Integrating Mind and Body: The Lived Experience of Improving Psychological Wellbeing Through Physical Activity

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Acknowledgments

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Abstract

The beneficial effects of physical activity (PA) on mental health are well documented. However, its use within mental health treatment appears to be suboptimal. Some suggest that this might be due to practitioners' insufficient knowledge of the mechanisms underpinning the PA and mental health relationship. Using Interpretative Phenomenological Analysis, this study set out to develop a more in-depth and contextualised understanding of the lived experience of improving psychological wellbeing through PA. It was hoped that, in comparison to previous quantitative research, this study's qualitative findings might more readily translate into the counselling psychology field and wider clinical practice. Eight participants were recruited and underwent semi-structured interviews. Analysis of their transcripts led to three Group Experiential Themes (GETs): 'Physical Activity Activates an Embodied Awareness', 'Physical Activity is a Reliable Resource for Managing How One Feels', and 'Physical Activity Facilitates Enriching Experiences that also Improves Wellbeing'. These GETs and their respective subthemes were discussed in relation to the existing literature, and their relevance to counselling psychology has been considered. Possible implications for clinical practice have also been explored, and the more active inclusion of PA as part of routine mental health care has subsequently been encouraged.

Preface

This preface will introduce the three sections of this doctoral portfolio, which consists of a research study, a combined client study/process report, and a publishable paper. Then, the common thread between these three sections – the mind-body connection – will be considered.

1 An Introduction to the Portfolio

Section A consists of a research study titled, *'What is the Lived Experience of Improving Psychological Wellbeing Through Physical Activity?'*. This study sets out to explore the lived experience of improving psychological wellbeing through the use of physical activity (PA). By using Interpretative Phenomenological Analysis (IPA), the aim of this research is to offer a more in-depth and contextualised understanding of the PA and mental health relationship so that PA might become more readily utilised within clinical practice and the counselling psychology field.

Section B consists of a combined case study and process report titled, *'Working with Psychological Vulnerability in Brief Psychodynamic Therapy and Linking Theory with Practice'*. This section demonstrates a piece of brief psychodynamic therapy with a man who presented with low mood, anxiety and somatic symptoms in the form of chronic cluster headaches. I found this case particularly thought provoking in terms of linking psychoanalytic theory with practice, and when considering defences against psychic pain and psychological vulnerability. In addition, this piece of work involved the careful navigation of somatic, as well as psychological, symptoms, enlightening me on the interlinking worlds between psychological and physical pain.

Section C consists of a publishable paper titled, *''Enforced mindfulness' as a potential new mechanism underpinning the physical activity and mental health relationship: qualitative findings and implications for clinical practice.'* This paper presents a seemingly important and novel finding from the original research study. It suggests that 'enforced mindfulness' might be a key mechanism underpinning the PA and mental health relationship and builds upon pre-existing theories. I intend to submit this paper to the *'Mental Health and Physical Activity'* journal. This is because, in line with the journal's aims, this paper hopes to advance our understanding of the relationship between mental health and PA and to provide a useful resource for professionals working within the field of mental health. With this in mind, possible implications for clinical practice are clearly outlined in this paper with the hope that the findings can then be more readily applied to clinical practice.

2 The Mind-Body Connection

Whilst the three sections of this portfolio are distinct pieces of work, uniting them is the concept of the mind-body connection. My interest in the connection between mind and body is longstanding. As an avid sportswoman, PA and physical health have always been important aspects of my life, and the connection that they have with my own psychological wellbeing is something that I have, over the years, become progressively aware of. However, upon reflection, I would say that my more academic and clinical interest in the mind-body connection truly came into fruition as I completed my MSc in Forensic Psychology in 2019. During this masters, I began to realize that whilst I appreciated the importance of risk assessment, and found the study of psychopathology interesting, I was most strongly drawn towards cases such as that of John McAvoy – a former criminal who turned around his life behind bars by using the power of sport and exercise to get out and reach his full potential (McAvoy & Turley, 2016). This inspiring story not only strengthened my belief that there is an inherent potential for growth in every human being, but also strengthened my curiosity about the connection between the mind and body, and with that, the connection between psychological wellbeing

and the use of PA. I soon realised that these interests and beliefs most closely aligned with the values of counselling psychology, and with that I decided to pursue this doctorate and this particular area of research.

The mind-body connection, perhaps unsurprisingly, shines through as an important part of participants' experiences in the research study presented in Section A. Perhaps most notably, participants describe fostering a present moment awareness of the activity at hand and often, therefore, their physical bodies. Importantly, it seems that this present and often bodily awareness enables participants to disengage from problematic thoughts that could in turn have a detrimental effect on their wellbeing. As further discussed in Section A, it seems that, in part, the beneficial effects of PA might be driven by the opportunity to readily shift one's attention between the body and the mind. It is, in fact, this experience of an embodied mindfulness that forms the basis of the publishable paper in Section C.

The combined case study and process report in Section B also speaks to the mind-body connection, albeit in slightly different ways. Perhaps most notably, whilst formulating the client's difficulties, I consider that as a result of his early environmental failures, he might have become overly reliant on dealing with disturbing affect in a preverbal fashion via his body (McDougall, 1989). In other words, I suggest that his somatic symptoms might, in part, be a physical or bodily expression of his emotions that he had not yet put into words. Throughout the process report in Section B I also notice how, at times, my own bodily reactions make up an important part of the countertransference, subsequently informing some of my interventions. That is, I am more able to make sense of the emotional experience of my client by attuning to the sensations I feel within my body. I also notice how the client refers to his own emotional experiences as particular feelings within his body. In other words, his feelings do not seem to be just inner mental states, but rather subjective experiences expressed through his physical self. Accordingly, the processes that occur throughout this therapy session also seem to be indicative of the inseparability of the body and the mind.

Taken together, this portfolio appears to highlight the importance of utilising the mind-body connection during mental health treatment in both explicit and more implicit ways. With this, I hope that it manages to convey the importance of considering the physical as well as the emotional, cognitive and behavioural aspects of our clients' experiences as and when we meet with them in therapy. As completing this portfolio comes hand in hand with the nearing end of my trainee counselling psychologist journey, it certainly inspires me to view and work with my clients more holistically as I strive to promote their wellbeing and mental health within my forthcoming qualified roles.

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Section A: Research Study

What is the Lived Experience of Improving Psychological Wellbeing Through Physical Activity?

Chapter 1: Introduction

1.1 Introduction

1.1.1 Overview

The beneficial effects of physical activity (PA) on mental health are well documented. In particular, research has found PA to benefit common mental health difficulties, such as anxiety and depression (e.g., Ensari et al., 2015; Schuch et al., 2016; Kvam et al., 2016; Stubbs et al., 2017; Schuch et al., 2018). However, despite this evidence, research also suggests that PA is not used at a rate that seems congruent with its value within mental health care settings. Some have suggested that this might be due to a lack of consensus and understanding of the psychological mechanisms that underpin the PA and mental health relationship (Hitschfeld, 2011; Vasilj, 2018; Way et al., 2018; Kleeman et al., 2020). This current study aims to explore the lived experience of improving psychological wellbeing through PA in the face of common mental health difficulties. Through this research, it is hoped that a richer, more contextualised understanding of the PA-mental health relationship and the underlying mechanisms at play might emerge. Through developing this type of understanding, one might expect PA to be more readily considered within mental health and counselling psychology settings.

The following chapter begins by considering the research that points towards PA having the ability to benefit psychological wellbeing and improve symptoms of common mental health

difficulties, such as anxiety and depression. It will then explore how and why PA does not seem to be being used to treat these common mental health difficulties at a rate that seems congruent with its value. After suggesting that this might be due to a lack of practitioner knowledge, especially with regards to the psychological mechanisms underlying the beneficial effects, this chapter will provide a critical summary of the research that has explored the various, potential mechanisms at play. A large proportion of the studies in this area of research are quantitative in nature, and this poses a number of limitations and challenges both in general and with regards to the integration of this knowledge into the field of psychology itself. With this in mind, the chapter will turn to look at a handful of qualitative studies that have examined the experience of improving psychological wellbeing through PA. Due to the context and focus of these studies, it will conclude that more research is required in order to develop an even richer, more contextualised understanding of the phenomenon of interest. A lead into the current study will then be provided, and finally, it's relevance to counselling psychology will be explored.

1.1.2 Defining 'Physical Activity'

The World Health Organization (WHO) defines PA as any bodily movement produced by skeletal muscles that requires energy expenditure (WHO, 2022). It refers to all movement including leisure activities, transport to and from places, or as part of a person's work. However, for the purpose of this research, PA will be defined as any *intentional* movement. For example, consciously getting off the tube one stop early to walk a part way home would class as intentional PA. I specify this type of PA as I believe that it will effectively narrow the focus of the research phenomenon, which is important in an Interpretative Phenomenological Analysis (IPA) study. Speaking to this, Smith et al. (2022) warn that addressing breadth, as opposed to depth, in IPA risks the production of a study of lower quality in comparison to those that focus on the particular in more detail. The study will also consider exercise – a more planned, structured and repetitive subset of PA with an objective of improving or maintaining

physical fitness (Caspersen et al., 1985) – as a form of intentional movement. With this in mind, studies that have explored the impact of 'exercise' and/or seemingly intentional 'PA' will be considered throughout this chapter.

1.1.3 Using the Terms 'Mental Health' and 'Psychological Wellbeing' Interchangeably

Throughout this chapter and indeed the entirety of this research thesis, the terms 'mental health', 'psychological wellbeing' and 'wellbeing' will be used interchangeably. This is, in part, in light of the WHO's definition of mental health, which states that it is "…a state of wellbeing that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community" (2022). If mental health is a state of wellbeing, then I suggest that both of these terms can be used to effectively describe the other. In addition, my decision to use these terms interchangeably is a reflection of my own values as a trainee counselling psychologist. Like many other counselling psychologists, I am particularly driven by the concept of wellbeing over psychopathology. With this in mind, my preference to use these terms interchangeably reflects my effort to shift the focus from mental illness to wellbeing in the context of mental health care, and perhaps with that, to promote ways of thinking that are more readily associated with positive psychology (Seligman and Csikszentmihalyi, 2000).

1.2 The Beneficial Effects of Physical Activity

Research provides consistent support for PA interventions reducing symptoms of depression (e.g., Schuch et al., 2016; Kvam et al., 2016; Schuch et al., 2018). In addition, whilst the effects of PA in relation to anxiety have received comparatively less empirical attention to date (Asmundson et al., 2013; Kandola et al., 2018), a meta-analysis conducted by Stubbs et al. (2017) found that PA significantly reduced anxiety symptoms with a similar magnitude of common pharmacotherapy. Another meta-analysis conducted by Ensari et al. (2015) also

found that even small bouts of activity can have a small, positive effects on symptoms of state anxiety.

More recently, the COVID-19 pandemic has further heightened people's awareness of the positive effects PA can have on mental health. In March 2020, the WHO declared the COVID-19 outbreak and, in the face of a global pandemic, lockdowns were imposed across the globe. Whilst deemed effective in containing the viral outbreak at the time, the quarantines have since been associated with undesirable effects on health and wellbeing due to the alterations in social habits – such as periods of prolonged self-isolation – and physical inactivity. For example, some recent systematic reviews have found that there was a decrease in PA and an increase in sedentary behaviours during the respective lockdowns across several populations (e.g., Stockwell et al., 2021; Wunsch et al., 2022). Of particular interest for this study, research has also associated these reductions in PA with the worsening of psychological wellbeing during the pandemic (e.g., Maugeri et al., 2020), whilst others have suggested that those who exercised regularly were able to maintain or improve their psychological wellbeing and show less symptoms of anxiety and depression (e.g., Alsharji, 2020; Violant-Holz et al., 2020; Ai et al., 2021; Wolf et al., 2021). To note, however, whilst these studies do seem to suggest that PA can be protective of, and beneficial for, psychological wellbeing during a particularly challenging time of unforeseen adversity, they did rely on self-report measures and were primarily cross-sectional in nature. With this in mind, conclusions cannot yet be drawn about the longer-term beneficial effects of PA in relation to the COVID-19 pandemic.

Also to note, mental health difficulties and disorders have been found to be highly co-morbid with physical health problems, such as diabetes and cardiovascular disease. This has been found to be the case for those suffering with anxiety (e.g., Batelaan et al., 2016), depression (e.g., Hare et al., 2014) and more complex mental illnesses, including schizophrenia and psychotic disorders (e.g., Vancampfort et al., 2015). Given that PA can also have beneficial

effects on physical health conditions, such as those mentioned above, promoting the use of PA does seem to have dual beneficial effects on the health outcomes of those struggling with mental health difficulties (Czosnek et al., 2019). In other words, the perceived benefits of PA for people with mental health difficulties seems to extend beyond the treatment of their mental health symptoms (Stubbs et al., 2017).

1.3 The Use of Physical Activity within Mental Healthcare

When considering this collective body of evidence supporting the beneficial effects of PA, it is perhaps unsurprising that PA has become routinely promoted within mental health charities and that, further still, the beneficial effects of PA have been the foundations upon which certain charities, such as Sport in Mind, have been founded upon. In addition, the National Institute for Clinical Excellence (NICE) guidelines recommends PA as an intervention for people with common mental health problems (NICE, 2011) and mild to moderate depression (NICE, 2022). Furthermore, in March 2022, the Office for Health Improvement and Disparities (OHID) and Health Education England's 'e-Learning for Healthcare' developed a guide that intended to promote PA as part of the professional practice of all healthcare workers across the UK (OHID, 2022). Whilst this guide outlines the physical health benefits of PA, it also highlights the beneficial effects it has on common mental health difficulties.

However, despite these recommendations, the actual use of PA within mental healthcare seems disappointing. Two (now slightly dated) reviews conducted by Daley (2002) and Callaghan (2004) suggested that PA was not being used to treat mental health difficulties at a rate that is congruent with its value. Whilst an up-to-date review does seem to be needed Czosnek et al. (2019) more recently wrote that, despite the evidence-base moving to a stage where government and non-government organisations are endorsing the role of PA in mental health treatment, its widespread uptake is, unfortunately, sub-optimal.

Importantly, some research has set out to uncover the barriers affecting the use of PA as a mental health intervention, and several factors have been considered. As one example, Way et al. (2018) adopted a qualitative methodology to investigate the self-reported barriers of prescribing exercise for mental health in a group of mental health professionals, including psychologists, social workers, mental health nurses and support workers. Amongst six higher-order themes, Way et al. found that a lack of practitioner knowledge, and training, served as a barrier to its implementation. Other research studies, including those conducted by Hitschfeld (2011), Vasilj (2018) and Kleeman et al. (2020), have also found that practitioners' insufficient knowledge about the effects of PA stood as a prominent barrier to addressing exercise in psychotherapy and using it as part of mental health treatment. In a counselling psychology doctoral thesis titled, "Counselling Psychologists' Experiences of Working with Exercise in Therapy: a qualitative study", Gordon (2014) also found that a lack of competence and specific guidance regarding the knowledge of PA limited counselling psychologists' use of PA within their therapeutic practice.

This apparent lack of knowledge or understanding shared amongst mental health practitioners, including counselling psychologists, is perhaps unsurprising given that other research has suggested that the mechanisms underpinning the positive relationship between PA and mental health remain unclear (Harvey et al., 2010; Kandola et al., 2019). With this in mind, one suggests that developing a better understanding of the psychological mechanisms underpinning the beneficial effects of PA could promote its use as an intervention or as an adjunct to more conventional mental health treatment and psychotherapy.

In the interest of providing a comprehensive overview of the PA and mental health literature, this chapter will now provide a brief summary of the proposed biological mechanisms thought to underpin the beneficial effects of PA. Then, given that this research is placed within the field of counselling psychology, it will go on to provide a more extensive review of the literature that

has examined several psychological mechanisms that might support the PA and mental health relationship.

1.4 Literature Review

1.4.1 Literature Search Strategy

In order to identify the most relevant literature for this literature review, the electronic databases PsychInfo, PsycBooks, PsycArticles and Google Scholar were searched. The relevant literature was identified through different combinations of various keywords including 'depression', 'anxiety', 'mental health', 'psychological wellbeing or wellbeing' 'psychological mechanisms' and 'physical activity or exercise'. The abstracts of articles appearing in the search results were read in order to determine their relevance to this review. Any irrelevant work was thereafter excluded. In order to ensure a sufficiently broad amount of relevant research was reviewed, the reference and citations lists of relevant articles were also examined. As and when I came across particular areas of research that seemed important (e.g., research relating to a specific psychological mechanism), I conducted additional literature searches with more specific or relevant terminology. To note, literature was limited to that published in the English language.

1.4.2 Biological Mechanisms: A Brief Summary

When considering the biological mechanisms underpinning the beneficial effects of PA, research has suggested that PA might elicit a wide range of biological changes in the brain and therefore influence psychological wellbeing through multiple physiological pathways. The seemingly most extensively researched mechanisms will now be outlined below.

Firstly, some research considering the antidepressant and anxiolytic effects of PA suggests that it might stimulate many of the neuroplastic mechanisms that can be associated with growth in several brain regions that are thought to be effected in those with depression (Gujral et al., 2017) and anxiety (Kandola et al., 2016). In one review, Gujral et al. (2017) found that PA has been linked to an increase in gray matter volume in the hippocampus, the pre-frontal cortex (PFC) and the anterior cingulate cortex (ACC) in multiple studies. All of these areas have been found to be of reduced volume in those suffering with depression. This led Gujral et al. to speculate that it is partially through these neural volumetric pathways that exercise exerts its antidepressant effects. However, the authors of this study also acknowledged that the specific mechanisms through which PA might lead to these volumetric reductions seem to remain uncertain.

