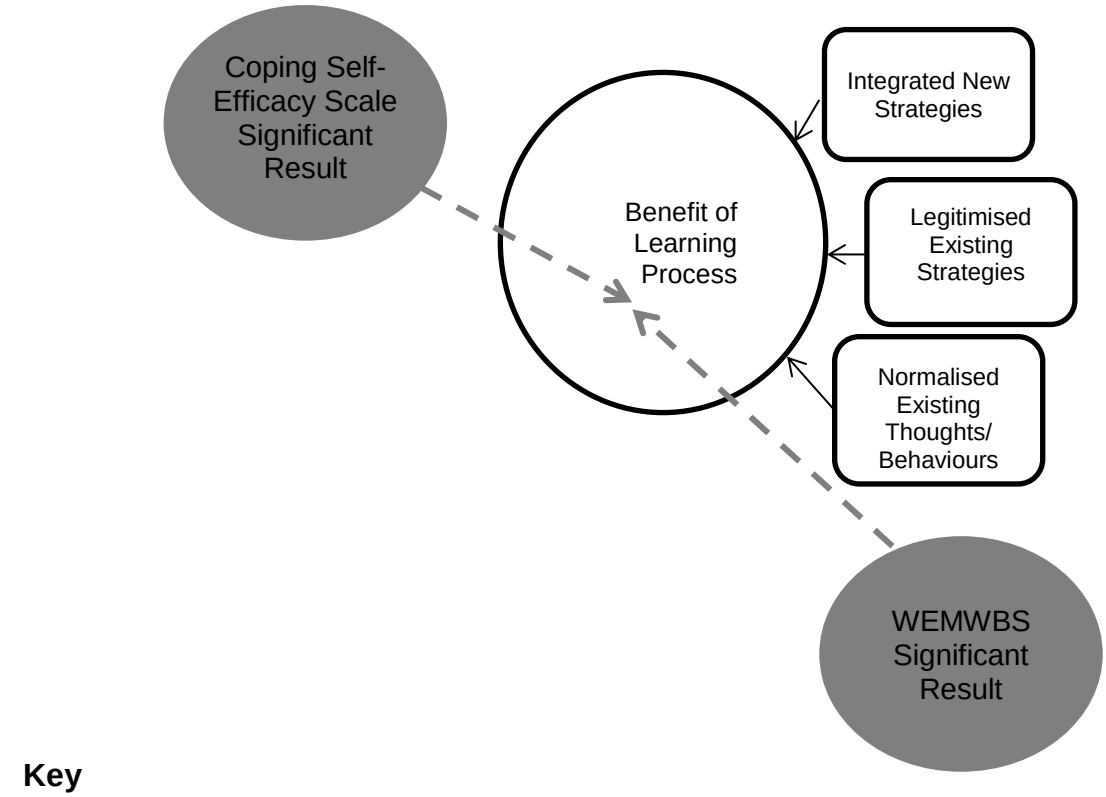
5.3 Benefit of learning process

Figure 5.4 Excerpt from Post Triangulation Visual Map of Quantitative and Qualitative Results (Figure 5.3.) specific to Benefit of learning process



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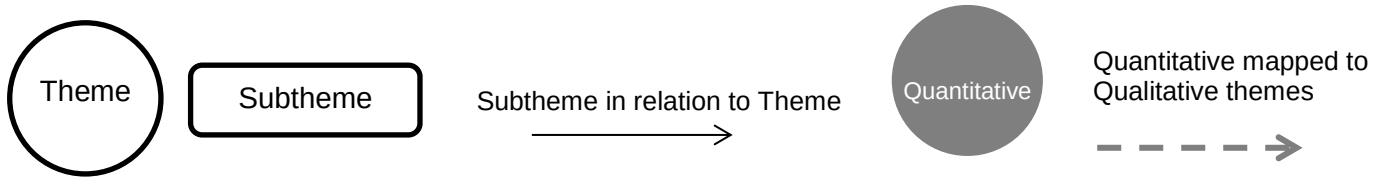


In this section the qualitative sub themes of '*Integrated New Strategies', 'Legitimised Existing Strategies'* and *'Normalised Existing Thoughts/ Behaviours'* and the quantitative results which indicated that the participants level of *'Coping'* (Coping Self-Efficacy Scale) and *'Wellbeing'* (Warwick Edinburgh Mental Wellbeing Scale) had improved statistically significantly after completing the intervention will be explored in relation to each other and in terms of the *'Benefit of the Learning Process'.*

5.3.1 Integrated new strategies

Hansman and Wilson (1998) found that one of the key factors in training not having an effect, or the effect being diminished, is the learned knowledge and skills not being used. This indicates that it is not enough for participants following the intervention to just be aware of the information

within the intervention. For the intervention to have an impact on the participant's mental health and/or wellbeing they would need to be using the techniques, ideally, on a regular basis. As the Participants tried the strategies and found them effective it seems they have been adopted as their go to response to their low mood. An example of this is Participant 9's comments on the frequency with which they are using the intervention's Poison Parrot strategy

'I use them daily to quieten the poison Parrot, distraction techniques and be your own best friend.'

In this example it may have the effect of lifting their mood more quickly than perhaps they have experienced in the past resulting in helping them to cope if their mood is lowered. It could also increase their resilience if they are able to apply the techniques regularly with potentially the additional effect of reducing episodes of significant low mood. The application of the strategies is an important aspect of participant feedback, as it indicates that participants are consciously using the strategies and noticing their positive impact which Bjaastad et al (2016) found is likely to reinforce and maintain the use of the techniques.

5.3.2 Legitimised existing strategies

Participants described how recognising that techniques / strategies they have used from the intervention and finding out that they were recognised techniques / strategies underpinned by research seemed to have a number of effects. The first was boosting confidence in themselves and their capability to deal with situations / challenges which links with the next subtheme of normalising. Another effect was that it increased their confidence in the intervention as it meant that the strategies being advocated were achievable as they were already using some of them which they knew to effective.

5.3.3 Normalised existing thoughts / behaviours

A focus of the intervention was to explain *'normal'* human reactions including their psychological and physiological basis. This was informed by the literature review with research indicating the positive impacts on individual's wellbeing of de-medicalising their 'normal' responses to their experiences, emotions, and behaviours (Watson, 2019; Manwell et al, 2015; Maercker et al, 2013). This approach was provided by using clear and relatable examples of different behaviours / cognitions and providing the safe space for others to share their own experiences. This was a hugely important part of the intervention as Wyatt et al.'s (2014) research indicates that the process of normalising mental health reduces the stigma and shame. This affect was found in this study for example Participant 5 said that prior to this study's intervention they had thought they were *'a nut'* and *'a bit weird'* but normalising the way they had handled their traumatic experiences meant that they no longer thought this.

'… (trainer) gave me and the tools we discussed just er confirmed that I've been actually using similar tools, it's just confirmed it is the right way. I thought, you know, I thought am I a bit of a nut you know a bit weird but it helped me to cope through trauma and difficult situations.'

This was echoed by other participants who described how the study's intervention had been very powerful and positive, as the normalisation had lifted the weight of their negative due to the realisation that there was nothing 'wrong' with them which in turn increased their confidence. The positive impact of legitimising and normalising seems to be supported by other research which has also found this effect such as Torres (2020 p22). This effect has been found to be particularly powerful in groups, as hearing peer's experiences and realising that your own experience are not unique is a significant benefit of group interventions as found by Newbold et al in 2013 and echoed by Participant 4's comment that

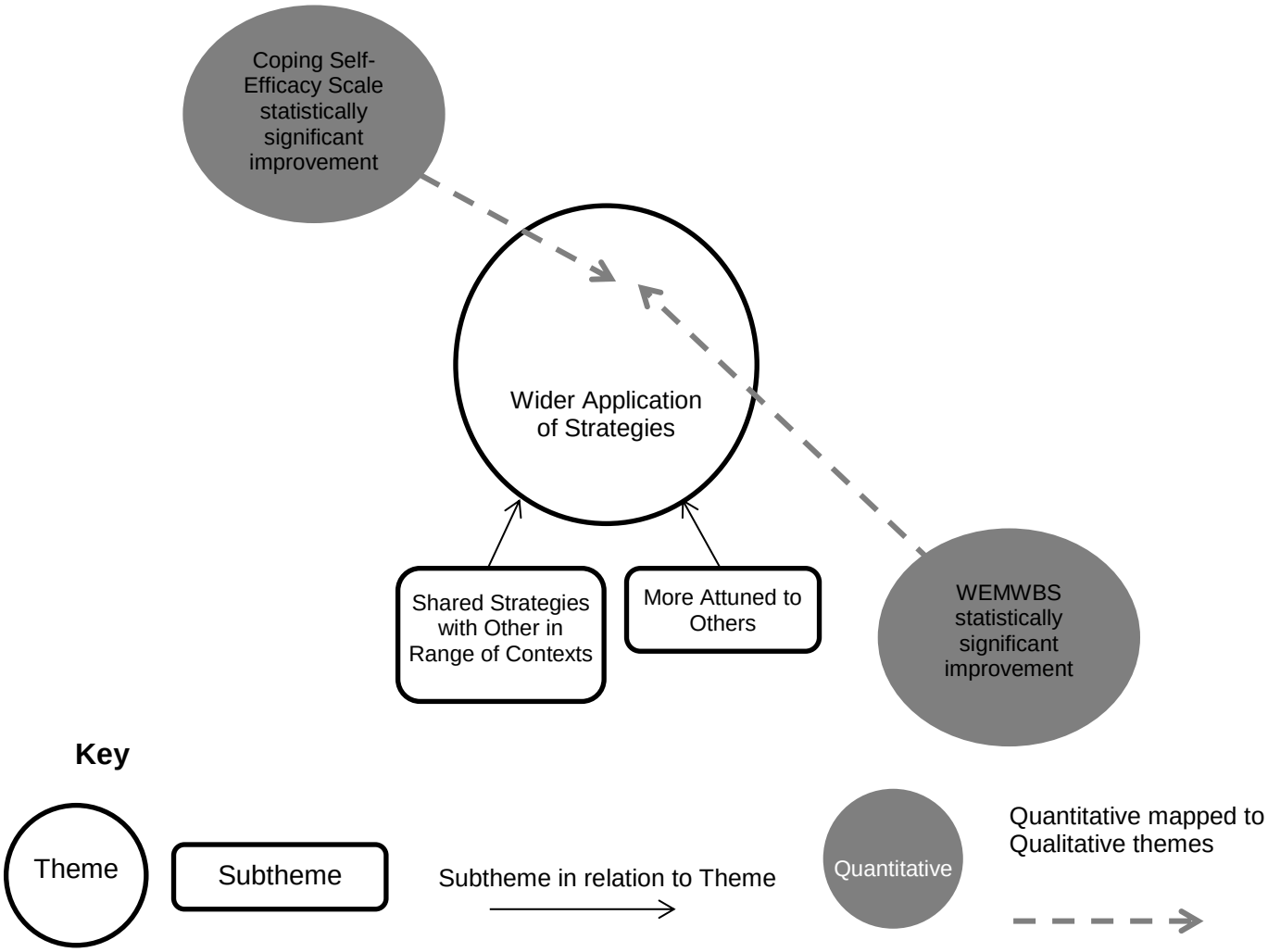
'I feel as well it was just giving a name to things that helps me massively with all of this and the fact that I'm not alone in all of this'.

5.3.4 Section Summary

In the '*Benefit of the Learning Process'* section the three sub themes; *'Integrated New Strategies', 'Legitimised Existing Strategies'* and *'Normalised Existing Thoughts / Behaviours'* all indicate that they have a positive impact on confidence. This could potentially link with the quantitative result which indicated an increase in coping, post intervention as studies have reported a link between increased confidence and an increased coping ability (Tarantino et al., 2013; Reeves et al., 2011). Studies have also reported that increased coping ability has been linked to an improvement in wellbeing (Lin et al., 2017; Marroquín et al., 2017) which fits with this study's findings and is consistent with existing research and that the supports the conclusion that collectively the three subthemes under the heading/theme *'Benefit of the Learning Process'* support the study's position that the intervention had a positive effect on participant wellbeing. For each subtheme potential mechanisms, which were likely to contribute to the study's results were found in the literature. This is important as it provides an understanding of not just what impact the intervention achieved but how this was achieved which will inform further iterations of this and possibly other interventions. The next section, titled '*Wider Application of the Strategies'* looks at the links between the quantitative and qualitative data and how this relates to participants application of the intervention strategies in their own lives and beyond.

5.4 Wider Application of the Strategies

Figure 5.5 Excerpt from Post Triangulation Visual Map of Quantitative and Qualitative Results (Figure 5.3.) specific to Wider Application of the Strategies



The qualitative feedback indicated that participants in the experimental group were using the strategies in several different ways beyond the overt target of the technique / strategy. This wider application of the strategies specifically being '*More attuned to others'* and that they *'Shared strategies with others in a range of contexts'* which were likely to be linked to the quantitative results which reported a significant increase, post intervention, in both the Coping Self-Efficacy Scale and the Warwick Edinburgh Mental Wellbeing Scale. This section will consider the wider application of the strategies in terms of its impact on the study's aim, how it fits with the findings of other research and how it could inform future iterations of the intervention.

5.4.1 Shared strategies with others in a range of contexts

The confidence that experimental group participants felt in the strategies and techniques was evident in their ability to recognise when others were experiencing thoughts or emotions that the strategies and techniques fitted as described in the next subsection (More attuned to others). Their depth of understanding was also evident as they related how they had explained to others what they had learnt within the session. The process of teaching others the techniques has been found to enhance their own learning as they are retrieving the information from their memory and practicing the information as they explain it to others (Koh et al., 2018). There is also research that indicates that sharing information that is perceived as potentially doing good / helping others, has a positive impact on wellbeing (Pressman et al., 2015; Schwartz et al., 2009). This improved wellbeing is supported by the quantitative data which reports a significant increase in wellbeing post intervention. There is also the potential impact that being confident and competent enough with the strategies to share these with others is linked to the significant increase in their coping / self-efficacy indicated by the quantitative data (Coping Self-Efficacy Scale).

5.4.2 More attuned to others

One of the ways the qualitative results indicated the intervention information was being utilised was to enable the participants to be more attuned to others. The mechanism for this seems to be that as the intervention provided a greater depth of understanding of their own psychological state which resulted in participants being able to apply this knowledge to others. An example of this is Participant 2 saying that since the intervention

'I've noticed more about other people and kind of going on about things outside of their control.'

This indicates that the insight into their own behaviour which had been the focus of the intervention has enabled them to notice this behaviour in others. This seems to have had the effect of feeling greater understanding and empathy for others as they recognise other's cognitive and behavioural patterns which they had explored within the intervention group. It also meant that they were keen to share the strategies they were now using to manage these situations, cognitions or emotions as described in the previous subsection 5.4.1. This effect seems to resonate with the Transdomain Model of Health (Huber et al, 2011) which described a *'Sense of 'Us'* defined as the '*Capacity for relating to and with others'* which was situated as the overlap between the domains of mental and social health.

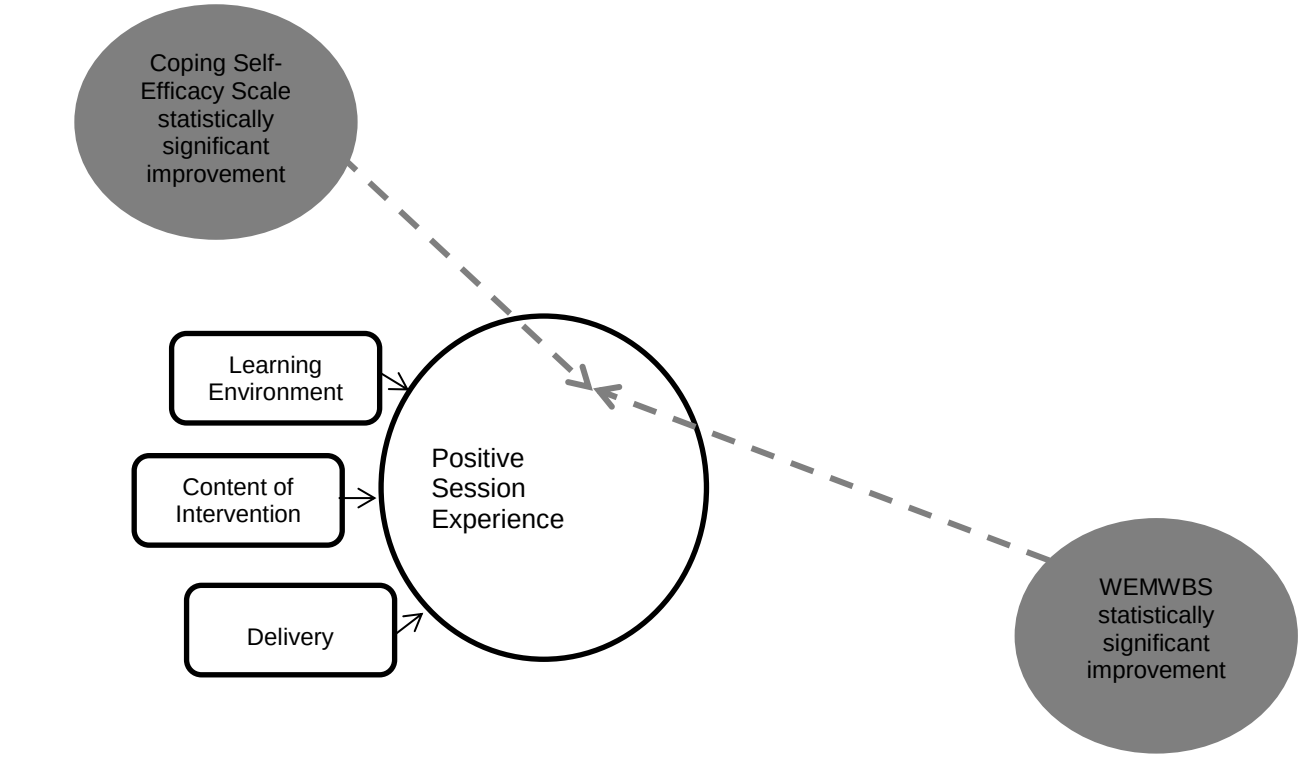
5.4.3 Section Summary

This section has identified and described potential explanations for the sharing of strategies in a wide range of context and being more attuned to others could be linked to the reported significant increase in coping and wellbeing. The next section focuses on factors that contributed to the

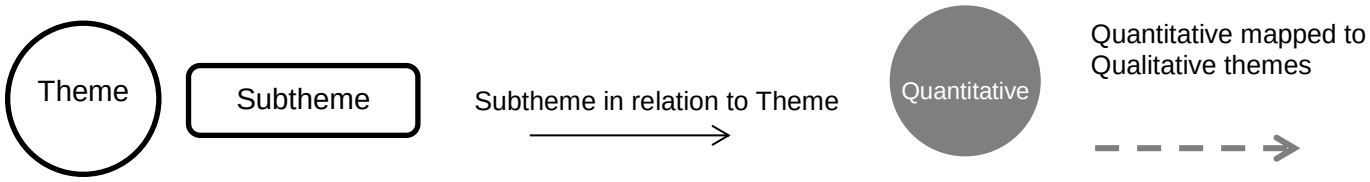
positive session experience reported and how this potentially links to reported increases in coping and wellbeing.

5.5 Positive Session Experience

Figure 5.6 Excerpt from Post Triangulation Visual Map of Quantitative and Qualitative Results (Figure 5.3.) specific to Positive Session Experience



Key



This section discusses how the learning environment, content of the intervention and the way the sessions were delivered led to the positive session experience reported by participants and how in turn this could be lined to their increase in coping / self-efficacy and wellbeing indicated by the quantitative measures.

5.5.1 Learning environment

Participants in their qualitative responses indicated that they enjoyed the sessions for example Participant 2 who said

'…it was, you know, really, really enjoyable, and I genuinely found it useful'.

Participant enjoyment may be a factor in their subsequent retention of the session content as research for example Lucardie in 2014 has shown that enjoyment has a positive impact on learning. Participants finding the sessions enjoyable may also be a factor in all the participants attending all of the session, as Wlodkowski in 2017 research indicated that enjoyment increases motivation to learn. The expressed enjoyment of the sessions could be posited as providing the conditions research has indicated are required for positive psychotherapeutic interventions which include, therapeutic alliance, empathy, group cohesion and goal consensus / collaboration (Schnur and Montgomery, 2010). Part of participant's enjoyment, based on their feedback, was linked to the humour within the session as Participant 10 put it

'…And it was a pleasure and it was a bit of fun as well. It wasn't all about being serious was it? You know we had a bit of a joke and everything. No, I thoroughly enjoyed it.'

Appropriate humour has been found to strengthen relationships and improve wellbeing by Charman in 2013 and Astedt-kurki et al in 2001 which fits with the wellbeing scales results showing wellbeing increased significantly post intervention, as well as being found to be linked to increased coping (Lennon-Maslin, 2018; Perchtold et al., 2019) which again fits with this study's quantitative results. Humour has also been found by Savage, 2017 to promote learning, enabling participants to engage with sometimes challenging concepts as it encourages positive feelings about the learning process. In addition, Savage in 2017 and Bakar and Kumar in 2019's research both found that positive emotional and social connections may lower defences making participants more open to the learning and each other.

As the results from both qualitative and quantitative indicated that all experimental group participants experienced some change either in knowledge, behaviour or cognition it is interesting the depth of change that has been achieved when the sessions were deliberately boundaried in terms of limiting the level of self-disclosure. This boundaried approach was taken to protect participant's wellbeing within the group setting, particularly as the groups were made up of the participant's colleagues. This meant that the sessions more closely resembled psychoeducation than a therapy session although the trainer's counselling psychology training was likely to have informed their approach in terms of creating a warm therapeutic relationship which has been found to increase group efficacy (Brown, 2018; Joice, and Mercer, 2010).

5.5.2 Content of intervention

In this section the interventions content including its 'toolkit' approach, which was to take the position that the strategies and techniques were populating their mental health 'toolkit' which they could then use or share when they felt appropriate, is explored. When participants were presented with a list of all of the intervention topics and asked in the qualitative questionnaire questions

which they had found most beneficial no topic was identified as not being beneficial. The most popular topic which related to managing negative automatic thoughts was identified as beneficial by 9 of the 10 experimental group participants. When reviewing the qualitative and quantitative feedback results it appears that the intervention's content has succeeded very well in improving the mental health and wellbeing of participants. This conclusion is supported by the participants own comments on how valuable they found the training for example Participant 1 described their perspective of the interventions content in the following terms

' … There's so much on there that was really, really achievable, and you did actually feel well, actually, I'm actually doing these things so that reinforced what we were talking about. … I found lots of this I could actually, you can literally pick it up and it can go into like your sort of virtual as I call it like a virtual toolbox.'

The positive feedback on the content of the intervention links with much of the research detailed in the literature review, which indicated these strategies have a positive effect on wellbeing. Stone et al in 2018 described a range of activities that had been found to have a positive impact on wellbeing. These included several that were specifically included in the intervention for example, gratitude, empathy, kindness. Wood et al's (2008) research indicated that gratitude decreased stress and depressive symptoms and encouraged higher social support, an aspect supported by Bartlett and Desteno's research which also indicated gratitude increasing prosocial behaviour which were theorised by Wood et al (2008) as potentially leading to other benefits often linked to empathy and kindness. Gratitude was also found by Emmons and McCullough (2003) to increase subjective wellbeing and by Vieselmeyer et al (2017) when linked to resilience, to be a factor in post-traumatic growth. This links to Lyubomirsky et al's research (2005) which reported that acts of kindness were beneficial to mental health and wellbeing of the person carrying out the act. The interventions inclusion of positive psychology content was motivated by research that indicated that these techniques had been found to improve participants mental health and wellbeing (Seligman and Csikszentmihalyi, 2014; Seligman et al, 2005; Seligman et al). There is also evidence that positive psychology exercises have a positive impact on people with depressive personality styles (Sergeant and Mongrain, 2011) which may be another factor in the improvement wellbeing indicated in this study's qualitative and quantitative results.

The literature review indicated clearly that interventions that drew on Cognitive Behaviour Therapy (CBT) were found to be effective in addressing a wide range of factors that negatively impact mental health and wellbeing such as anxiety (Carpenter et al, 2018); depressive symptoms (Seligman et al., 2007); stress (Joyce et al, 2016); improving resilience (Joyce et al, 2018) (Foster et al 2018). Although CBT based interventions undoubtedly have a wide research base, other interventions that draw on a wider psychological therapy, models and theories have also been found to be effective for; anxiety (Bardseth et al, 2013; Tolin 2010); depressive symptoms (Hetrick et al., 2016) and improving resilience (Joyce et al, 2018).

5.5.3 Delivery

This section looks at the impact the trainer's approach has had from both the participant's perspective and what the research indicates. The section then focuses on the structure and delivery mode (online) of the intervention. Again, this is viewed through both the participant and the research lens.