Other research points towards the influence of PA on the neuroendocrine system and the hypothalamic-pituitary-adrenal (HPA) axis, which is responsible for mediating physiological responses to stress and anxiety (Kandola et al. 2018). The influence of changes in the HPA-axis has also been suggested in those with depression. For example, in one pilot study, Foley et al. (2008) randomly assigned depressed participants to either a 12-week aerobic exercise or a stretching program. Both groups significantly decreased in depression severity after 12-weeks, and the cortisol awakening response (one measure of HPA axis function) was also found to have decreased in the aerobic group. However, these changes in cortisol were non-significant, and these findings have not been replicated by subsequent, larger studies (e.g., Krogh et al., 2010). This suggests that further research exploring the impact of PA on the HPA axis is required.

Changes in the opioid system have also been suggested to benefit wellbeing during PA. Perhaps most notably the ‘endorphin hypothesis’ posits that experiences such as mood elevation and reduced anxiety following PA is due to the release and bind of endorphins to their receptors sites in the brain (Anderson & Shivakumar, 2013). Some research suggests

that it is this increase in opioid activity in the central and peripheral nervous system that might induce a euphoric state and reduce pain (e.g., Harber & Sutton, 1984). However, others argue that, whilst plausible, the hypothesis that endorphins are responsible for changes in euphoria and other moods has been perpetuated with little evidence (Dishman & O'Connor, 2009) and therefore more research into this specific area of exercise neurobiology seems required.

Finally, some research has also considered that PA might improve symptoms of common mental health difficulties through the regulation of the inflammatory system. This is largely due to the converging evidence that exercise has anti-inflammatory effects, and that inflammation is thought to play a role in the pathophysiology of depression (Kandola et al., 2019) and anxiety (Moylan et al., 2013; Kandola et al., 2018). In addition, Lavebratt et al. (2017) conducted a study that examined whether exercise was associated with reduction in serum samples of pro-inflammatory interleukin-6 (IL-6) and depression symptoms. Following a 12-week PA group, improvements in depression symptom severity were linearly associated with reduction in serum IL-6 levels. However, other research measuring long-term changes in inflammatory markers have found that PA does not produce significant changes in inflammatory makers in people with depression (e.g., Hennings et al., 2013). Given these mixed findings, it does seem that, again, further research is required.

1.4.3 Psychological Mechanisms

The psychological mechanisms put forward by existing research will now be considered. Firstly, research has suggested that improvements in positive and negative affect might mediate the relationship between PA and mental health. Positive affect encompasses emotions such as happiness, interest, excitement and joy, whilst negative affect includes feelings such as distress, tension, anger, fear and shame (Pasco et al., 2011). Exploring the relationship between these two constructs and PA, Pickett et al. (2012) conducted multiple mediation analyses in order to assess the relationship between PA and a number of different

mechanisms including positive and negative affect in 164 participants experiencing depression or low mood. Participants completed a one-off postal questionnaire containing measures of PA, depression and other potential mediators and covariate variables. Importantly, analysis showed that PA might be beneficial for depression as it increases positive affect and reduces negative affect. These findings are similar to those found in a slightly earlier research study conducted by White et al. (2009). In this study it was found that participants experienced a reduction in depression and improvements in positive and negative affect following an eight-week period of increased PA. However, in this study it was also noted that at week one and week three the effects sizes for change in positive affect were larger than those for negative affect (and other mechanisms). This suggests that PA might be particularly effective at enhancing positive affect. This emphasis on the relationship between positive, as opposed to negative, affect and PA is supported by other research. For example, Pasco et al. (2011) found that higher positive affect, only, was associated with higher levels of habitual PA. Given that low positive affect and loss of pleasure are specific and common characteristics of depression (White et al. 2009), it might be that PA is particularly effective in reducing common mental health symptoms, such as low mood, through the facilitation of positive affect alone. Unfortunately, however, research exploring the mediating role between positive/negative affect and other common mental health difficulties, such as anxiety, does appear to be lacking. With this in mind, it seems that further exploration of these mechanisms is required.

Research has also pointed towards the role of social support in the antidepressant effects of PA. Social support can be defined as, "…the assistance that social relationships and transactions provide" (Kandola et al., 2019, p.530). Through providing opportunities for social interactions, PA is thought to enhance social support, which in turn is thought to create a buffer against depressive symptomology (Ozbay et al., 2007; Kandola et al., 2019). Considering the role of social support in the beneficial effects of PA, Miller et al. (2019) employed a cross-sectional analysis of questionnaire data to investigate which exercise-related variables

predicted depressive symptoms in a sample of community-dwelling older adults. Interestingly, they found that when considering exercise behaviour, exercise-induced mood, exercise self-efficacy and social support, social support was the strongest predictor of depressive symptomology. Whilst no causal relationships can be assumed from these findings, and whilst the study utilized a sample of older adults only, this study provides preliminary support for the role that social support may have in relation to the antidepressant effects of PA.

Other research has suggested that PA activity serves as a distraction from worries, anxiety provoking and depressive thoughts. This was initially suggested by Bahrke and Morgan (1978) who conducted a study comparing the influence of PA and meditation on state anxiety, as measured using the Spielberger Scale. Participants in the exercise group exercised for 20 minutes at 70 percent of their maximal heart rate and those in the meditation group practised Benson's Relaxation Response for 20 minutes. A control group rested quietly for the same period of time. The researchers found a significant decrease in anxiety across all groups, and suggested that PA, as well as other activities, offered a beneficial time-out or distraction from anxieties, stress and feelings of depression. This suggestion has since been referred to as "the time-out hypothesis". Testing this hypothesis further, Breus and O'Connor (1998) examined differences in state anxiety in high trait anxious women following four different conditions – exercise only, exercise whilst studying (or in other words, exercise whilst a time-out was prevented), studying only and a resting control condition. Interestingly, they found that state anxiety significantly reduced following the exercise only condition, only. In light of this, the researchers suggested that the anxiolytic effects of exercise were essentially blocked by studying whilst exercising. This finding supports the hypothesis that PA reduces state anxiety because it provides individuals with a "time out" from daily stresses or worries. Craft (2005) also conducted a study to test whether a nine-week exercise program was associated with an increase in the use of distraction in women with clinical depression. Importantly, this utility of distraction in depression is based on response style theory (Nolen-Hoeksema, 1991), which

suggests that individuals can respond to feelings of depression in two different ways – with rumination or distraction. Those who respond with rumination tend to passively and repeatedly focus on one's negative feelings, whilst those who respond with distraction tend to busy themselves in an attempt to focus on something other than their depressed mood. Whilst rumination is thought to have a negative influence on the course of depression, distraction appears to be associated with more positive outcomes. However, in their study, Craft (2005) did not find that participants demonstrated a higher use of distraction techniques at week nine. Whilst this raises questions about the role of distraction in the beneficial effects of PA, it is possible that distraction and changes in response style were not adequately measured or identified by the self-report measure used in this study. This suggests that further research regarding the role of distraction is required.

Research has also suggested that PA benefits wellbeing through reducing anxiety sensitivity, which can be defined as the tendency to "…misinterpret and catastrophize anxiety-related sensations based on the belief that they will result in disastrous physical, psychological, and/or social outcomes" (Anderson & Shivakuma, 2013, p.2). By exposing an individual to a feared anxiety-related sensation, such as a rapid heartbeat, PA is thought to increase tolerance for similar sensations in the context of anxiety symptoms (Ströhle et al., 2009; Ofosu et el., 2023). First exploring this concept, Broman-Fulks et al. (2004) assigned 54 physically inactive, anxiety sensitive participants to either a high or low intensity aerobic exercise condition. Each group participated in six 20-minute walking or running treadmill sessions over a period of two weeks. Using self-ratings of anxiety sensitivity, it was found that, whilst both high and low intensity exercise reduced anxiety sensitivity, the high intensity group reported significantly less fear of anxiety-related bodily sensations at post-intervention in comparison to the low intensity group. In addition, more high-intensity participants experienced a decrease in anxiety sensitivity than those in the low intensity group. This suggests that higher intensity exercise might be effective in reducing fear of physiological arousal in highly anxiety sensitive individuals.

In a similar study, Smits et al. (2008) randomly assigned 60 participants with elevated levels of anxiety sensitivity to either a two-week exercise intervention, a two-week exercise plus cognitive restructuring intervention or a waitlist control group. They found that both the exercise interventions led to clinically significant changes in anxiety sensitivity that were superior to the waitlist condition. In addition, mediation analyses found that reducing anxiety sensitivity lead to significant improvements in levels of anxiety and depressive mood. This led the authors to suggest that PA may exert some of its beneficial effects through an anxiety sensitivity mechanism that is similar to interoceptive exposure – the systemic exposure of individuals to feared sensations of anxiety – which can be used in cognitive behavioural therapy (CBT).

Building on this, more recently Sabourin et al. (2016) conducted a study that examined the effects of a brief group-based CBT intervention, with running as an introspective exposure (IE) component, on anxiety sensitivity levels. The CBT/IE group was compared to a health education control (HEC) group that comprised of a group discussion on health, including exercise, diet and sleep. Based on self-report questionnaire data, participants with high anxiety sensitivity experienced a linear decrease in anxiety sensitivity in the CBT/IE condition and this decrease was maintained at a 14-week follow up. However, in comparison, the interventions resulted in few changes in low anxiety sensitive participants. In light of this finding, Sabourin et al. (2016) suggested that the CBT/IE intervention was particularly effective in benefiting those with high fears of cardiorespiratory, running related sensations, such as rapid heartbeat or shortness of breath. This might suggest that the introspective exposure – or in this instance, running – could be the operational mechanism. However, further research is required before any definitive conclusions can be drawn.

Others have suggested that another promising mechanism underlying the antidepressant effects of PA is behavioural activation. This concept is grounded in behavioural theory and

asserts that a loss of meaningful and rewarding activity can be associated with the onset of depression (Veale, 2008). With this in mind, interventions that target behavioural activation tend to involve fostering re-engagement with personally rewarding and meaningful experiences (Turner et al., 2019) and increase opportunities for positive reinforcement (Thomas et al., 2020). Exploring this mechanism, Parker et al. (2016) compared the effectiveness of a PA intervention using a behavioural activation approach with a lifestyle psychoeducation intervention in reducing depression and anxiety symptoms in help seeking young people between 15 and 25 years old. Based on the Beck Depression Inventory-II scores, the findings showed that the PA group improved significantly more from baseline than the psychoeducation group. A significantly greater number of young people in the PA intervention also experienced changes in scores that reflected remission of clinical levels of depressive symptomatology.

Slightly more recently, Turner et al. (2019) also conducted a study to examine behavioural activation as a mechanism mediating the effect of a PA intervention on depressive symptom improvement in a sample of individuals with multiple sclerosis (MS). Some participants were randomly assigned to a telephone counselling and home-based telehealth monitoring condition (TC), which consisted of a 6-month home exercise program with targeted activities and goals. Others were randomly assigned to a self-directed education condition (EC), within which individuals were encouraged to watch a DVD highlighting the benefits of PA and encouraged to develop their own PA program. As hypothesised, analysis showed that those in the TC condition showed significantly lower levels of depression at 6 months in comparison to those in the EC condition. Increases in behavioural activation – as measured by the Activation subscale of the Behavioral Activation for Depression Scale - were also associated with lower depression at 6-months. The indirect or mediating effect of the intervention on depression via change in behavioural activation was also significant, and in the presence of the mediator, the treatment to outcome relationship was attenuated. This study therefore provided preliminary evidence that behavioural activation represents one mechanism through

which PA may improve depression symptoms. However, of course in this instance, these findings are limited to individuals with MS. Given that individuals with MS may experience specific additional issues that make accessing meaningful activity more difficult (including reduced mobility, increased fatigue, pain etc.) it is possible that the benefits of behavioural activation are greater in this group in comparison to the general population. With this in mind, it seems that research exploring this mechanism in other groups is required.

Research has also suggested that PA may have potential to benefit mental health through the enhancement of self-esteem (McAuley et al.,1997). Self-esteem can broadly be defined as "…the favourable views one holds of one's self…" (McAuley et al., 1997, p. 68). Low self-esteem and a poor self-concept are often apparent in individuals struggling with depression (White et al., 2009) and anxiety disorders (Kandola et al., 2018). With this in mind, it is perhaps unsurprising that theoretical models, such as the Exercise and Self-Esteem Model (EXSEM) (Sonstroem & Morgan, 1989), suggest that increases in self-esteem are important for the mood enhancing effects of PA (Kandola et al., 2019). More specifically, the EXSEM model proposes that physical self-perceptions (such as stamina, muscular strength, attractiveness of body) can be improved through PA and generalize to improvements in physical self-worth. In turn, physical self-worth is related to global self-esteem, and increased global self-esteem can lead to a reduction in depression and anxiety symptoms.

This hierarchical model has been supported by existing research in several different populations and contexts (e.g., Van de Vliet et al., 2002; Knapen et al., 2005; Gothe et al., 2021). For example, Knapen et al. (2005) conducted a study that examined changes in self-reported physical self-concept, global self-esteem, depression, and anxiety following two different psychomotor therapy programs. Participants, who were a part of a sample of nonpsychotic psychiatric inpatients, were randomly assigned to one of two kinds of psychomotor therapies. One intervention was a 16-week 'psychomotor fitness program', which consisted of aerobic exercise and weight training. The other 'general program of psychomotor

therapy' intervention consisted of different forms of physical exercise and progressive relaxation training. After completing the programs, both groups developed a significantly more positive attitude towards their physical self, showed a significant increase in global self-esteem and a significant decrease in depression and anxiety severity. This corroborates with the Exercise and Self-Esteem model. However, it must be highlighted that no control group was included within this study, and all participants were a part of multidisciplinary treatment programs. We cannot, therefore, be certain that either of the exercise programs caused the observed changes in mental health.

Including a control group, however, Legrand (2014) investigated the effects of a seven-week long exercise program on physical self-concept, global self-esteem, and depression in women from low socioeconomic background with elevated depressive symptoms. Significant decreases in self-reported depression were observed between baseline and the end of the intervention on the exercise group. In comparison, no change was observed in the waitlist controls. Furthermore, significant improvements in physical self-esteem and self-perceived physical condition preceded any reductions in depressive symptoms. As temporal precedence has been identified as one criterion for establishing a factor as a mediator of change (Barker et al., 2002), the authors identified physical self-esteem and self-perceived physical condition as plausible mechanisms driving the effects of PA on depression.

Finally, research has also indicated that PA might influence psychological wellbeing through self-efficacy (McAuley et al., 2000). Self-efficacy refers to "…the belief that one possesses the necessary skills to complete a task as well as the confidence that the task can actually be completed with the desired outcome obtained" (Craft, 2005, p. 153). Diminished self-efficacy manifests itself as learned helplessness in depression (Ryan, 2008; APA, 1994) and perceived coping deficits in anxiety (DeBoer et al., 2012). Thus, PA may be a successful intervention and alleviate symptoms of depression and anxiety by rebuilding a sense of self-efficacy through offering mastery experiences that, according to Bandura (1997), teach the individual

to self-monitor behaviours, set goals, and utilize social support (Craft, 2005; Anderson & Shivakumar, 2013).

In one early study, Marquez et al. (2002) manipulated self-efficacy in low active women by presenting computer-generated false feedback after a graded exercise test. Participants then returned several days later for a second exercise bout. The researchers found that those in high efficacy condition experienced less anxiety than those in the low efficacy condition following the graded exercise test and before and after the second bout of exercise. Bodin and Martinsen (2004) also conducted a study that compared changes in mood following two different types of exercise sessions – one with high and stable self-efficacy (e.g., stationary bike exercise) and one with low but increasing self-efficacy (e.g., martial arts). During the martial arts condition, negative affect and state anxiety decreased whilst self-reported self-efficacy increased. In comparison, during the stationary bike exercise, no statistically significant changes were found. These findings suggest that increasing self-efficacy is important for changes in affect to occur.

Craft (2005) also examined self-efficacy and depressive symptoms throughout a nine-week exercise intervention in a group of twenty-one women diagnosed with clinical depression. Ten women chose to participate in the control group and eleven women chose to participate in the exercise intervention group, which consisted of three days per week of moderate intensity PA. Within the exercise group, the researchers attempted to facilitate a mastery experience by enabling participants to gradually take a more active role in the process as they progressed through the nine-week programme. During the final three weeks of the programme, the participants were responsible for the entire exercise session. The findings indicated that the women in the exercise group had significantly higher self-efficacy by the third week of the intervention in comparison to controls, and self-efficacy demonstrated a strong, negative relationship with depression. That is, higher levels of self-efficacy were associated with lower levels of depression. Whilst this does not necessary provide definitive, causal evidence that

self-efficacy is a psychological mechanism underpinning the beneficial effects of PA, it does suggest that this mechanism warrants further investigation. It must, however, be noted that this study utilised a quasi-experimental design with participants choosing to be in either the control or exercise group. It is therefore possible that the two groups were not equivalent at study entry.

Importantly, however, the role of self-efficacy has been researched and continued to be supported in more recent years. For instance, Haller et al. (2018) conducted a randomized controlled trial that assessed the effectiveness of an individualized 8-week web-based exercise intervention in treating participants with moderate to severe depression. The researchers also assessed for changes in quality of life and self-efficacy. Importantly they found that, in addition to a significant decrease in the severity of depression, the intervention led to a significant increase in self-efficacy. In addition, Pickett et al. (2012) suggested that, based on multiple mediation analyses of self-report questionnaire data, self-efficacy mediates the relationship between PA and depression.

To note, the specific types of self-efficacy that are measured throughout the literature vary. For instance, Pickett et al. (2012) referred to 'scheduling' self-efficacy, which is a type of self-efficacy that can be experienced through self-regulating physical activity behaviours, such as reaching goals, adhering to an exercise program and overcoming barriers (Ryan, 2008). In contrast, Craft (2005) specified a 'coping self-efficacy', which is elicited by a sense of being able to self-regulate and control symptoms or mood (e.g., Craft, 2005). Another form of self-efficacy highlighted and distinguished in the literature is 'task self-efficacy', which can be facilitated through learning a new skill (Ryan, 2008).