In addition to the content of the intervention, research indicates that the trainer was likely to be an important factor in the intervention's success, for example the quality of psychoeducation delivery has been identified by Donker et al, (2009) to be important in its level of effectiveness. While research such as Wilkinson et al, (2017) and Lai et al (2017) indicate that the trainer's style and knowledge is a key factor in the success of an intervention, a position also indicated by this study's participant feedback. A perspective exemplified by Participant 6's statement that

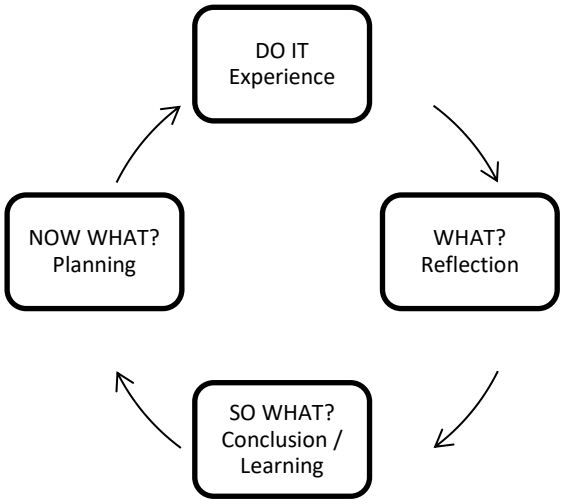
'… the person delivering it definitely does have a big impact on the value of the training when it's delivered'.

The relationship built between the trainer and the participants could be viewed as similar to a therapeutic relationship which is a key factor in the success of psychotherapy (Ardito and Rabellino, 2011). The four factors of the therapeutic relationship in groups which have been empirically supported are '*therapeutic alliance, empathy, goal consensus/collaboration, and group cohesion'* (Schnur and Montgomery, 20102 p238). In terms of the therapeutic alliance as defined by Rogers (2012) as '*empathy, congruence, and unconditional positive regard'* the participants qualitative feedback indicate that they experienced a warm therapeutic relationship with the trainer. This may have contributed to the participants trusting both the information provided and how the sessions were conducted. Participants also expressed how the trainer explained concepts in a way that resonated with them, describing the trainer as '*relatable'*. Both of these descriptors fit with the Rogerian '*empathy'* and the concept of '*empathic resonance'* which has been found to facilitate client change and emotional wellbeing during therapy (Atzil-Slonin et al, 2019). Empathic resonance has also been explored from a neuroscience perspective as an element of therapeutic empathy, from this perspective it is, in common with the psychotherapeutic perspective, an important factor in eliciting physiological and neurological change (Decety and Ickes, 2011). The trainer being described as relatable and eliciting feelings of trust and safety within the sessions also fits well with the Rogerian concepts of '*congruence, and unconditional positive regard'* (Rogers, 1957). This is likely to be an important aspect of the programme as this would have created the safe space that enabled participants to explore challenging topics and share supportively, which was a consistent aspect of their feedback, all of which would develop group cohesion (Schnur and Montgomery, 20102).

Each session had a distinct theme which was communicated clearly to the participants at the beginning of the programme and recapped at the start of each session. In addition, at the

beginning of each session there was a review and reflection on the previous session's content and a review of the between session activity. This provided the opportunity to reflect on the previous sessions learning outcomes and share with the group how these had been applied between sessions. This approach draws on Kolb's learning cycle (Figure.5.7), which was enacted within and between sessions through the setting of a *'task'* at the end of each session. The *'task'* participants were invited to try out, was a specific technique from the session which they reported their experience of using back to the group in the next session.

Figure 5.7 Kolb's Learning Cycle



Kolb, 2014

This approach was selected to support the transfer of learning from the session into the participant's real world. The act of reflecting on the strategy participants had tried and the time set aside within the sessions to discuss and reflect on the strategies being introduced seemed to have a twofold effect. The reflection enabled participants to make the information their own and situate it within their own life experience as Boud et al (1985 p176) put it *'Reflection is an important human activity in which people recapture their experience, think about it, mull it over and evaluate it. It is this working with experience that is important in learning.'* This process also brought the group together as the sharing of their reflections seemed to enhance the sense of trust and camaraderie (Wagner et al, 2015). This also served to normalise experience as discussed in section 5.2.3. The programmes action planning segment at the end of session 4 (last session) also provided the opportunity for participants to develop a plan of which techniques / strategies they were going to focus on integrating into their everyday lives and how they would maintain this plan. Based on the post programme feedback this strategy was successful in maintaining the strategies once the programme had finished.

5.5.4 Section Summary

This section discusses individually how the learning environment, content of the intervention and the way the sessions were delivered would have created a positive session experience for the participants. The impact of the intervention content and delivery from the participant's perspective and from the perspective of the research base has been explored. From the participant's perspective the content of the intervention and delivery was found to be beneficial and would have likely contributed to their transferring their learning into action with the result of increasing their level of coping as found be the quantitative coping measure. Their level of wellbeing would potentially have been affected in two ways first was the weekly enjoyment that they experienced in the session would likely have provided both something to look forward to and given a lift to their mood. The participants taking the knowledge, strategies and techniques and utilising them would likely as this was their specific purpose also had a positive effect on their wellbeing. The intervention's integrative approach to its design which is informed by counselling psychology practice drawing on a wide range psychological therapy, models and theories which research indicated to be efficacious would likely have been complemented by the trainer's Counselling Psychology skillset which would have been a significant factor in the positive experience of the sessions the participants described. In the next section the focus shifts from the intervention to the implication of the study's overall findings.

5.6 Implications of Findings

To explore the implication of the study's findings the section will look at the implications for, Employees, Organisations, Counselling Psychology and Workplace Mental Health and Wellbeing Funding Bodies.

5.6.1 Employees

For employees this study indicates that investing time in taking part in this intervention and then using the strategies and techniques that are most relevant to them could have a positive impact on their mental health and wellbeing. The intervention also serves to promote engaging with your mental state with the aim of being more attuned to your own psychological health and wellbeing in order to be able to apply strategies proactively. An example of how the intervention aims to achieve this is the content related to participant's psychological and physical processes such as, respectively, negative automatic thoughts and the body's Fight/flight response. Participant's fed back that the intervention information enabled them to be consciously aware of these processes and use the techniques introduced to address them, by for example, challenging their negative automatic thoughts or using breathing techniques to deescalate their Fight/flight response. The pilot study results indicate that this increased level of self-knowledge was appreciated by participants and was being used in conjunction with the techniques to achieve a positive impact

on mental health and wellbeing as indicated by the quantitative measure results on resilience (CD-RISC), coping (Coping Self-Efficacy Scale), and wellbeing (WEMWBS). Research supports the positive impact of using these techniques for example Gross (2013) found that becoming consciously aware of an emotional state enabled participants to manage and move forward which links to Lovibond's (2011) research which suggested that learning about the cognitive and physical experience of anxiety enabled cognitive techniques to be accessed earlier leading to a reduction in both the severity and longevity of the anxiety symptoms. The application of physical techniques for example breathing control is supported by evidence which indicates its efficacy at activating the parasympathetic nervous system which acts as a brake on the sympathetic nervous system when this has been activated in response to stress / anxiety (Taylor et al., 1999; Eckberg, 2003; Zaccaro et al., 2018; Kozlowska et al., 2015).

5.6.2 Organisations

The study's intervention enables organisation to invest in protecting and enhancing their employee's mental health and wellbeing through funding the intervention delivery and the cost of releasing staff to participate. The intervention does not negate the organisations responsibility to reduce the negative impacts on their employees of workplace stress through for example, appropriate workplace demands, level of control and support, relationships within the workplace, role clarity and how change is managed, as outlined by the Health and Safety Executive (2019). It also does not reduce organisation responsibility to fund support for employees who are struggling with their mental health and wellbeing through, for example, Employee Assistance Programmes. What this intervention intends to do is to add an additional option to the range of training that organisations routinely invest in to develop and safeguard their staff. This intervention's goal is to develop employee's mental health and wellbeing knowledge which they can then apply in their workplace, through the provision of its toolkit of techniques and strategies. The intervention also encourages an understanding and normalisation of mental health issues with the aim of encouraging participants to carry on these conversations and the sharing of what they have learnt in their workplace as this pilot study's participants have. There is a significant amount of research that details the cost to organisations of stress, anxiety and depression (HSE, 2019; HSE, 2020; Stevenson, 2017; de Weerd et al, 2014). Therefore, an intervention which this initial pilot study indicates resulted in a statistically significant improvement on a range of factors which research has indicated as being linked to employees being less negatively affected by stress and more resistant to anxiety and depression for example coping, resilience and hardiness would be likely to be welcomed (Lazarus and Folkman, 1984; Windle, 2011 p152; Farber and Rosendahl, 2018; Maddi and Khoshaba, 1994).

5.6.3 Counselling Psychology

The positive impact on mental health and wellbeing that the study results indicate supports the research featured in the literature review (Section 2.7) that the proactive application of the Counselling Psychology skills and knowledge with this study's intervention can make a valuable contribution to workplace mental health and wellbeing. There is a wealth of research that demonstrates how Counselling Psychology has contributed to workplace mental health and wellbeing through for example, EAP programmes, psychoeducation, consultancy and the person-centred approach to employee wellbeing (Attridge, 2012; Lane, 1993; Strawbridge, 2018; Douglas et al., 2014). This intervention builds on the rich tradition of Counselling Psychology in the workplace, by creating a mix of strategies and techniques informed by an integrative, humanistic, person centred and pluralist approach. The study results indicate that an integrative approach which draws on a range of theories and models and recognises and values the impact of the relationships within the group can be effective. This approach to the intervention could be viewed as having similarities with the integrative formulation particularly team formulation (Johnstone and Dallos, 2013) which has been found to facilitate culture change (Summers, 2006 p343). The focus of the intervention was to build resilience, increase coping skills and increase internal assertiveness (management of negative automatic thoughts) integratively which contrasts with other interventions targeting these areas which were based solely on CBT techniques (Joyce et al, 2016 Stallard et al, 2013; Shochet and Ham, 2004; Brunwasser et al., 2009). While the Counselling Psychology integrative approach to psychotherapy has engendered a wide range of supporting research (Zarbo et al., 2016; Norcross and Goldfried, 2005; Castonguay et al., 2015), this intervention adds supports to the use of the Counselling Psychology integrative approach to workplace mental health and wellbeing training as it is this, rather than the interventions content which is drawn from a broad base of existing strategies and techniques, that makes this intervention unique and so effective. At the moment research indicates that this approach is more commonly used within the Counselling Psychology / Counselling professions to train students in counselling skills (Callagher, 2007; Sotskova and Dossett, 2017) rather than in the workplace. This study also indicates how well-suited Counselling Psychologists are to delivering workplace interventions as their approach to groups, their counselling skills and their depth and breadth of psychology knowledge is recognised and appreciated by participants which based on this study results in an increase in the intervention's efficacy.

5.6.4 Workplace Mental Health and Wellbeing Funding Bodies.

As the government's own Figures, through the Health and Safety Executives research, indicate the significant cost to the UK of stress, anxiety and depression for example 17.9 million working days lost in 2019/20 (HSE, 2020) an intervention that could potentially improve employee's

mental health and wellbeing would likely be of interest. This intervention may also be welcomed as it provides strategies and techniques proactively with the intent of enabling employees to not only enhance their mental health and wellbeing but protect it from the impacts of stress for example, through increasing their resilience and coping. This intervention may be particularly well timed as following the Covid-19 pandemic there is an increase in workplace mental health issues for example workplace anxiety (Public Health England, 2020) which would potentially indicate that the financial investment in this intervention would result in a positive return on investment.

5.6.5 Section Summary

This study findings support the integrative '*toolkit'* approach of the intervention which drew on a wide range of strategies and techniques informed by Counselling Psychology theories, models and resources. If the intervention's initial results are borne out by further large-scale studies, then the intervention may be a useful addition to employer's response to the mental health and wellbeing needs of their staff with benefits from both employees and employers. This may also mean that there is interest from workplace mental health and wellbeing funding bodies that, particularly since the pandemic, have been encouraging initiatives which support employee mental health and wellbeing. The intervention also underlines the wider role that Counselling Psychology and Psychologists can provide to workplace mental health and wellbeing through for example, applying the integrative approach to workplace training and their expert intervention delivery.

5.7 Limitations

The main limitations of the study were the challenges of the mixed method study design, the small sample size, online delivery and the impact of Covid-19 on the study.

A criticism levelled at many workplace intervention studies is that the study designs are weak. Qualitative research has been criticised as lacking scientific rigour, open to bias, and lacking reproducibility (Mays and Pope, 1995; Castro et al 2010). However, qualitative method's holistic perspective within the participant's natural environment (Gelo, Braakman, Gerhard, & Benetka, 2009) provides a richness of information from the participant that, it has been argued, quantitative methods do not (Plano Clark et al, 2008). Quantitative in contrast to qualitative is characterised as providing the scientific rigour, as it enables the operationalisation and measurement of constructs, robustly compares groups and examines the strength of association between variables enabling hypotheses to be tested (Castro et al, 2010). The recommended study design was a between-participant design, employing an active comparison group and random assignment (Vanhove et al, 2016). This study is a between-participant design, employing a non-intervention control group and random assignment which according to Vanhove et al (2016) was

the second most rigorous option. This mixed methods approach seeks to bring together the strengths of both methods specifically in this study by using the triangulation method to bring together the qualitative and quantitative data.

A criticism of the triangulation approach is that the methods *'tap different domains of knowing'* (Mathison, 1988 p14). This argument, that quantitative and qualitative methods are epistemologically not commensurate, was also expressed by Fielding (2012) but was countered by Flick et al who argued that the triangulation of mixed methods perspectives enables a greater understanding of complex problems (Flick 2018). Mertens and Hesse-Biber, (2012) provided in their editorial entitled 'Tri*angulation and mixed methods research: Provocative positions'* a conclusion on these differing positions which stated that *'…triangulation can capture the synergistic potential of mixed methods research'* (Mertens and Hesse-Biber, 2012 p78). This study agrees with Mertens and Hesse-Biber, (2012), as the process of triangulating the two sets of data (qualitative and quantitative) has enabled the links between the results to be revealed enabling a richer picture of the intervention's impact to emerge and be explored.

There were still aspects of this study which reduced its efficacy; one of these as discussed in Chapter 3 (Research Methods 3.2.3) was the small sample size which means that conclusions drawn from the outcomes must be treated with caution as they may not be representative. Nevertheless, the results indicate that the pilot intervention has achieved significant success, albeit on a small scale and that a further large-scale study would be warranted to further test the intervention's efficacy.

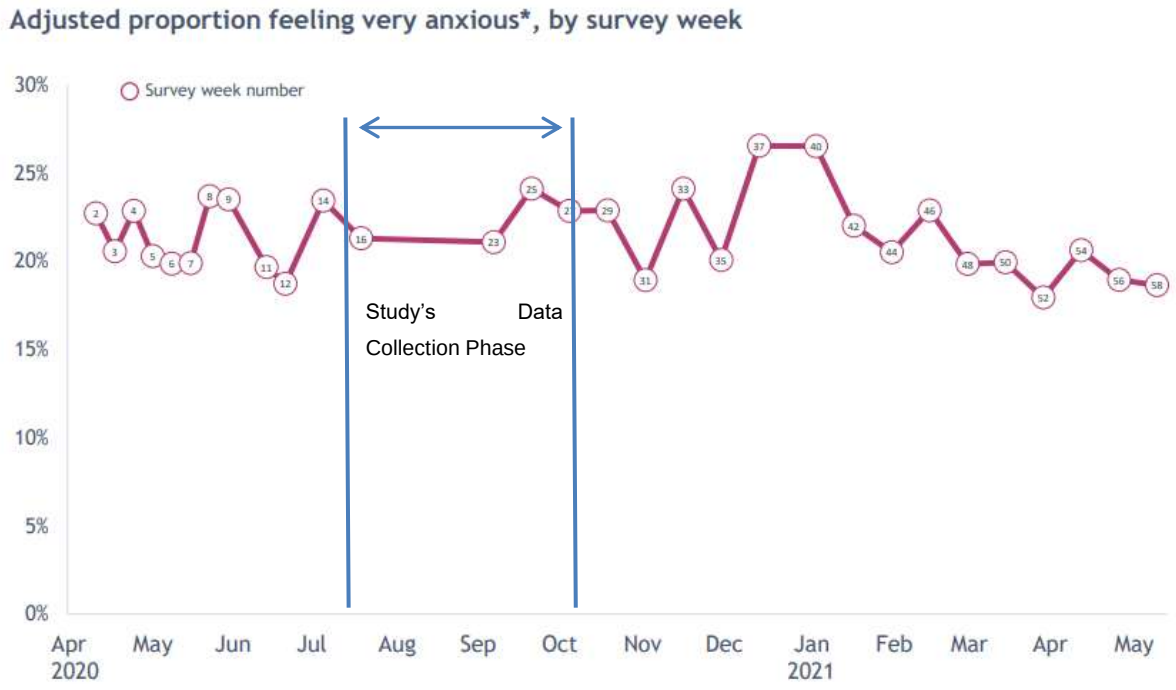
The study was not initially designed to test an online intervention, however, due to the Covid-19 pandemic; the intervention was adapted to be delivered online. This change meant that the method of delivery could potentially have limited the efficacy of the intervention and has meant that how the intervention performs when delivered face to face has not been tested. In terms of the intervention the content was not greatly changed other than the addition of the between session activities and minor adaptions to the PowerPoints. The structure of the intervention did change, as it was initially planned as a one-day workshop which was changed to four, two-hour online sessions delivered once a week for four weeks. The transition to online was greatly aided by the fact that all participants had been working from home and online for just over 3 months before the sessions began. This meant that participants were already familiar with the process of working online using Microsoft Teams. On reflection the shift to online was beneficial to the intervention in several ways. The weekly sessions meant that there was time between sessions to try out the strategies / techniques and for participants to reflect on these experiences. Participants described the sessions as enjoyable and said that they looked forward to the weekly sessions, this may in part have been due to the session atmosphere which was warm and friendly but also because at that time during lockdown participants were craving something and someone that was different and that provided something interesting and fun (Al Hashlamoun and Daouk,

2020). This may have contributed to the fact that no one dropped out of the experimental group and their motivation to engage with the programme content and each other was high throughout. Although a few participants said that while they enjoyed the online, they would have preferred face to face, it may be that the online format was actually central to the high level of group cohesion that they described. The online group may have provided a good balance between engagement and open communication with its easy control of self-disclosure, either verbal or visual, simply by clicking off the microphone and/or camera, a conclusion supported by Gelinas et al., 2021. The option to participate as much or as little as you were comfortable with, leave or re-join the session with no fuss or explanation was agreed at the outset of the programme and maintained throughout. In addition, the trainer assured participants that at no time would any question be posed directly at anyone and no one would be singled out for comment or to share. Instead, while welcome to share within the boundaries of their self-care, the participants had full autonomy on their level of engagement and sharing which seemed to have the effect of actually encouraging participants to feel in control and therefore willing to share as much or as little as they saw fit an effect also found by Bender et al, 2021.

The participants in the current study completed their pre-intervention questionnaire during the relaxation of Covid-19 lockdown, in July 2020. The easing of restrictions continued throughout August when the intervention was being delivered. In the beginning of September 2020, the intervention was continuing to be delivered with all delivery completed by the 24th of September 2020. At this point increases in the virus were being reported and some local restrictions were being put in place in Wales. Throughout the period the participants were completing their post intervention interviews and recompleting the questionnaire between 25th September and the 22nd of October restrictions were increasing. This culminated in a 17 day '*circuit break'* lockdown being announced on the 19th of October to start on the 23rd of October.

Public health England statistics show psychological distress falling between April 2020 and September 2020. Evidence suggests that there was a second deterioration in population mental health and wellbeing between October 2020 and February 2021. The changes to the population's mental health and wellbeing *'coincides with the periods of national lockdown and high COVID-19 cases followed by easing of lockdown and reducing cases'* (Public Health England, 2021). The Public Health Wales data indicates that the Welsh population's wellbeing also fluctuated during the pandemic. The graph (Figure 5.8, next page) tracks reported levels of high anxiety in Wales through the pandemic. It shows that the study's data collection phase was during a period of high anxiety within the Welsh population which makes the study timely but also subject to external / confounding variables (Bryman, 2012). For the study's conclusions this means that it is not possible to know what impact on the study results, either positive or negative, the background of the Covid-19 pandemic has had.

Figure 5.8 Public Health Wales 'Feeling Anxious' Data overlaid with this Study's data collection phase



Public Health Wales, 2021

A factor in the intervention's positive impact that emerged from the participant's qualitative feedback was the trainer's demeanour, skill and knowledge. As the trainer developed the intervention, is an experienced workplace trainer and a trainee Counselling Psychologist these factors would all be likely to affect the training delivery the participants experienced. While having one trainer deliver the programme would have provided consistency of delivery across all of the sessions. Should the intervention be scaled up resulting in other trainer's delivering the programme the quality of delivery would be a variable that would need to be measured and ideally controlled and the benefit of Counselling Psychologists delivering the training further explored.

The literature review (Chapter 2) indicates that there is a wealth of knowledge related to potential interventions efficacy using a wide range of content targeted at and equally wide range of behaviour / cognition. There is also substantial evidence also explored in the Literature Review and Discussion sections of this study, that these interventions have achieved success albeit at varying levels. There is nevertheless a consistent reduction in workplace mental health and wellbeing indicating that the outcomes of these studies are not being disseminated in a way that achieves a wide scale positive impact. The ambition for this intervention is to be as widely disseminated in workplaces as, for example, the Mental Health First Aid programme has been. This study's intervention would also serve as a counterpoint to a programme like Mental Health First Aid which takes a reactive and medical model informed position on mental health and wellbeing. In contrast to this study's intervention which is designed to improve participant's mental health and wellbeing proactively and embodies counselling psychology's values and approaches

taking as it does an integrative, humanistic, person centred and pluralist approach and drawing on a wide range of modalities, thus demonstrating the contribution Counselling Psychologists can make to workplace mental health and wellbeing.

5.8 Suggestions for Future Research

This pilot study of this intervention has been useful as it has indicated a number of areas that could be the focus of future research. A larger sample size would enable the research conclusions to be more strongly validated, as the current small sample size limits the generalisability of the results. A larger sample would also allow future studies to explore differences between participants such as age, gender or job role. This would also provide a valuable opportunity to develop the programme content and structure further. For example, the individual efficacy of elements of the intervention could be identified and future interventions adapted to reflect these findings. A potential focus for this could be the intrapersonal assertiveness which links to the concept of negative automatic thoughts, termed Poison Parrot in the intervention, which was the single topic area most positively referred to by participants. Future interventions could expand this topic area which would identify whether the current content was the optimum for participant affect or whether further expansion of this topic would increase further the benefit achieved in the pilot.

The mode of delivery could also be varied both in terms of group versus one-to-one delivery, and face to face versus online. The intervention was 4 sessions of two hours each, as the length of the intervention is related to its cost both in terms of its delivery due to the trainer's time and the cost to the workplace of releasing staff to attend the sessions. Future research could explore the efficacy of shorter programmes which focussed on the specific intervention content which had been identified as most effective. This would also provide an insight into the factors that contribute to the interventions effect, for example this study indicated that the group experience may have contributed to the positive effect on mental health and wellbeing not simply through the communication of the strategies but through the process of discussing and sharing thoughts and experiences related to mental health and wellbeing within the group. Larger scale future research would also potentially provide an indication of the impact of the trainer, as multiple trainers would potentially be required so the individual trainer's effect on the intervention impact through their demeanour, intrinsic knowledge and delivery skill could be explored. This could identify the optimum delivery approach with future trainers existing required knowledge including the counselling psychology practice which the trainer (study researcher and trainee counselling psychologist) drew on to deliver the intervention and/or them being trained specifically on these skills to optimise their intervention delivery. Future studies would also benefit from a more granular feedback approach, with more data gathered on individual aspects of the intervention

and participants asked specifically for their suggestions to improve the intervention; these would then inform future iterations.

Since completing the research both participating organisations (Hafod and Platfform) based on the feedback of the study participants, requested the intervention be provided to additional staff. The feedback for the intervention continued to be very positive resulting in, through word-of-mouth recommendation by participants, the intervention being delivered to many organisations with, to date (December 2021), over 250 people participating in the Mental Health and Wellbeing Toolkit intervention. This enthusiastic support from the interventions participants beyond the study provides further momentum for additional research. The intervention has continued to evolve post study with other trainers being trained to deliver. These trainers based on the importance of the trainer's knowledge and approach highlighted by the study have all been qualified and experienced counsellors / psychotherapists who received additional training to ensure that the intervention delivery remained high quality and true to its counselling psychology ethos and values. This has resulted in feedback from subsequent participants remaining positive as the delivery model was expanded. It also supports the researcher's decision not to actively share in detail the study's content other than with trainers and participants. As mentioned in section 5.6.3 Counselling Psychology, this study and subsequent intervention delivery indicates that it is the depth of knowledge and approach of the trainer which is central to the intervention's success. The centrality of *'how'* the intervention is delivered rather than simply *'what'* is being delivered means that the researcher is committed to maintaining the quality of the delivery by ensuring that the intervention trainers are suitably qualified and experienced. The intervention's content and structure has remained virtually the same since the study with only the addition of one graphic which supported visually the explanation one of the strategies.