1.4.4 Shared Methodological Limitations

Whilst much of the research outlined so far does appear to be promising, a few shared methodological limitations are apparent. Firstly, all the studies mentioned above are reliant on self-report questionnaires. Although self-report questionnaires may be reliable and valid from a psychometric point of view, several factors such as social desirability, self-presentation strategies and demand characteristics might be responsible for changes in scores during and post treatment (Knapen et al., 2005). Importantly, it has also been argued that some changes in functioning wouldn't necessarily be reflected in questionnaire scores as they may, for example, lack sensitivity due to their quest for homogenous components (Craft, 2005; Knapen et al., 2005). Furthermore, the studies conducted by Ryan (2008) and Smits et al. (2008) are the only two studies discussed so far that appeared to control for expectancy effects. This is unfortunate given that previous research has found that outcome variables, such as self-esteem, can be inflated by experimentally fostered outcome expectancies (Desharnais et al., 1993; Ryan, 2008). Due to the quantitative nature of all the research discussed so far, it might also be suggested that the studies do not provide sufficient space for theory challenging or development. This is in line with Willig (2022), who wrote, "If all we can do is test existing theories to either reject or retain them, we are unlikely to come across entirely new and unexpected insights in our research practice" (p.6). Instead, qualitative research that adopts an inductive, bottom-up research design could more readily allow for the emergence of new theories or ideas (Willig, 2019). This is because it moves beyond descriptions of observable events, as is seen in quantitative research, and more readily considers what might be lying beneath them.

Therefore, whilst the research discussed so far does provide some support for the hypothesised roles of social support, distraction, behavioural activation, anxiety sensitivity, self-esteem and self-efficacy as potential psychological mechanisms underpinning the beneficial effects of PA, qualitative research could allow for a richer, more contextualised understanding of the PA-mental health relationship to develop. In addition, qualitative research is also not reliant on data derived from self-report questionnaires, nor does it tend to be at risk

of any expectancy effects. However, despite these benefits, qualitative research investigating PA in relation to common mental difficulties seems rare, pointing to a gap in the current literature.

1.4.4 Qualitative Research

Whilst qualitative research examining the PA and mental health relationship is rare, a handful of qualitative studies were identified through a literature search. These will now be considered below.

Firstly, Crone (2007) conducted a qualitative study that investigated a walking project that aimed at improving the quality of life of long-term users of mental health services in the Southwest of England. Four adult participants (two males and two females), who were referred to the program by Primary Care or Secondary Mental Health Services, underwent one-to-one interviews that lasted between twenty and forty-five minutes. The interview transcripts were then analysed using constant comparative analysis and five themes emerged from the data. Under the first theme – "attitudes regarding the project prior to starting" – participants shared feelings of apprehension about the unknown. However, attitudes about the programme prior to starting also seemed to be positive due to it offering a new opportunity. According to Crone, it seemed to give participants something to look forward to, and perhaps presented them with something purposeful to do. In addition, and perhaps of most relevance to this research study, under the fourth theme – "perceived benefits and outcomes of participation" – five benefits experienced by the participants emerged from the data. First, participants experienced enjoyment in relation all aspects of the program, including the travel to the walking destination. It also provided them with opportunities for "socialising" and to experience a sense of unity and admiration for others. Undertaking a purposeful activity also provided the participants with a sense of achievement. However, with regards to the rest of this study's findings, the themes that emerged spoke more to the practicalities and opinions of the walking project (e.g., "factors

affecting participation" and "attitudes and opinion of the project"). Because of this, it seems that future research could build on this study's findings by further considering the particularly phenomenological, lived experiences of PA.

More recently, Cooley et al. (2021) also explored the experiences and perceived outcomes of patients participating in an occupational therapy-led walking group that specifically conducted rural as well as urban walks. A total of 29 participants were recruited from a 'Walk to Wellbeing' group and were outpatients of a UK NHS secondary mental health service. Participants had received various, and sometimes multiple diagnoses, including anxiety and depression. The data was analysed using reflexive thematic analysis. Findings showed that the group seemed to provide participants with an opportunity for behavioural activation and a sense of purpose. Some participants also reported feeling distracted from distressing thoughts and some described feeling increasingly confident within a group. Similar to Crone (2007), the data also suggested that the walking group provided a social anchor for participants, many of whom were otherwise socially isolated. The participants also indicated that they valued a sense of companionship that the walking group provided, and it also gave them the opportunity to develop social skills. A greater interconnectivity between the participants and the natural world was also evident in the study, and this seemed to have a positive impact on mood and anxiety. However, to note, only four participants in this sample underwent one-to-one research interviews, and all other data was collected through diary entries and feedback forms. Whilst still insightful, these methods of data collection are likely to have limited the depth at which the lived experiences of PA could have really been explored. In addition, a significant part of this study's focus was to compare and contrast the impact of urban vs. green spaces and to explore the process through which outcomes transfer from the walking group to the participant's day-to-day lives. Whilst interesting areas of research, arguably these specific findings do not particularly enrich our understanding of the psychological mechanisms underpinning PA.

Crone and Guy (2008) also used qualitative methodology to explore experiences of service users who had successfully participated in strategic sports therapy as part of their treatment. This sports therapy consisted of PA sessions twice weekly and included sessions of badminton, gym, water aerobics and occasional trips to the bowling alley. Eleven service users of a Southwest England Trust were recruited, and they attended one of two focus groups. Transcripts from these focus groups were then analysed to unearth several themes. Under one core theme, “taking part”, participants described their perceived benefits of sport therapy. Some described feelings of accomplishment and wellbeing, whilst others shared that it felt good for their self-esteem because “you are in charge of your own destiny, nobody can do it for you” (p.204). They also expressed feeling mentally positive and more energised with improved mood. Participants also said that sports therapy provided a distraction from the difficulties they had and acted as a method for managing their condition. However, similar to Crone (2007), the other core themes in this study focused on “reasons for participation” and “attitudes and opinions” towards this type of therapy. Because of this, again, a particularly in-depth exploration of the psychological mechanisms underpinning of the benefits of PA itself does still seems to be lacking.

Another qualitative study conducted by Searle et al. (2011) explored patients’ views of using PA as a potential treatment for depression in the context of primary care. The participants recruited were in regular contact with their GP and had either recently started antidepressants or had recently consulted their GP for depression and had met the ICD-10 criteria for depression. Individuals with a history of psychosis, bipolar disorder, and major alcohol or substance abuse were excluded from the study. Thirty-three participants underwent semi-structured interviews that lasted between 30 and 120 minutes. Transcripts were read, discussed and coded by three researchers. Themes were identified within four key areas that were explored during the interview. When exploring how PA helps to manage their depression, participants talked of perceiving an increase in mood enhancing chemicals in the brain, especially those participants who were deemed more active at interview. They also expressed

that PA provided a distraction from negative thoughts and a helpful sense of purpose. Some participants also considered that less-aerobic activities had a relaxing or meditative quality. The rest of this analysis focused on the feasibility of assimilating activity into daily life and comparing PA to other treatments for depression. Again, whilst insightful, this appeared to shift the focus of the qualitative findings to the practicalities of implementing PA as opposed to the subjective, lived experience of this phenomenon.

Wright et al. (2012) conducted an IPA study exploring the lived experiences of PA amongst individuals with Bipolar Disorder. Whilst this study did offer an initial descriptive level content analysis that lead to the identification of some general themes, the more in-depth interrogative analysis of the beneficial effects of PA was of particular relevance to individuals struggling with Bipolar Disorder, only. For instance, the study explored participants' accounts of how PA exerted a prophylactic effect against severe mood swings. Whilst important, details of these lived experiences seem specific to those with Bipolar Disorder as opposed to common mental health difficulties.

Perhaps of most relevance to this current study, Pickett et al. (2017) conducted a grounded theory study that aimed to produce a theoretical account of how PA improved either self-reported or diagnosed depression. The researchers recruited 26 participants, from both within and outside of the NHS, who had experienced depression or low mood. Each participant underwent a semi-structured interview about their experiences of PA. The majority of participants had self-initiated PA during periods of depression or low mood, whilst a few had attended exercise referral schemes or had had healthcare professionals recommend PA. Analysis suggested that PA helped participants by providing them with "a forward movement in life". This theme was underpinned by a sense of engagement that participants felt. Doing something rather than nothing also appeared to foster a sense of achievement. Another theme, "enjoyment", highlighted that enjoying PA is important for improving participants' moods. Key elements of an enjoyable PA experience included how the body felt, having a

purpose, focusing on the present moment and discovering personal abilities. The authors suggested that this concept of enjoyment might indicate that increased positive affect mediates the PA and depression relationship, and that 'enjoyment' and 'reduced anhedonia' might be two important mechanisms responsible for driving change. Analysis also highlighted how participants moved from feeling as though they had to be physically active to wanting to be active. Participants expressed that as they came to realise that PA made them feel good, it become self-reinforcing. This shift in motivation also seemed to be representative of participant managing their depression and ultimately "taking control". The author used this latter insight to support the notion that PA may somewhat improve depressive symptoms through increasing self-efficacy for coping with negative moods.

Out of all of the studies identified through the literature search, this research conducted by Pickett et al. (2017) appears to provide the most in-depth, contextualised exploration of the PA and mental health relationship. However, given the study's motivation to produce a more theorised account of the change process, it seems that there remains a space for qualitative research to explore the subjective, lived experiences of these mechanisms without focusing on identifying and theorising a process through which they lead to change. Secondly, like the majority of PA and mental health research, and like much of the research discussed in this chapter so far, Pickett et al. (2017) considered the experience of PA in relation to depression or low mood, only. Given that depression is more likely to co-occur with anxiety than to occur in isolation (Bond et al., 2020) adopting this focus could be problematic. With this in mind, it seems that future qualitative work should also consider the experience of PA in relation to other commonly experienced mental health difficulties, such as anxiety.

1.4.6 Summary

This literature review has provided an overview of the research that has explored the mechanisms that might underpin the positive PA and mental health relationship. Studies

considering key biological mechanisms were summarised, although findings from the research in this area does appear to be mixed. The body of literature exploring the potential psychological mechanisms underpinning the beneficial effects of PA was then more extensively examined. This pointed towards six key mechanisms, namely social support, distraction, behavioural activity, anxiety sensitivity, self-esteem and self-efficacy. Whilst the findings from this research appear promising, a number of methodological limitations were highlighted. Perhaps most notably, given the predominantly quantitative nature of these studies, they seem to fall short of providing a richer, more contextualised understanding of PA and its impact of psychological wellbeing. Whilst a handful of qualitative studies that have been identified do seem to add depth to our knowledge base of some of these mechanisms, the majority of these studies have been conducted to explore the experience of PA interventions with the intention to contribute to service development. Because of this, I argue that the practical elements of PA interventions were considered at the cost of developing more in-depth, phenomenological accounts of the lived experience of PA. In addition, with the exception of the study conducted by Pickett et al. (2017), all the identified qualitative studies exploring PA in relation to common mental health difficulties used forms of thematic analysis, which in comparison to other phenomenological approaches to research, tends to contribute to a breadth as opposed to a depth in research findings (Spiers & Riley, 2019; Braun & Clarke, 2021).

1.5 The Present Study

1.5.1 Research Question and Aims

With the existing literature and its apparent limitations held in mind, this study now aims to develop a more subjective and in-depth understanding of the lived experience of improving psychological wellbeing through PA in the face of common mental health difficulties. By conducting a study with an IPA methodology, this research hopes to add a more

contextualised understanding of the PA-mental health relationship. Importantly, research approaches that emphasise subjective, idiosyncratic and individually situated experiences – such as IPA – are thought to translate into counselling psychology practice more naturally than other quantitative or positivist approaches. This is because these emphases chime with the humanistic values and principles upon which the counselling psychology field was partially founded (Kasket, 2016). With this in mind, it is hoped that through adding a more subjective and idiosyncratic understanding of PA to the existing body of research, PA might start to become more readily incorporated into the field and practice of counselling psychology and the wider mental health care system as a whole.

This leads to the research question of:

> *What is it like to experience an improvement in psychological wellbeing through physical activity?*

1.5.2 Relevance to Counselling Psychology

Importantly, counselling psychologists have historically tended to focus on the concept of wellbeing over psychopathology (Kasket, 2017). Similarly, they have always been as interested in the promotion of health and wellbeing as they are interested in recovery (Owen, 2010). With this in mind, one might argue that this focus opens up the field to anything that promotes an individual's wellbeing or healthy functioning (Gordon, 2014). Related to this, Caldwell (1997) described healthy functioning as "…a physical as well as emotional, cognitive, and behavioural experience" (p.9), and thus I suggest that physical health, the body and therefore PA could and should be deemed relevant and key to this field.

In addition, I suggest that incorporating PA into the counselling psychology field is in keeping with its philosophical roots in pluralism. Counselling psychology is inherently pluralistic, in the

sense that it offers multiple different ways of practising (Murphy, 2017). By advocating for a pluralistic framework, Counselling Psychologists tend to be open towards and appreciative of the widest possible range of therapeutic understandings and methods. In fact, writing in Murphy's (2017) book, "*Counselling Psychology: A textbook for study and practice",* Hanley et al. (2017) put forward that the pluralistic psychologist is open to the idea that any activity can be therapeutic. Given the empirical evidence suggesting the beneficial effects of PA on psychological wellbeing, I suggest therefore that Counselling Psychologists are in a strong philosophical position to consider its incorporation genuinely and openly into the field. Importantly, through adopting this pluralistic philosophy and hereby offering clients a bespoke approach to psychotherapy and mental health treatment, counselling psychologists are able to readily recognise and celebrate the inevitable diversity of their clients (Cooper & Dryden, 2015).

Considering PA within the field of counselling psychology also seems important when we consider the efficacy of other approaches. That is, whilst traditional interventions, such as pharmacotherapy, psychotherapy, or a combination of both, do provide valuable benefits for the treatment of common mental health disorders, research has found that one third of people with depression (Rush et al., 2006; Kandola et al., 2019) and one third of those with anxiety (Hofmann & Smits, 2008; De Vries et al., 2016; Kandola et al., 2018) do not respond to treatment. Furthermore, pharmacotherapy can cause adverse and unpleasant side-effects (Anderson et al., 2012) and it poses a considerable cost to the National Health Service (NHS) (Daley, 2002). Thus, whilst there is no doubt that traditional interventions will continue to play an important role in the treatment of mental health problems, it does seem necessary for alternative interventions, such as PA, to be more readily considered and better understood within this field.

Finally, I suggest that considering PA and the role it might play within the treatment of common mental health conditions is in keeping with recent calls for the integration of physical and

mental health care and training within the NHS. This is in light of research suggesting that one of the deepest fault-lines in the NHS is the disconnection between mental healthcare and the rest of the system (Naylor et al., 2016; Das et al., 2016). Exploring this need for integration, in 2016 the King's Fund built on findings from the NHS England's *Five Year Forward View for Mental Health* by publishing *"Bringing Together Physical and Mental Health: A new Frontier for Integrated Care"* (Naylor et al., 2016). Within this document, they emphasise the importance of taking a whole person perspective. This requires a mindset whereby "…health and care professionals see the fundamental purpose of their role as being to support improvement in both the mental and physical health of the people they work with" (p.13). Whilst this study is interested in the relationship between physical *activity* and mental health (as opposed to physical and mental health specifically), I wonder if developing our understanding of the PA-mental health relationship could, in its own small way, help to support this move towards more integrated ways of working.

Chapter 2: Methodology

2.1 Introduction

This chapter considers how I have attempted to answer the research question: what is it like to experience an improvement in wellbeing through physical activity? This study adopted a qualitative methodology of Interpretative Phenomenological Analysis (IPA). This chapter begins by explaining why and how I chose this qualitative approach, before outlining the design and process of the study. It also highlights the ethical considerations of the study and describes the analytic strategy. Importantly, whilst this chapter also offers dedicated personal and analytical reflexive sections, I have provided further personal reflections on different stages of the research process in separate boxes throughout. I hope this adds further transparency to the development and process of this study.

2.2 Rationale for Adopting a Qualitative Design

As outlined in the introduction chapter, to my knowledge, a limited number of qualitative studies have been conducted in this area of research, and seemingly no qualitative studies exploring PA and psychological wellbeing have been conducted in the field of Counselling Psychology. This present study therefore hoped to contribute to this evident gap in the literature. This felt important given that, through providing in-depth, subjective and idiosyncratic descriptions of a given phenomenon, qualitative research is thought to be crucial in contributing to psychological knowledge. In fact, qualitative research methods are believed to have served as a cornerstone for advancing both theory and practice within the counselling and psychotherapy professions (Ponterotto et al., 2017).

In addition, this study aimed to develop a more contextualised understanding of the experience of improving psychological wellbeing through PA. This aim fitted best with a qualitative

methodology, which is concerned with the quality and texture of an experience, rather than with the identification of cause-effect relationships that are, instead, at the heart of quantitative research (Willig, 2022). Furthermore, Willig (2022) argues that, by relying on hypotheses that are generated by existing theories, quantitative approaches foreclose the possibility of generating new theories or ideas. That is, if research projects merely test existing theories so that we can then either reject or retain them, we are unlikely to come across new or unexpected insights in our given area of research. With this in mind, by adopting a qualitative research design, I believed I could remain more open to unearthing new ideas about the experience of improving psychological wellbeing through PA in a way that might also enable the counselling psychology profession to be open to new perspectives (McLeod, 2017).

Finally, qualitative research seems to align with my interpersonal skill set that is central to my identity as a trainee counselling psychologist. Over the last three years, my developing clinical work has focused on understanding my clients' subjective experiences within a safe, collaborative and empathic therapeutic relationship. My therapeutic practice has also utilised my ability to interpret and help make sense of unclear experiences of my clients'. With this in mind, I hoped that through conducting a piece of qualitative research, I would both utilise and reinforce these skills.

2.3 Philosophical Considerations

Before justifying my choice of particular methodology and method, it is essential for me to consider my 'ontological' and 'epistemological' assumptions (Crotty, 2020). Ontology is concerned with the nature of existence, with the structure of reality and what is out there to be known. Epistemology, on the other hand, is concerned with the nature and limits of knowledge, asking questions about what and how we can know. Importantly, Chamberlain (2012) argued that any statement making a claim about the use of a particular methodology without mention of these underlying assumptions is essentially "tautological" and "empty of real content" (p.3).