An unexpected area for development is a follow up to the intervention which participants have requested. This is envisaged as recapping on key concepts and adding additional strategies and techniques to the participant's mental health and wellbeing 'toolkit'. There have also been requests for a one-day version and face to face versions both of the original 4 session structure and as a one-day workshop which are currently being planned.

The researcher has been surprised and hugely gratified by how the Mental Health and Wellbeing Toolkit has been embraced by organisations and participants and is looking forward to building further on the positive results of this pilot study.

Chapter 6 Conclusion

The previous chapter's consideration of the triangulation of the quantitative and qualitative study results supports the conclusion that the intervention had a positive impact on the participant's mental health and wellbeing. This means that based on this study's results the research question *'What impact does the Mental Health and Wellbeing Toolkit programme delivered online have on employee mental health and wellbeing?'* can be answered as *'A very positive impact'.*

A wide range of positive impacts were found, from increasing resilience, hardiness and coping/self-efficacy to improving wellbeing, sleep and reducing stress. The participant's feedback also provided a strong indication that the *'toolkit'* approach of the intervention was effective as while each participant shared the same learning experience, each developed their own individual mix of the techniques which they felt best suited their needs. Participants described how they benefitted personally from the intervention plus there was evidence, that having taken on board the range of techniques, they shared these, as they felt appropriate, with colleagues, family and friends. This is important for future iterations of the programme, as it is a strong indication that the wide range of techniques should be retained, as this was a factor in enabling the intervention to have a wider reach as participants were utilising the toolkit of techniques for their own and others benefit.

While the study has limitations for example its small sample size, it has been successful as a pilot programme in enabling an initial and tentative conclusion on the intervention's efficacy to be drawn. Following this study an additional indicator that intervention participants felt positively about the intervention and valued the strategies and techniques that they gained, was that based on their feedback to their respective organisations both participating organisations enrolled additional staff onto the programme. This pattern of referral has continued resulting, as the programmes positive reputation grew, with hundreds of people having now completed the intervention. The feedback from these participants, in these post study programmes concurred with this study's conclusion that the intervention has a positive impact on mental health and wellbeing.

An intervention which this initial pilot study indicates resulted in a statistically significant improvement on a range of factors which research has indicated as being linked to employees being less negatively affected by stress and more resistant to anxiety and depression for example coping, resilience and hardiness would be likely to be welcomed (Lazarus and Folkman, 1984; Windle, 2011 p152; Farber and Rosendahl, 2018; Maddi and Khoshaba, 1994). Particularly as the government's own figures, through the Health and Safety Executives research, indicate the significant cost to the UK of stress, anxiety and depression for example 17.9 million working days

lost in 2019/20 (HSE, 2020) which means that an intervention that could potentially improve and/or protect employee's mental health and wellbeing would likely be of interest.

This intervention may also be welcomed as it provides strategies and techniques proactively with the intent of enabling employees to not only enhance their mental health and wellbeing but protect it from the impacts of stress for example, through increasing their resilience and coping. This intervention may be particularly well timed as following the Covid-19 pandemic there is an increase in workplace mental health issues for example workplace anxiety (Public Health England, 2020) which would potentially indicate that the financial investment in this intervention would result in a positive return on investment. With the UK workforce facing significant challenges in the last few years and existing mental health services struggling to cope with demand (Senedd Research, 2021). Based on this study's results, a Counselling Psychology informed intervention that provides individuals with a toolkit of strategies and techniques to proactively protect and enhance their mental health and wellbeing is already providing a welcome addition to available workplace mental health and wellbeing support.

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Appendices

Appendix 1 – Participant Information

Participant Information

Research Title – *Pilot study of the impact of the Mental Health and Wellbeing Toolkit programme on employee mental health and wellbeing delivered online*

Thank you for considering taking part in this research. To inform your decision below is an explanation of why the research is being undertaken, who is undertaking the research, the structure of the research along with information on how your privacy is respected and data secured. If there is any further information that would aid your decision full contact details for all involved in the research are provided at the end of this document.

Research Focus

The research is a pilot study testing the impact on mental health and wellbeing, specifically levels of stress, anxiety, depression and wellbeing, of an online *Assertive Resilience* training programme. The research is being undertaken by Helen Jones as part of the Professional Doctorate in Counselling Psychology. As the Director of a workplace training company, Fellow of the Institute of Leadership and Management with extensive experience of developing and delivering psychologically informed training Helen is keen to explore the impact of the online Mental Health and Wellbeing Toolkit programme. The online training aims to provide participants with a range of skills and strategies to proactively protect and enhance their resilience and assertiveness. The focus on resilience *and* assertiveness reflects the rationale that improvements to an individual's mental health and wellbeing, as indicated by the Bio-Psycho-Social model (Biological, Psychological, Social) does not rest solely within the individual but also their social environment.

Research indicates that building resilience, recognising when resilience is depleted and knowing what actions to take at an early stage before becoming overwhelmed / stressed has a positive impact on mental health and wellbeing. By also building assertiveness, individuals are able to proactively affect the factors impacting their mental health and wellbeing by seeking the actions and/or support that they need to protect and enhance their mental health and wellbeing.

Benefit of taking part in this research

The aim is for the participants who complete this research to develop a range of skills and strategies which will protect and enhance their resilience and assertiveness with the aim of having a positive impact on your mental health and wellbeing

Background to research

This research is part of the University of South Wales, Professional Doctorate in Counselling Psychology programme

Research Method

If after receiving the invitation you choose to participate in the research, you will be asked to complete an online questionnaire. The link to the questionnaire will be sent to your email address. The first part of the questionnaire relates to demographic information such as gender, age and job role i.e., manager, support worker.

The second part is made up of validated self-report measures these are the DASS – 21 which measures depression, anxiety and stress, the Connor-Davidson Resilience Scale which measures resilience and the Warwick Edinburgh Mental Wellbeing Scale which measures mental wellbeing and the Coping Self-Efficacy Scale which measures ability to cope effectively with life challenges. All of these measures have been selected as they have robust evidence that measure what they say they measure. Although some of the questions within the scale will seem similar, this is a deliberate part of the scale design so all questions should be answered in order to achieve the most accurate results.

The third part of the questionnaire has questions which ask your opinion and provide space for you to type a brief answer.

Once the questionnaire is completed – you will be notified by email whether you have been randomly allocated to either the control group or the experimental group. If allocated to the control group, you will be contacted after the post training measures and interviews have been completed and have the option of attending the online training. If allocated, you will be contacted after the study has completed and given the option of participating in the online training programme.

The Experimental Group participants will -

- Be invited to participate in the training.
- The training is scheduled to run online via Microsoft Teams.
- The training is spilt into four, two-hour sessions to run once a week for four weeks.
- Following training if you have consented, after each session you will receive an email containing a summary of the contents of the session.
- Two weeks after the training you will be invited to participate in a one-to-one interview to discuss the training's impact.
- One month after completion of the training you will be asked to complete the initial online questionnaire again.

The Control Group participants will -

- Be invited to complete the initial online questionnaire again two weeks after experimental group's training delivery completed.
- This group do not participate in the initial training but will be contacted after the study is complete and given the option to participate in the training then.

Online Training

To enable social distancing to be observed the training will be delivered online via Microsoft Teams. This means that you will need access to a laptop, tablet or PC with a camera, microphone and internet access in order to take part in the training. A mobile phone is not suitable for participation in this training. All sessions will be recorded. Joining instructions including the link to the online training and your individual login and password will be emailed to you prior to the training commencing.

Right to Withdraw

Participation is completely voluntary. At any point in the study, you are able to stop participating or refuse an invitation to the next part of the study. You are able to withdraw your data after participating up to two weeks after the post participation interview without giving any reason and without any consequence (after this point data is anonymised meaning an individual's data can no longer be withdrawn as an individual's data cannot be identified). To withdraw contact Helen Jones 17137012@students.southwales.ac.uk

Consent

Your consent will be sought before completing each questionnaire and taking part in the interview and again prior to the online training. Data collected in this study will be held anonymously and securely in line with British Psychological Society Code of Human Research Ethics (2014), the Data Protection Act (2018), GDPR guidelines (2018) and USW Research Governance (2019).

Confidentiality

All data is anonymised with the research results forming part of a doctorate thesis. The cut-off date for withdrawal of your data is two weeks after you have completed the post training questionnaire. On completion of the study the key to the anonymised data which has been kept separate from the data will be destroyed. This means that after this point withdrawal from the study will not be possible as individual data can no longer be identified. The University of South Wales is the data controller with regard to this personal information, and it is committed to protecting the rights of individuals in line with the Data Protection Act 1998 (DPA) and the new General Data Protection Regulation (GDPR). This means that your confidentiality will be respected, and all appropriate measures will be taken to prevent unauthorised access and disclosure. The University of South Wales has a Data Protection Officer who can be contacted through dataprotection@southwales.ac.uk

Information use

Information gathered in this study will be used as part of a doctoral thesis. This means following completion of gathering and analysing data the information will be used as part of a written project and presented at a VIVA presentation. Summarised information may also be disseminated to the wider community via social media, presentations, conferences, publications and other appropriate dissemination routes.

All of the information is anonymised and held securely.

For more information or to raise a complaint:

This research has been reviewed and approved by The School of Psychology and Therapeutic Studies Ethics Sub-Committee at the University of South Wales.

If you have further questions about this study, please contact:

Researcher - Helen Jones 17137012@students.southwales.ac.uk

Alternatively, you can contact

Academic Manager and Study Supervisor - Dr Phillip Tyson phillip.tyson@southwales.ac.uk

Senior Lecturer In Counselling And Psychotherapy and Study Supervisor - Dr Shelley Gait shelley.gait@southwales.ac.uk

If you have any concerns regarding the conduct of the research in which you are being asked to participate, please contact the University South Wales Information Governance Officer - Jonathan Sinfield jonathan.sinfield@southwales.ac.uk

Appendix 2 – Online Consent Form

University of South Wales
Prifysgol De Cymru

CONSENT FORM

Pilot study of the impact of the Mental Health and Wellbeing Toolkit programme on employee mental health and wellbeing delivered online

Researcher	**Helen Jones**
Supervisors	**Dr Phillip Tyson** **Dr Shelley Gait**
Title of study	**Pilot study of the impact of an Mental Health and Wellbeing Toolkit programme on employee mental health and wellbeing delivered online**

Please select Yes or No in ***all*** boxes

1. I confirm that I have read and understood the participant information sheet - Participant Information Sheet	Yes / No
2. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	Yes / No
3. I understand that my participation is voluntary and that I am free to withdraw up to two weeks post participation without giving any reason, without any consequence to myself (after this point data is anonymised meaning an individual's data cannot be identified).	Yes / No
4. I understand that completion and return of the online questionnaire will be taken as consent to receiving an invitation to the training, follow up questionnaire and interview.	Yes / No
5. I agree to my participation in the interview being audio recorded and it's been explained how this data will be stored, destroyed, anonymised, who will have access to it, and how long it will be kept.	Yes / No
6. I give permission for my data to be stored and processed in accordance with USW GDPR Guidelines (2018).	Yes / No

7. I agree to my anonymised data being used in this study as well as VIVA examinations, related publictions, subsequent articles that will appear in academic journals and conference presentations as part of this study.	Yes / No
8. I understand that there are limits to confidentiality within this study and if I disclose intent to harm myself or others or any unprofessional or illegal activity the researcher will have a duty to act and report this to the appropriate authority.	Yes / No
9. I agree to take part in the **Assertive Resilience** study.	Yes / No

Name of participant	Date

Guidance for participating in Online Training

Joining instructions will be emailed prior to the training date.

Ensure they are in a comfortable, private space. If others are around at home, agree on what you will do if you are disturbed. Make sure that you are in a suitable space with no information visible that you don't want to be seen by others. Beware of the glare from bright objects in your background. Try to orientate yourself so you do not have a window behind you, otherwise others will only see your silhouette in the camera.

If you have further questions about this study or you would like to withdraw, please contact: **Researcher - Helen Jones 17137012@students.southwales.ac.uk**

Appendix 3 – Online Questionnaire

Research Title – ***Pilot study of the impact of an Mental Health and Wellbeing Toolkit programme on employee mental health and wellbeing delivered online***

Pre training Questionnaire

Demographic Questions

1) What is your gender:

   ☐ Male

   ☐ Female

   ☐ Gender Non-Conforming

2) Please specify your age: _____

3) Please state your job title: _____

4) Please state how long you have been with your current employer: _____

5) What are your standard working hours: _____

6) Please provide your country of birth: _____

Qualitative Questions

7) How would you describe your current level of resilience?

8) How would you describe your current level of workplace stress?

9) How would you describe your current level of wellbeing?

10) What difference would increasing your resilience and assertiveness make to you?

11) What are you hoping to gain from the online training?

12) Tick the all training topics that you think you would find most beneficial to your mental health and wellbeing. You can add a topic/s if there is something you would like included that's not listed

- ☐ Reducing stress
- ☐ Increasing resilience
- ☐ Mindfulness
- ☐ Assertiveness
- ☐ Time management
- ☐ Managing Worry
- ☐ Grounding Techniques
- ☐ Breaking Vicious Cycle
- ☐ Unhelpful Thinking Styles
- ☐ Distraction
- ☐ Action Planning

Other: _____

CD Risc Rating

Each item on the scale is rated on a 5-point range of responses from zero not true at all - to four true nearly all of the time.

		0	1	2	3	4
1	I am able to adapt to change					
2	I have close and secure relationships					
3	Sometimes fate or God can help					
4	I can deal with whatever comes					
5	Past success gives confidence for new challenge					
6	I see the humorous side of things					
7	Coping with stress strengthens					
8	I tend to bounce back after illness or hardship					
9	Things happen for a reason					
10	I give my best effort no matter what					
11	I can achieve your goals					
12	When things look hopeless, I don’t give up					
13	I know where to turn for help					
14	Under pressure, I focus and think clearly					
15	I prefer to take the lead in problem solving					
16	I am not easily discouraged by failure					
17	I think of myself as a strong person					
18	I can make unpopular or difficult decisions					
19	I can handle unpleasant feelings					
20	I have to act on a hunch					
21	I have a strong sense of purpose					
22	I have few regrets in life					
23	I like challenges					
24	I work to attain my goals					
25	I have pride in my achievements					

DASS 21

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

0 Did not apply to me at all

1 Applied to me to some degree, or some of the time

2 Applied to me to a considerable degree, or a good part of time

3 Applied to me very much, or most of the time

		0	1	2	3
1	I found it hard to wind down				
2	I was aware of dryness of my mouth				
3	I couldn't seem to experience any positive feeling at all				
4	I experienced breathing difficulty (e.g., excessively rapid breathing,				
5	breathlessness in the absence of physical exertion)				
6	I found it difficult to work up the initiative to do things				
7	I tended to over-react to situations				
8	I experienced trembling (e.g., in the hands)				
9	I felt that I was using a lot of nervous energy				
10	I was worried about situations in which I might panic and make				
11	a fool of myself				
12	I felt that I had nothing to look forward to				
13	I found myself getting agitated				
14	I found it difficult to relax				
15	I felt down-hearted and blue				
16	I was intolerant of anything that kept me from getting on with				
17	what I was doing				
18	I felt I was close to panic				
19	I was unable to become enthusiastic about anything				
20	I felt I wasn't worth much as a person				
21	I felt that I was rather touchy				

Coping Self-Efficacy Scale

When things aren't going well for you, or when you're having problems, how confident or certain are you that you can do the following

		Cannot do at all				Moderately certain can do						Certain can do
		0	1	2	3	4	5	6	7	8	9	10
1	Keep from getting down in the dumps.											
2	Talk positively to yourself.											
3	Sort out what can be changed, and what cannot be changed.											
4	Get emotional support from friends and family.											
5	Find solutions to your most difficult problems.											
6	Break an upsetting problem down into smaller parts.											
7	Leave options open when things get stressful.											
8	Make a plan of action and follow it when confronted with a problem.											
9	Develop new hobbies or recreations.											
10	Take your mind off unpleasant thoughts.											
11	Look for something good in a negative situation.											
12	Keep from feeling sad.											
13	See things from the other person’s point of view during a heated argument.											
14	Try other solutions to your problems if your first solutions don’t work.											
15	Stop yourself from being upset by unpleasant thoughts.											

Warwick-Edinburgh Mental Well-being Scale

Below are some statements about feelings and thoughts.

Please tick (√) the box that best describes your experience of each over the last 2 weeks

		None of the time	Rarely	Some of the time	Often	All of the time
1	I've been feeling optimistic about the future					
2	I've been feeling useful					
3	I've been feeling relaxed					
4	I've been feeling interested in other people					
5	I've had energy to spare					
6	I've been dealing with problems well					
7	I've been thinking clearly					
8	I've been feeling good about myself					
9	I've been feeling close to other people					
10	I've been feeling confident					
11	I've been able to make up my own mind about things					
12	I've been feeling loved					
13	I've been interested in new things					
14	I've been feeling cheerful					

Appendix 4 – Debrief Form Post Online Questionnaire completion

Debrief Form
after Questionnaire Completion

Research Title – ***Pilot study of the impact of the Mental Health and Wellbeing Toolkit programme on employee mental health and wellbeing delivered online***

Thank you for taking part in this research.

The research is a pilot study testing the impact on mental health and wellbeing, specifically levels of stress, anxiety, depression and wellbeing, of a two-day *Assertive Resilience* online training. The aim is for the participants who complete this research to develop a range of skills and strategies which will protect and enhance their resilience and assertiveness with the aim of having a positive impact on your mental health and wellbeing. The focus on resilience *and* assertiveness reflects the rationale that improvements to an individual's mental health and wellbeing, as indicated by the Bio-Psycho-Social model (Biological Psychological Social) does not rest solely within the individual but also their social environment. Research indicates that building resilience, recognising when resilience is depleted and knowing what actions to take at an early stage before becoming overwhelmed / stressed has a positive impact on mental health and wellbeing. By also building assertiveness, individuals are able to proactively affect the factors impacting their mental health and wellbeing by seeking the actions and/or support that they need to protect and enhance their mental health and wellbeing.

Additional Support

If you feel you would benefit from support with your mental health and wellbeing there are a number of options –

- You can contact your organisation's Human Resources Department who will provide you with a range of information on the Employee Assistance Programme that you can access.

- Alternatively, your GP (General Practitioner) is the first point of contact in Wales to access mental health support through the NHS.

If you need immediate support, there are a number of options –

- In an emergency call 999 or visit your local Accident and Emergency centre or call your GP for an emergency appointment.

- You can call - NHS Direct 0845 46 47 (Wales) or NHS 111 (England) for advice and information.

To talk in confidence call Samaritans 116 123 (Freephone) who are available 24 hours a day, 7 days a week or you can email jo@samaritans.org

- For advice and support related to children or young people you can call Childline 0800 1111

www.mind.org.uk has a wide range of mental health information online and an information line which is open 9am to 6pm Monday to Friday (excluding bank holidays).

If you have any questions of concerns regarding this research

This research has been reviewed and approved by The School of Psychology and Therapeutic Studies Ethics Sub-Committee at the University of South Wales.

If you have further questions about this study, or would like to withdraw please contact: Researcher - Helen Jones 17137012@students.southwales.ac.uk

Alternatively, you can contact: Academic Manager and Study Supervisor - Dr Phillip Tyson phillip.tyson@southwales.ac.uk or Senior Lecturer in Counselling And Psychotherapy and Study Supervisor - Dr Shelley Gait shelley.gait@southwales.ac.uk

If you have any concerns regarding the conduct of the research in which you are being asked to participate, please contact the University South Wales Information Governance Officer - Jonathan Sinfield jonathan.sinfield@southwales.ac.uk

Appendix 5 – Debrief Form Post Intervention Completion

Debrief Form
after Intervention Completion

Research Title – ***Pilot study of the impact of an Mental Health and Wellbeing Toolkit programme on employee mental health and wellbeing delivered online***

Thank you for taking part in this research.

The research is a pilot study testing the impact on mental health and wellbeing, specifically levels of stress, anxiety, depression and wellbeing, of an *Assertive Resilience* online training programme. The aim is for the participants who complete this training to develop a range of skills and strategies which will protect and enhance their resilience and assertiveness with the aim of having a positive impact on your mental health and wellbeing. The focus on resilience *and* assertiveness reflects the rationale that improvements to an individual's mental health and wellbeing, as indicated by the Bio-Psycho-Social model (Biological Psychological Social) does not rest solely within the individual but also their social environment. Research indicates that building resilience, recognising when resilience is depleted and knowing what actions to take at an early stage before becoming overwhelmed / stressed has a positive impact on mental health and wellbeing. By also building assertiveness, individuals are able to proactively affect the factors impacting their mental health and wellbeing by seeking the actions and/or support that they need to protect and enhance their mental health and wellbeing.

Additional Support

If you feel you would benefit from support with your mental health and wellbeing there are a number of options –

- You can contact your organisation's Human Resources Department who will provide you with a range of information on the Employee Assistance Programme that you can access.

- Alternatively, your GP (General Practitioner) is the first point of contact in Wales to access mental health support through the NHS.

If you need immediate support, there are a number of options –

- In an emergency call 999 or visit your local Accident and Emergency centre or call your GP for an emergency appointment.

- You can call - NHS Direct 0845 46 47 (Wales) or NHS 111 (England) for advice and information.

- To talk in confidence call Samaritans 116 123 (Freephone) who are available 24 hours a day, 7 days a week or you can email jo@samaritans.org

- For advice and support related to children or young people you can call Childline 0800 1111

www.mind.org.uk has a wide range of mental health information online and an information line which is open 9am to 6pm Monday to Friday (excluding bank holidays).

If you have any questions of concerns regarding this research

This research has been reviewed and approved by The School of Psychology and Therapeutic Studies Ethics Sub-Committee at the University of South Wales.

If you have further questions about this study, or would like to withdraw please contact: Researcher - Helen Jones 17137012@students.southwales.ac.uk

Alternatively, you can contact: Academic Manager and Study Supervisor - Dr Phillip Tyson phillip.tyson@southwales.ac.uk or Senior Lecturer in Counselling And Psychotherapy and Study Supervisor - Dr Shelley Gait shelley.gait@southwales.ac.uk

If you have any concerns regarding the conduct of the research in which you are being asked to participate, please contact the University South Wales Information Governance Officer - Jonathan Sinfield jonathan.sinfield@southwales.ac.uk

Appendix 6 – Post Training Questionnaire

Research Title – ***Pilot study of the impact of an Mental Health and Wellbeing Toolkit programme on employee mental health and wellbeing delivered online***

Post training Questionnaire

Qualitative Questions

1) How would you describe your current level of resilience?

2) How would you describe your current level of workplace stress?

3) How would you describe your current level of wellbeing?

4) What difference (if any) has the online training made to your level of resilience and /or assertiveness?

5) What aspect of the online training have you found most useful? How?

6) How have you used the information in the training?

7) Are any further comments regarding the online training or its impact on you that you'd like to share?

Appendix 7 – Semi Structured Interview Questions

1. How (if at all) have you used the information and strategies within the online training?
2. Have you any examples of where you have noticed a change in your level of assertiveness or resilience?
3. Has the online training had an impact on your mental health and/or wellbeing?
4. Have you any examples of where you have noticed a change in your level of mental health and/or wellbeing?
5. Was there any specific topic or topics that you found most helpful? In what way were they helpful?
6. How did you find participating in the training online?
7. Are there any other comments about the training you'd like to make?

Appendix 8 – Hafod Housing Study Participation Confirmation

Dear Sir / Madam

I am writing to confirm that Hafod Housing Ltd has agreed for our colleagues in the Housing Team to participate in Helen Jones Professional Doctorate in Counselling Psychology research entitled *'Pilot study on the impact of an Assertive Resilience online training on employee mental health and wellbeing'*

Research Overview

Research Title (provisional) – Pilot study on the impact of an Assertive Resilience online training on employee mental health and wellbeing

Background to research
The research is part of the University of South Wales, Professional Doctorate in Counselling Psychology programme

Research Focus
The research is a pilot study testing the impact on mental health and wellbeing, specifically levels of stress, anxiety, depression and wellbeing, of a two day *Assertive Resilience* online training. The online training provides participants with a range of skills and strategies to proactively protect and enhance their resilience and assertiveness. The focus on resilience *and* assertiveness reflects the rationale that improvements to an individual's mental health and wellbeing, as indicated by the Bio-Psycho-Social model (Biological Psychological Social) does not rest solely within the individual but also their social environment.

Research indicates that building resilience, recognising when resilience is depleted and knowing what actions to take at an early stage before becoming overwhelmed / stressed has a positive impact on mental health and wellbeing. By also building assertiveness, individuals are able to proactively affect the factors impacting their mental health and wellbeing by seeking the actions and/or support that they need to protect and enhance their mental health and wellbeing.

Research Design
The research is a mixed method, randomised controlled, between- subjects experimental design.

Research Method
All housing staff invited to complete online questionnaire.
Of those who completed the questionnaire sixty staff randomly selected to participate in study.
Thirty staff allocated to control group
Thirty staff allocated to experimental group

Control Group

- Complete the initial online questionnaire one month after the experimental group's online training delivery completed.
- This group do not participate in the online training.

Experimental Group

- The thirty staff within the experimental group are invited to participate in an online training.
- The online training are scheduled to run three times between April and May on dates agreed with Hafod, (ideally on two consecutive days) enabling participants to select their preferred online training dates.
- The online training run between 10am and 4pm on Hafod premises
- One month after completion of their online training staff recomplete the initial online questionnaire.

- Staff who complete the online training will also be invited to participate in a two hour interview to discuss the training's impact

Research analysis
Following the online training delivery all of the data will be analysed and the provisional findings communicated to Hafod. The full doctorate thesis will be then be produced for submission in March 2021. Once the thesis has passed the USW doctoral process a copy will be provided to Hafod. Subsequent dissemination of the research results will, with Hafod's permission, acknowledge that Hafod's commitment to their employee wellbeing enabled this research to be completed.

Yours Sincerely,

Eleanor Elliott
HRBP – Colleague Engagement and Well-being

Appendix 9 – Platfform Study Participation Confirmation

Platfform
Head office
2nd floor, Derwen House
2 Court Road, Bridgend
CF31 1BN

01656 647722
connect@platfform.org
platfform.org

For mental health and social change
Dros iechyd meddwl a newid cymdeithasol

17th February 2020

University of South Wales
Usk Way
Newport
NP20 2BP.

Ref - Pilot study on the impact of an Assertive Resilience two day workshop on employee mental health and wellbeing

Dear Sir/Madam

I am writing to confirm that Platfform has agreed for Platfform staff to participate in Helen Jones Professional Doctorate in Counselling Psychology research entitled *'Pilot study on the impact of an Assertive Resilience two day workshop on employee mental health and wellbeing'*

Below is the information upon which we have based this decision

Research Overview

Research Title (provisional) – Pilot study on the impact of an Assertive Resilience two day workshop on employee mental health and wellbeing

Background to research

The research is part of the University of South Wales, Professional Doctorate in Counselling Psychology programme

Research Focus

The research is a pilot study testing the impact on mental health and wellbeing, specifically levels of stress, anxiety, depression and wellbeing, of a two day *Assertive Resilience* workshop. The workshop provides participants with a range of skills and strategies to proactively protect and enhance their resilience and assertiveness.

The focus on resilience *and* assertiveness reflects the rationale that improvements to an individual's mental health and wellbeing, as indicated by the Bio-Psycho-Social model (Biological Psychological Social) does not rest solely within the individual but also their social environment.

Research indicates that building resilience, recognising when resilience is depleted and knowing what actions to take at an early stage before becoming overwhelmed / stressed has a positive impact on mental health and wellbeing. By also building assertiveness, individuals are able to proactively affect the factors impacting their mental health and wellbeing by seeking the actions

Continued

and/or support that they need to protect and enhance their mental health and wellbeing.

Research Design

The research is a mixed method, randomised controlled, between- subjects experimental design.

Research Method

All staff invited to complete online questionnaire.

Of those who completed the questionnaire sixty staff randomly selected to participate in study.

Thirty staff allocated to control group

Thirty staff allocated to experimental group

Control Group

- Complete the initial online questionnaire one month after experimental group's workshop delivery completed.
- This group do not participate in the workshops.

Experimental Group

- The thirty staff within the experimental group are invited to participate in a two day workshop.
- The workshops are scheduled to run three times between March and May on dates agreed with Platfform, (ideally on two consecutive days) enabling participants to select their preferred workshop dates.
- The workshops run between 10am and 4pm on Platfform premises
- One month after completion of their workshop staff recomplete the initial online questionnaire.
- Staff who complete the workshop will also be invited to participate in a two hour focus group to discuss the intervention's impact

Research analysis

Following the workshop delivery all of the data will be analysed and the provisional findings communicated to Platfform.

The full doctorate thesis will be then be produced for submission in March 2021.

Once the thesis has passed the USW doctoral process a copy will be provided to Platfform.

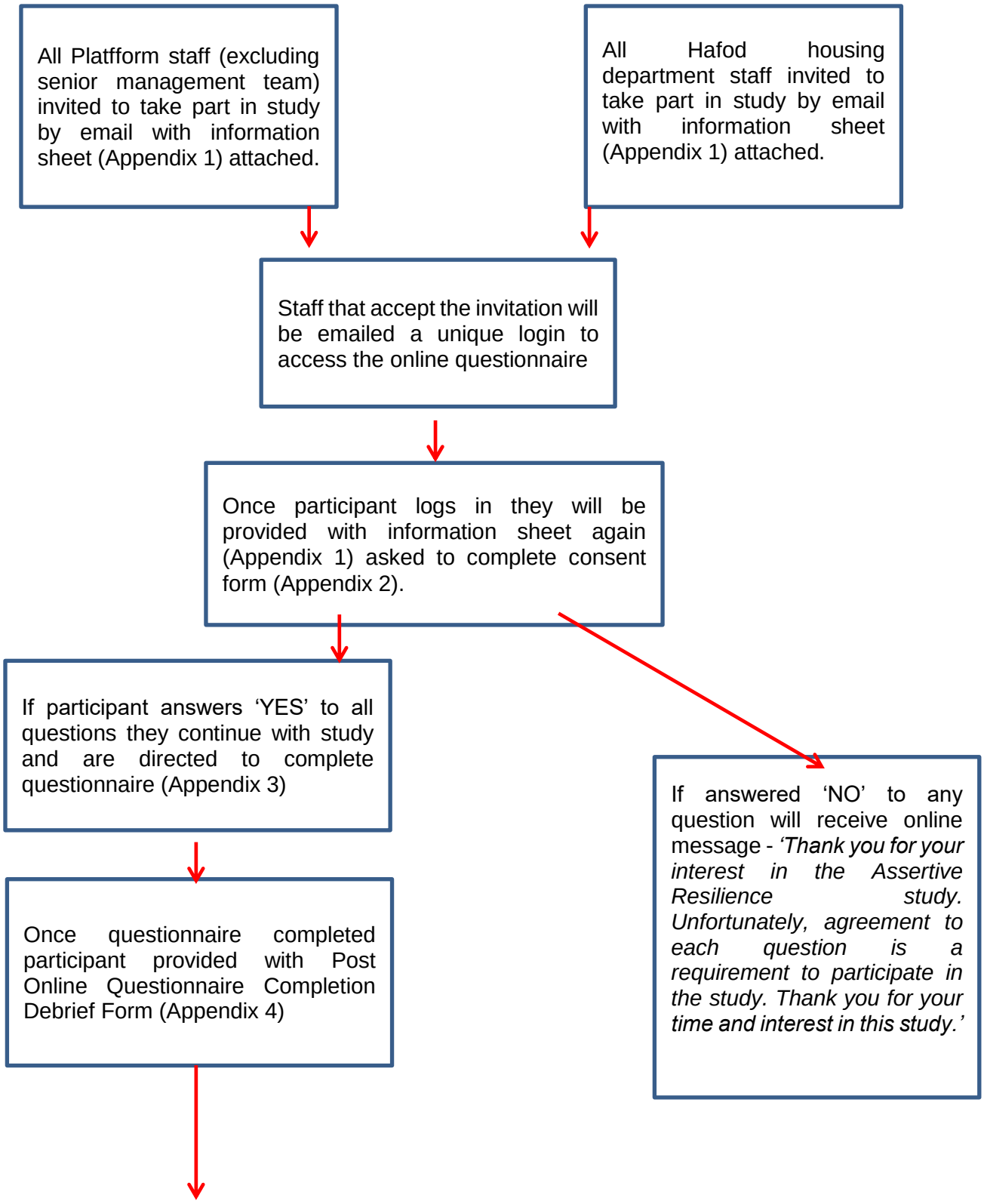
Subsequent dissemination of the research results will, with Platfform's permission, acknowledge that Platfform's commitment to their employee wellbeing enabled this research to be completed.

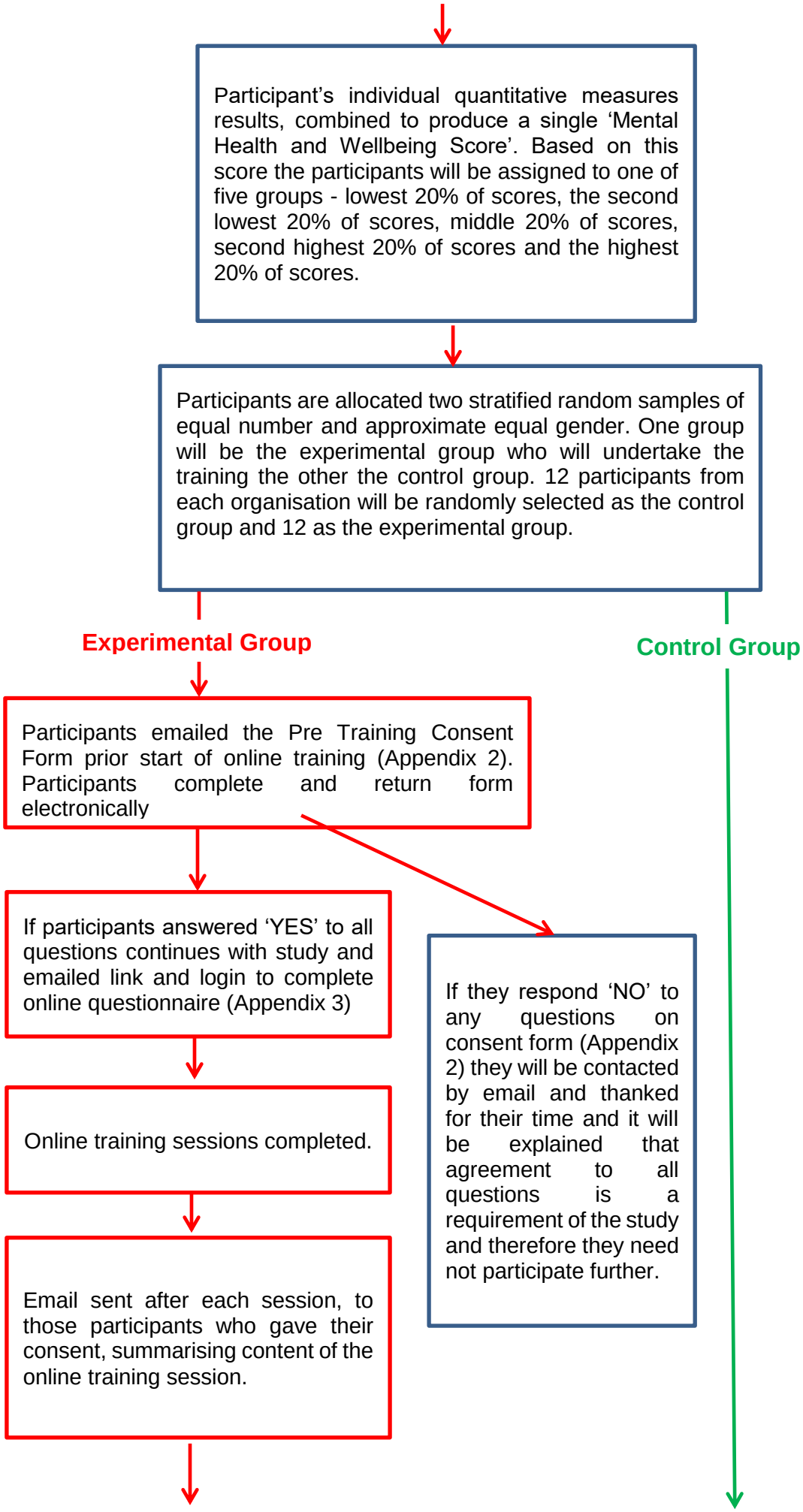
Jane Evans
Director HR & OD

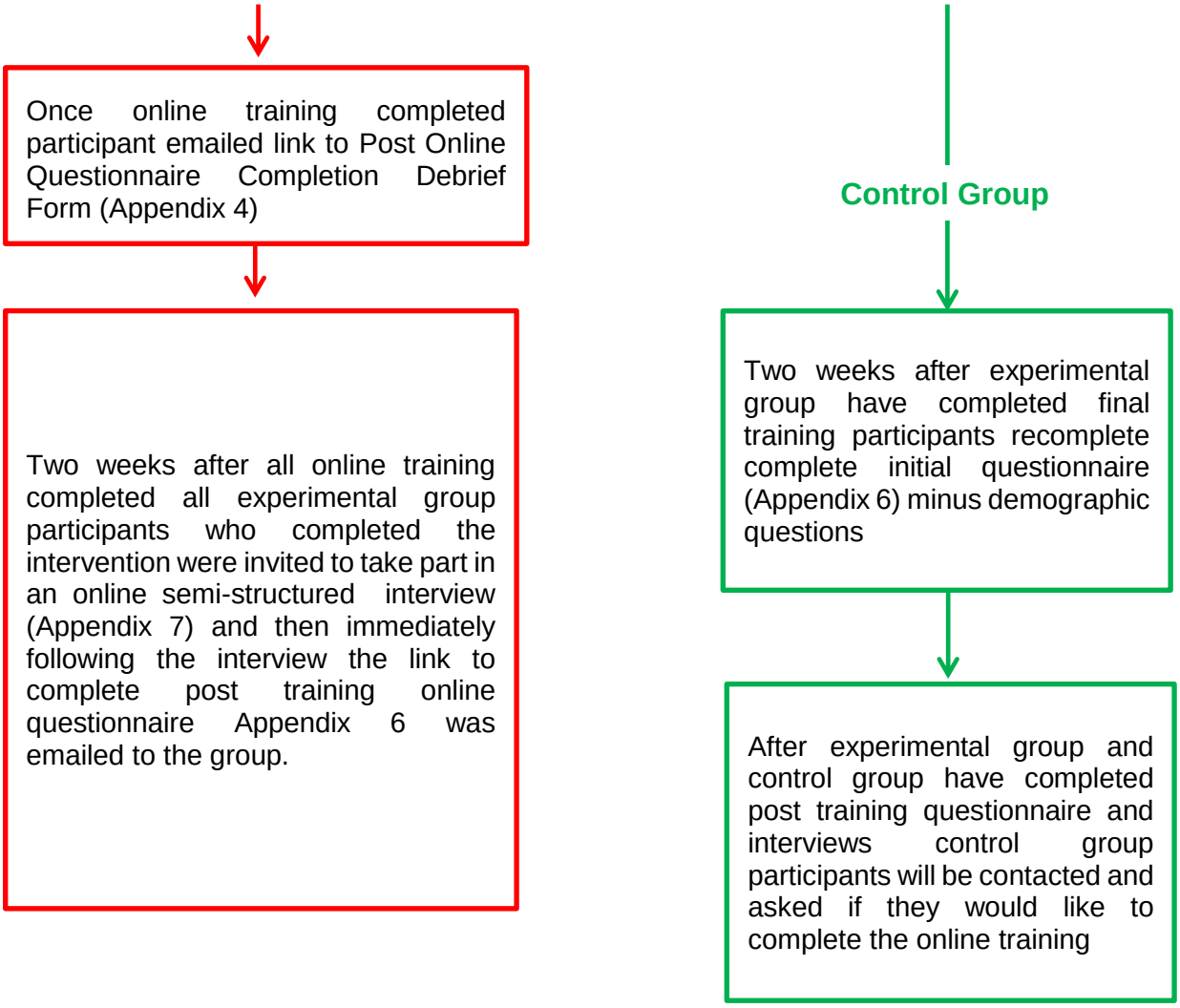
PLATFORM

Appendix 10 Participant's Study Participation Journey

Platfform and Hafod staff will follow the same process but within their discrete organisation groups.




Participant's individual quantitative measures results, combined to produce a single 'Mental Health and Wellbeing Score'. Based on this score the participants will be assigned to one of five groups - lowest 20% of scores, the second lowest 20% of scores, middle 20% of scores, second highest 20% of scores and the highest 20% of scores.
Participants are allocated two stratified random samples of equal number and approximate equal gender. One group will be the experimental group who will undertake the training the other the control group. 12 participants from each organisation will be randomly selected as the control group and 12 as the experimental group.
Experimental Group
Control Group
Participants emailed the Pre Training Consent Form prior start of online training (Appendix 2). Participants complete and return form electronically
If participants answered 'YES' to all questions continues with study and emailed link and login to complete online questionnaire (Appendix 3)
Online training sessions completed.
Email sent after each session, to those participants who gave their consent, summarising content of the online training session.
If they respond 'NO' to any questions on consent form (Appendix 2) they will be contacted by email and thanked for their time and it will be explained that agreement to all questions is a requirement of the study and therefore they need not participate further.


Once online training completed participant emailed link to Post Online Questionnaire Completion Debrief Form (Appendix 4)
Two weeks after all online training completed all experimental group participants who completed the intervention were invited to take part in an online semi-structured interview (Appendix 7) and then immediately following the interview the link to complete post training online questionnaire Appendix 6 was emailed to the group.
Control Group
Two weeks after experimental group have completed final training participants recomplete complete initial questionnaire (Appendix 6) minus demographic questions
After experimental group and control group have completed post training questionnaire and interviews control group participants will be contacted and asked if they would like to complete the online training

Appendix 11 Interview Participant Information

Interview
Participant Information

Research Title – ***Pilot study of the impact of an Mental Health and Wellbeing Toolkit programme on employee mental health and wellbeing delivered online***

Thank you for taking part in this interview. ***Your participation is voluntary and you are free to decline to answer any question or to leave the interview at any time, without giving a reason.***

The interview focuses on the impact on mental health and wellbeing, specifically levels of stress, anxiety, depression and wellbeing, of the *Assertive Resilience* online training programme. The aim of the research was for the participants to develop a range of skills and strategies which will protect and enhance their resilience and assertiveness with the aim of having a positive impact on your mental health and wellbeing. The focus on resilience *and* assertiveness reflects the rationale that improvements to an individual's mental health and wellbeing, as indicated by the Bio-Psycho-Social model (Biological Psychological Social) does not rest solely within the individual but also their social environment. Research indicates that building resilience, recognising when resilience is depleted and knowing what actions to take at an early stage before becoming overwhelmed / stressed has a positive impact on mental health and wellbeing. By also building assertiveness, individuals are able to proactively affect the factors impacting their mental health and wellbeing by seeking the actions and/or support that they need to protect and enhance their mental health and wellbeing.

Interview Instructions

- The interview will be completed live online on Microsoft Teams
- The interview will take no more than one hour.
- Mobile phones should be switched off or on silent.
- Ensure you are in a quiet location where you won't be disturbed.

Interview Questions

1. How (if at all) have you used the information and strategies within the online training?
2. Have you any examples of where you have noticed a change in your level of assertiveness or resilience?
3. Has the online training had an impact on your mental health and/or wellbeing?
4. Have you any examples of where you have noticed a change in your level of mental health and/or wellbeing?
5. Was there any specific topic or topics that you found most helpful? In what way were they helpful?
6. How did you find participating in the training online?
7. Are there any other comments about the training you'd like to make?

The interviewer may ask further questions to elicit additional information in response to participant answers.

Additional Support

If you feel you would benefit from support with your mental health and wellbeing there are a number of options –

- You can contact your organisation's Human Resources Department who will provide you with a range of information on the Employee Assistance Programme that you can access.
- Alternatively, your GP (General Practitioner) is the first point of contact in Wales to access mental health support through the NHS.

If you need immediate support, there are a number of options –

In an emergency call 999 or visit your local Accident and Emergency centre or call your GP for an emergency appointment.

You can call - NHS Direct 0845 46 47 (Wales) or NHS 111 (England) for advice and information or to talk in confidence call Samaritans 116 123 (Freephone) who are available 24 hours a day, 7 days a week or you can email jo@samaritans.org

For advice and support related to children or young people you can call Childline 0800 1111

www.mind.org.uk has a wide range of mental health information online and an information line which is open 9am to 6pm Monday to Friday (excluding bank holidays).

If you have any questions of concerns regarding this research

This research has been reviewed and approved by The School of Psychology and Therapeutic Studies Ethics Sub-Committee at the University of South Wales.

If you have further questions about this study, or you would like to withdraw from the study either during or up to two weeks after participation in the interview (after this point data is anonymised meaning an individual's data cannot be identified). please contact: Researcher - Helen Jones 17137012@students.southwales.ac.uk

Alternatively, you can contact: Academic Manager and Study Supervisor - Dr Phillip Tyson phillip.tyson@southwales.ac.uk or Senior Lecturer In Counselling And Psychotherapy and Study Supervisor - Dr Shelley Gait shelley.gait@southwales.ac.uk

If you have any concerns regarding the conduct of the research in which you are being asked to participate, please contact the University South Wales Information Governance Officer - Jonathan Sinfield jonathan.sinfield@southwales.ac.uk

Appendix 12 Interview Consent Form

INTERVIEW CONSENT FORM

Pilot study of the impact of an Mental Health and Wellbeing Toolkit programme on employee mental health and wellbeing delivered online

Researcher	**Helen Jones**
Supervisors	**Dr Phillip Tyson** **Dr Shelley Gait**
Title of study	**Pilot study of the impact of an Mental Health and Wellbeing Toolkit programme on employee mental health and wellbeing delivered online**

Please select Yes or No in **all** boxes

1. I confirm that I have read and understood the Interview Participant Information	Yes / No
2. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	Yes / No
3. I understand that my participation is voluntary and that I am free to decline to answer any question or to leave the interview at any time, without giving a reason.	Yes / No
4. I understand that my participation is voluntary and that I am free to withdraw from this research up to two weeks post interview participation without giving any reason, without any consequence to myself (after this point data is anonymised meaning an individual's data cannot be identified)..	Yes / No
5. I understand that all information provided is anonymous and confidential and that I cannot discuss the things other participants say in the group with other people outside of the group.	Yes / No

6. I understand the interview will be audio-recorded and transcribed.	Yes / No
7. I understand the interview will be reproduced and analysed in the Pilot study on the impact of an Assertive Resilience online training on employee mental health and wellbeing research. Anonymised extracts for the interview may be quoted in other publications and presentations.	Yes / No
8. I give permission for my data to be stored and processed in accordance with USW GDPR Guidelines (2018).	Yes / No
9. I agree to my anonymised data being used in this study as well as VIVA examinations, related publictions, subsequent articles that will appear in academic journals and conference presentations as part of this study.	Yes / No
10. I understand that there are limits to confidentiality within this study and if I disclose intent to harm myself or others or any unprofessional or illegal activity the researcher will have a duty to act and report this to the appropriate authority.	Yes / No
11. I agree to continue to take part in the **Assertive Resilience** study interview.	Yes / No

Name of participant	Signature	Date
Name of researcher	Signature	Date

If you have further questions about this study, or you would like to withdraw from the study either during or up to two weeks after participation in the interview (after this point data is anonymised meaning an individual's data cannot be identified). please contact: Researcher - Helen Jones 17137012@students.southwales.ac.uk

Appendix 13 Data - Kolmogorov-Smirnov test indicating Normal Distribution

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PreCDRiscTotal	.114	24	.200*	.943	24	.195
PreCDRiscHardiness	.153	24	.150	.947	24	.237
PreCDRiscCoping	.200	24	.014	.930	24	.098
PreCDRiscAdaptabilityFlexibility	.134	24	.200*	.940	24	.165
PreCDRiscMeaningfulnessPurpose	.155	24	.140	.956	24	.368
PreCDRiscOptimism	.213	24	.006	.878	24	.008
PreCDRiscRegulationEmotionCognition	.166	24	.087	.952	24	.298
PreCDRiscSelfEfficacy	.167	24	.082	.906	24	.029
PreDAS21Depression	.124	24	.200*	.944	24	.202
PreDAS21Anxiety	.213	24	.006	.899	24	.021
PreDAS21Stress	.184	24	.035	.920	24	.059
PreCopingSelfEfficacyScore	.139	24	.200*	.968	24	.629
PreWEMWBSScore	.094	24	.200*	.960	24	.441
PostCDRiscTotal	.154	24	.147	.945	24	.213
PostCDRiscHardiness	.103	24	.200*	.968	24	.606
PostCDRiscCoping	.108	24	.200*	.952	24	.305
PostCDRiscAdaptabilityFlexibility	.201	24	.013	.909	24	.034
PostCDRiscMeaningfulnessPurpose	.163	24	.098	.942	24	.180
PostCDRiscOptimism	.219	24	.004	.919	24	.055
PostCDRiscRegulationEmotionCognition	.201	24	.013	.938	24	.146
PostCDRiscSelfEfficacy	.154	24	.145	.910	24	.035
PostDAS21Depression	.140	24	.200*	.951	24	.279
PostDAS21Anxiety	.184	24	.036	.849	24	.002
PostDAS21Stress	.233	24	.002	.834	24	.001
PostCopingSelfEfficacyScore	.121	24	.200*	.968	24	.629
PostWEMWBSScore	.131	24	.200*	.956	24	.364