Further still, Silverman (1993) argues that "…without theory there is nothing to research" (Willig, 2013, p.9). With this in mind, careful consideration of my theoretical position will now be outlined.

2.3.1. Ontology and Epistemology: A Critical Realist Approach

Initially, my interest in participants' internal and subjective experiences of PA, and my desire to unearth individuals' interpretations of such experiences, led me to believe that my theoretical position must have been non-realist. However, in line with Willig (2016), I came to consider that focusing on internal subjectivity did not necessarily make my research relativist. Instead, asking research questions about what people feel and/or experience attributes a certain 'out-there-ness' to those processes, especially if I as the researcher believed that I could, to some degree, access those lived realties (Willig, 2016). For instance, my research question – "what is it like to experience an improvement in wellbeing through PA?" – could be deemed realist as it points to a phenomenon (an improvement in wellbeing through PA) that has ontological status because it exists as a mental and/or experiential structure that would be there even if the participant did not articulate it to me, the researcher (Willig, 2016). I have assumed that the process of improving psychological wellbeing through PA is out there and, therefore, at some level real. This is in line with a realist ontology.

However, whilst accepting that these real events and experiences do occur, critical realism also proposes that these events are caused by real mechanisms that are neither self-evident nor directly observable (Gorski, 2013; Vincent & O'Mahoney, 2018). This is because Bhaskar (1998) refuted that reality is not exclusively about what is empirically known and argued that the nature of the word is not reducible to our knowledge of reality (Lawani, 2021). Instead, critical realism assumes that reality is multiply determined (Bhaskar, 1975) or stratified into three domains: the empirical (what can be observed or experienced), the actual (what is going on that may not be observed) and the real (underlying mechanisms that are capable of

producing an observable event) (Nairn, 2012; Walsh & Evans, 2014). Critical realism views these underlying, unobservable structures as real on the ground that their effects can be experienced or observed (Walsh & Evans, 2014). So, whilst adopting a critical realist perspective in this research study, understanding the lived experience of improving psychological wellbeing through PA involves understanding the underlying mechanisms that shape this experience, rather than just looking at the surface-level phenomena. To give an example, instead of simply observing that PA is associated with psychological wellbeing (the empirical), this critical realist study might also observe that a participant feels more able to take on challenging activities (the actual) because they experience enhanced self-efficacy or a greater perceived ability to cope (the real).

However, importantly, critical realism does not assume that the data will tell us something about what is going on in the real world in a self-evident, unmediated fashion. Instead, the data needs to be interpreted in order to provide access to the potential underlying structures and mechanisms that then generate the phenomena that we are trying to gain knowledge about (Willig, 2013). For instance, in relation to this research, some of the data that I collected through the research interviews provided me with information about how engaging in PA provided some relief from negative emotions. However, the data did not tell me explicitly what drove this particular experience, and it was not enough for me to accept my participants' interview answers at face value. Instead, I interpreted the text in order to try and discover the underlying mechanisms that drove their observed experiences. In order to do this, I drew upon my own pre-understanding of the phenomenon and the social and cultural contexts within which my participants existed. From this perspective, the knowledge generated through the research was (in part) constructed by me as I tried to uncover the full complexity of the phenomenon. Therefore, whilst retaining a form of ontological realism, critical realism accepts a form of epistemological relativism, which posits that our understanding of the word is inevitably constructed from our own perspectives and standpoints (Maxwell, 2012). It is for

this reason that critical realism approach has been described as a “marriage of epistemological relativism and ontological realism” (Vincent & O’Mahoney, 2018, p.201).

2.4 Methodology: Interpretative Phenomenological Analysis (IPA)

I used IPA to explore the lived experience of promoting psychological wellbeing through PA. The process of choosing this methodology will now be considered before I outline the key philosophical foundations of IPA.

2.4.1 Choosing a Methodology: Comparing IPA and Grounded Theory

IPA and grounded theory were both considered as potential methodologies for this study. Given their co-evolution in the history of ideas, some of the boundaries between these two methodologies can appear somewhat blurred (Starks & Brown Trinidad, 2007). Both aspire to an inductive model of knowledge generation, and both aim to obtain a rich and detailed view of a group or a person’s world (Dhillon, 2018). In addition, these two methodologies tend to utilise similar data collection and analytical methods. However, they differ in terms of their sampling and coding procedures and, perhaps of most importance here, they differ somewhat in terms of their product (Starks & Brown Trinidad, 2007). That is, whilst grounded theory ultimately aims to produce a theory that explains a phenomenon, IPA seeks to develop a rich understanding of a phenomenon through providing an in-depth account of lived experience (Gill, 2020; Urcia, 2021). Historically, grounded theory has also lent a focus to uncovering social processes, as opposed to individual experiences at a more psychological level (Willig, 2013).

2.4.2 Reflections and Rationale for Choosing IPA

At first, I was drawn to the idea of theory production and therefore grounded theory so that my research might appeal to practitioners who seek explanatory models upon which they could design interventions (as suggested by Starks & Brown Trinidad, 2007). This seemed exciting to me given that I would like to see PA more readily utilised within/alongside existing mental health treatments. However, Urcia (2021) highlights that grounded theory is perhaps best suited to studying a phenomenon with little known or pre-existing information, and this made me reflect upon the existing PA-mental health literature and my subsequent research aims. Quantitative research on PA and psychological wellbeing is well established, and subsequently, a number of theories regarding the potential psychological mechanisms at play have already been put forward (as outlined in the introduction chapter). I therefore realised that in order to add-value, enrich or even challenge some of these pre-existing macro-accounts, I needed to prioritise the micro-analysis of individual experience. I also wanted to place an emphasis upon psychological, as opposed to social, processes so that I could delve deeper into the psychological mechanisms underpinning participants' experiences, have the opportunity to potentially develop or challenge existing psychological theory, and more readily apply my findings to clinical practice. With this in mind, I concluded that IPA was the most suitable approach for this study.

2.4.3 Overview and Philosophical Foundations of IPA

IPA is a qualitative research approach that is "…committed to the examination of how people make sense of their major life experiences" (Smith et al., 2022, p.1). Whilst conducting an IPA study, the researcher is required to collect detailed, reflective, first-person accounts from research participants before providing a phenomenologically focused interpretation of these accounts (Larkin & Thompson, 2011). Unlike most qualitative methods, IPA originated in psychology when Jonathan Smith (1996) argued for an approach to psychology that could capture the qualitative and experiential. Since then, it has rapidly become one of the best known and most commonly used qualitative methodologies in psychology (Smith, 2011).

Importantly, IPA has been informed by three key areas of the philosophy of knowledge, namely phenomenology, hermeneutics and idiography. Phenomenology is the philosophical movement concerned with the lived experience or the philosophical study of 'being' and was founded by Edmund Husserl. Husserlian phenomenology focuses on understanding the essence of a person's lived experience and using this as a crucial source of knowledge (Husserl, 2012; Urcia, 2021). According to Husserl, orientating towards an object with a willingness and capacity to understand it is key to the phenomenological approach (Smith et al., 2022). In order to develop this clear understanding, Husserl proposed that we need to step outside of our 'natural attitude' and instead adopt a 'phenomenological attitude'. In practice, this requires a process of methodological 'reductions' in the form of 'bracketing', whereby the researcher suspends their preconceived perceptions, and transcends their assumptions, in order to get at the universal essence of a phenomenon (Larkin & Thompson, 2011). In the context of this research, this would require me to bracket or set aside my own experiences of promoting my own wellbeing through the use of PA so that I could strive to hear the participants' experiences, and sense making of their experiences, from their individual and unique perspectives. These ideas have, however, been particularly influential on the more 'descriptive' forms of phenomenological psychology, whilst IPA draws upon later readings of phenomenology developed by Husserl's successors.

Perhaps most importantly, Husserl's successors questioned any knowledge outside of an interpretative stance. In *Being and Time,* Heidegger (1962) looked to an etymological definition of phenomenology and observed that the word is made up of two parts: phenomenon and logos. Phenomenon can be translated as 'show' or 'appear', and logos as discourse, reason or judgement. Thus, whilst phenomenon is primarily perceptual, logos is primarily analytical, and this can point towards the different activities involved in phenomenology. That is, whilst a phenomenon might first 'appear' to show itself, "…analytical thinking required by the logos aspect then helps us to facilitate…this showing" (Smith et al., 2022, p.20). This second

process of interpretation is adopted in IPA and ties it to the hermeneutic perspective. Heidegger also argues that this interpretative element of phenomenology will inevitably be founded upon our preconceptions or assumptions (1962). These preconceptions might precede our encounter with a phenomenon, or only become obvious after we have engaged with the text. Either way, by using one's preconceptions, Schleiermacher (1998) suggests that the analyst is able to add value to the process by offering a perspective on the text which the author is not. Following this, IPA is concerned with examining how a phenomenon appears, whilst also acknowledging that the analyst is implicated in facilitating and making sense of this appearance (Smiths et al., 2022). With that being said, in light of Heideggers's writing in *Being and Time,* Smith et al. (2009) note that "…priority should always be given to the new object, rather than to one's preconceptions" (p.25). In other words, researchers should avoid interpretation at the early stages of the analysis so that the phenomenon of interest can show itself for itself. This is in keeping with the task of phenomenology (Gyollai, 2020) and was reflected in the priority given in this study to the reading and re-reading and the initial descriptive noting of the interview transcripts.

Finally, IPA is influenced by idiography. This means that it is concerned with the particular, in terms of detail and therefore depth of analysis. In order to attend to this, IPA studies tend to start with the close examination of individual cases before it cautiously moves to considering similarities and differences across cases. In addition, IPA is committed to understanding how a particular phenomenon or experience is meaningful in the context of one's life as it has been, is being and might be lived (Eatough & Smith, 2017). This is based on the premise that any experience is inevitably interwoven with the rest of an individual's lifeworld (Ashworth, 2016) and socio-cultural context. Because of this, IPA strives to understand lived experience from the perspective of particular people within particular contexts (Larkin & Thompson, 2011; Smith, Flowers & Larkin, 2022). That is, an IPA researcher will consider how cultural, social and situational factors might influence a participant's individual experiences and perspectives. For example, during analysis in this study, I considered how one participant's experience of

gaining a sense of structure and routine through PA could be understood from their situational context of being a new student at university. Importantly, this concern with the particular in IPA offers an alternative to the more dominant nomothetic approach, which tends to be actuarial and probabilistic, dealing with group averages rather than particular cases.

2.5 Personal Reflexivity

Researcher reflexivity has been increasingly recognised as a crucial strategy in the process of all qualitative research. It requires me as the researcher to, at times, turn the lens back on myself in order to recognise and understand my own situatedness with the research and the effect that this might have. Summarising this notion, Berger (2015) defined reflexivity as "…the process of a continual internal dialogue and critical self-evaluation of researcher's positionality as well as an active acknowledgement and explicit recognition that this position may affect the research process and outcome" (p.220). The researcher's positionality could include personal characteristics such as race and gender or personal experiences, beliefs and biases. Importantly, all of these factors could affect the way I pose questions during an interview, or filter and make meaning of the information and data I gather from participants. With this in mind, reflexivity must be deemed important throughout the entirety of the research process.

In order to help my personal reflexive practice, I have kept a reflexive journal throughout the entirety of the research project. I also used supervision as a continuous reflexive space. In light of these reflexive practices, I am aware that I was originally drawn to this topic as a result of both personal and professional experiences. As a qualified personal trainer and an avid sportswoman, PA and physical health have always been an important part of my life. Over more recent years, and especially since pursuing a career in mental health, I have become increasingly fascinated by the interplay between both physical and psychological wellbeing. Consequently, I have engaged relatively extensively with the PA-mental health literature, and I have also begun to more consciously use PA to regulate and promote my own psychological

wellbeing. Given these personal interests, experiences and knowledge, one might infer that I am studying the 'familiar'. That is, I am researching a topic that I both intellectually know about and have some personal experience of. With studying the familiar, there does come some noteworthy benefits. For example, I have felt equipped with some insights that have enabled me to better understand implied content, hear the unsaid or probe participants more efficiently (Berger, 2015). In addition, it has made the research process enjoyable! By researching something that I deeply care about, I have been able to engage with the research in a thorough and enthusiastic way.

However, with that being said, with the 'familiar' also came the risk of me over imposing my own beliefs, biases and preconceptions, which could have prevented me from hearing my participants' own, and inevitably, unique personal experiences. In addition, after starting the research and conducting the research interviews, I took on a placement, and subsequently an employed role, within an eating disorder and body image psychology clinic. Here I work with adults who are struggling with a range of eating disorders, body image difficulties, and at times, exercise addiction. This work, perhaps unsurprisingly, added an interesting dimension to my experience of conducting this research. Perhaps most notably, within my clinical role I have come to understand at some depth the negative role PA can play on someone's psychological wellbeing. Therefore, whilst I was very aware of this opposite or negative relationship when I began this research, my work with eating disorders brought these alternative experiences a little more into focus. Holding this in mind when analysing the research interviews felt somewhat important to do. This is because having an in depth understanding of the potential negative impact of PA could have influenced how I made sense of my participants' contrasting positive experiences. For example, a couple of participants did touch on the ways in which PA made them feel good about their body. When it came to analysing this aspect of their narrative, I found myself feeling quite sceptical about how positive this aspect of their experience really was. This was because, within my clinical work, overly relying on one's body shape to feel a certain way is often a problematic feature of eating disorder presentations. However, within

the context of this research, I had to bracket off this understanding, and home into my participants' (non-eating disorder) experiences so that I could strive to truly understand how and why this aspect of their experience *was* helpful and important to them. I will further consider this analytically reflexive process in the 'Analytical Reflexivity' section.

2.6 Method: Design and Process

2.6.1 Sampling Considerations

This study has a sample of eight participants as I hoped that this would enable me to collect an abundant amount of data that was still manageable to undergo detailed analysis within the allocated timeframe. Furthermore, through recruiting a small sample, I hope that I could sufficiently attend ideographically to each case, before attempting a comparative analysis of the material (Eatough & Smith, 2017). Given this focus on the particular, it was also necessary for me to 'purposively-select' the sample so that the research project could offer sufficient insight into the particular experience at hand (Smiths et al., 2022). So, firstly, in order to ensure that participants could offer sufficient insight into the research phenomenon, prospective participants were required to self-report that they were physically active and indicate that they have experienced or are currently experiencing an improvement in their psychological wellbeing through the use of PA. Secondly, in an attempt to ensure further homogeneity of the sample, I screened for individuals who might have been suffering from 'exercise addiction', as indicated by the Exercise Addiction Inventory (Terry et al., 2004. See Appendix E). This is because the favourable mental health impacts of PA are thought to be yielded only when exercise activities are performed in moderation, whilst obsessive or compulsive exercising can actually have negative psychological outcomes, including increased anxiety (Trott et al., 2021). In addition, given that it has recently been found that exercise addiction is three and a half times more likely in people with an eating disorder (Trott et al., 2021), I also screened for disordered eating using the SCOFF Questionnaire (Morgan et al., 2000. See Appendix E). No

participants who expressed an interest in the study were excluded after screening. Additional inclusion and exclusion criteria will be outlined below.

2.6.2 Inclusion and Exclusion Criteria

The inclusion and exclusion criteria are outlined in Table 1.

Table 1: Inclusion and Exclusion Criteria

Inclusion	***Exclusion***
- 18 years old and over. - English speaking. - Participate in at least 60 minutes of intentional PA a week. - Experience, or have experienced, an improvement in psychological wellbeing in the face of common mental health difficulties through the use of PA.	- Exercise dependency – as indicated by the Exercise Addiction Inventory. - Eating disorder – as indicated with the SCOFF Questionnaire. - Those who are currently experiencing high levels of emotional distress or those who anticipate high levels of emotional distress during interview (as assessed during screening).

In the interest of expanding on these inclusion exclusion criteria a little further, firstly, I included participants who were 18 years old or over as I was interested in an adult sample, only. My interest in researching adult participants' experiences is probably a reflection of my clinical interests too. Across all three years of clinical training, I have worked with adult and young adult clients, only. With this in mind, researching an adult sample felt most relevant and interesting to me from a clinical perspective. Secondly, it felt important that my participants were English speaking so that I could ensure that there was a sufficient level of understanding between us that could then enable a sufficiently in-depth interview to be conducted. Thirdly, I specified that participants needed to be participating in at least 60 minutes of intentional PA a

week so that their lived experiences of improving wellbeing through PA were more likely to be accessible or fresh in their minds in some way. I hoped that would also support rich accounts of the participants' experiences to be recorded. Finally, I excluded those who were experiencing, or anticipated experiencing, high levels of emotional distress. This was in the interest of minimising the risk of causing any of the participants some form of unnecessary harm. This latter point will be further considered within the ethical considerations section. All other aspects of the inclusion exclusion criteria have been outlined in the sampling considerations above.

2.6.3 Defining the Term "Common Mental Health Difficulties"

I decided that the term "common mental health difficulty" would not be defined throughout the sampling and recruitment process (and the research process more broadly). Instead, individuals could volunteer to take part in the study based on their own assessment of whether or not they had experienced these difficulties. This was to ensure that the study was inclusive of those who have for whatever reasons not received an official diagnosis. Furthermore, I hoped that some individuals might feel more comfortable volunteering to take part in the study if they could refer to themselves as experiencing or as having experienced a 'common mental health difficulty' as opposed to a potentially more stigmatizing term such as 'depression' and/or 'anxiety'.

To note, one participant in the sample shared that she had previously been hospitalized following an episode of psychosis. Given that this is not deemed a "common mental health difficulty", I wondered whether or not this participant should be included in the sample. However, after some deliberation and discussion within supervision, I decided to include this particular participant. This was based on the understanding that this participant was no longer experiencing psychosis, and therefore high levels of emotional distress, and that her

day-to-day struggles seemed to be in keeping with common mental health difficulties, such as symptoms of anxiety and depression.