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Appendix 14 Data - Levene's test of Homogeneity of Variance indicating Equality of Variance at Outset

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Age	Based on Mean	.267	1	22	.610
	Based on Median	.283	1	22	.600
	Based on Median and with adjusted df	.283	1	21.968	.600
	Based on trimmed mean	.272	1	22	.608
PreCDRiscTotal	Based on Mean	.360	1	22	.555
	Based on Median	.160	1	22	.693
	Based on Median and with adjusted df	.160	1	20.035	.694
	Based on trimmed mean	.362	1	22	.554
PreCDRiscHardiness	Based on Mean	.083	1	22	.776
	Based on Median	.106	1	22	.747
	Based on Median and with adjusted df	.106	1	21.100	.748
	Based on trimmed mean	.079	1	22	.781
PreCDRiscCoping	Based on Mean	.914	1	22	.349
	Based on Median	.898	1	22	.354
	Based on Median and with adjusted df	.898	1	19.345	.355
	Based on trimmed mean	.912	1	22	.350
PreCDRiscAdaptabilityFlexibility	Based on Mean	.654	1	22	.427
	Based on Median	.798	1	22	.381
	Based on Median and with adjusted df	.798	1	21.449	.382
	Based on trimmed mean	.627	1	22	.437
PreCDRiscMeaningfulnessPurpose	Based on Mean	.198	1	22	.661
	Based on Median	.462	1	22	.504
	Based on Median and with adjusted df	.462	1	21.202	.504
	Based on trimmed mean	.220	1	22	.644
PreCDRiscOptimism	Based on Mean	.353	1	22	.558
	Based on Median	.591	1	22	.450
	Based on Median and with adjusted df	.591	1	21.948	.450
	Based on trimmed mean	.372	1	22	.548

PreCDRiscRegulationEmotionCognition	Based on Mean	.099	1	22	.756
	Based on Median	.042	1	22	.840
	Based on Median and with adjusted df	.042	1	21.555	.840
	Based on trimmed mean	.046	1	22	.832
PreCDRiscSelfEfficacy	Based on Mean	.120	1	22	.733
	Based on Median	.198	1	22	.661
	Based on Median and with adjusted df	.198	1	21.016	.661
	Based on trimmed mean	.134	1	22	.718
PreDAS21Depression	Based on Mean	.756	1	22	.394
	Based on Median	.647	1	22	.430
	Based on Median and with adjusted df	.647	1	21.890	.430
	Based on trimmed mean	.715	1	22	.407
PreDAS21Anxiety	Based on Mean	.044	1	22	.837
	Based on Median	.005	1	22	.944
	Based on Median and with adjusted df	.005	1	19.091	.944
	Based on trimmed mean	.008	1	22	.928
PreDAS21Stress	Based on Mean	6.318	1	22	.020
	Based on Median	3.790	1	22	.064
	Based on Median and with adjusted df	3.790	1	15.451	.070
	Based on trimmed mean	6.118	1	22	.022
PreCopingSelfEfficacyScore	Based on Mean	1.694	1	22	.207
	Based on Median	1.187	1	22	.288
	Based on Median and with adjusted df	1.187	1	21.592	.288
	Based on trimmed mean	1.645	1	22	.213
PreWEMWBSScore	Based on Mean	6.431	1	22	.019
	Based on Median	6.243	1	22	.020
	Based on Median and with adjusted df	6.243	1	20.447	.021
	Based on trimmed mean	6.455	1	22	.019
PostCDRiscTotal	Based on Mean	.040	1	22	.844
	Based on Median	.038	1	22	.847
	Based on Median and with adjusted df	.038	1	19.484	.847
	Based on trimmed mean	.040	1	22	.844
PostCDRiscHardiness	Based on Mean	.639	1	22	.433

	Based on Median	.655	1	22	.427
	Based on Median and with adjusted df	.655	1	21.945	.427
	Based on trimmed mean	.633	1	22	.435
PostCDRiscCoping	Based on Mean	.026	1	22	.874
	Based on Median	.047	1	22	.830
	Based on Median and with adjusted df	.047	1	19.639	.830
	Based on trimmed mean	.029	1	22	.867
PostCDRiscAdaptabilityFlexibility	Based on Mean	.332	1	22	.570
	Based on Median	.573	1	22	.457
	Based on Median and with adjusted df	.573	1	21.660	.457
	Based on trimmed mean	.298	1	22	.590
PostCDRiscMeaningfulnessPurpose	Based on Mean	.620	1	22	.439
	Based on Median	.343	1	22	.564
	Based on Median and with adjusted df	.343	1	18.914	.565
	Based on trimmed mean	.557	1	22	.463
PostCDRiscOptimism	Based on Mean	.963	1	22	.337
	Based on Median	.407	1	22	.530
	Based on Median and with adjusted df	.407	1	21.867	.530
	Based on trimmed mean	.854	1	22	.365
PostCDRiscRegulationEmotionCognition	Based on Mean	.590	1	22	.451
	Based on Median	.384	1	22	.542
	Based on Median and with adjusted df	.384	1	18.602	.543
	Based on trimmed mean	.479	1	22	.496
PostCDRiscSelfEfficacy	Based on Mean	.299	1	22	.590
	Based on Median	.273	1	22	.607
	Based on Median and with adjusted df	.273	1	18.893	.608
	Based on trimmed mean	.269	1	22	.609
PostDAS21Depression	Based on Mean	.458	1	22	.505
	Based on Median	.458	1	22	.505
	Based on Median and with adjusted df	.458	1	20.697	.506
	Based on trimmed mean	.457	1	22	.506
PostDAS21Anxiety	Based on Mean	.325	1	22	.574
	Based on Median	.477	1	22	.497

	Based on Median and with adjusted df	.477	1	21.604	.497
	Based on trimmed mean	.275	1	22	.605
PostDAS21Stress	Based on Mean	11.942	1	22	.002
	Based on Median	7.162	1	22	.014
	Based on Median and with adjusted df	7.162	1	14.441	.018
	Based on trimmed mean	11.117	1	22	.003
PostCopingSelfEfficacyScore	Based on Mean	.086	1	22	.772
	Based on Median	.082	1	22	.777
	Based on Median and with adjusted df	.082	1	17.116	.778
	Based on trimmed mean	.086	1	22	.772
PostWEMWBSScore	Based on Mean	4.430	1	22	.047
	Based on Median	4.202	1	22	.052
	Based on Median and with adjusted df	4.202	1	20.147	.054
	Based on trimmed mean	4.427	1	22	.047

Appendix 15 Table A - Equivalence of Groups at Baseline - Data – Mean Scores and Standard Deviation

Group Statistics

	Experimental1orControl2	N	Mean	Std. Deviation	Std. Error Mean
Age	1.00	10	43.8000	8.89194	2.81188
	2.00	14	39.6429	7.74206	2.06915
PreCDRiscTotal	1.00	10	67.8000	14.04596	4.44172
	2.00	14	67.7857	11.93043	3.18854
PreCDRiscHardiness	1.00	10	20.0000	4.57044	1.44530
	2.00	14	19.5714	3.89703	1.04152
PreCDRiscCoping	1.00	10	13.6000	3.02581	.95685
	2.00	14	14.2857	2.23361	.59696
PreCDRiscAdaptabilityFlexibility	1.00	10	9.4000	1.95505	.61824
	2.00	14	9.1429	2.21384	.59167
PreCDRiscMeaningfulnessPurpose	1.00	10	7.6000	2.27058	.71802
	2.00	14	9.0000	2.44949	.65465
PreCDRiscOptimism	1.00	10	5.4000	1.42984	.45216
	2.00	14	5.2143	1.76193	.47090
PreCDRiscRegulationEmotionCognition	1.00	10	5.0000	1.56347	.49441
	2.00	14	4.8571	1.70326	.45522
PreCDRiscSelfEfficacy	1.00	10	6.8000	1.22927	.38873
	2.00	14	5.7143	1.43734	.38414
PreDAS21Depression	1.00	10	5.2000	3.35989	1.06249
	2.00	14	5.1429	3.95858	1.05797
PreDAS21Anxiety	1.00	10	3.7000	3.16403	1.00056
	2.00	14	4.2857	3.77091	1.00782
PreDAS21Stress	1.00	10	6.5000	2.32140	.73409
	2.00	14	8.6429	4.84541	1.29499
PreCopingSelfEfficacyScore	1.00	10	148.8000	27.85997	8.81010
	2.00	14	155.2857	36.39406	9.72672
PreWEMWBSScore	1.00	10	47.5000	4.24918	1.34371
	2.00	14	45.5000	8.00721	2.14002

Appendix 16 Table A - Equivalence of Groups at Baseline - Data – Independent Samples T Test, Degrees of Freedom and Significance

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Age	Equal variances assumed	.267	.610	1.220	22	.235	4.15714	3.40833	-2.91131	11.22559
	Equal variances not assumed			1.191	17.777	.249	4.15714	3.49114	-3.18407	11.49835
PreCDRiscTotal	Equal variances assumed	.360	.555	.003	22	.998	.01429	5.31547	-11.00932	11.03789
	Equal variances not assumed			.003	17.457	.998	.01429	5.46769	-11.49860	11.52717
PreCDRiscHardiness	Equal variances assumed	.083	.776	.247	22	.807	.42857	1.73301	-3.16548	4.02262
	Equal variances not assumed			.241	17.506	.813	.42857	1.78148	-3.32176	4.17890
PreCDRiscCoping	Equal variances assumed	.914	.349	-.640	22	.529	-.68571	1.07119	-2.90724	1.53581
	Equal variances not assumed			-.608	15.721	.552	-.68571	1.12779	-3.07998	1.70855
PreCDRiscAdaptabilityFlexibility	Equal variances assumed	.654	.427	.294	22	.771	.25714	.87437	-1.55619	2.07048
	Equal variances not assumed			.300	20.899	.767	.25714	.85575	-1.52300	2.03729
PreCDRiscMeaningfulnessPurpose	Equal variances assumed	.198	.661	-1.422	22	.169	-1.40000	.98456	-3.44184	.64184
	Equal variances not assumed			-1.441	20.415	.165	-1.40000	.97166	-3.42421	.62421
PreCDRiscOptimism	Equal variances assumed	.353	.558	.274	22	.786	.18571	.67664	-1.21756	1.58899
	Equal variances not assumed			.284	21.555	.779	.18571	.65283	-1.16979	1.54122
PreCDRiscRegulationEmotionCognition	Equal variances assumed	.099	.756	.209	22	.836	.14286	.68213	-1.27180	1.55752
	Equal variances not assumed			.213	20.518	.834	.14286	.67206	-1.25677	1.54248
PreCDRiscSelfEfficacy	Equal variances assumed	.120	.733	1.934	22	.066	1.08571	.56147	-.07871	2.25014
	Equal variances not assumed			1.987	21.178	.060	1.08571	.54651	-.05024	2.22167
PreDAS21Depression	Equal variances assumed	.756	.394	.037	22	.971	.05714	1.54242	-3.14165	3.25593
	Equal variances not assumed			.038	21.239	.970	.05714	1.49940	-3.05889	3.17318
PreDAS21Anxiety	Equal variances assumed	.044	.837	-.400	22	.693	-.58571	1.46374	-3.62132	2.44989
	Equal variances not assumed			-.412	21.328	.684	-.58571	1.42014	-3.53631	2.36488
PreDAS21Stress	Equal variances assumed	6.318	.020	-1.291	22	.210	-2.14286	1.66019	-5.58587	1.30016
	Equal variances not assumed			-1.440	19.751	.166	-2.14286	1.48859	-5.25050	.96479
PreCopingSelfEfficacyScore	Equal variances assumed	1.694	.207	-.472	22	.641	-6.48571	13.73340	-34.96703	21.99561
	Equal variances not assumed			-.494	21.844	.626	-6.48571	13.12352	-33.71353	20.74210
PreWEMWBSScore	Equal variances assumed	6.431	.019	.718	22	.480	2.00000	2.78586	-3.77753	7.77753
	Equal variances not assumed			.791	20.638	.438	2.00000	2.52690	-3.26060	7.26060

Appendix 17 Table B – Pre and Post Intervention Means and Standard Deviations

Descriptive Statistics

Experimental1orControl2		N Statistic	Range Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Variance Statistic	Skewness Statistic	Skewness Std. Error	Kurtosis Statistic	Kurtosis Std. Error
1.00	PreCDRiscTotal	10	42.00	47.00	89.00	67.8000	14.04596	197.289	-.299	.687	-1.068	1.334
	PreCDRiscHardiness	10	14.00	14.00	28.00	20.0000	4.57044	20.889	.419	.687	-.752	1.334
	PreCDRiscCoping	10	9.00	9.00	18.00	13.6000	3.02581	9.156	-.363	.687	-.755	1.334
	PreCDRiscAdaptabilityFlexibility	10	6.00	6.00	12.00	9.4000	1.95505	3.822	-.259	.687	-.380	1.334
	PreCDRiscMeaningfulnessPurpose	10	7.00	4.00	11.00	7.6000	2.27058	5.156	-.589	.687	-.335	1.334
	PreCDRiscOptimism	10	4.00	3.00	7.00	5.4000	1.42984	2.044	-.889	.687	-.160	1.334
	PreCDRiscRegulationEmotionCognition	10	5.00	3.00	8.00	5.0000	1.56347	2.444	.436	.687	-.029	1.334
	PreCDRiscSelfEfficacy	10	3.00	5.00	8.00	6.8000	1.22927	1.511	-.431	.687	-1.461	1.334
	PreDAS21Depression	10	10.00	.00	10.00	5.2000	3.35989	11.289	.004	.687	-.673	1.334
	PreDAS21Anxiety	10	9.00	.00	9.00	3.7000	3.16403	10.011	.501	.687	-.865	1.334
	PreDAS21Stress	10	7.00	4.00	11.00	6.5000	2.32140	5.389	.566	.687	-.224	1.334
	PreCopingSelfEfficacyScore	10	100.00	94.00	194.00	148.8000	27.85997	776.178	-.215	.687	1.042	1.334
	PreWEMWBSScore	10	14.00	41.00	55.00	47.5000	4.24918	18.056	.478	.687	-.343	1.334
	PostCDRiscTotal	10	37.00	52.00	89.00	71.8000	13.63655	185.956	-.261	.687	-1.230	1.334
	PostCDRiscHardiness	10	14.00	14.00	28.00	21.4000	4.42719	19.600	-.151	.687	-.874	1.334
	PostCDRiscCoping	10	9.00	9.00	18.00	13.8000	2.82056	7.956	.068	.687	-.106	1.334
	PostCDRiscAdaptabilityFlexibility	10	6.00	6.00	12.00	9.7000	1.82878	3.344	-.537	.687	.545	1.334
	PostCDRiscMeaningfulnessPurpose	10	8.00	4.00	12.00	8.8000	2.97396	8.844	-.803	.687	-.793	1.334
	PostCDRiscOptimism	10	4.00	4.00	8.00	5.7000	1.25167	1.567	.280	.687	-.066	1.334
	PostCDRiscRegulationEmotionCognition	10	4.00	4.00	8.00	5.5000	1.35401	1.833	.504	.687	-.468	1.334
	PostCDRiscSelfEfficacy	10	3.00	5.00	8.00	6.9000	1.10050	1.211	-.388	.687	-1.236	1.334
	PostDAS21Depression	10	10.00	.00	10.00	4.5000	3.02765	9.167	.240	.687	-.327	1.334
	PostDAS21Anxiety	10	8.00	.00	8.00	2.3000	2.79086	7.789	1.263	.687	.495	1.334
	PostDAS21Stress	10	4.00	3.00	7.00	5.3000	1.41814	2.011	-.076	.687	-1.155	1.334
	PostCopingSelfEfficacyScore	10	74.00	145.00	219.00	173.0000	26.66667	711.111	.387	.687	-1.330	1.334
	PostWEMWBSScore	10	14.00	43.00	57.00	49.9000	5.32186	28.322	.136	.687	-1.600	1.334
	Valid N (listwise)	10										
2.00	PreCDRiscTotal	14	36.00	49.00	85.00	67.7857	11.93043	142.335	-.255	.597	-1.083	1.154
	PreCDRiscHardiness	14	12.00	14.00	26.00	19.5714	3.89703	15.187	.023	.597	-1.335	1.154
	PreCDRiscCoping	14	7.00	10.00	17.00	14.2857	2.23361	4.989	-.563	.597	-.743	1.154
	PreCDRiscAdaptabilityFlexibility	14	7.00	5.00	12.00	9.1429	2.21384	4.901	-.408	.597	-.843	1.154
	PreCDRiscMeaningfulnessPurpose	14	7.00	6.00	13.00	9.0000	2.44949	6.000	.403	.597	-1.169	1.154
	PreCDRiscOptimism	14	6.00	1.00	7.00	5.2143	1.76193	3.104	-1.068	.597	1.056	1.154
	PreCDRiscRegulationEmotionCognition	14	6.00	1.00	7.00	4.8571	1.70326	2.901	-.832	.597	.452	1.154
	PreCDRiscSelfEfficacy	14	5.00	3.00	8.00	5.7143	1.43734	2.066	.041	.597	-.277	1.154
	PreDAS21Depression	14	12.00	.00	12.00	5.1429	3.95858	15.670	.215	.597	-1.205	1.154
	PreDAS21Anxiety	14	13.00	.00	13.00	4.2857	3.77091	14.220	1.318	.597	1.374	1.154
	PreDAS21Stress	14	17.00	1.00	18.00	8.6429	4.84541	23.478	.505	.597	-.416	1.154
	PreCopingSelfEfficacyScore	14	118.00	99.00	217.00	155.2857	36.39406	1324.527	.354	.597	-.784	1.154
	PreWEMWBSScore	14	25.00	31.00	56.00	45.5000	8.00721	64.115	-.244	.597	-1.077	1.154
	PostCDRiscTotal	14	36.00	49.00	85.00	68.8571	11.87018	140.901	-.405	.597	-1.042	1.154
	PostCDRiscHardiness	14	12.00	14.00	26.00	19.8571	3.61316	13.055	-.059	.597	-.877	1.154
	PostCDRiscCoping	14	8.00	10.00	18.00	14.4286	2.59331	6.725	-.461	.597	-.814	1.154
	PostCDRiscAdaptabilityFlexibility	14	7.00	5.00	12.00	9.2857	2.16364	4.681	-.642	.597	-.385	1.154
	PostCDRiscMeaningfulnessPurpose	14	7.00	6.00	13.00	9.0000	2.41788	5.846	.609	.597	-1.077	1.154
	PostCDRiscOptimism	14	4.00	3.00	7.00	5.4286	1.39859	1.956	-.321	.597	-1.401	1.154
	PostCDRiscRegulationEmotionCognition	14	6.00	1.00	7.00	4.9286	1.73046	2.995	-.912	.597	.400	1.154
	PostCDRiscSelfEfficacy	14	5.00	3.00	8.00	5.9286	1.43925	2.071	-.398	.597	-.122	1.154
	PostDAS21Depression	14	12.00	.00	12.00	5.0000	3.67946	13.538	.313	.597	-.639	1.154
	PostDAS21Anxiety	14	13.00	.00	13.00	4.2143	3.80644	14.489	1.340	.597	1.291	1.154
	PostDAS21Stress	14	15.00	3.00	18.00	8.6429	4.68397	21.940	.777	.597	-.480	1.154
	PostCopingSelfEfficacyScore	14	118.00	99.00	217.00	155.2143	33.52193	1123.720	-.024	.597	-.218	1.154
	PostWEMWBSScore	14	25.00	31.00	56.00	44.3571	8.03461	64.555	-.081	.597	-1.391	1.154
	Valid N (listwise)	14										

Appendix 18 Table B Means and Standard Deviation of Variables for Experimental Group (Completed Intervention) and Control Group (Did Not Complete Intervention) Pre and Post Intervention - Data - Paired Sample t Test and Significance (2 tailed)

Paired Samples Test

Experimental1orControl2			Paired Differences					t	df	Sig. (2-tailed)
			Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
1.00	Pair 1	PreCDRiscTotal - PostCDRiscTotal	-4.00000	4.64280	1.46818	-7.32126	-.67874	-2.724	9	.023
	Pair 2	PreCDRiscHardiness - PostCDRiscHardiness	-1.40000	1.50555	.47610	-2.47700	-.32300	-2.941	9	.016
	Pair 3	PreCDRiscCoping - PostCDRiscCoping	-.20000	1.47573	.46667	-1.25567	.85567	-.429	9	.678
	Pair 4	PreCDRiscAdaptabilityFlexibility - PostCDRiscAdaptabilityFlexibility	-.30000	1.49443	.47258	-1.36905	.76905	-.635	9	.541
	Pair 5	PreCDRiscMeaningfulnessPurpose - PostCDRiscMeaningfulnessPurpose	-1.20000	1.47573	.46667	-2.25567	-.14433	-2.571	9	.030
	Pair 6	PreCDRiscOptimism - PostCDRiscOptimism	-.30000	.67495	.21344	-.78283	.18283	-1.406	9	.193
	Pair 7	PreCDRiscRegulationEmotionCognition - PostCDRiscRegulationEmotionCognition	-.50000	.70711	.22361	-1.00583	.00583	-2.236	9	.052
	Pair 8	PreCDRiscSelfEfficacy - PostCDRiscSelfEfficacy	-.10000	.31623	.10000	-.32622	.12622	-1.000	9	.343
	Pair 9	PreDAS21Depression - PostDAS21Depression	.70000	1.33749	.42295	-.25679	1.65679	1.655	9	.132
	Pair 10	PreDAS21Anxiety - PostDAS21Anxiety	1.40000	2.50333	.79162	-.39078	3.19078	1.769	9	.111
	Pair 11	PreDAS21Stress - PostDAS21Stress	1.20000	2.04396	.64636	-.26216	2.66216	1.857	9	.096
	Pair 12	PreCopingSelfEfficacyScore - PostCopingSelfEfficacyScore	-24.20000	34.15585	10.80103	-48.63362	.23362	-2.241	9	.052
	Pair 13	PreWEMWBSScore - PostWEMWBSScore	-2.40000	4.37671	1.38404	-5.53091	.73091	-1.734	9	.117
2.00	Pair 1	PreCDRiscTotal - PostCDRiscTotal	-1.07143	3.07507	.82185	-2.84692	.70406	-1.304	13	.215
	Pair 2	PreCDRiscHardiness - PostCDRiscHardiness	-.28571	1.54066	.41176	-1.17526	.60384	-.694	13	.500
	Pair 3	PreCDRiscCoping - PostCDRiscCoping	-.14286	.77033	.20588	-.58763	.30192	-.694	13	.500
	Pair 4	PreCDRiscAdaptabilityFlexibility - PostCDRiscAdaptabilityFlexibility	-.14286	.36314	.09705	-.35253	.06681	-1.472	13	.165
	Pair 5	PreCDRiscMeaningfulnessPurpose - PostCDRiscMeaningfulnessPurpose	.00000	1.10940	.29650	-.64055	.64055	.000	13	1.000
	Pair 6	PreCDRiscOptimism - PostCDRiscOptimism	-.21429	.89258	.23855	-.72965	.30108	-.898	13	.385
	Pair 7	PreCDRiscRegulationEmotionCognition - PostCDRiscRegulationEmotionCognition	-.07143	.73005	.19511	-.49294	.35009	-.366	13	.720
	Pair 8	PreCDRiscSelfEfficacy - PostCDRiscSelfEfficacy	-.21429	.57893	.15473	-.54855	.11998	-1.385	13	.189
	Pair 9	PreDAS21Depression - PostDAS21Depression	.14286	.94926	.25370	-.40523	.69094	.563	13	.583
	Pair 10	PreDAS21Anxiety - PostDAS21Anxiety	.07143	1.07161	.28640	-.54730	.69016	.249	13	.807
	Pair 11	PreDAS21Stress - PostDAS21Stress	.00000	1.10940	.29650	-.64055	.64055	.000	13	1.000
	Pair 12	PreCopingSelfEfficacyScore - PostCopingSelfEfficacyScore	.07143	18.28604	4.88715	-10.48661	10.62947	.015	13	.989
	Pair 13	PreWEMWBSScore - PostWEMWBSScore	1.14286	2.17882	.58231	-.11516	2.40087	1.963	13	.071

Appendix 19 Table C. Comparison of Change Scores Per Variable for Experimental and Control Group – Test A Data – Independent Samples t-test Pre Intervention between experimental and control