2.6.4 Recruitment Process

A recruitment poster (Appendix A) was shared on social media platforms, including LinkedIn and Instagram. I shared it myself, although some of my online contacts also re-shared the poster. Whilst sharing the poster online felt time effective and also ensured that it reached a large audience, I did wonder whether this method of distribution would mean that the poster would predominantly reach a fairly young and – within the context of sharing it on LinkedIn – a potentially professional or corporate sample. With this in mind, I also shared the poster with community sports groups in London and across the UK and with a mental health sport charity via email. I hoped that this would help ensure that the opportunity to participate reached a diverse range of individuals from the community. Unfortunately, the mental health sport charity was the only organisation that got back to me, and through them I recruited one participant. All the other seven participants came across the poster online.

Participants interested in the study were instructed to contact me via a provided email address in order to express their interest. They were then sent a participant information sheet (Appendix B) and asked to participate in a pre-interview screening call which assessed whether or not they met the inclusion and exclusion criteria (Table 1). Participants were informed via email that they had two weeks to decide whether they would like to participate in the screening call after receiving the information sheet. All participants that received the information sheet got back within the timeframe to confirm that they would like to participate in the screening call.

During the pre-interview screening call, potential participants verbally completed the Exercise Addiction Inventory (Terry et al., 2004) and the SCOFF Questionnaire (Morgan et al., 2000)

in order to screen for potential exercise dependency and disordered eating. If participants responses indicated that they might have had an exercise dependency (a score of twenty-four out of thirty or over) or disordered eating (a yes response to two or more of the five questions), they would have been informed during the call that participation in the study was not recommended. The reasoning for this would have been sensitively explained, emotional support would have been offered, and further emotional support resources would have been provided (Appendix C). Fortunately, no concerns were raised for any of the participants that expressed an interest in the study, and so all screening calls went on to assess whether the potential participants had sufficient insight into the phenomenon of interest. 'Sufficient insight' was inferred if the potential participant made some reference to their psychological wellbeing improving through the use of some form of intentional PA. The screening calls also assessed whether potential participants felt psychologically well-enough to participate in the interview (for specific screening call questions, see Appendix D). This was to avoid causing any unnecessary or excessive emotional distress during the research interview. Again, no concerns were raised during any of the screening calls. If a potential participant became acutely distressed at any stage of the screening call, an emotional distress protocol was also created to be followed (Appendix F). Fortunately, this was not required. All participants were deemed suitable following the screening call and were verbally accepted as a research participant and invited to a research interview. They were then sent a consent form (Appendix I) and asked to choose a pseudonym in order to maintain their anonymity.

Recruitment was completed between March and July 2022, and it felt like a relatively smooth process. However, one aspect of the process that did warrant some further thought and reflection was the interest that I received from friends, or friends of a member of my family. Perhaps as a result of me sharing my poster on social media, a number of individuals with whom I had some pre-existing connections contacted me to express their interest in taking part. I felt unsure as to whether having some prior knowledge about, or some pre-existing

relationship with, an individual could impact the interview process in some way. I also worried that participants who knew me, or knew of me, wouldn't be as open about their psychological experiences, especially if they had been challenging. Whilst I appreciate that the research interview is by no means a replica of therapy, I felt as though having a similarly boundaried relationship with the participants would be important in order to facilitate research interviews that had emotional depth. I used my reflective journal and supervision to reflect upon and explore these concerns. I came to conclude that I would avoid including individuals with whom I had an active friendship with. This was because I did not think I could fully take on the role of a curious and open interviewer with someone I currently knew. I also did not feel comfortable probing for an in-depth understanding of a friend's psychological wellbeing. However, I did decide to include one participant with whom I had trained with in a sports club in the past. With this participant I decided that enough time had passed (four years) since we had known each other at a little more depth. I also decided to include two friends of a member of my family. This was because I did not know these individuals personally, and I did not feel as though our mutual connection would get in the way of the research. When making these decisions, I did explicitly address the historical or mutual connections that these three individuals and I had, and I asked them whether or not they thought it would impact their comfort and their experience of participating in anyway. All three individuals felt confident that it would not and hence we collaboratively decided to proceed.

2.6.5 Participant Summary

Eight participants were purposively recruited in order to strive for homogeneity in the sample. The demographics of the sample is outlined in Table 2 below.

Table 2: Participants' Demographics				
Pseudonym	***Age***	***Ethnicity***	***Main country of residence***	***Gender***
Theo	27	White British	UK	Male
Robert	24	White British	UK	Male
Tara	27	Indian	UK	Female
John	24	White British	UK	Male
JonT	61	Chinese/African	UK	Male
Elena	50	White American	Amsterdam	Female
Lucy	24	White British	UK	Female
Akina	47	White British	UK	Female

Although the sample was homogenous in terms of the participants' experiences of improving psychological wellbeing through PA, it did have some variation in terms of age, gender and ethnicity. With that being said, the sample was predominantly White British and five of the participants were in their 20s. This slight lack of demographic variance is potentially reflective of my recruitment process and strategy.

Whilst having a more diverse sample in terms of demographics could have led to some interesting insights in relation to the experiences of those with different ethnicities and/or ages, I do not believe that having a more demographically heterogenous sample was wholly relevant to this study's aims and nor would it have necessarily helped me to better answer the research question. In addition, as demonstrated in Table 2, only one participant in the sample was not based in the UK and I therefore spent some time deliberating her inclusion. This was because the experience of improving wellbeing through PA is bound to vary in different sociocultural contexts (e.g., the understanding of what wellbeing entails will be culturally specific). However, with that being said, I came to reflect upon the fact that all

other participants' socio-cultural contexts were also bound to vary despite them all residing in the UK. Therefore, at the cost of being able to say that this study consisted of a UK sample, I decided to include the participant.

2.6.6 Data Collection

In order to collect 'rich' data, participants should be "…granted an opportunity to tell their stories, to speak freely and reflectively, and to develop their ideas and express their concerns at some length" (Smith et al., 2022, p.53). Semi-structured, one-to-one interviews were therefore used in this study. Importantly, semi-structured interviews attempt to come at the interview question 'sideways' (Smith et al., 2022), meaning that the interview should facilitate discussion of relevant topics, which can then allow a research question to be answered via in-depth qualitative analysis. In order to support this interview process, I developed an interview schedule (see Appendix G). I then conducted one pilot interview with a friend who met study criteria to assess the suitability of this schedule and to also develop my research interview skills.

Conducting the pilot interview was a particularly informative process. Perhaps most notably, it highlighted the importance of using the interview schedule as a guide, rather than a rigid structure. During the pilot interview I stuck to the structure quite closely, and upon reflection, this prevented me from delving deeper into my pilot interviewee's experience. This is because, as I became preoccupied with the structure, I spent little time probing the interviewee further. I also noticed that I summarised some of my interviewee's experiences and responses, much like I would do with a client in therapy. At times I also interpreted what the interviewee had said, offering her my understanding of her experience whilst also taking it one step further. This process came quite naturally to me, but when listening back to the pilot interview I realised it needed to be avoided. Instead, I needed to stay as close to the

interviewee's experience as possible, supporting her in making her own sense of the experience, and then my interpretative work could come later, at the stage of analysis.

Following the pilot interview, I made no real structural changes to the interview schedule; however, during the actual research interviews I was able to interact with the interview schedule less stringently as a result of my pilot interview experience. I believe this enabled the research interviews to feel more natural and explore the research phenomenon at a greater depth. At the start of each interview meeting, I offered the participants a brief re-cap of the study and re-iterated that I was really interested in their own, personal experiences, and that there were, therefore, no right or wrong answers. I then began recording – using a digital recorder that complied with GDPR and university requirements – and conducted the interviews using the interview schedule in a guiding, flexible manner. At times it felt important to move away from the interview schedule and instead follow the participants' concerns. I also frequently added in probing or prompting questions in order to encourage participants to elaborate on the potentially important or meaningful things they had to say. For example, I would ask questions such as, "What felt so difficult?" or "Can you tell me more about that feeling of joy?". This probing enabled me to better understand participants' affective, embodied and evaluative experiences, which was helpful when it came to the analysis. In order to avoid interrupting the participants' narratives, I also made notes throughout the interviews of things that I would want to return to. As I approached the end of the interview, I used these notes and the interview schedule to make sure that we had covered all the areas I intended to. All research interviews lasted between 60 and 90 minutes.

To note, participants were given the choice of conducting the research interviews in person or online, via Zoom. The option of conducting the interviews online was offered as I recognised that this could be an easier and less costly option for my participants, and less demanding of their time. Indeed, all participants opted for an online interview. These online interviews ran smoothly and given the ability to video call, I felt able to establish a sufficient rapport with each

of the participants. However, it is of course important to consider that when conducting interviews online, some information that might be more readily conveyed through the body might have, unfortunately, been lost. This potential limitation of this study will be further discussed in the methodological limitations section of the discussion chapter.

Overall, I really enjoyed the interview process. Each participant brought rich, unique and interesting experiences that I enjoyed learning more about. However, finding a balance between using the interview schedule and following the natural flow of the research interview continued to develop over time. With each interview I became a little more confident in following the natural flow of the interview and using the schedule purely as a prompt. I think this was perhaps reflective of me becoming more familiar with the different areas or questions I wanted to consider, which then enabled me to delve into them more naturally as and when they came up. With this in mind, I wonder if more than one pilot interview could have been helpful to give me more time to find my feet.

Following the research interviews, the participants were given a Debrief Sheet, which included a list of resources, and they were given the opportunity to ask any questions that they might have had. Participants were also given the opportunity to reflect upon the interview process itself. Many said that the interview process had been interesting and enjoyable, and that it had enabled them to think about things in ways they hadn't before. Participants were also offered a follow up phone call if they felt that they could benefit from a check-in, or to discuss additional support. No participant requested to have this phone call. Following each interview, I also privately reflected on how I felt it had gone, what it had brought up in me, what some of the emerging themes might be and any concerns that I might have had.

2.6.7 Transcription

The audio recordings of each interview were transcribed verbatim. Because IPA analysis primarily interprets the meaning of the participants shared accounts, details such as length of pauses and seemingly insignificant non-verbal utterances were not included during transcription. This was in line with recommendations from Smith et al. (2022). However, more notable non-verbal utterances – such as laughter – and significant pauses that stood out were included. Non-verbal utterances were placed in brackets and pauses were illustrated by '…'. Identifiable information, such as names, were moved and replaced by a pseudonym in order to protect the individual's identity.

2.7 Ethical Considerations

This research project was granted formal approval by the Psychology Research Ethics Committee at City, University of London, on 20th November 2021. This research was conducted in accordance with the BPS Code of Ethics and Conduct (2021) and the BPS Code of Human Research Ethics (2021). It was therefore conducted with the upmost a) respect for the autonomy, privacy and dignity of the research participants, b) scientific integrity, c) responsibility, and d) with the overall aim of maximising benefit and minimising harm. In relation to these values, a number of specific ethical considerations associated with this study will now be outlined below.

2.7.1 Emotional distress

In line with values concerning responsibility, I considered the ways in which this research might risk causing participants some form of harm. Perhaps most importantly, given that participants were asked to reflect upon the use of PA during times they have experienced mental health difficulties, there was a chance that the interview process evoked some level of distress. In order to minimise this risk, potential participants were asked during screening if they felt psychologically well-enough to participate. I also screened for disordered eating and exercise

dependency in order to further minimise the risk of distress and associated harm. Then, during the interview process, I utilised my counselling skills to contain difficult emotions, and to create an environment where my participants felt able to choose whether or not they wanted to proceed (Thompson & Chambers, 2011). I also debriefed all participants (Appendix H) and provided them with a list of resources in case they decided to seek out further support (Thompson & Russo, 2012). I also offered follow up phone calls two days after the interview in order to check-in with the participants and assess whether or not they need additional help. During this phone call I would have offered participants a space to voice their concerns and feel heard, before signposting them to further support. However, no participants requested this follow up.

2.7.2 Use of Clinically Relevant Measures

Given the use of objective screening tools at the screening stage of the study, I acknowledged that there was a risk of attaching negative 'labels' to participants, such as being an 'exercise addict' or having an 'eating disorder'. In order to minimise this risk of labelling, I was sure to inform participants that the measures could not be used to infer a particular label or a particular diagnosis (in line with City's research ethics guidelines on the potential of labelling when using clinically relevant measures). This was also outlined in the participant information sheet. I also made it clear prior to completing the measures that if any concerns were to arise, I would discuss them with the participant, and then suggest that they contacted their GP. This is in line with BPS Code of Human Research Ethics and the guidelines on 'giving advice' (2021).

2.7.3 Informed Consent

In line with the ethical principle of respect, and to ensure that all participants' autonomy is maintained (Thompson & Russo, 2012), all participants signed a written consent form (see Appendix I) prior to taking part in the research interview. Within this consent form, it was made

clear that participants had the right to withdraw from the interview at any time without reason. It was also made clear that participants had the right to withdraw their data up to three weeks post interview (as after that data analysis commenced). Given that I was conducting in-depth interviews, it was also occasionally necessary for me to seek ongoing or 'processual consent' (Thompson & Chambers, 2011). This was achieved through asking questions such as, "do you feel comfortable to talk about that a little more?" (Allmark et al., 2009). Importantly, questions like this meant that participants had the option to opt out at any point. These questions also helped to even out the potential power imbalance between me and the research participant.

2.7.4 Confidentiality

Participants' data was handled with respect and their anonymity was maintained. Participants were asked to choose a pseudonym and they gave consent for direct (anonymised) quotes to be used in the write up of the research. For some participants within the sample, identifiable information – such as their ethnicity – was changed during the write up of analysis in order to further preserve anonymity.

2.7.5 Multiple roles

Thompson and Russo (2012) highlight that "…barriers to acting ethically commonly occur when professionals wear too many hats" (p,34). This is particularly relevant to me as a trainee psychologist. Whilst my clinical skills acquired through training made me well equipped to conduct interviews that elicited rich and elaborative data, I had to remain mindful of moving towards providing psychological therapy instead of pursuing inquiry (Haverkamp, 2005). I also made sure not to use my clinical skills to place implicit pressure on privacy boundaries (Thompson & Russo, 2012). Instead, as and when I sensed that we were approaching an emotionally triggering or personally sensitive lived experience, I would explicitly ask the

participant whether or not they wanted to pursue the particular experience or their current line of thought. This required me to remain as in tune as possible with my participants' emotional experiences and responses to the interview and my lines of enquiry. This felt particularly important given that the research participants gave consent for providing information, rather than pursuing personal change.

2.7.6 Data Protection

The interviews were recorded using a Dictaphone digital recorder that complies with GDPR and university requirements. These recordings were transferred onto a password protected laptop and stored on City OneDrive. The interviews were then transcribed in Word ahead of analysis. These transcripts were also stored on City OneDrive. In line with City's guidelines, personal data, such as the interview recordings, will be held until the end of the study. The deidentified research data, such as the anonymised transcripts, will be retained for 10 years before being safely destroyed.

2.8 Analytic Strategy

IPA can be characterized by a set of common processes – such as moving from the unique to the shared and from the descriptive to the interpretative – and principles – such as understanding the participant's point of view. Importantly, the analytical processes involved in IPA are applied in a flexible, multidirectional and iterative manner. That is, the researcher moves back and forth between different ways of thinking about the data, shifting how they relate to it according to the hermeneutic cycle. For the novice qualitative researcher, this dynamic aspect of IPA can seem quite overwhelming. Consequently, Smiths et al., (2022) have come up with a seven-step, somewhat unidirectional guide to conducting IPA analysis. I found this guide incredibly helpful when navigating the process of analysis myself. Perhaps most notably, it helped to foster feelings of manageability. However, as recommended by

Smith et al., (2022), I used their guide flexibly, treating each step as a prompt to think about the data in different ways, and I continuously moved between earlier and later steps of analysis. I will now outline these different steps below and reflect on my experiences where necessary.

2.8.1 Reading and Re-reading

The analysis of each transcript began with the reading and re-reading of its contents. Following this initial reading, I made notes in my reflective diary of my initial impressions of the transcript and of any particularly thought-provoking observations I made. Through this reading I began to understand the structure of each interview and where in the interview particularly rich insights seemed to be made.

I found the initial reading of my first transcript challenging. It was quite long, and I felt quite overwhelmed by the lengthy narrative and the amount of data I seemed to have. In order to manage this, I made a loose timeline of the interview. Having this chronological account made the overall structure of the interview clearer and appear somewhat more manageable. When reading the transcripts, I also found myself becoming frustrated when I felt as though I, as the interviewer, had missed something important during the interview. For example, at times I felt I had missed a follow-up question that could have added more depth to something a participant had to say. Whilst frustrating to read, I think this experience did enable me to tweak or improve my interview technique as I progressed with other participants. I also came to realise that the interpretative element of IPA enabled me to tentatively add some of this depth to the participants' accounts at a later stage of analysis myself.

2.8.2 Exploratory noting

Next, I examined the semantic content and language at an exploratory level in order to produce a comprehensive and detailed set of comments on the data. I recorded these comments in a column to the right of the transcript, and I colour coded them depending on their focus. Comments with a clear phenomenological focus were highlighted in green. These notes purely focused on describing and summarising the content of what the participant had said. Comments that were considered more linguistic were highlighted in pink, and these explored the participants' specific use of language. Comments that were more conceptual or beginning to be more interpretative were highlighted in orange. These comments attempted to add depth to the analytic process, and they began to move the analysis beyond the superficial and purely descriptive. They helped me to think about how and why a participant might have had the experience they described. I also highlighted the raw data of the transcript in these different colours, highlighting potentially important words in pink, parts of the transcript I thought could be interpreted further in orange, and highlighting otherwise generally interesting extracts in green. I also used a yellow highlighter to highlight parts of the transcript and comments that spoke more to the process of the interview. So, if something seemed difficult to verbalise, for example, I highlighted it in yellow. See Appendix J for an example transcript with exploratory noting.

When I began the analytical process with my first transcript, I struggled to grasp the balance between my descriptive and more interpretative noting. My notes were detailed, but perhaps overly descriptive. I worked hard to stay as close to the participant's experience as possible, but perhaps at the cost of exploring the transcript at a little more depth. For example, I didn't spend much time pulling out or highlighting the more linguistic features of the text. I used supervision to reflect on this process, and with some guidance from my supervisor, I gradually became more confident in going a little further with the text. I began asking more questions from the data, offering interpretative comments that were grounded in the participant's experience. In order to ensure my interpretations remained tentative, I would

often mark an interpretative note with a question mark to highlight that a comment was co-constructed from the participant's words as well as ideas of my own.

2.8.3 Constructing Experiential Statements

Once I was happy with my exploratory notes, I produced concise summaries of what seemed most important in the form of experiential statements. These statements endeavoured to speak to the experiential, the particular and the conceptual parts of the data. This way, the statements aimed to not only reflect the participants' original words, but also my own interpretations of their experiences. They tried to reflect what was crucial at a local point in the text, but they were also, inevitably, influenced by the whole. Importantly, whilst constructing these experiential statements, I often returned to the original transcripts and made further exploratory notes if new ideas subsequently emerged. In other words, at this stage, as well as others, I found myself actively passing around the hermeneutic cycle.

When I first navigated this step of analysis, I created numerous (153) experiential statements. This made the next steps of analysis particularly arduous due to the sheer number of statements I had to organise. I took this difficulty to supervision. My supervisor encouraged me to be a little more interpretative with the experiential statements. Instead of offering numerous statements that aligned with multiple, small parts of the transcript, I was encouraged to pull back and to try and articulate the most important parts of my exploratory notes. Then, instead of offering multiple summaries that tried to describe all aspects of the participant's narrative, I was able to create fewer statements that conveyed what seemed to be most important. Whilst still firmly grounded in the data, these statements also became more conceptual.

2.8.4 Searching for Connections Across Experiential Statements

This next step of analysis involved looking for connections and common themes amongst the experiential statements. In order to do this, I typed up and printed out all of the statements and then cut them up into individual pieces of paper. I then spread these statements out on the floor, moved them around, and grouped connected statements together. Then, within these specific groups, I further divided the statements into sub-groups, depending on the specific aspects of an experience they seemed describe. In order to support this process, I also re-referred myself to the original data that contributed to the experiential statements. To note, a handful of experiential statements were removed at this stage if they did not fit into a 'personal experiential theme' (PET).

2.8.5 Naming Personal Experiential Themes

The aforementioned groups of experiential statements were then put into a table that I created on excel. A quote from the raw data was included next to each statement. Each group of statements was then given a title to describe its key characteristics, and these groups hereby became the participants' 'Personal Experiential Themes' (PETs). Within these PETs were sets of subthemes, which also had their own titles. For an example of a PET table, see Appendix K.

During this step of the analysis, I had to reflect upon and navigate my tendency to bring in psychological language. For example, I initially named one of Elena's PETs "Assists affect regulation". However, upon reflection, I came to realise that this language was overly psychological. I also considered that at this stage of analysis I did not need to be thinking about the participant's experience through a more theoretical lens. With this in mind, the theme was renamed to "A way to manage emotions". This seemed much more in line with and representative of this participant's own language and experience.

2.8.6 Continuing the Individual Analysis of Other Cases

This next step involved repeating steps 1-5 with the next participants' transcripts. In keeping with IPA's idiographic commitment, it was essential to treat each next case on its own terms, to do justice to its own individuality (Smiths et al., 2022). This was so that I did not simply reproduce ideas of previous transcripts. It was, however, inevitable that as I moved from one transcript to the next, I was likely to be influenced by what I already might have found. In order to minimise this, and to let new analytic entities to emerge, I made sure to rigorously engage in the first step of analysis (reading and re-reading the transcript) so that I became fully emersed in the new set of data and attune to its potentially unique set of ideas.

2.8.7 Developing Group Experiential Themes

Once I had created a PET table for each of the individual participants, I began looking for similarities and differences across the PETS in order to create a set of 'Group Experiential Themes' (GETs). To help this process, I printed out all the PET and subtheme titles and, again, cut them up into individual pieces of paper. I moved these around, clustering titles that seemed to speak to similar experiences together. Throughout this process, I often referred to the experiential statements that underpinned each title, in order to fully make sense of potential connections and divergences between the existing PETs and their subthemes. Over all, whilst there were unique aspects to each of the participants PETs, there was a reasonable amount of convergence across the sample. Because of this, most PETs were incorporated into the GET table. At times I also went back to my exploratory notes and the original transcripts, in order to fully understand the texture of the emerging group themes. Returning to these earlier steps of the analysis also helped me to pick apart subthemes within each group. Importantly, this step of the analysis was not an attempt to create group norms but was rather an opportunity to highlight the shared and the more unique features of the experience within the sample. For a comprehensive table of GETs, see Appendix L.

2.8.8 Analytic Reflexivity: Positionality and Interpretation

As previously discussed, and demonstrated, researcher reflexivity is important throughout the entirety of the research process. However, it felt particularly important throughout the analysis stage of the study. As already highlighted, the researcher's positionality includes personal characteristics, such as race and gender, and/or personal experiences, beliefs and biases (Berger, 2015). In addition, positionality reflects the position of the researcher within a given research study, and this can influence both how the research is conducted and what the research will come to find (Holmes, 2020).

Notably, the interpretative nature of IPA positioned me, the researcher, as a co-constructor of the study's findings. This is because at times it was helpful for me to draw on my own understanding of the research topic or my psychological knowledge in order to make most sense of my participants' accounts. However, with this position also came great responsibility to ensure that whilst my interpretations were being drawn from my own knowledge and understanding, they remained grounded in what the participants were telling me in their own words about their experiences. In order to ensure that this was the case, it was crucial for me to pass around the 'hermeneutic circle' (Smith et al., 2022) or 'dance' "…between striving for reductive focus and reflexive self-awareness; between bracketing pre-understandings and exploiting them as a source of insight" (Finlay, 2008, p.1). This way I could remain fully open to the research encounter, whilst concurrently using personal experience as a springboard for making sense of and interpreting the participants' experiences and the data (Finlay, 2003).

To support this continuous process, I actively used a reflective journal to record and navigate my own thoughts, feelings and experiences in response to my participants accounts. Through doing this I managed to pause and consider whether my understanding of a participant's experience was unduly influenced by knowledge or experiences of my own. I have also found

supervision to be an important reflective space. In particular, I have found voicing and justifying my thoughts, ideas and interpretations to my supervisor useful in consolidating my interpretations and reviewing where they might have originated from.

As one example of this reflective process, when interpreting Elena's experience of PA having an impact on her thoughts, I initially clustered some experiential statements together and named the subtheme "Defuses unhelpful thoughts". However, whilst pausing and reflecting on this title, I realised that I had imposed my own theoretical knowledge about cognitive fusion and defusion onto this subtheme name. Because of this, I had consequently missed the experiential nature of Elena's experience. Through recognising this, I was able to bracket off this pre-understanding and strive for a more reductive focus on what Elena had to say. By doing this, I came to understand that Elena felt able to turn her attention away from anxiety provoking thoughts whilst shifting her focus to the activity. This acknowledgment led me to re-name the subtheme to "PA shifts attention away from unhelpful thoughts". Whilst theoretically this experience does seem to represent something similar to "defusion", this renewed subtheme title felt more experiential and, importantly, included some of Elena's own words.

Regardless of this careful reflective process, the nature of interpretations means that some will have gone beyond the self-understanding of the participants. This raises ethical issues (Brinkmann & Kvale, 2008). Perhaps most significantly, should participants be exposed to interpretations of themselves that they have not asked for? Whilst I, the researcher, want my analysis to be as deep and as probing as possible, I also want to be respectful to my participants, which risks scratching the surface of their experience. Navigating this ethical dilemma required careful judgement and reflections, again through the use of journaling and the research supervision space. I also held this dilemma in mind during the write up of the research findings. In order to reduce the risk of overly imposing my own ideas, I have tried to

present them tentatively and to make it clear when an idea has come directly from my participant's understanding and when it has instead been influenced by my own.

2.9 Quality and Validity

The traditional, scientific criteria used to ensure research validity and quality are incompatible with qualitative research methods. This is because the numerous and diverse range of qualitative methodology do not converge on one set of methods, assumptions and objectives (Yardley, 2000; 2017). This has, unfortunately, led to some scepticism over the quality and validity of qualitative work. However, in light if this, Yardley (2000) has offered a framework of flexible, evaluative criteria that can be applied to qualitative inquiry in order to enhance and demonstrate the quality and validity of the research. This framework can be broadly grouped into four key dimensions. Each of these dimensions will be outlined below, and I will suggest how each dimension has been met by the current study in a flexible, non-prescriptive manner.

2.9.1 Sensitivity to Context

The context of any given qualitative study comprises many facets (Yardley, 2000). First, qualitative researchers need to demonstrate sensitivity to the context of theory and the understandings of the research topic that have been created by previous research. In this study, such sensitivity to theory has been cultivated through a thorough engagement with the existing literature, as demonstrated in the extensive literature review. However, in addition, it is integral to the rationale of all empirical research that the analysis is sensitive to the data collected itself. In this study, this has been demonstrated by my openness to unexpected findings or experiences that are perhaps in conflict with my pre-existing understanding of the topic. Secondly, qualitative researchers need to demonstrate sensitivity to the socio-cultural context of a study. This feels particularly important within an IPA study, as it is the participants' individual experiences and perspectives that are placed at the centre of it. This study

demonstrated such sensitivity during the research interviews, where I remained sensitive and open to participants' perspectives by asking open ended questions and using my clinical skills to respond with empathy, and to maintain a stance of curiosity throughout. I also endeavoured to remain sensitive to the participants' perspectives and socio-cultural context throughout the write-up of the research. I have demonstrated this by including potentially important information about the participants' individual and unique 'lifeworlds'. This aspect of the study also speaks to the idiographic nature of IPA.

2.9.2 Commitment and Rigour

Commitment and rigour correspond to the usual expectations for thoroughness in data collection, analysis and the presentation or reporting of any research project (Yardley, 2000). In this study, commitment is demonstrated through the prolonged engagement with the research topic. Whilst this engagement has been academic – as a doctoral researcher over the course of the last three years – it has also been more personal, as I have become progressively more interested and aware of my own experience of improving psychological wellbeing through PA. Commitment also encompasses the display of expertise and skills in the methods used, and rigour refers to the completeness of the data collection and analysis (Yardley, 2000; 2017). Importantly, I have engaged fully with the teaching and supervision opportunities that are offered on the doctorate course in order to support the development of my research skills and my expertise in the research method used. This research also demonstrates rigour through its choosing of a purposive sample that could offer a rich and deep insight into the research topic. I also spent time creating and piloting a research interview schedule so that I felt confident in eliciting a set of interesting and in-depth interview transcripts. Finally, I hoped to convey rigour at the analytical stage of this project by exploring the data in a way that ensures idiographic and interpretative – as opposed to purely descriptive – findings.

2.9.3 Transparency and Coherence

Coherence refers to the fit between the research question and the philosophical perspective adopted. In order to adhere carefully to this principle, my philosophical underpinnings and theoretical position have been clearly outlined. Transparency refers to the clarity of the presentation of the research, including a clear description of the research process and findings. In order to adhere to this, I have clearly presented and openly reflected upon all aspects of the research and data collection process. I have also included excerpts of the raw data, or quotes, in the write-up of the analysis so the reader can clearly see how an interpretation has been made. Within this write-up I have also always tried to make it clear whether a particular interpretation or idea has been influenced by my own thinking or understanding, or whether an idea has arisen directly from the participant themselves. Related to this, this criterion requires the researcher to reflect upon their own process and involvement across the entirety of the research project. In keeping with this, I have adopted a reflective stance at all stages of this study and have included personal and analytical reflexive sections in order to openly consider my own experiences and potential influences on the research and its findings.

2.9.4 Impact and Importance

Finally, Yardley (2000) argues that it is not sufficient to develop a sensitive and thorough analysis if the ideas generated have little or no impact on the beliefs and actions of anyone else. With this in mind, this final criterion requires the research to be useful or in some way change the way we think about the world (Yardley, 2017). In line with this, my hope with this research project was to develop a more contextualised understanding of the experience of improving psychological wellbeing through PA, so that practitioners, such as myself, might be able to consider PA and the body more readily as part of the treatment of common mental

health difficulties moving forward. This criterion will be further considered in the strengths section of the discussion chapter.

Chapter 3: Analysis

3.1 Introduction

This chapter provides a comprehensive account of the analysis of the research interviews. It aims to answer the research question, exploring what it is like to experience an improvement in wellbeing through PA. In order to do this, it includes a number of extracts from the interview transcripts. I will comment on and explore these quotes in an attempt to make sense of the participants' experience. In line with the phenomenological aspect of this research, I will try and stay as close to the participants' experience and explicit meaning as possible. However, as outlined in the methodology chapter, at times I will also inevitably and tentatively adopt a more interpretative stance in order to add depth to the analysis. Where interpretation occurs, I will try to be as clear as possible with regards to what is my understanding and what is theirs. I hope this offers transparency to the analytical process.

When conducting the interviews, it quickly became clear that a number of the participants had many rich experiences to share. Whilst fruitful, and perhaps indicative of the potential importance of research in this area, it does mean that a large amount of data has been collected. Because of this, it is not possible to include all aspects of each participant's accounts within the write-up of this chapter. Instead, and in keeping with Smith et al.'s (2022) recent guidelines for IPA, I will select extracts that seem to be particularly rich in emotion, or those that capture my imagination and elicit interesting ways of making sense of participants' experiences. I will also try to select extracts that capture the range of experiences described by participants, both within and between the different GETs and subthemes. Some extracts will demonstrate similarity in experience between participants, whilst others will demonstrate difference and the unique aspects of the experience. This is in line with the idiographic focus of IPA. Whilst not all aspects of every participant's narrative will be included, it is still important to give voice to the full range of participants who took part, and I will ensure that this is evident

throughout. A Table of GETS is also provided in the appendices (Appendix L). This table does include all of the different quotes that contributed to each GET and their respective subthemes.

It is also important to note that each participant's experience is inevitably interwoven within their individual "lifeworlds" (Ashworth, 2016, p.20). A 'lifeworld' can be thought of as "…the realm of immediate human experience…" from the perspective of the meaning-making individual (Eatough & Smith, 2017, p.9). With this in mind, throughout this chapter I will include some of the participants' relevant personal and wider social contexts, in order to further enrich the meaning making aspect of the analytical process.

As outlined in the methodology chapter, once the PETs had been established for each of the participants, similarities across the individual cases emerged and a set of GETs and subthemes were subsequently made. The final lay out of these GETs and subthemes are demonstrated in Figure 1a below. To note, all participants spoke to all the GETs generated, fitting into at least one subtheme within each. Whilst the individual differences within these themes are still evident, I hope that this points towards a comprehensive summary of this phenomenon.

The first GET – **'Physical activity activates an embodied awareness'** – captures the participants' experiences of becoming more actively aware of both their body and their mind. The theme explores the ways in which PA enhances a present moment awareness that seems to regulate thought processes and the activity of the mind. It also considers how PA highlights and seemingly activates the connection between body and mind.

The second GET – **'Physical activity is a reliable resource for managing how one feels' –** captures the experience of participants feeling able to rely on PA to manage how they feel. It considers how the concept of reliability is containing in itself, before exploring how PA

enhances a belief in one's ability to cope. It also explores the specific emotions that participants feel more able to control.

The third GET – '**Physical activity facilitates enriching experiences that also improve wellbeing' –** captures the way PA seems to improve psychological wellbeing less directly. It explores participants' experiences of establishing a more enriching engagement in life, as well as considering the importance of social interactions and support.

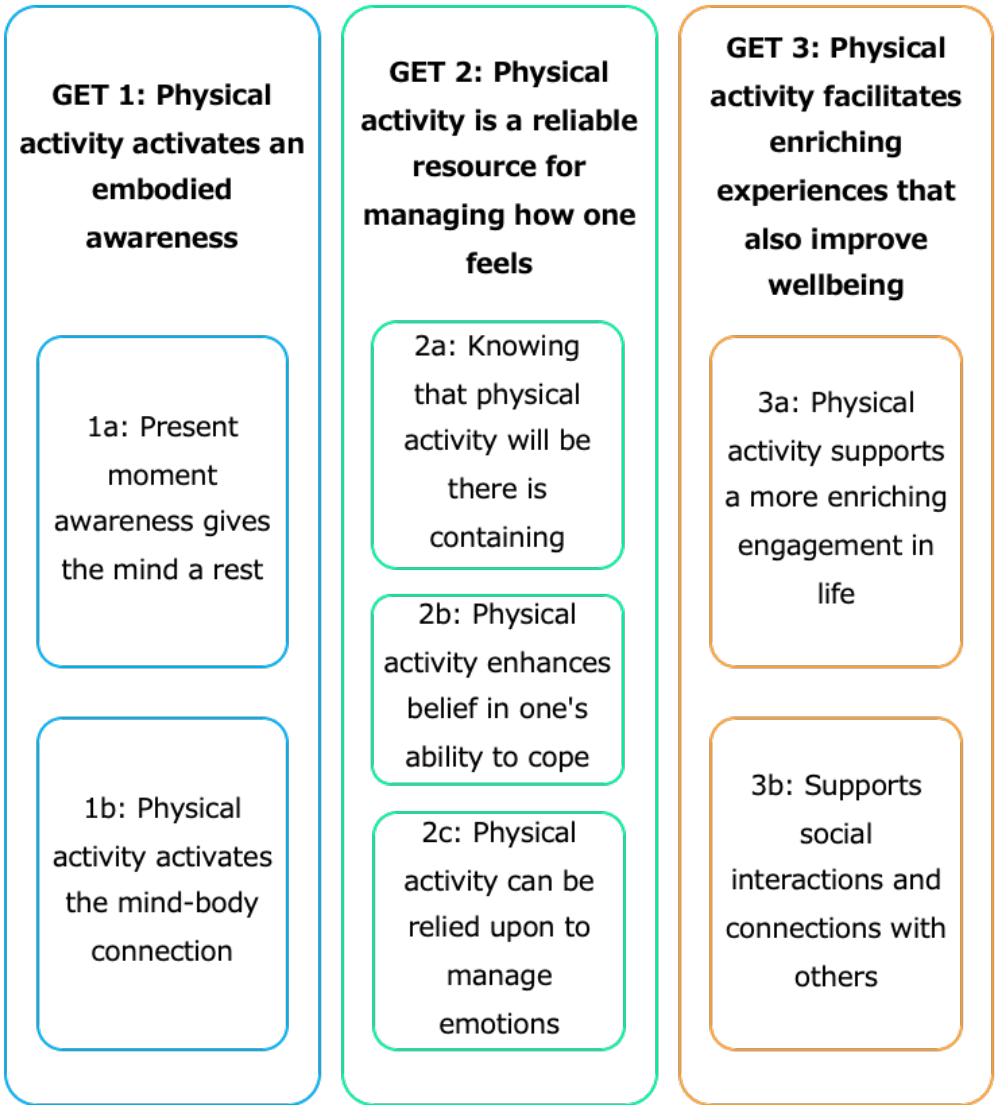

Figure 1a: Visual Demonstration of GETs and Subthemes.