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Age	Equal variances assumed	.267	.610	1.220	22	.235	4.15714	3.40833	-2.91131	11.22559
	Equal variances not assumed			1.191	17.777	.249	4.15714	3.49114	-3.18407	11.49835
PreCDRiscTotal	Equal variances assumed	.360	.555	.003	22	.998	.01429	5.31547	-11.00932	11.03789
	Equal variances not assumed			.003	17.457	.998	.01429	5.46769	-11.49860	11.52717
PreCDRiscHardiness	Equal variances assumed	.083	.776	.247	22	.807	.42857	1.73301	-3.16548	4.02262
	Equal variances not assumed			.241	17.506	.813	.42857	1.78148	-3.32176	4.17890
PreCDRiscCoping	Equal variances assumed	.914	.349	-.640	22	.529	-.68571	1.07119	-2.90724	1.53581
	Equal variances not assumed			-.608	15.721	.552	-.68571	1.12779	-3.07998	1.70855
PreCDRiscAdaptabilityFlexibility	Equal variances assumed	.654	.427	.294	22	.771	.25714	.87437	-1.55619	2.07048
	Equal variances not assumed			.300	20.899	.767	.25714	.85575	-1.52300	2.03729
PreCDRiscMeaningfulnessPurpose	Equal variances assumed	.198	.661	-1.422	22	.169	-1.40000	.98456	-3.44184	.64184
	Equal variances not assumed			-1.441	20.415	.165	-1.40000	.97166	-3.42421	.62421
PreCDRiscOptimism	Equal variances assumed	.353	.558	.274	22	.786	.18571	.67664	-1.21756	1.58899
	Equal variances not assumed			.284	21.555	.779	.18571	.65283	-1.16979	1.54122
PreCDRiscRegulationEmotionCognition	Equal variances assumed	.099	.756	.209	22	.836	.14286	.68213	-1.27180	1.55752
	Equal variances not assumed			.213	20.518	.834	.14286	.67206	-1.25677	1.54248
PreCDRiscSelfEfficacy	Equal variances assumed	.120	.733	1.934	22	.066	1.08571	.56147	-.07871	2.25014
	Equal variances not assumed			1.987	21.178	.060	1.08571	.54651	-.05024	2.22167
PreDAS21Depression	Equal variances assumed	.756	.394	.037	22	.971	.05714	1.54242	-3.14165	3.25593
	Equal variances not assumed			.038	21.239	.970	.05714	1.49940	-3.05889	3.17318
PreDAS21Anxiety	Equal variances assumed	.044	.837	-.400	22	.693	-.58571	1.46374	-3.62132	2.44989
	Equal variances not assumed			-.412	21.328	.684	-.58571	1.42014	-3.53631	2.36488
PreDAS21Stress	Equal variances assumed	6.318	.020	-1.291	22	.210	-2.14286	1.66019	-5.58587	1.30016
	Equal variances not assumed			-1.440	19.751	.166	-2.14286	1.48859	-5.25050	.96479
PreCopingSelfEfficacyScore	Equal variances assumed	1.694	.207	-.472	22	.641	-6.48571	13.73340	-34.96703	21.99561
	Equal variances not assumed			-.494	21.844	.626	-6.48571	13.12352	-33.71353	20.74210
PreWEMWBSScore	Equal variances assumed	6.431	.019	.718	22	.480	2.00000	2.78586	-3.77753	7.77753
	Equal variances not assumed			.791	20.638	.438	2.00000	2.52690	-3.26060	7.26060

Appendix 20 Table C. Comparison of Change Scores Per Variable for Experimental and Control Group – Test B Data – Independent Samples t-test Post Intervention between experimental and control

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
DiffCDRiscTotal	Equal variances assumed	7.165	.014	1.864	22	.076	2.928571	1.571488	-.330494	6.187637
	Equal variances not assumed			1.741	14.536	.103	2.928571	1.682554	-.667708	6.524851
DiffCDRiscHardiness	Equal variances assumed	.863	.363	1.763	22	.092	1.114286	.631986	-.196373	2.424944
	Equal variances not assumed			1.770	19.822	.092	1.114286	.629453	-.199489	2.428060
DiffCDRiscCoping	Equal variances assumed	3.470	.076	.124	22	.903	.057143	.461344	-.899627	1.013912
	Equal variances not assumed			.112	12.516	.913	.057143	.510063	-1.049128	1.163413
DiffCDRiscAdaptabilityFlexibility	Equal variances assumed	9.613	.005	.381	22	.707	.157143	.412288	-.697890	1.012176
	Equal variances not assumed			.326	9.763	.752	.157143	.482444	-.921355	1.235641
DiffCDRiscMeaningfulnessPurpose	Equal variances assumed	3.665	.069	2.278	22	.033	1.200000	.526690	.107711	2.292289
	Equal variances not assumed			2.170	15.935	.045	1.200000	.552892	.027533	2.372467
DiffCDRiscOptimism	Equal variances assumed	.041	.841	.255	22	.801	.085714	.335638	-.610357	.781785
	Equal variances not assumed			.268	21.886	.791	.085714	.320098	-.578330	.749758
DiffCDRiscRegulationOfEmotionAndCognition	Equal variances assumed	.934	.344	1.436	22	.165	.428571	.298419	-.190311	1.047454
	Equal variances not assumed			1.444	19.925	.164	.428571	.296764	-.190617	1.047759
DiffCDRiscSelfEfficacy	Equal variances assumed	1.480	.237	-.565	22	.578	-.114286	.202398	-.534032	.305461
	Equal variances not assumed			-.620	20.869	.542	-.114286	.184229	-.497557	.268986
DiffDAS21Depression	Equal variances assumed	1.816	.191	-1.197	22	.244	-.557143	.465548	-1.522630	.408344
	Equal variances not assumed			-1.130	15.273	.276	-.557143	.493207	-1.606756	.492470
DiffDAS21Anxiety	Equal variances assumed	4.210	.052	-1.782	22	.089	-1.328571	.745525	-2.874685	.217552
	Equal variances not assumed			-1.578	11.375	.142	-1.328571	.841838	-3.174014	.516871
DiffDAS21Stress	Equal variances assumed	7.581	.012	-1.857	22	.077	-1.200000	.646268	-2.540278	.140278
	Equal variances not assumed			-1.687	12.794	.116	-1.200000	.711119	-2.738797	.338797
DiffCopingSelfEfficacy	Equal variances assumed	11.535	.003	2.257	22	.034	24.271429	10.755800	1.965264	46.577593
	Equal variances not assumed			2.047	12.694	.062	24.271429	11.855229	-1.403134	49.945991
DiffWEMWBS	Equal variances assumed	3.950	.059	2.623	22	.016	3.542857	1.350654	.741771	6.343943
	Equal variances not assumed			2.359	12.204	.036	3.542857	1.501548	.277310	6.808404

Appendix 21 Qualitative Analysis - Initial Coding Example

Line	Quote	Code	Code	Code
13	really, really helpful	Helpful		
13	I've used lots of it	Useful		
14	very easy to use	Easy to use		
15	not just in work but also in my personal life as well	Applicable Work	Applicable personal life	
18	Definitely yeah	Impact Assertiveness		
18	Definitely yeah	Impact Resilience		
18,19,20	it's a given me time and obviously, Um, I don't like to say the word permission, but it's obviously give me sort of permission to sort of stop and think before sometimes rushing in	Thinking change	permission for self-care	
21,22	And allowing myself time before and saying it's OK to have that time and being my own best friend.	be own best friend	permission for self-care	
23,24,25	Whereas before I would tend to sort of umm sort of beat myself up about doing things and and making sure it was all done and pushing myself	previously self-critical	high expectations	putting self under pressure
25, 26, 27	I feel far more relaxed	More Relaxed		
26,27	OK to just, you know, I'm doing a good job, but it's OK for me to take that step back almost.	Permission for self-care	positive affirmation	
29	I have found that very, very useful	Useful		
32	Yes, most definitely. Yes. Most definitely a positive impact.	positive Impact on Mental Health & Wellbeing		
34	from obviously speaking with yourself	Relationship with trainer		

Line	Quote	Code	Code	Code
34,35,36	I was constantly sort of battling with time and sort of saying to myself aww you know, I needed to do this and not really putting myself first.	was putting self under pressure	time pressure	not prioritising self-care
36,37	not really putting myself first.	previous lack of self-care		
37	felt obviously since having those the the time with yourself	Relationship with trainer		
37,38,39	it sort of made me more aware that it's OK to sort of umm be again, like you would say, be your own best friend	Permission for self-care	be own best friend	
39	like you would say	Relationship with trainer		
39	be your own best friend	be own best friend		
39, 40	so things like enjoying time	enjoyment		
40	going for a swim	enjoyable activity		
41,42	having some downtime and spending time perhaps in the garden or relaxing	enjoyable activity	relaxation	
43	encouraged my team	encourage team		
44	second lockdown	Impact of Covid		
44,45	ever changing cycle in work is quite challenging	Impact Covid	work continual change	
47	challenging for the staff team	Impact Covid	team facing challenges	
47,48	very challenging for the individuals that we work	Impact Covid	clients facing challenges	
49	encouraging those, the team	encourage team		

Line	Quote	Code	Code	Code
50	little bit more aware	Increased awareness		
50	OK for you	Support team		
51	we're all working from home	Impact Covid	working pattern change	
53,54	I can come to the stresses so it's about you know, picking up on that when I'm chatting to them	attuned to team stresses		
54,55	sort of what things they like and I can encourage them to take part	know teams likes	encourage team participation	
55,56	and myself really	encouraged Self-Care		
55,56	and my family	encourage family to self-care		
77	The distraction I found that very useful.	distraction Useful technique		
81	we covered so much	A lot of content		
81	I found it all really useful	Useful		
84,85	is a thought, not a fact that's something that has really resonated with me	technique Resonated		
87, 88, 89	And again about being your own best friend that is such a, it's such a small sort of thing when you read it but it has such a massive impact.	Massive impact	own best friend	
91,92	it resonates with so many things	Resonated		
93	I could filter in personally	applied Personally		
93	in work	uses in work		

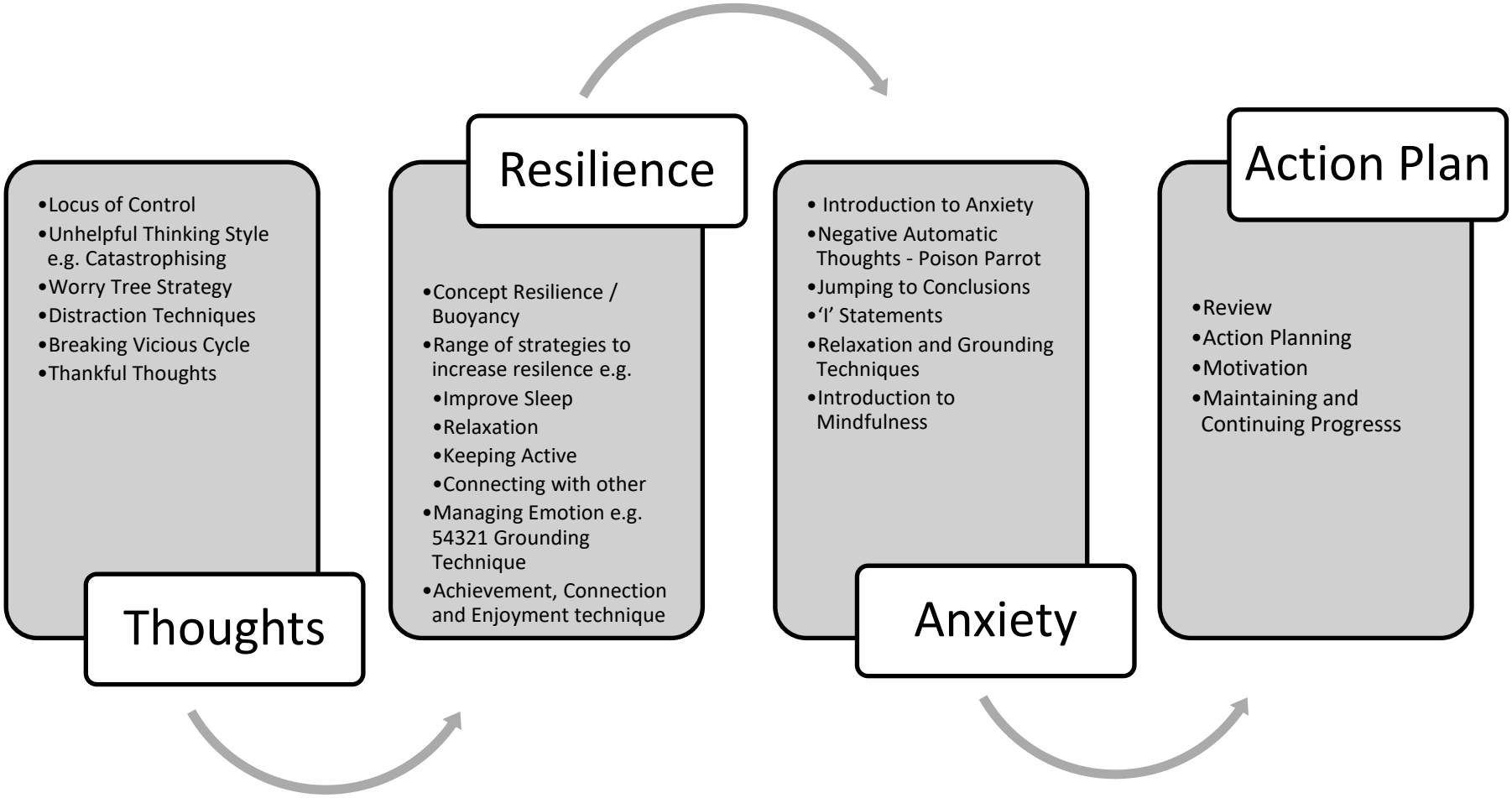
Line	Quote	Code	Code	Code
94	in work	shared with team		
94	with everybody really	could use with everybody		
94,95	And I think anybody can sort of get that.	widely applicable	easy to understand	
99	obviously the motivation	motivating		
100 101	wasn't thinking about my own certain needs	previous lack of self-care		
102	I was far more motivated	motivating		
102,103	I just felt a little bit more channelled my energies into actually wanted to do something	motivating		
105,106	I've done something similar things to this before and I sort of talk the talk but I don't actually do it	previously not applying knowledge		
107, 108, 109	it resonated with me thinking actually xxx you need to practice what you preach 'cause a lot to this we do actually with the people that we work alongside	motivated to use information	resonated	self-reflection
117	I was absolutely fine about it	online delivery positive		
117,118	I think I more from it because it was a smaller group.	smaller group more effective		
119,120	bit worried when it was going to be a big, it it was not a big group	worried about big group		
120,121	funny how it come along at this time in my, at this time in my life	programme well timed		

Line	Quote	Code	Code	Code
121,122	I mean and I holding lots of things in	holding a lot of things		
123,124	bigger group I would have really struggled to be truly open, you	wouldn't have been open in bigger group		
124,125	just be mindful of the other people in the group and the impact	would have had concern about impact on group		
125,126	Perhaps me saying or doing or saying something could have you know,	would have had concern about group judgement		
126,127	If I would have got as much as I got out of it on a one to one session.	one to one more beneficial		
130	think it's really it's it's. It's really useful	really useful		
130,131	I think it's something that could be really rolled out to lots of, to everybody.	beneficial to others		
131, 132, 133	I think in the organisation I think everybody could could get something from there.	beneficial to others		
133	I think 'cause it it pitches itself at all levels.	broad application		
135,136	You know it's not. 'cause sometimes you can do these type of things and you think well actually it's not really achievable.	Other training not achievable		
136,137	There's so much on there that was really, really achievable	Programme content achievable		

Line	Quote	Code	Code	Code
137,138	and you did actually feel well, actually, I'm actually doing these things so that reinforced what what we were talking about	resonated	reinforced existing positive behaviour	
139, 140, 141	Whereas like I've had quite a bit of training about some of these things before. And it's like, actually. How do I transfer that, either to myself or to the people that I work with?	not clear how to transfer other training		
143, 144, 145	Whereas I found lots of this I could actually, you can literally pick it up and it can go into like your sort of virtual as I call it like a virtual toolbox.	transferable skills	tool box of skills	
145,146	you could sort of literally use it it wasn't, and it didn't take a lot of thinking about	transferable skills	easy to use	
146,147	sometimes if you've got to think about resources and think about it, it becomes very difficult, doesn't it?	important easy to use		
148	Whereas I found lots was very easy.	easy to use		
148,149	It was very easy to understand	easy to understand		
149,150	Poison parrot, for example, I found that was brilliant.	poison parrot brilliant		
150	I really could understand that	easy to understand		
151, 152	'cause I again, because obviously doing things remotely, but that was very, very visual it's something that resonates with me	resonated	easy to visualise	
152,153	it's done specially like in my personal life with my my own family.	used with family		

Line	Quote	Code	Code	Code
154	sort of used that with my children	used with children		
155, 156	especially again with the current climate we're in and them being a little bit more anxious	impact of covid	increased anxiety	
156,157	cause things are changing.	period of change		
157,158	. It's very easy to sort of pick it up and go with it	easy to use		
181	Lovely thank you ever so much	pleased with programme		
181	I really enjoyed it.	enjoyable		
181,182	Yeah and it's been very very useful	useful		
182	Got to be fair it's been very useful	useful		
182	Yeah lovely	lovely		

Appendix 22 Summary of Intervention Session Content



Appendix 23 – Journal Article

What impact does the Mental Health and Wellbeing Toolkit programme delivered online have on employee mental health and wellbeing?

Helen Jones

University of South Wales

Background: The current study evaluated the efficacy of the pilot trial of a Counselling Psychology informed workplace intervention designed to improve the mental health and wellbeing of participants. **Methods:** The study used a mixed methods (quantitative and qualitative), randomised controlled, between-subjects experimental design with 24 participants (10 in the experimental group and 14 in the control group) who were employees of two UK organisations (Platfform and Hafod). Data was collected at baseline and post intervention. **Results:** The quantitative measure's results (paired samples t-tests) indicated that participant's Resilience, Hardiness, Meaningfulness / Purpose, Coping / Self-Efficacy and Wellbeing all increased significantly following the intervention. There was also a marginally significant increase in participant's Regulation of Emotion and Cognition, and a marginally significant decrease in their level of Stress. The qualitative results were equally encouraging, as all participants reported that the intervention had a positive impact on their mental health and wellbeing. The four qualitative themes that emerged from the data expressed the participant's view that the intervention had a positive effect on their wellbeing, that the learning process was beneficial, the session experience positive and participants found they were able to apply the intervention's strategies widely. **Conclusion:** The findings suggest that the pilot Counselling Psychology informed intervention was successful in improving participant's mental health and wellbeing.

Keywords: Mental health, Wellbeing, Resilience, Counselling Psychology, Coping, Self-Efficacy, Emotional Regulation, Workplace, Employees

Introduction

Research indicates that depression, anxiety and stress are having a significant negative impact on the mental health and wellbeing of UK employees and that this negative impact has been further magnified by the Covid-19 pandemic.

The intervention was designed drawing on Counselling Psychology values and approaches taking as it does an integrative, humanistic, person centred and pluralist approach and drawing on a wide range of modalities, to provide a toolkit of strategies and techniques that personal experience and evidence indicated would be both helpful for those already suffering with impaired mental health and wellbeing and also proactively provide protection from the negative impacts of stress.

Research on workplace interventions indicates that resilience, assertiveness and coping are factors which are linked to workplace health and wellbeing that these factors can be improved through workplace interventions. These findings have informed the content of this study's intervention which includes strategies and techniques targeted specifically at resilience, assertiveness and coping.

Workplace Mental Health and Wellbeing

Research on workplace mental health and wellbeing, has identified three key issues; stress, anxiety and depression as having the greatest negative impact on employees (Lelliot and Tulloch, 2008; CIPD, 2021; Stevenson, 2017). An insight into the prevalence and impact of this triad is provided by the Health and Safety Executive (HSE) whose data at the inception of this study in 2018/19 data showed 602,000 workers were off work due to stress, anxiety or depression (HSE, 2019). The latest available data, released in November 2020, based on the 2019/2020 Labour Force Survey, states that 828,000 workers were suffering with stress, depression or anxiety which is an increase of 37.5% from the previous year's data. The number of working days lost due to work-related stress, depression and anxiety shows an even larger increase, of just under 40% from 12.8 million working days lost in 2018/19 to 17.9 million in 2019/20 (HSE, 2020). In 2018/19 stress, depression or anxiety accounted for 54% of all working days lost due to ill health in the UK (HSE, 2019) this had increased to 55% in 2019/20. Depression, Anxiety and Stress are having a significant negative impact on the mental health and wellbeing of UK employees and that this negative impact has been further magnified by the Covid-19 pandemic.

Resilience, Coping and Interpersonal Assertiveness

The research, on the impact of workplace training on employee stress (Richardson and Rothstein, 2015), depression, anxiety (Joyce et al, 2016) and wellbeing (Strauss et al, 2018, Johnson and Wood, 2017), indicates that resilience is an important aspect of employee wellbeing and performance in the workplace (Robertson et al, 2015; Cooke et al, 2019; Foster[2] et al, 2018; Nadeem et al, 2019). Fletcher and Sarkar (2013) provide a useful conceptual distinction between resilience and coping. They suggest the definition of resilience should incorporate the behavioural and the trait aspects of resilience. They see resilience as consisting of an interaction between how stressors are appraised, the metacognitive response to this, the emotions that are experienced, and the coping strategies (both behavioural and emotional) that are selected in order to protect the individual from any potential stressor negative impact. Another aspect to resilience is its potential to be needed for circumstances that aren't necessarily negative, such as a job promotion, but still require the characteristics of resilience to navigate the situation (Fletcher and Sarkar, 2013). Based on the evidence strategies to improve resilience have been included in this study's intervention

Assertiveness is often used in the context of interpersonal communication, however, in this study the term was in the context of intrapersonal communication. The focus within the intervention was on the internal assertiveness which draws on the concept of negative automatic thoughts (NATs) from the cognitive behavioural therapy (CBT) perspective. Negative automatic thoughts have been linked to both depression and anxiety disorders (Breznoscakova, 2017). When categorising a situation's level of stress two core forms of appraisal have been described, primary appraisal and secondary appraisal (Lazarus and Folkman, 1984). The primary appraisal decides if the situation is benign-positive, irrelevant or stressful. If the primary appraisal categorises the situation as stressful then the secondary appraisal decides what can be done to manage the stressor and any subsequent distress. At this stage the individual identifies and evaluates the coping resources they have, their previous coping style and the specific situation's variables (Dewe and Cooper, 2007). These factors then form the individual's response to the stressor, with the aim of either managing the stressor, which is problem focused coping or, regulating the emotions elicited by the stressor, which is emotion focused coping (Lazarus and Folkman, 1984[2]). How successful the coping strategy applied is, in responding to the stressor, then informs the individual's response to future stressors. If having coping strategies that best fit the situation / context is optimum, then having a wide range of coping resources would seem ideal. This is supported by research as having a mix of coping resources has been found to be positively related to wellbeing (Petru and Jarosova, 2019). The Petru and Jarosova, 2019 study also found that an extensive range of coping resources provided better life satisfaction and improved physical and mental health

as well as acting as a mitigating factor against stress and burnout (Petru and Jarosova, 2019). This finding was also supported by research undertaken to explore the protective role of, coping strategies and defence mechanisms on participants perceived life satisfaction and level of stress during the Covid-19 pandemic. This research found that coping strategies, positive attitude, and mature defences partially mediated the negative impacts on life satisfaction and perceived stress (Gori, Topino and Di Fabio, 2020) which informed their inclusion in this study's intervention.

The Current Study

This research is a pilot study testing the efficacy of an eight hour live online Assertive Resilience training programme (delivered in four two-hour sessions, once a week for four weeks). The training provides participants with a range of skills and strategies inspired by cognitive behaviour therapy, mindfulness, emotional regulation and stress management techniques to proactively protect and enhance their resilience and assertiveness with the aim of this having a positive impact on their wellbeing and performance.

This study focuses on two workplaces whose staff, whilst undoubtedly subject to stress, would not be classed either as high risk for example the police, high pressure for example nursing or highly competitive for example sport. The intervention, due to Covid-19 restrictions, was delivered online to small groups of participants. This study's UK based participants work in low to moderate stress environments. The intervention is aiming to have a measurable positive impact, as indicated by the measures and the participant qualitative feedback on the participant's mental health and wellbeing. The negative impact of workplace mental health issues means that a short online training programme that aims to improve mental health and wellbeing for individuals working in a low to moderate stress workplace, by building resilience, coping strategies and internal assertiveness would provide employers with a useful tool.

When designing the intervention, a different approach was taken to psychoeducation interventions in Welsh primary care, where the interventions are tailored to the specific mental health issue such as stress, anxiety, or depression (National Psychological Therapies Management Committee, 2017). This intervention, whilst including strategies and techniques which applied to managing stress, reducing anxiety and alleviating depression, took the position that the information was useful to everyone as it could be applied proactively or reactively, as they were useful life skills / knowledge. To be effective the intervention is not simply imparting information rather it is seeking to elicit change. There has been extensive research on the efficacy of various methods of changing health behaviour for example exercise (Carron, Hausenblas and Mack, 2007), older adult activity (Husebø et al, 2013) and blood donation (Bednall et al, 2013). A meta-analysis of these health-related intentions and

behaviours found that attitude, norm, and self-efficacy change will promote health-related intentions and behaviour (Sheeran et al, 2016). If this study's intervention is to be successful in improving mental health and wellbeing, then changing participant's negative attitudes, the norms that are applied to their mental health, and wellbeing and promotion of their self-efficacy would seem to be important (Arthur et al., 2003).