Before exploring the GETs in further detail, the order in which they will be presented seems important to note. The second subtheme will follow the first as it seems that it is, in part, the enhanced embodied awareness that actually enables the participants to then feel able to manage how they feel. In essence, I suggest that having an embodied awareness precedes the sense of agency that participants describe. Then, following on from this, it seems likely that an increase in agency, or the enhanced belief in one's ability to manage how one feels, helps participants to adopt a more enriching engagement in life (GET 3). It also seems to enable them to explore and utilise other methods or activities to manage how they feel. In summary, whilst the individual GETs are distinct and capture different elements of the participants' lived experiences, they very much remain connected to one another in these different ways.

3.2 GET 1: Physical Activity Activates an Embodied Awareness.

The first group experiential theme captures the participants' experience of becoming more actively aware of both their body and their mind. All participants contributed to this theme in some way. At times, a focus on the PA itself seems to bring participants into the present moment, where their worry thoughts subside, or their mindsets are able to shift. This particular, perhaps more cognitive, element of the experience is further explored in the first subtheme. For most participants, PA also seems to highlight an impactful connection between the body and the mind. That is, the ways in which participants become aware of and experience their body seems to become reflected, or perhaps mirrored, in the experience of their mind. This is further explored in the second subtheme below.

3.2.1 Subtheme 1a: Present Moment Awareness Gives the Mind a Rest.

All participants shared that their thought processes changed during, and in some cases, immediately after engaging in PA. This often seemed to be a result of participants needing to

focus on the PA at hand. This seemed to bring a welcome relief from an otherwise busy or preoccupied mind, and because of this, there seemed to be a common notion of PA enabling the mind to get a rest.

For a number of participants, the process of attending to or focusing on PA seemed to shift their attention away from anxiety provoking or unhelpful thoughts. For example, John describes ceasing to worry about a family member's illness whilst focusing his attention on playing sport:

> *"…I'm so void of any thought other than the sport I'm doing and like how I'm how I'm performing and what I can be doing. And it takes up my entire mind. It's almost, it's almost like, I do some meditation, and it's, I would compare it to meditating. It's like a complete and entire focus on one objective that doesn't like, that I don't think about anything else." (p.24)*

Here I am struck by the contrast between John's mind being "void" of any thoughts other than those about the sport he is doing, which then take up his "entire mind". It seems that John experiences his mind as a space, which is filled out or occupied by his thoughts. Perhaps sport offers John a very clear objective that then enables only his related thoughts to occupy his mind – so much so, there is room for nothing else. Interestingly, he likens this experience to meditation. Perhaps sport becomes an anchor point to which John's attention can always return, much like the breath in a typical meditation practice. Similar to John, Elena describes having "no space" for other thoughts whilst focusing on riding a spin bike:

> *"…all you can do is focus on these five minutes that you're doing whatever song you do, there's no space really to be drifting off and thinking about whatever else." (p.19)*

Again, Elena's "focus" strikes me as being in stark contrast to her alternative experience of "drifting off" – a type of thought process that one might deem unmindful. For both Elena and John, it seems that PA offers them a complete alternative to the type of thoughts they might otherwise have. Notice how Elena also says that adopting a focus is "all you can do". For Elena it seems that PA leaves no option but to bring her attention to what she is doing. Elena also described how PA shifts her attention to her surroundings:

> *"You know, one of the things that's happened for me is…and I don't know that its consciously but now that there's language around it, is mindfulness. And what I mean by that is, I'm, I'm paying attention when I'm exercising to where I am." (p.18)*

For Elena, it seems that PA has the ability to cultivate a focus on both the activity itself and her surroundings. In both instances it would seem that Elena is attending to the present moment, rather than her thoughts, and interestingly Elena uses the term "mindfulness" to describe this experience. It is interesting that Elena feels as though this newfound mindfulness did not occur at a conscious level. Perhaps this draws a distinction between PA and other mindfulness practices. That is, during PA, present moment awareness occurs without someone actively striving for it. Later in the interview Elena expressed that this mindfulness continues throughout the day, helping her to be more *"productive"* as her "*mind is clear"* (p.39). This suggests that the present moment awareness Elena is able to generate during PA is long-lasting to some degree. Tara also described shifting her attention away from her cognitions and into the present moment:

> *"I'm an anxious person, I feel like there's always too many tabs open in my head, you know, for like a lack of a better explanation for it, you know. So when I'm exercising, it kind of just switches off and I can just like breathe and be in that moment…" (p.17)*

Here it seems that PA helps Tara to regulate, or get relief from, her over active mind. PA enables Tara to *"switch off"* the *"tabs"* open in her head, suggesting a relatively quick and complete relief from her anxious thoughts. This reference to *"tabs"* is also interesting, given that Tara is a PhD student. I wonder if at some level, PA enables her to get away from her experience of potentially having numerous, actual tabs open on her laptop. It seems that she is then more able to connect to her body by focusing on her breath and grounding herself in the moment. In other words, for Tara, it seems like the body, as well as the physical activity itself, plays an important role in the management of her thoughts.

Tara also says:

> *"…it just allows me to concentrate on the physical, like pushing myself to those limits, which I, which is what allows me to get away from my thoughts as well" (p.18)*

Perhaps distinct from the other participants, Tara seems to emphasise a focus on pushing herself as important in regulating her mind. That is, in addition to focusing on the activity, improving herself serves as an important focal point. Furthermore, the term "get away" seems to highlight to me that her previous thoughts are unwanted in some way. I also wonder if it feels as though PA takes her to a hypothetical place where these thoughts simply don't exist. Related to this, John expressed that his mind gets *"…a complete rest…"* when he focuses on sport and that this experience was *"…just like bliss" (p.25).* It seems that PA provides both of these participants with a welcome break from their mind. JonT also shares:

> *"It's freeing because like I said before, it's, it puts you in a different frame of mind, it puts you somewhere, somewhere else to send your mind to. And so that to me is a form of freedom" (p.14)*

JonT's reference to freedom also reminds me of getting away from or becoming released from something unpleasant. I also wonder if having the *"freedom"* to shift mindset so easily gives JonT a sense of agency in relation to his mind. JonT feels able to *"send"* his mind somewhere, which, to me, paints a picture of him exerting an element of (cognitive) control. I wonder if with this control comes a sense of freedom to think and perhaps feel the way he wants to.

Related to this idea of changing the contents of one's mind, Lucy says:

> *"I'm physically tired, but I have some like, mental energy, but it's like positive mental energy. Like I'm not gonna be thinking all these like crappy things. Instead, it's like, what can I do that's like positive with my brain." (p.18)*

It seems that feeling mentally energised after PA enables Lucy to think more "positive" things. This aspect of Lucy's experience is relatively unique from other participants, as there is less emphasis on giving her mind a rest, and more emphasis on facilitating an energy that generates a more positive frame of mind. I also found the contrast between her physical tiredness and mental energy thought provoking as it seems as if there has been a transfer of energy in some way. Lucy goes on to say that she gets these *"good vibes"* because she has *"accomplished something" (p.18).* I wonder, therefore, if her physical tiredness is a sign of achievement that boosts self-worth and facilitates a more positive line of thought. Lucy also asks herself in this extract*, "what can I do that's like positive with my brain"?* Similar to JonT, I wonder if this is indicative of Lucy experiencing a sense of agency over her mind. What it does and what she thinks has become something that she can decide.

Distinct from all participants, Theo emphasises a sense of normality following PA due to the clearance of his "brain fog". He said:

"…when the fog clears I'm just kind of everything kind of just starts to flood back through again. But but it's not I'm not thinking about like, I suppose that is quite interesting, I'm not really thinking about umm any like the bad times or anything. It's just like normal things that go through my head. (p.18)

For Theo, who had suffered a period of depression, it is the experience of normality that feels significant. For me, the phrase *"flood back through"* suggests that PA re-opens a door to 'normal' cognitions that have been held back in the fog. These normal cognitions then seem to prevent Theo from thinking about the *"bad times".* Also notice how Theo says, "*I suppose that is interesting".* It seems that during the interview, he is thinking about this aspect of his experience for the first time. Perhaps the importance of normality is not something he has thought about, or considered as significant, before. Nonetheless, Theo goes on to further explore this normality a little later in the interview:

"…everyone else is out there living their lives and, and progressing through well through their lives, and you're kind of stagnant. And you do feel a disconnect. So when you start to get these kind of normal thoughts back, and even though they are small, very, very small baby steps, you've just it's the first time you feel a bit of progress, I guess. And it does, it's a very, it's very relieving" (p.19)

Things had started to feel difficult for Theo when he had to re-sit an A Level whilst his friends went off to University. Perhaps this fed into his experience of feeling "stagnant" or stationary and, ultimately, disconnected and left behind. There seems to be a stark contrast between the experience of feeling stagnant and the experience of his thoughts flooding back through again. I wonder if the movement involved in PA could be connected to the newfound movement in his mind. Taking *"very small baby steps"* forward provides Theo, unsurprisingly, with great relief. Again, I get the sense of movement – in the form of baby steps – coming back into Theo's life. Later in his interview, Theo expressed that this shift provided him with hope that

he *"could kind of continue a bit longer" (p.32.)*. This part of the interview was difficult for Theo, but it highlighted the extent of his suffering and also his relief. Strikingly, it was the experience of normality that seemed to give him the strength to bear his depression and the hope that he could go on.

Slightly distinct from other participants, Akina talks of PA shifting her attention away from the emotion of anxiety, rather than her thoughts per se. She says:

> *"I guess when I'm playing sport, I'm not so anxious…I think because I'm doing something to take my mind off it". (p.10)*

It seems that for Akina shifting her attention away from the anxiety brings her some emotional relief.

3.2.2 Subtheme 1b: Physical Activity Activates the Mind-Body Connection.

This second subtheme captures the participants' experiences of their wellbeing improving as an effect of the connection between body and mind. All, bar one participant, refer to this experience in some way. Many describe how their experiences felt within the body become reflected in the functioning of their mind. Related to this, but distinct in some way, other participants describe the improvement of their wellbeing as both a physical and psychological experience. Speaking to this latter point, Elena expresses the following when trying to explain the 'high' she gets after PA:

> *"Umm…I cannot put words to it…. Like if I am going to now I'm going to go and think about it when I get off the bike next time. But I don't know what it is like I…All I know is I keep wanting to go back because I get this emotional, physical, emotional feeling around it." (p.31)*

It seems here that Elena is trying to describe a feeling that is both emotional and physical. She keeps *"wanting to go back",* suggesting that this *"emotional, physical"* feeling is pleasant or beneficial for her in some way. I wonder whether her repetition of "emotional" is indicative that her experience is felt predominantly at an emotional level. However, whilst she is aware of this experience and behaves in a way that ensures its repetition, note that it appears to be difficult for Elena to describe. I wonder if this difficulty is related to the indication that this experience is out of her conscious awareness in some way – she wants to go back and think about it more actively next time. This difficulty in verbalising her experience re-occurs throughout her interview. For instance, later Elena also says:

> *"Ummm…I feel like I'm lacking the knowledge or information that I need to describe. Like from a scientific standpoint. Because I just I know, I know, for myself, that there is a connection, direct connection between my exercise and movement and my emotional wellbeing." (p.34)*

I wonder if the embodied nature of Elena's experience feels complex, so that she believes she needs a particular knowledge base to be able to sufficiently put it into words. It appears that she also feels as though it is necessary to describe the connection between movement and her wellbeing from a *"scientific standpoint".* Perhaps the more physical aspect of her experience is assumed to have a predominant scientific or physiological basis. In addition, Elena is a clinical social worker and was in the process of starting a business connecting mental wellbeing and movement herself. I wonder therefore if, as a professional with an interest in this area of research, Elena feels the pressure to make sense of her experience in a sufficiently intellectual way. Despite *"lacking the knowledge"* she deems necessary, Elena feels certain about the realness of her experience, repeating that she *"knows"* there is a connection. I wonder if, on some level, Elena finds comfort in holding such certainty in this area of her life.

Similar to Elena, when discussing the impact of going for a run, Theo seems to describe a particularly embodied experience:

> *"…it was kind of euphoric in a way. Because…you can get into that, that stride. And you can kind of go into that Zen state and yeah, and and it's called runner's high is called runner's high, isn't it? But um, yeah, and, and that was kind of the first like, little glimpse of it. But in terms of like, umm, that's like I guess the physical first physical reaction or well noticing the first physical reaction". (p.10)*

Theo associates getting into a "stride" with his experience of a *"Zen state"* and the *"runner's high"*. I wonder if he draws a connection between this movement of his physical body and his emotional experiences, and if this sets the basis for him to make sense of his feelings as the result of a *"physical reaction".* It also seems as though Theo's experience of the Zen state co-occurs with his experience of the runner's high. I wonder if this is akin to a state of flow that is both active and calm. Later, Theo also says:

> *"I don't know how much truth there is to like…if its a placebo or if its umm or if there was actually sort of some sort of chemistry going on, but either way, like, if like, it feels real, and it feels good…" (p.11)*

Similar to Elena, it seems that it feels necessary for Theo to attribute the realness of his experience to some sort of chemical phenomenon, even if it is a placebo. I wonder if, for both of these participants, it feels necessary to attribute such a significant experience to something more tangible in order to make most sense of how it occurs. Related to this, whilst exploring feelings of relaxation following a session, JonT says:

"…the breath work affects your vagus, the vagus drops you back down from a sympathetic to parasympathetic state" (p.28).

Again, JonT associates the psychological experience of relaxation to a more hormonal phenomenon. For JonT, making sense of his experience in this way is perhaps unsurprising given that he is a trained medical professional and has worked in a medical context for many years. Perhaps his understanding of change in functioning is primarily biological.

For other participants, there is less emphasis on the biochemical nature of their experience and instead a greater awareness of the body's ability to influence their mind. For example, Lucy says:

"It's like, a, a…energy that you get from being physically active I think that then just like enables me to like lift my mood a bit. I think that's what it is. It's like, oh, I feel like my body feels physically active and good and then it kind of like engages your mind slightly to kind of like, yeah, stop being so depressing and try and get up a bit." (p.29)

It seems that feeling the physical energy of her body enables Lucy to activate her mind in a more desirable way. It seems as though she becomes able to mirror the body's energy in her mind in some way. I wonder if the experience of her body feeling *"good"* promotes some sort of agency in relation to her mind so that she can then feel able to *"stop"* feeling low in mood and instead *"try and get up a bit".* This seems probable given that Lucy also describes experiencing numerous "*physical symptoms"* of anxiety that PA enables her to *"control"* (p.24). Lucy also describes how a particular type of movement can help her mind to relax:

"…swimming is super like relaxing, right? Because you're like the weight's taken off your whole body. And you're just like chilling and it's very loose, which is lovely." (p.25)

Here Lucy seems to suggest that the loose and weightless movement associated with swimming relaxes both body and mind. Lucy's choice of words also reminds me of the saying "a weight lifted off my shoulders". I wonder if the actual weightlessness of her body in water facilitates the relief of particular stresses weighing down on her mind. Tara also articulates how the movement of running has an impact on her mind:

> *"…what I wanted to do for my PhD also came about while I was running, so…I've always thought of running as meditation in motion…it's a very cyclical sport, you know, you're just doing one thing for an extended period of time. So think it gives me a lot of like, clarity, mental clarity, as well." (p.3)*

Here it seems that Tara finds the simple, repetitive and perhaps predictable nature of running helpful in facilitating a clarity of mind. Perhaps when Tara is so sure of what her body is doing – *"you're just doing one thing for an extended period of time*" – she has more capacity to think clearly about other things. By using the example of her PhD topic, I wonder if Tara is conveying the extent of this clarity as well – after all, a PhD topic is an important idea to have. It is also interesting that Tara refers to this aspect of her experience as *"meditation in motion".* This suggests that Tara experiences similar, if not the same, benefits of meditation, but whilst she is on the move. Whilst this extract does seem indicative of an elevated connection between body and mind, likening PA to *"meditation in motion"* also seems to link this aspect of Tara's experience to subtheme 1a. That is, PA is having some sort of calming effect on her mind. JonT also shares how particular experiences in his body become reflected in his mind. He says:

> *"So I'd then copy dance moves and learn these things. And it gives me a kind of flexibility, oh, where you can, you can twist a bit further, or you can twist this way or you can whatever it is, that is. And for me that flexibility of moving bodily, it's connected to the flexibility of your mind." (p.22)*

Here JonT seems to experience a reflection between the flexibility of his body and the flexibility of his mind. I wonder if the experience of learning new things and pushing himself *"a bit further"* physically, opens up his mind to also take in new or alternative ideas. I get the sense that JonT is open to both physical and mental discoveries, which require an openness and a sort of whole-body elasticity.