Due to the impact of Covid-19 on training delivery, specifically social distancing requirements this intervention was delivered live online through Microsoft Teams. Prior to the Covid-19 pandemic the research on the efficacy of training delivery online versus face to face offered a complex picture as definitions of types of online training delivery varied. Some analysis indicated little difference in learner outcome (Richmond et al, 2017, Isfahani and Moghadas, 2018) or equivalent outcomes (Power et al., 2020), others indicated face to face training had better learning outcomes (DuPaul et al, 2018). A consequence of the Covid-19 pandemic and the subsequent lockdown is the significant increase in individuals using online communication, this has been shown to have an effect on the participant's experience of live online training delivery as some participants may have become more familiar and comfortable with online communication (Wei and Chou, 2020).

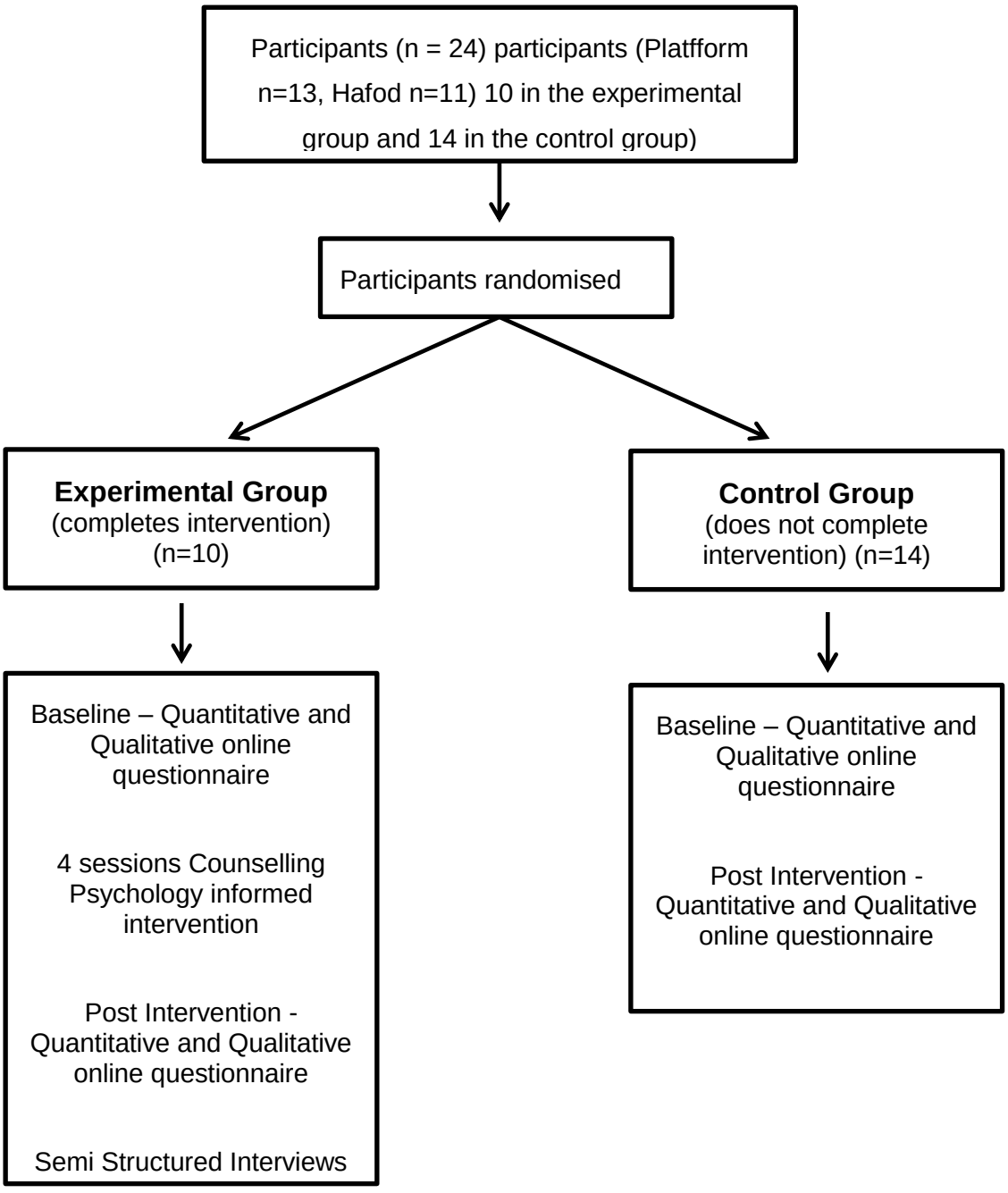
Based on the finding of the literature review the study's research question is *'What impact does the Mental Health and Wellbeing Toolkit programme delivered online have on employee mental health and wellbeing?*' This research focus is informed by the potential for Counselling Psychology expertise to be applied in order to counter the significant negative impacts of poor workplace mental health and wellbeing. The study seeks to assess the efficacy of the counselling psychology derived intervention in improving employee mental health and wellbeing by developing employee's resilience, coping and internal assertiveness.

Method

Study Design

This study is a mixed methods, randomised controlled, between-subjects experimental design. Quantitative measures and qualitative data were collected concurrently with equal priority. The qualitative data was analysed using thematic analysis. The quantitative data was analysed using mean, standard deviation and t-tests. The quantitative and qualitative results have been triangulated in order to consider the degree of consistency between the results obtained using these two separate methodologies (Bryman, 2012).

Figure 0.1 Study Process



Study Participants

Study participants were from two organisations Hafod and Platfform. Hafod is provider of housing care and support and Platfform is a mental health and social change charity. The study had a total of twenty-four participants. This total was made up of thirteen staff from Platfform and eleven from Hafod. The sample method used was probability sampling from a convenience sample of potential participants.

Intervention

The participants from each organisation randomly allocated to the experimental group were invited to complete an eight-hour programme which was delivered as four, two-hour online sessions. The intervention was delivered by the researcher (sometimes referred to as the trainer) on the same day and at the same time every week for the four weeks. Participants who were selected to the control group were advised that they would be contacted by email in six weeks (two weeks after the intervention completed) to recomplete the online measures. Due to the impact of Covid-19 on training delivery in terms of social distancing requirements, the intervention was delivered live online through Microsoft Teams which is an encrypted secure online platform.

The intervention's four session content drew on cognitive behavioural therapy, neuroscience and psychological research to provide participants with psychoeducation and a *'toolkit'* of strategies and techniques designed to have a positive impact on their mental health and wellbeing. Each of the four sessions had a specific theme, thoughts, resilience, anxiety and taking action, which informed all of the session content.

Measures

Demographic Characteristics

Participants reported their age and gender. The total number of participants was 24. The mean age for all participants was 41 years (SD 8.319). The total group age range was 24 years to 56 years. The gender split of participants was 16 female participants (66%) and 8 male participants (34%). The female's average age was 40 years and the males' average was 43 years.

Quantitative

Quantitative data analysis was undertaken of the four measures completed which were the Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003), the Depression Anxiety Stress Scale 21 (DASS-21) (Lovibond & Lovibond, 1995), Coping self-efficacy (CSE)

scale (Chesney et al., 2006) and the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (Tennant et al., 2007). SPSS statistics software was used for the quantitative analysis.

Connor-Davidson Resilience Scale - Connor & Davidson, 2003

The Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) is a 25 item self-report scale which assesses components related to the construct of resilience. Each item statement is rated by participants on a 5-point scale (0-4) to indicate how much that particular statement applies to them over the last month. If the situation portrayed in the item statement has not occurred over the last month, then participants are instead encouraged to answer based on how they think they may have felt. The total score ranges from 0-100, with a higher score reflective of an individual with greater resilience.

The reliability of the scale has been measured indicating that it has a strong internal consistency (Cronbach's α = 0.89) being identified for the full scale for the general population group. The test-retest reliability was also assessed by the authors using the participants experiencing generalised anxiety disorder and PTSD who were engaging in study trials. The mean (SD) CD-RISC scores collected at time 1 [52.7 (17.9)] and time 2 [52.8 (19.9)] showed little variation, thus advocating for the reliability of the CD-RISC.

Depression Anxiety Stress Scale 21 - Lovibond & Lovibond, 1995

The Depression Anxiety Stress Scale 21 (DASS-21; Lovibond & Lovibond, 1995) is a 21-item self-report measure of the constructs of depression, anxiety, and stress. The scale consists of three sub-scales of anxiety, stress, and depression, each consisting of seven items. Participants read each item statement and respond using a 4-point scale to indicate how much the statement applies to them over the past week.

The DASS-21 total scale has been found to demonstrate good internal consistency for the total scale (Cronbach alpha =.93) and each of the sub-scales (Depression =.88; Anxiety =.82; Stress =.90) among non-clinical samples (Henry & Crawford, 2005), which is comparable with more recent research (Sinclair et al., 2012). The DASS-21 scale has also been found to achieve adequate item-scale convergence (Sinclair et al., 2012) and good construct validity (Henry & Crawford, 2005). Furthermore, Lovibond & Lovibond (1995) found the convergent and discriminant validity of the DASS-21 with other measures of health and wellbeing was found to be adequate, strongly correlating with the Beck Anxiety Inventory (BAI) (Beck[2] et al., 1988) and the Beck Depression Inventory (BDI; Beck, Steer & Carbin et al., 1988). Therefore, the DASS-21 has been identified as a suitable screening tool for targeting non-specific aspects of psychological distress within non-clinical populations (Chin et al., 2019; Sinclair et al., 2012).

Coping self-efficacy scale - Chesney et al., 2006

The coping self-efficacy (CSE) scale (Chesney et al., 2006) is a 26-item measure of self-perceived ability to perform coping behaviours when faced with life threats and challenges. Participants are asked when things aren't going well for them, or when they're having problems, how confident or certain are they that they can do 26 statements which are then scored on an 11 point scale from 0 to 10.

Reliability for the CSE scale has been measured using internal consistency coefficient alpha (Cronbach, 1951). Strong internal consistencies between α = 0.73 and α = 0.84 for the subscales have been identified, which were deemed as satisfactory (Mahmoudi et al., 2015). Furthermore, test–retest reliability was deemed strong for all three sub-scales (Chesney et al., 2006). Content validity of the instrument has been evaluated using both quantitative and qualitative measures (Mahmoudi et al., 2015). The content validity index (CVI) and the content validity ratio (CVR) were calculated from the opinions of a panel of 20 experts who reviewed the individual items of the CSE scale. The majority of items were deemed to have acceptable CVI and CVR scores. The subscales have been found to moderately correlate; however analyses of concurrent validity indicate that the individual sub-scales assess different types of coping which are all aspects of coping self-efficacy (Chesney et al., 2006). Finally, predictive validity was analysed and demonstrated that changes in emotion-focussed and problem-focussed coping skills was predictive of increased psychological well-being and psychological distress at baseline and at a 3-month post-intervention follow up (Chesney et al., 2006).

Warwick-Edinburgh Mental Well-being Scale - Tennant et al., 2007

The Warwick-Edinburgh Mental Well-being Scale (WEMWBS; Tennant et al., 2007) is a 14 item self-report scale of mental well-being including positive affect, positive functioning and satisfying interpersonal relationships. Participants read each item statement and respond using a 5-point Likert scale to indicate how much the statement applies to their experience over the past two weeks.

The WEMWBS has demonstrated good content validity, internal consistency (Cronbach's α = .91) and high test-retest reliability at one week follow up (ICC = 0.83) among a representative population sample. Furthermore, confirmatory factor analysis has provided support for the single construct of the scale, suggesting good validity (Tennant et al; 2007). The WEMWBS also showed significantly high correlations with other scales of mental well-being, such as the Positive and Negative Affect Schedule- Positive Affect (Watson & Tellegen, 1985) (r = 0.71) and the Scales of Psychological Well-Being (Ryff, 1989) (r = 0.74), supporting the criterion validity of the scale. It has also been found to be fairly unsusceptible to the effects of social desirability bias (Tennant et al., 2007).

Qualitative Data

In addition to the quantitative measures and demographic information, the questionnaire includes opportunity for narrative responses to questions on subjective mental health and wellbeing status and how participant's feel the intervention has impacted these. This section also invites opinion on the intervention content and the opportunity to add further suggestions.

The post intervention semi-structured online interviews completed by the experimental group were recorded and transcribed. The purpose of the semi-structured interviews was to enable participants to describe the impact of the training. This provided a level of richness in terms of their behavioural and emotional response to the intervention that the quantitative measures may not have identified.

All experimental group participants participated in the interviews. The interviews were analysed using thematic analysis which followed the Braun and Clark (2006) approach, specifically the data led approach which complements the integrative mixed method design as detailed by Castro et al (2010).

Code of Ethics

The ethical code followed in this study was the British Psychological Society Code of Human Research Ethics (BPS 2014). As this study is mixed methods both rigour and trustworthiness standards needed to be upheld. To ensure the rigour of the data quantitative data, measures used were thoroughly assessed to ensure their quality and suitability and data was collected following clear procedures. To ensure trustworthiness of the qualitative data, again clear procedures and methods of analysis which had been selected as a best fit for the data and the research question were followed.

Results

Quantitative

Baseline

The results show that there were no statistically significant differences at baseline on any demographic or psychological variables, and all p values were $\geq$ *0.05.* This means that as the experimental and control groups were equivalent on all measures at the start of the study any post intervention change in the experimental group results post study could be attributed to the intervention.

Post Intervention

In order to identify any change, between the experimental and control groups pre and post intervention quantitative measures score separate paired sample t-test were completed, one for the experimental group and one for the control group. To do this the means and standard deviation of variables for experimental group (completed intervention) and control group (did not complete intervention) pre and post intervention were calculated.

The results showed that between baseline and post intervention the experimental group has improved significantly ($p = \leq 0.05$) on three variables and there was marginal significance ($p = \leq 0.08$) on two. The control group did not show any significant change ($p = \geq 0.05$) on any variable. The three variables where there was significant improvement were the CD-Risc Total score, CD-Risc Hardiness subscale score and the CD-Risc Meaningfulness / Purpose subscale score. The variables where there was marginally significant improvement were the Coping Self- Efficacy Scale score and CD-Risc Regulation of Emotion and Cognition subscale score.

Table 0.1 Means and Standard Deviation of Variables for Experimental Group (Completed Intervention) and Control Group (Did Not Complete Intervention) Pre and Post Intervention

Measure	Experimental / Control Group	Pre-Intervention Mean (SD)	Post Intervention Mean (SD)	t (df)	Significance (2 tailed)
CD-Risc -Total	Experimental	67.80 (14.05)	71.80 (13.64)	-2.724 (9)	**0.023**
	Control	67.79 (11.93)	68.86 (11.87)	-1.304 (13)	0.215
CD-Risc - Hardiness	Experimental	20.00 (4.57)	21.40 (4.43)	-2.941 (9)	**0.016**
	Control	19.57 (3.90)	19.86 (3.61)	-0.694 (13)	0.500
CD-Risc - Coping	Experimental	13.60 (3.03)	13.80 (2.82)	-0.429 (9)	0.678

	Control	14.29 (2.23)	14.43 (2.59)	-0.694 (13)	0.500
CD-Risc – Adaptability / Flexibility	Experimental	9.40 (1.96)	9.70 (1.83)	-0.635 (9)	0.541
	Control	9.14 (2.21)	9.29 (2.16)	-1.472 (13)	0.165
CD-Risc – Meaningfulness / Purpose	Experimental	7.60 (2.27)	8.80 (2.97)	-2.571 (9)	**0.030**
	Control	9.00 (2.45)	9.00 (2.42)	0.000 (13)	1.000
CD-Risc - Optimism	Experimental	5.40 (1.43)	5.70 (1.25)	-1.406 (9)	0.193
	Control	5.21 (1.76)	5.43 (1.40)	-0.898 (13)	0.385
CD-Risc – Regulation of Emotion and Cognition	Experimental	5.00 (1.56)	5.50 (1.35)	-2.236 (9)	**0.052**
	Control	4.86 (1.70)	4.93 (1.73)	-0.366 (13)	0.720
CD-Risc – Self Efficacy	Experimental	6.80 (1.23)	6.90 (1.10)	-1.000 (9)	0.343
	Control	5.71 (1.44)	5.93 (1.44)	-1.385 (13)	0.189
DASS21 - Depression	Experimental	5.20 (3.36)	4.50 (3.03)	1.655 (9)	0.132
	Control	5.14 (3.96)	5.00 (3.68)	0.563 (13)	0.583
DASS21 - Anxiety	Experimental	3.70 (3.16)	2.30 (2.79)	1.769 (9)	0.111
	Control	4.29 (3.77)	4.21 (3.81)	0.249 (13)	0.807
DASS21 - Stress	Experimental	6.50 (2.32)	5.30 (1.42)	1.857 (9)	0.096
	Control	8.64 (4.85)	8.64 (4.68)	0.000 (13)	1.000
Coping Self-Efficacy Scale	Experimental	148.80 (27.86)	173.00 (26.67)	-2.241 (9)	**0.052**
	Control	155.29 (36.39)	155.21 (33.52)	0.015 (13)	0.989
Warwick Edinburgh Mental Wellbeing Scale	Experimental	47.50 (4.25)	49.90 (5.32)	-1.734 (9)	0.117
	Control	45.50 (8.01)	44.36 (8.03)	1.963 (13)	0.071

CD-RISC - Connor-Davidson Resilience Scale, DASS21 - Depression Anxiety Stress Scale

Significance of Difference between Experimental Group (Completed Intervention) and Control Group (Did Not Complete Intervention) Pre and Post Intervention Scores. Paired Samples t – test including df (degrees of freedom) and 2-tailed significance.

Significance (p = ≤ 0.05) and marginally significant (p = ≤ 0.08) results are in bold.

A paired samples t-test was then completed to see if there was a statistically significant change in the scale results from the beginning of the study to the end of the study for the two groups: control and experimental (Table 0.2).

The CD Risc -25 total results indicate that the experimental group's resilience increased following the intervention as there was a significant change between the experimental group's pre and post intervention mean scores of level of resilience as t = -2.724 (9) p = 0.023. The subscales results indicate that after the intervention there was a significant increase in participant's levels of Hardiness (t = -2.941 (9) p = 0.016,), Meaningfulness/ Purpose (t = -

2.571 (9) p = 0.030), and a marginally significant increase in their Regulation of Emotion and Cognition (t = -2.236 (9) p = 0.052).

The DASS-21 results indicate that whilst there was not a significant change in the experimental group's level of depression or anxiety there was a marginally significant decrease in their level of stress post intervention compared to the control group (t = -1.857 (22) p = 0.077).

The Coping and Self-Efficacy Scale results show that post intervention, the experimental group's level of self-efficacy increased significantly compared to the control group (t = -2.241 (9) p = 0.052) (table 0.1) and that there was a significant difference (t = 2.257 (22) p = 0.034) (table 0.2) when comparing the difference in the Coping Self – Efficacy scores for the experimental and control group. The Coping Self-Efficacy Scale (CSES) results indicate that participants in the experimental group's level of coping and self-efficacy increased significantly following their participation in the intervention.

The Warwick-Edinburgh Mental Well-being Scale results showed that the experimental group's level of wellbeing compared to the control group, increased significantly after participating in the intervention (t = 2.623 (22) p = 0.016). This indicates that the participants in the experimental group's level of wellbeing were significantly different from the control group after participating in the intervention

Table 0.2 Comparison of Difference Scores Per Variable for Experimental and Control Group

	Test A - Independent Samples t-test Pre-Intervention between experimental and control			Test B – Independent Samples t-test Post Intervention between experimental and control		
Measure	Mean Difference	t (df)	Significance (2-tailed)	Mean Difference	t (df)	Significance (2-tailed)
CD-Risc –Total	0.01	0.003 (22)	0.998	2.93	1.864 (22)	0.076
CD-Risc - Hardiness	0.43	0.247 (22)	0.807	1.11	1.763 (22)	0.092
CD-Risc - Coping	-0.69	-0.640 (22)	0.529	0.06	0.0124 (22)	0.903
CD-Risc – Adaptability / Flexibility	0.26	0.294 (22)	0.771	0.16	0.381 (22)	0.707
CD-Risc – Meaningfulness / Purpose	-1.40	-1.422 (22)	0.169	1.20	2.278 (22)	**0.033**
CD-Risc - Optimism	0.19	0.274 (22)	0.786	0.09	0.255 (22)	0.801
CD-Risc – Regulation of Emotion and Cognition	0.14	0.209 (22)	0.836	0.43	1.436 (22)	0.165
CD-Risc – Self Efficacy	1.09	1.934 (22)	0.066	-0.11	-0.565 (22)	0.578
DAS21 - Depression	0.06	0.37 (22)	0.971	-0.56	-1.197 (22)	0.244
DAS21 - Anxiety	-0.59	-0.400 (22)	0.693	-1.33	-1.782 (22)	0.089
DAS21 - Stress	-2.14	-1.291(22)	0.210	-1.20	-1.857 (22)	0.077
Coping Self-Efficacy Scale	-6.49	-0.472 (22)	0.641	24.27	2.257 (22)	**0.034**
Warwick Edinburgh Mental Wellbeing Scale	2.00	0.718 (22)	0.480	3.54	2.623 (22)	**0.016**

Test A – Independent Sample t-test - Pre-Intervention for Experimental Group (Completed Intervention) and Control Group (Did Not Complete Intervention) indicates equivalence of groups at baseline. Equal variances assumed.
Test B – Independent Sample t - test – Measure Difference between Post Intervention for Experimental Group (Completed Intervention) and Control Group (Did Not Complete Intervention). Equal variances assumed
Significant and marginally significant scores are in bold

Qualitative Results

This section details the outcomes of the Thematic Analysis of the qualitative data collected. Qualitative data was collected from post intervention semi structured interviews completed by the experimental group participants. The table below details the Themes and their Subthemes which emerged from the data.

Table 0.3 Visual Map of Qualitative Themes and Subthemes

Theme 1: Positive Effect on Wellbeing
Subtheme 1.1: Building Resilience
Subtheme 1.2: Improved Sleep
Subtheme 1.3: More able to manage emotions
Subtheme 1.4: Able to recognise and challenge negative thoughts
Theme 2: Benefit of learning process
Subtheme 2.1: Integrated New Strategies
Subtheme 2.2: Legitimised Existing Strategies
Subtheme 2.3: Normalised existing thoughts / behaviours
Theme 3 : Wider Application of Strategies
Subtheme 3.1: Shared strategies with others in range of contexts
Subtheme 3.2: More attuned to others
Theme 4: Positive Session Experience
Subtheme 4.1: Learning Environment
Subtheme 4.2: Content of Intervention
Subtheme 4.3: Delivery

The Positive Effect on Wellbeing theme focuses on the aspects of wellbeing that participants identified as being positively impacted by the programme. The subthemes each reflect an aspect of wellbeing that individually and/or collectively would be likely to have a positive impact on wellbeing. The theme *'Positive Effect on Wellbeing'* has four subthemes; '*Building Resilience', 'Improved Sleep', 'More able to manage emotions'* and '*Able to recognise and challenge negative thoughts'*. Each of the subthemes focuses on an aspect of the interventions effect that is likely to have had a positive effect on their wellbeing.

The theme '*Benefit of learning process'* draws together three subthemes; *'Integrated New Strategies'*, *'Legitimised Existing Strategies'* and *'Normalised existing thoughts / behaviours'*.

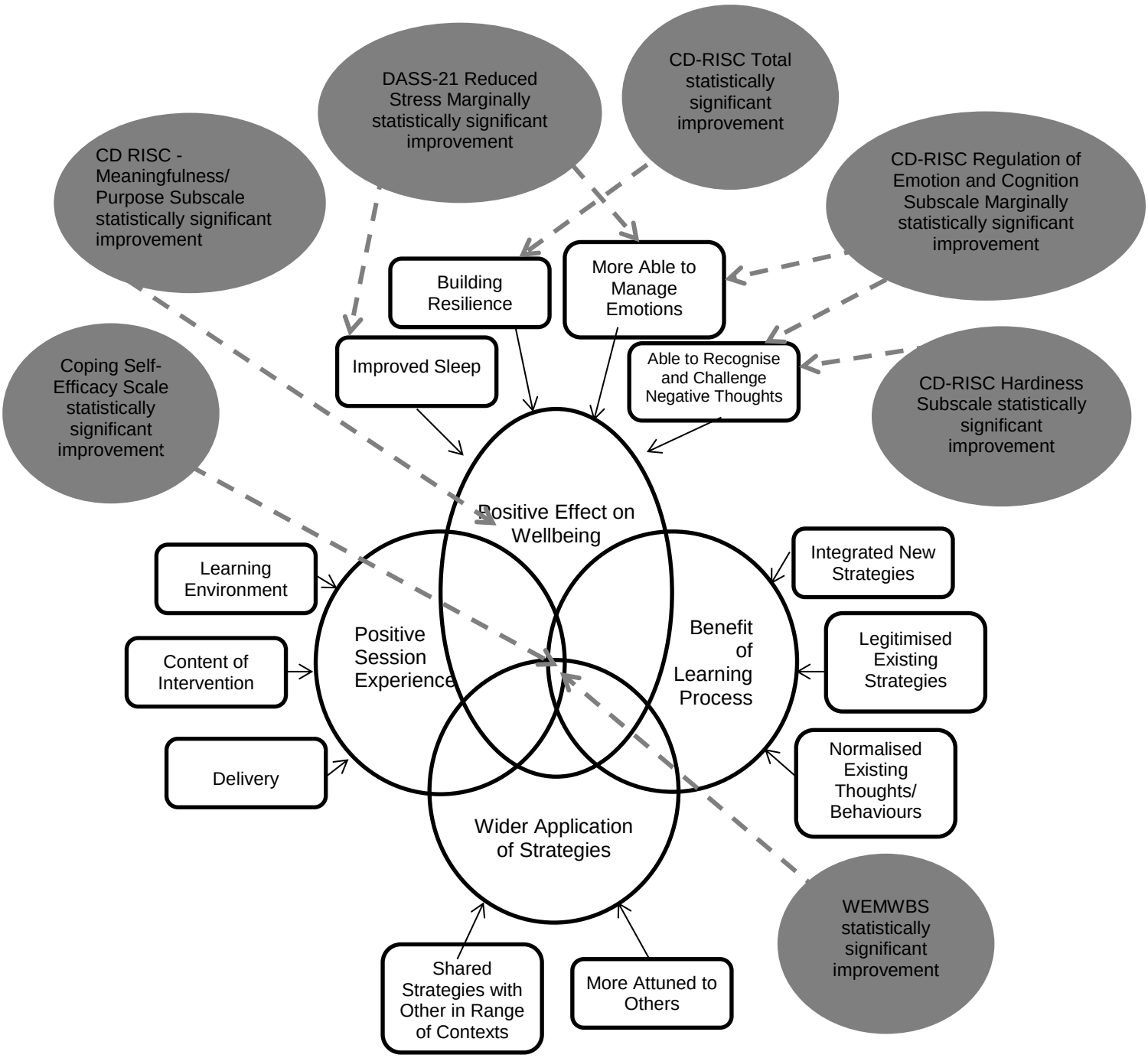
These three subthemes can be viewed as three facets of the learning process benefit as they reflect distinctly different ways the learning has been applied. '*Integrated New Strategies'* is based on participant's comments on how they have integrated the new information into their lives. This contrasts with '*Legitimised Existing Strategies'* which reflects the impact of participant's existing knowledge being included in the programmes content. '*Normalised existing thoughts / behaviours'* emerged from participants comments on how it felt to both understand what and why they think / behave and that this is entirely normal.

This '*Wider Application of Strategies'* theme has two subthemes, '*Shared strategies with others in range of contexts'* and '*More attuned to others'.* The subtheme *'Shared strategies with others in range of contexts'* emerged from participants comments on the range of contexts, for example work, home and personally, within which they were sharing and applying the strategies and techniques. The subtheme '*More attuned to others'* describes how participants extended the information from knowledge about themselves to recognising thought and behavioural patterns in others. The theme also includes the impact that this new insight had.

The *'Positive Session Experience'* theme has three subthemes; '*Learning Environment', 'Content of Intervention'* and '*Delivery'*. Collectively these subthemes draw together different aspects of the session experience which based on participants feedback they found positive. The subtheme '*Learning Environment'* emerged from participant's comments on both the logistical aspects of the programme for example the online environment and group size. This theme also encompassed the group environment for example the emotional landscape, interpersonal relationships and communication. The subtheme '*Content of the Intervention'* focussed on the topics covered within the intervention and how participants viewed them. The final subtheme, '*Delivery'*, emerged from participant's comments about the way the session was delivered including their views on the trainer's approach, knowledge and communication style.

The Quantitative and Qualitative research were triangulated, as described in the research methods section, in order to identify whether the two corroborated each other (Bryman 2012) and if so how they linked together. Figure 0.2 is a visual map of the outcome of the quantitative and qualitative data triangulation.

Figure 0.2 Post Triangulation Visual Map of Quantitative and Qualitative Results.



Key

Theme

Subtheme

Subtheme in relation to Theme

Quantitative

Quantitative mapped to Qualitative themes

A notable aspect of the qualitative and quantitative data was the overwhelmingly positive response to the intervention with no negative feedback from any of the experimental group participants, all of whom identified aspects of the intervention that they had found helpful. The study's results from both the quantitative and qualitative data led to the conclusion explored in this discussion, that the intervention had a positive impact on participant's mental health and wellbeing. This study findings support the integrative '*toolkit'* approach of the intervention which drew on a wide range of strategies and techniques informed by Counselling Psychology theories, models and resources. If the intervention's initial results are borne out by further large-scale studies, then the intervention may be a useful addition to employer's response to the mental health and wellbeing needs of their staff with benefits from both employees and employers. This may also mean that there is interest from workplace mental health and wellbeing funding bodies that, particularly since the pandemic, have been encouraging initiatives which support employee mental health and wellbeing. This study also indicates how well-suited Counselling Psychologists are to delivering workplace interventions as their approach to groups, their counselling skills and their depth and breadth of psychology knowledge is recognised and appreciated by participants.

Discussion

All the intervention participants reported in their qualitative responses that their wellbeing had improved. The quantitative research, which is based on the statistical significance of the change between pre intervention results and post intervention results, echoes this for example, the CD-Risc meaningfulness / purpose subscale shows a significant increase following participation in the intervention. Meaningfulness / Purpose have been found to be associated with emotional wellbeing (Steptoe and Fancourt, 2020). It has also been identified as one of the three aspects of wellbeing, termed eudemonic, so a significant increase in this measure is a good indicator of an improvement in wellbeing (Steptoe, Deaton and Stone, 2015). That the programme has achieved a positive impact on wellbeing is also supported by the Warwick Edinburgh Mental Health and Wellbeing scale which reported a significant improvement in wellbeing in the experimental group post intervention. In addition, the Coping Self-Efficacy Scale also reported a significant improvement which, as ability to cope has been found to have a protective effect on mental health and wellbeing further supports the conclusion that the programme's effect on mental health and wellbeing has been positive (Aldwin and Revenson, 1987; Dawson and Golijani-Moghaddam, 2020).

Participant's qualitative feedback in both the semi-structured interview and the qualitative questionnaire questions strongly indicated that they felt their level of resilience had increased since completing the intervention. The quantitative data mirrors this, as the Connor–Davidson

Resilience Scale's (CD-Risc) results indicated a significant improvement in the level of resilience for the experimental group who completed the intervention compared to the control group where there was no change in their post intervention scores compared with the beginning of the study. As being resilient has been found to be positively correlated with self-efficacy, optimism, social support and wellbeing and negatively with depressive symptoms and trait anxiety (Rutter, 1985; Petros et al, 2013) the intervention resulting in an increase in resilience is an extremely positive result.

An interesting result from the quantitative data was that the change in the experimental group's wellbeing score post intervention on the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) was not significant, the control group's decrease in wellbeing at the end of the study was only marginally significant However, the change between the pre and post WEMWBS scores was significant. This result may be linked to the study taking place during the Covid-19 pandemic restrictions with the post intervention qualitative and quantitative taking place as lockdown restrictions were reintroduced. A wide range of research has indicated that the Covid-19 pandemic has had a negative impact on mental health and wellbeing (Chandola et al, 2020; Burn et al, 2020). A possible explanation for this current study's results could be that the intervention provided the experimental group with some protection from the broader negative impact of the pandemic, an explanation which is supported by the online questionnaires qualitative questions responses which indicated that control group participants level of wellbeing had fallen compared to the experimental group which had not. This could be from the cumulative effect of the interventions content and could also be linked to the interventions impact on resilience which is aligned to existing research that indicated that higher levels of resilience mitigate the negative impact of the pandemic (Plomecka, 2020; Paredes, 2021)

Research has shown that resilience can be improved through training programmes and that increased resilience is also linked to an improvement in wellbeing and reduction in stress (Chitra and Kurunanidhi, 2018). The challenge of comparing workplace programmes efficacy has been highlighted by other research which found that, for example, successful resilience training needs to be theoretically based, with the trainer being critical in the success of the programme (Baker et al., 2021). The Baker et al study, also found that connecting to participants' motivation to change, their values and goals enhanced the impact of the training. In addition, the opportunity for participants to reflect on successes and challenges was found to be key to their development of new resilience skills which in turn strengthens these skills and builds their confidence which supports the skills future use (Baker et al., 2021). These findings resonate with this study's results as all of these key components were either intrinsic

to the intervention and/or emerged from this data analysis. This is helpful as it supports this study's conclusions.

A subtheme that emerged from the qualitative analysis was that participants in the experimental group reported their sleep had improved following the intervention. The decrease in experimental group participant's level of stress indicated by the quantitative Depression, Anxiety and Stress Scale, although only marginally statistically significant, may be linked to the improvement in sleep as increased stress leading to poor sleep has been found by many studies (Kalmbach et al, 2018; Åkerstedt et al, 2012; Martire et al, 2020). The intervention included relaxation techniques, strategies for managing anxiety and worry which referenced improving sleep, plus several techniques specifically for improving sleep (Lee et al, 2018; Eisenbeck et al, 2018). Several participants, in their qualitative responses, mentioned that they were using these techniques. If the intervention is improving sleep then research indicates (Azza et al, 2019; Linton et al., 2015; Torquati et al., 2019) that this would potentially be a factor in the interventions wider positive impact, such as the improvement in overall wellbeing indicated by the significant improved level of the quantitative measure of wellbeing (Warwick Edinburgh Mental Wellbeing Scale). This interpretation is supported by research which indicates that poor sleep has a negative impact on mental health and wellbeing (Short et al, 2019; Reimann et al, 2011; João et al, 2018). Improved sleep therefore could be an important factor in the intervention having an overall positive impact on mental health and wellbeing.

The subtheme which emerged from the qualitative analysis of '*More able to manage emotions'* potentially links to two results from the quantitative research, the first is the Depression, Anxiety and Stress Scale result indicating that the experimental group reported a marginally lower level of stress post intervention. The ability to manage emotions or to use an alternate psychological term '*emotionally regulate'* has been found by Extremera and Rey, 2015 and Prakash et al, 2015 to enable individuals to manage their level of stress more effectively, which not only reduces the level of stress but also its negative impact. The second CD-Risc sub scale '*Regulation of emotion and cognition'* result showed a marginally significant increase in participant's ability to regulate their emotion and cognition. Emotional regulation has been found to be important in maintaining mental health and wellbeing with low levels of emotional regulation being associated with impaired mental health and lower levels of happiness and life satisfaction, i.e. subjective wellbeing (Saxena et al, 2011). The intervention introduced techniques drawn from attention bias modification which based on participant feedback and the quantitative results seem to have been a valuable inclusion in the intervention's toolkit (Beard et al, 2012). This approach enables participants to recognise what they are paying

attention to and shift their attention onto something else if this is helpful, using distraction techniques.

A focus of the intervention was recognising and challenging negative automatic thoughts which were characterised as a Poison Parrot, which the strategies aimed to challenge. The participant's feedback indicated that they found this aspect of the intervention particularly useful and that by utilising these techniques, they experienced a positive change

The qualitative feedback is again echoed by the quantitative results. The CD-Risc Hardiness subscale reported a significant increase in experimental group participant's level of hardiness. Hardiness has been found to be a construct related to resilience (Maddi and Khoshaba, 1994) and has been substantially correlated with measures of higher well-being and lower stress, including lower scores on measures of depression and traumatic stress (Alarcon et al, 2009; Adriaenssens et al, 2015; Eschleman et al., 2010; Matthews et al, 2019). Hardiness has also been found to play a significant role in managing stress, for example by playing a moderating role in the relationship between emotional demands and exhaustion (Preti et al., 2020) as well as being a protective factor for stress and trauma (Eschleman et al., 2010). It is likely that both increased hardiness and resilience are having a positive impact on participants within this study, the significant increase in hardiness, in the CD-Risc subscale being posited to be linked to the overall increase in resilience which is supported by the qualitative feedback that indicated positive change had been achieved. Increased hardiness is also likely to be linked to the reduction in stress (DASS-21) (Fishman, 2012) and the significant increase in Coping (Coping Self-Efficacy Scale) (Mayordomo et al., 2016) and Wellbeing (Tonkin, 2018).

The quantitative data when viewed concurrently with the qualitative data helps build the clear impression that the intervention has achieved a positive impact on participant's wellbeing through a range of factors. The marginal reduction in stress post intervention (DASS-21 Reduced Stress subscale marginally statistically significant improvement) is likely to have a direct impact on wellbeing as well as potentially being a factor in the participant's improved sleep and their reported increased ability to manage their emotions. This positive effect on their emotion management is also reflected in the significant positive change in the level of emotional regulation (CD-RISC Regulation of Emotion and Cognition Subscale marginally statistically significant improvement) which would also potentially be linked to participant's increased ability to recognise and challenge negative thoughts which in turn could also be linked to increase in hardiness indicated by the CD-RISC Hardiness Subscale which reported a statistically significant improvement post intervention.

The statistically significant positive change in Meaningfulness / Purpose (CD-Risc subscale) and Coping / Self-Efficacy (Coping Self-Efficacy Scale) have all be found to be potential factors

in the increase in wellbeing expressed by participants in their qualitative data responses and reported by the Warwick Edinburgh Mental Wellbeing Scale. It is noteworthy that the specific mix of factors that may have collectively resulted in the positive outcomes reported by the participants will be individual to each participant. Therefore, while it is useful to explore the potential links between the study's data it is, as when reviewing a jigsaw, equally important to consider the whole picture that the data presents, which in this case is an intervention that has for every participant had a positive impact which in itself is a valuable and significant achievement.

Participants described how recognising that techniques / strategies they have used from the intervention and finding out that they were recognised techniques / strategies underpinned by research seemed to have a number of effects. The first was boosting confidence in themselves and their capability to deal with situations / challenges which links with the next subtheme of normalising. Another effect was that it increased their confidence in the intervention as it meant that the strategies being advocated were achievable as they were already using some of them which they knew to be effective.

A focus of the intervention was to explain *'normal'* human reactions including their psychological and physiological basis. This was informed by research indicating the positive impacts on individual's wellbeing of de-medicalising their 'normal' responses to their experiences, emotions, and behaviours (Watson, 2019; Manwell et al, 2015; Maercker et al, 2013). In the '*Benefit of the Learning Process'* section the three sub themes; *'Integrated New Strategies', 'Legitimised Existing Strategies'* and *'Normalised Existing Thoughts / Behaviours'* all indicate that they have a positive impact on confidence. This could potentially link with the quantitative result which indicated an increase in coping, post intervention as studies have reported a link between increased confidence and an increased coping ability (Tarantino et al., 2013; Reeves et al., 2011). Studies have also reported that increased coping ability has been linked to an improvement in wellbeing (Lin et al., 2017; Marroquín et al., 2017) which indicates that this study's findings are consistent with existing research and that the supports the conclusion that collectively the three subthemes under the heading/theme *'Benefit of the Learning Process'* support the study's position that the intervention had a positive effect on participant wellbeing. For each subtheme potential mechanisms, which were likely to contribute to the study's results were found in the literature. This is important as it provides an understanding of not just what impact the intervention achieved but how this was achieved which will inform further iterations of this and possibly other interventions.

The qualitative feedback indicated that participants in the experimental group were using the strategies in a number of different ways beyond the overt target of the technique / strategy. This wider application of the strategies specifically being '*More attuned to others'* and that they

'Shared strategies with others in a range of contexts' which were likely to be linked to the quantitative results which reported a significant increase, post intervention, in both the Coping Self-Efficacy Scale and the Warwick Edinburgh Mental Wellbeing Scale.

The confidence that experimental group participants felt in the strategies and techniques was evident in their ability to recognise when others were experiencing thoughts or emotions that the strategies and techniques fitted. Their depth of understanding was also evident as they related how they had explained to others what they had learnt within the session. The process of teaching others the techniques has been found to enhance their own learning as they are retrieving the information from their memory and practicing the information as they explain it to others (Koh et al., 2018). One of the ways the qualitative results indicated the intervention information was being utilised was by enabling the participants to be more attuned to others. The mechanism for this seems to be that as the intervention provided a greater depth of understanding of their own psychological state which resulted in participants being able to apply this knowledge to others.

Participants in their qualitative responses indicated that they enjoyed the sessions. Their enjoyment may be a factor in their subsequent retention of the session content as research for example Lucardie in 2014 has shown that enjoyment has a positive impact on learning. Participants finding the sessions enjoyable may also be a factor in all the participants attending all of the session, as Wlodkowski in 2017 research indicated that enjoyment increases motivation to learn.

Research indicates that interventions drawing on Cognitive Behaviour Therapy (CBT) were found to be effective in addressing a wide range of factors that negatively impact mental health and wellbeing such as anxiety (Carpenter et al, 2018); depressive symptoms (Seligman et al., 2007); stress (Joyce et al, 2016); improving resilience (Joyce et al, 2018) (Foster et al 2018). Although CBT based interventions undoubtedly have a wide research base, other interventions that draw on a wider psychological therapy, models and theories have also been found to be effective for; anxiety (Baardseth et al, 2013; Tolin 2010); depressive symptoms (Hetrick et al., 2016) and improving resilience (Joyce et al, 2018).

In addition to the content of the intervention, research indicates that the trainer was likely to be an important factor in the intervention's success, for example the quality of psychoeducation delivery has been identified by Donker et al, (2009) to be important in its level of effectiveness. While research such as Wilkinson et al, (2017) and Lai et al (2017) indicate that the trainer's style and knowledge is a key factor in the success of an intervention, a position also indicated by this study's participant feedback. The relationship built between the trainer and the participants could be viewed as similar to a therapeutic relationship which

is a key factor in the success of psychotherapy (Ardito and Rabellino, 2011). This is likely to be an important aspect of the programme as this would have created the safe space that enabled participants to explore challenging topics and share supportively, which was a consistent aspect of their feedback, all of which would develop group cohesion (Schnur and Montgomery, 2010).

Implications of Findings

For employees this study indicates that investing time in taking part in this intervention and then using the strategies and techniques that are most relevant to them could have a positive impact on their mental health and wellbeing. The intervention also serves to promote engaging with your own mental state with the aim of being more attuned to your own psychological health and wellbeing in order to be able to apply strategies proactively. The pilot study results indicate that this increased level of self-knowledge was appreciated by participants and was being used in conjunction with the techniques to achieve a positive impact on mental health and wellbeing as indicated by the quantitative measure results on resilience (CD-RISC), coping (Coping Self-Efficacy Scale), and wellbeing (WEMWBS).

The study's intervention enables organisation to invest in protecting and enhancing their employee's mental health and wellbeing through funding the intervention delivery and the cost of releasing staff to participate. The intervention does not negate the organisations responsibility to reduce the negative impacts on their employees of workplace stress. What this intervention intends to do is to add an additional option to the range of training that organisations routinely invest in to develop and safeguard their staff. This intervention goal is to develop employee's mental health and wellbeing knowledge which they can then apply in their workplace, through the provision of its toolkit of techniques and strategies. The intervention also encourages an understanding and normalisation of mental health issues with the aim of encouraging participants to carry on these conversations and the sharing of what they have learnt in their workplace as this pilot study's participants have.

This intervention builds on the rich tradition of Counselling Psychology in the workplace, by creating a mix of strategies and techniques informed by an integrative, humanistic, person centred and pluralist approach. The study results indicate that an integrative approach which draws on a range of theories and models and recognises and values the impact of the relationships within the group can be effective. The focus of the intervention was to build resilience, increase coping skills and increase internal assertiveness (management of negative automatic thoughts) integratively which contrasts with other interventions targeting these areas which were based solely on CBT techniques (Joyce et al, 2016 Stallard et al, 2013; Shochet and Ham, 2004; Brunwasser et al., 2009). While the Counselling Psychology

integrative approach to psychotherapy has engendered a wide range of supporting research (Zarbo et al., 2016; Norcross and Goldfried, 2005; Castonguay et al., 2015), this intervention adds supports to the use of the Counselling Psychology integrative approach to workplace mental health and wellbeing training as it is the approach rather than the content that makes this intervention so successful. This study also indicates how well-suited Counselling Psychologists are to delivering workplace interventions as their approach to groups, their counselling skills and their depth and breadth of psychology knowledge is recognised and appreciated by participants which based on this study results in an increase in the intervention's efficacy.

Limitations

The main limitations of the study were the small sample size, online delivery and the impact of Covid-19 on the study.

This study's small sample size means that conclusions drawn from the outcomes have to be treated with caution as they may not be representative. Nevertheless, the results indicate that the pilot intervention has achieved significant success, albeit on a small scale and that a further large-scale study would be warranted to further test the intervention's efficacy.

The study was not initially designed to test an online intervention, however, due to the Covid-19 pandemic; the intervention was adapted to be delivered online. This change meant that the method of delivery could potentially have limited the efficacy of the intervention and has meant that how the intervention performs when delivered face to face has not been tested

The participants in the current study completed all aspects of this study during the Covid-19 pandemic, throughout the study period varied. Public Health Wales data indicates that the Welsh population's wellbeing fluctuated during the pandemic and that the study's data collection phases were during periods of high anxiety within the Welsh population which makes the study timely but also subject to external / confounding variables (Bryman, 2012). For the study's conclusions this means that it is not possible to know what impact on the study results, either positive or negative, the background of the Covid-19 pandemic has had.

Conclusion

The triangulation of the quantitative and qualitative study results supports the conclusion that the intervention had a positive impact on the participant's mental health and wellbeing. This means that based on this study's results the research question *'What impact does the Mental Health and Wellbeing Toolkit programme delivered online have on employee mental health and wellbeing?'* can be answered as *'A very positive impact'.*

A wide range of positive impacts were found, from increasing resilience, hardiness and coping/self-efficacy to improving wellbeing, sleep and reducing stress. The participant's feedback also provided a strong indication that the *'toolkit'* approach of the intervention was effective as while each participant shared the same learning experience, each developed their own individual mix of the techniques which they felt best suited their needs. Participants described how they benefitted personally from the intervention plus there was evidence, that having taken on board the range of techniques, they shared these, as they felt appropriate, with colleagues, family and friends. This is important for future iterations of the programme, as it is a strong indication that the wide range of techniques should be retained, as this was a factor in enabling the intervention to have a wider reach as participants were utilising the toolkit of techniques for their own and others benefit.

While the study has limitations for example its small sample size, it has been successful as a pilot programme in enabling an initial and tentative conclusion on the intervention's efficacy to be drawn. Following this study an additional indicator that intervention participants felt positively about the intervention and valued the strategies and techniques that they gained, was that based on their feedback to their respective organisations both participating organisations enrolled additional staff onto the programme. This pattern of referral has continued resulting, as the programmes positive reputation grew, with hundreds of people having now completed the intervention. The feedback from these participants, in these post study programmes concurred with this study's conclusion that the intervention has a positive impact on mental health and wellbeing.

An intervention which this initial pilot study indicates resulted in a statistically significant improvement on a range of factors which research has indicated as being linked to employees being less negatively affected by stress and more resistant to anxiety and depression for example coping, resilience and hardiness would be likely to be welcomed (Lazarus and Folkman, 1984; Windle, 2011 p152; Farber and Rosendahl, 2018; Maddi and Khoshaba, 1994). Particularly as the government's own figures, through the Health and Safety Executives research, indicate the significant cost to the UK of stress, anxiety and depression for example 17.9 million working days lost in 2019/20 (HSE, 2020) which means that an intervention that could potentially improve and/or protect employee's mental health and wellbeing would likely be of interest.

This intervention may also be welcomed as it provides strategies and techniques proactively with the intent of enabling employees to not only enhance their mental health and wellbeing but protect it from the impacts of stress for example, through increasing their resilience and coping. This intervention may be particularly well timed as following the Covid-19 pandemic there is an increase in workplace mental health issues for example workplace anxiety (Public

Health England, 2020) which would potentially indicate that the financial investment in this intervention would result in a positive return on investment. With the UK workforce facing significant challenges in the last few years and existing mental health services struggling to cope with demand (Senedd Research, 2021). Based on this study's results and the already significant uptake (over 250 participants by December 2021) of the intervention by a range of organisations, a Counselling Psychology informed intervention that provides individuals with a toolkit of strategies and techniques to proactively protect and enhance their mental health and wellbeing provides a welcome addition to available workplace mental health and wellbeing support.

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