Theo also considers how his body impacts his mind. In relation to his brain fog he says:

> *"I think it's when like my heart rate gets up to a certain level then it kind of just seems to like kind of evaporate pretty quickly umm to a certain extent." (p.18)*

Here, I wonder if Theo's use of the word *"evaporate"* is particularly indicative of a felt connection between his body and mind. As his heart rate increases, and his body inevitably warms up, his brain fog is caused to evaporate, perhaps in both a literal and a metaphorical way. I also wonder if the word "evaporate" speaks to the speed at which movement can have an impact on his mind. With that being said, Theo caveats his statement saying that his brain fog evaporates *"pretty quickly umm to a certain extent".* I wonder if he doesn't want to overemphasize the effectiveness of PA, at the risk of downplaying his suffering. Later in the interview, Theo also describes an increase in heart rate as *"euphoric in itself"* (p.30). I wonder if, when coming from a place of depression and fogginess, there is something particularly exhilarating in feeling your body activated and alive.

For some participants, the way PA makes their body look also seems to impact how they feel. For example, whilst exploring the link between PA and his confidence, Theo says:

> *"I mean, there's, there's quite like a narcissistic kind of viewpoint with that, just because it's like, I mean, look good, feel good, kind of thing. And it's not like, I don't mean that*

like I'm vain in any way. But just, obviously, everybody likes to like, like, look and feel good." (p.23)

Here, Theo seems to feel uncomfortable admitting that his confidence is influenced by his aesthetics. He starts the sentence saying that the link between looking and feeling good feels *"narcissistic",* before clarifying that he is not vain in any way and that this part of his experience is inevitably shared with others. I wonder if Theo feels self-conscious admitting to me, a female interviewer, that he feels good about the way he looks. Later in the interview, Theo also refers to the importance of feeling bigger *"as a guy" (p.44)*. I wonder, therefore, if the link between his physique and his confidence is an important part of his identity as a man, perhaps influenced by masculine culture in some way. With that being said, Tara also shares that receiving compliments from others about how fit she looks can provide a boost in her *"self-esteem"* (p.10). This seems to suggest that the connection between looking and feeling a certain way is experienced by both men and women in the sample.

Finally, whilst the majority of participants seem to discuss the impact that the body has on the mind, Tara also describes experiencing this connection between mind and body the other way around. She says:

"Because like if I haven't been present mentally in the workout, you know, if I've been like, anxious about something else or my mind has been somewhere else, it's very, very certain that my workout won't be 100% either, you know, I can then come out of it feeling like I wasn't able to push as much." (p.37)

When Tara's mind is elsewhere, she feels physically unable to push herself. This seems to be indicative of her mind also having an impact on the way the body is able to work. In order to push her body, Tara seems to need the present moment engagement of her mind. Tara also says:

"Like I was just so like mentally drained out that I didn't have like the physical strength to go and work out. And then that's something that didn't make me feel good. You know, like it was just like a negative cycle." (p.16)

Here, it seems that feeling mentally drained also drains Tara's body of some, if not all, of its physical strength. Tara then describes how a subsequent lack of PA negatively impacted her mood, suggesting a cyclical relationship between her body and her mind.

3.3 GET 2: A Reliable Resource for Managing How One Feels.

The second GET captures the experience of all participants feeling able to rely on PA to manage how they feel. In a way, this second GET builds upon the first, exploring the sense of agency over wellbeing that an embodied awareness and the mind-body connection seems to bring. This theme captures how participants use their awareness, and the mind-body connection, to manage how they feel. For some participants, their experience seems to centre on the inner emotions that PA enables them to change or control. For others, the reliable impact of PA seems to enhance a belief in one's ability cope. These related experiences are further explored below.

3.3.1 Subtheme 2a: Knowing that Physical Activity Will Be There is Containing.

This first subtheme focuses on the reliability of PA. Some participants seem to experience this reliability in terms of the beneficial effects of PA. However, for many others, PA seems to provide a reliable and containing sense of structure to their day. Exploring this sense of structure, Tara says:

"So this at least gives my day some structure, then, you know, like having that scheduled workout and creating things according to that plan." (p.34)

Tara is a PhD student who primarily works by herself online. I therefore wonder if having something *"scheduled"* into her day provides her with something more fixed than the relatively open-ended process of her studies. In a sense, I wonder if PA has become a consistent centrepiece around which her evolving studies can be organised. This seems probable given that Tara talks of *"creating things according to that plan".* Robert shares a similar experience:

"… it wasn't just the, the rugby routine three or four times a week, it was, because if you're playing rugby one day, that would mean you'd have to, like you'd have the whole of Wednesday off so that'd mean you had to do uni work on the Monday and the Tuesday, for example." (p.9)

For Robert, it seems that PA brings a sense of structure to his week. This seemed particularly containing for Robert as he tried to settle into University. When starting university, Robert told me that he had initially struggled with all of his *"free time".* However, sport had meant that life became *"quite busy"* once again (p.9). I wonder, therefore, if playing sport also provides Robert with a sense of purpose when he needs it most. Similarly, when talking about playing sport at University, John says:

"I've got this to do, I've got that to do…and it kind of keeps yourself a little bit focused, and like, I'm not completely going off the rails like doing whatever, but you have to kind of have that certain element of discipline." (p.7)

Here, the contrast between the word *"focus"* or *"discipline"* and the phrase *"going off the rails"* stands out to me. It seems to suggest that sport brings an element of control to John's life, which was appreciated when he was a student. If sport kept him on the rails, I imagine it

supporting him in progressing through his young adult years in an undeviating sort of way. Later in his interview John also says, *"I'm just doing it. There are no ifs or buts about it"* (p.63). This seems to highlight a strict commitment to sport, and it makes me wonder whether PA represents some sort of authoritative figure to John, playing the role of something, or someone, that is commanding and ultimately obeyed.

Lucy also speaks of finding comfort in establishing some sort of routine. She says:

> *"I'm in control of what's happening. I know, I'm going to do my work. I know, I'm gonna, like, have do some fun stuff. And then I also know that I've like, also got the time to like, take for myself to like, go for a run or whatever. And I think it's like, yeah, it's like, a comfort in like having that kind of like control over what I'm doing and just kind of set up." (p.35)*

It seems that setting up a routine and knowing what her day/week has in store is comforting for Lucy. It brings a sense of *"control"* that seems important here. Perhaps it provides some certainty within a day that's content could otherwise be unknown. It also seems that incorporating a run into her day means that Lucy *"knows"* that she has time for herself. I wonder if knowing that she has time for herself makes the demands of the day more tolerable. Finding comfort in a sense of structure is also echoed by John who says:

> *"Having structure was so good for just, just basically just like diarising physical and mental benefits of exercise." (p.63)*

Here I am struck by the concept of *"diarising"* the benefits of PA. It seems to suggest that, for John, reaping the benefits of PA feels easy or even guaranteed in some sort of way. The benefits feel so likely, he can schedule them into the diary. John also works a demanding corporate job in the city, and so I wonder whether this experience of scheduling, and reliably

gaining the benefits from, PA feels particularly useful and containing as part of his busy lifestyle.

3.3.2 Subtheme 2b: Physical Activity Enhances Belief in One's Ability to Cope.

Building on 2a, this subtheme tries to capture how the reliability of the beneficial effects of PA provides seven out of the eight participants with a clear sense of agency over their mental health and wellbeing. It ultimately considers how PA seems to provide participants with opportunities to withstand a challenge and develop their belief in their ability to cope. This then seems to cultivate a sense of control participants have over how they feel. Speaking to this, Tara says the following when reflecting on her experience of boxing:

> *"…I think that's where that resilience then comes from, because you've put your body through the hard stuff, and you know that you can handle it and you know that you can do it again. And you're just gonna get strong each time you're able to, like, take that beating and then come back up." (p.40)*

Here Tara seems to be saying that the experience of challenging herself physically facilitates a mental resilience and composure during hard times. Surviving a challenge once seems to enhance her belief in being able to endure a challenge again. Whilst Tara speaks of this in the context of boxing, I think this idea can be readily considered as a metaphor for her mental resilience as well. Perhaps when life knocks Tara down psychologically, she feels confident in being able to pick herself back up. In addition, Tara refers to getting "strong" each time she gets knocked down and comes back up again. I wonder if Tara's experience of getting stronger as a result of a physical challenge enables her to withstand and believe in the possibility of growing psychologically stronger as a result of her mental challenges as well. To some extent, this aspect of Tara's experience also ties into subtheme 1b, suggesting a connection between body and mind. Tara also says:

"I really, really enjoy improving myself. And you know, that feeling of invincibility." (p.20)

For Tara, improving herself at the gym feeds into a sense of *"invincibility".* This suggests that for Tara, she has come to feel as though there is no limit, and perhaps no challenge that is too hard to withstand. Whilst she is perhaps referring to her physical abilities here, I wonder if this sense of invulnerability translates into her emotional world.

Whilst considering the challenge of training for a half marathon, Elena says:

"…it is a challenge, to me, it is a challenge. It's not an easy thing to do. But those feelings of enjoying it, being in the moment, happiness, all of those things take me through the challenge of it…It's teaching me that I can do hard things, and also have these feelings of this kind of sucks. But, in, for the most part, I'm proud of myself, I'm doing it. It's not terrible. I'm enjoying it." (p.27)

Perhaps most notably here, Elena seems to undergo a challenge whilst also getting in touch with the more positive aspects of her experience. She is able to *"do hard things"* whilst also contacting the present moment and experiencing feelings of happiness, pride and enjoyment. Perhaps this enables Elena to not experience hard times as all bad and instead to see the light when things get hard. In other words, it seems that Elena feels able to cope with, and not get overwhelmed by thoughts and feelings of *"this kind of sucks".* During the latter part of this quote, it also feels as though Elena is actively trying to convince herself that she is proud and enjoying the challenge she has just described. I wonder if this is actually revealing the inner dialogue she tends to adopt when she is training or finding things particularly hard. John also speaks of bearing a challenge. He says:

"It just feels like it's like a real sense of like, accomplishment, more so than other forms of, like more so than going to the gym, definitely. It's more, because it was more of a challenge. Because I was like, my body was less prepared to go on a 5k run than it was just to go to the gym, it's more of a challenge. It's more of like a feat. It's like, I've done something that I'm not necessarily physically designed to do well, and I've gone and done it." (p.39)

John seems to experience more pride and feelings of accomplishment after doing something his body is *"less prepared"* for or not *"physically designed to do".* I wonder if, in addition to feelings of accomplishment, John finds contentment in knowing that he can cope with challenges that are, to some extent, unforeseen. Perhaps he rests assured that he can cope with anything that comes his way. Robert and Lucy also expressed that accomplishing a workout in the morning increases their confidence in taking on other challenges later on in the day. For example, Lucy says:

"I think it's just like, oh, like, if I feel like I've accomplished something, I feel motivated, like, I did, did a good job, well done. Like, oh, I can do something else with this kind of like, I can do stuff. I can do this too, whatever. Oh, I ran what what that distance before breakfast - great. Now I can do X, Y and Zed this morning or whatever, I don't know." (p.18)

Perhaps what stands out to me most in this short extract is Lucy's relatively blasé attitude towards what she feels able to do next. For instance, *"I can do stuff. I can do this too, whatever."* I wonder if this is indicative of her confidence in being able to cope with whatever it is she decides to do. That is, she has no reason to be worried, she has already achieved something challenging that day. Interestingly, a little later in the interview Lucy also says, *"I don't need to stress about being anxious, I have control over being anxious" (p.21).* It seems

therefore that perhaps, for Lucy, gaining *"control"* over her anxiety through PA means that she is more confident in the face of being challenged whilst at work. If she has no reason to stress about her anxiety, perhaps she has more capacity to tolerate other things.

Theo also speaks of an enhanced belief in his ability to cope with his depression. He says:

> *"…it never seems to get that bad anymore. Because I know I can bounce back from it. And I think part of the reason why it's so bad back in the day was obviously you just feel hopeless. You feel like nothing's worth doing. There's no way out of it. But yeah, once you've once I've got through it once I just, you know then you have the capacity to get yourself out of anything. If I can get myself out of that, I could get myself out of anything." (p.55)*

It seems that the experience of successfully managing his depression through using PA before gives Theo an ongoing sense of agency over his depression and wellbeing today. He now believes that he *"can bounce back from"* a period of suffering instead of feeling as though *"there's no way out…".* Perhaps he now sees psychological pain as temporary instead of an unbounded state or experience. It seems that for Theo, knowing that there is a way to manage his depression cultivates a sense of hope, instead of a hopelessness, and this seems important in preventing Theo's depression from getting as bad as it was once before. Theo's closing line – *"If I can get myself out of that, I could get myself out of anything"* – gives me a real sense of invincibility. It is as if Theo now feels that he could manage anything that comes his way. Touching on this sense of agency earlier in the interview, Theo also says:

> *"So like, I do get a bit of like, fog in the brain. But then, then I know now how to kind of tackle it. And when I tackle it, I get like a real good, like, positive boost. And that then motivates me to then do something else." (p.13)*

Notably, it seems that successfully tackling his brain fog through PA gives Theo a *"positive boost"* in itself. That is, in addition to the relief of the brain fog improving his wellbeing, Theo seems to get something positive out of the actual process of managing it. I wonder if this suggests that there is something mood enhancing in the experience of having agency itself. This then motivates him to do something else, suggesting a positive feedback loop. Elena also describes a sense of knowing exactly what to do. She says:

> *"Yeah, I know exactly what I need to do. Yeah, I know exactly what I need to do. Yep. I just get back out there and do it. And I know that once I'm back in my routine very quickly, I'll feel better." (p.46)*

I wonder if Elena's repetition here is indicative of her strong sense of knowing exactly what to do. This extract also seems to convey a simplicity to her experience, with no doubt over what she needs and the positive impact of PA. Perhaps this certainty is also beneficial for her wellbeing in some way. With that being said, Elena also shares:

> *"I think I could not, I don't think I could go off the antidepressant and solely rely on exercise. I think they complement each other." (p.17)*

This extract seems to highlight that, despite the certainty with which Elena feels able to manage her wellbeing with PA, she does not feel able to rely on it alone. Slightly later, she elaborates on this complementary experience of medication:

> *"…it takes the edge off. And the day-to-day stress of life and anxiety is not as bad because I'm on that medication, although I still have it from just living life, and that, the icing on the cake so to speak, what really helps it all is for me to get out and exercise and have that time to myself. It's therapeutic for me, in a sense. Like I don't, you know, I work through a lot of stuff." (p.17)*

It seems that Elena relies on her medication to maintain a sense of wellbeing, and PA is then used to enhance her wellbeing even more. The term *"icing on the cake"* suggests that, for Elena, PA is an enhancement rather than a baseline necessity. Interestingly, Elena suggests that PA provides her with time for herself to work through *"a lot of stuff"* – a therapeutic sounding experience that medication alone might not provide.

3.3.3 Subtheme 2c: Physical Activity Can Be Relied Upon to Manage Emotions.

This subtheme captures the more emotional elements of participants' experiences. Adding to the experience of developing a belief in one's ability to cope, here all participants speak of using PA to actively manage their different emotions. Similar to the other subthemes discussed in this GET, this experience feels reliable or, for some, a guarantee. For example, Lucy says:

> *"I can't think of a time where I've like, been out and done exercise and kind of come home and been like, I feel worse than I did before before I went out, right. Like, I always feel like, better when I get back. Like, even if I feel kind of good, I come back, and I feel better ". (p.19)*

For Lucy, PA seems to always have a positive impact on her mood. This frames PA as a somewhat reliable tool. It also has a positive impact even when she feels *"kind of good"* before. This suggests that PA is not limited to improving psychological wellbeing when things don't feel so good. Interestingly, for John, believing in this consistency and reliability seems to be enough to improve his mood alone. He says:

> *"…the prior recognition of the effects before the effects actually come in, is what I would say. That you understand that it's going to make you feel better, so that that means that you feel better already." (p.33)*

Here, anticipating the benefits of PA seems to enable John to experience them itself. I wonder if knowing that you can, and ultimately will, feel better provides John with a sense of hope and positivity, no matter what else has gone on for him within his day. I also wonder if this sense of knowing provides John with a containing sense of security or an experience of always maintaining an element of control.

Some participants also refer to the different emotions upon which PA has an effect. For some, PA seems to elicit feelings of accomplishment. For example, Elena says:

> *"It's 45 minutes, I'm in and out. I feel like I've accomplished a lot. I'm set for the day. I love the feeling that I have the minute I get off that bike, I feel super accomplished. I've done something that's really super hard." (p.31)*

As a social worker and business owner, I wonder if Elena's working day feels relatively open-ended with ongoing projects and cases to support. Because of this, I wonder if the discrete nature of a workout – that enables Elena to be *"in and out"* – feels particularly helpful as it is something for Elena to fully complete and accomplish within her day. It also seems that eliciting these feelings of accomplishment at the beginning of the day sets the precedent for how the rest of it might unfold. Perhaps Elena feels more able and prepared to continue to do hard things. Related to this latter point, Robert says:

> *"…I feel kind of, like, I've been successful with everything. And then that kind of makes me feel happy and makes me feel better, and then kind of makes me feel motivated to kind of get on with the rest of the day." (p.32)*

For Robert, experiencing his workout as an early *"success"* seems important. It elicits feelings of happiness that are motivating. I wonder if feeling "successful" at something facilitates his confidence in seeking out success in other things that day.

Some participants, such as Tara, emphasise feelings of enjoyment, whilst others seem to place importance on the concept of having fun. For instance, Akina says:

> *"I think when I'm doing dance it umm it makes me laugh. Because I'm trying to copy what the dance teacher is showing us but I'm sort of lagging behind a bit in time. And that gives me the mechanisms to smile about it…" (p.9)*

It seems that PA provides Akina with an opportunity for light-hearted laughter. Given that Akina says that PA gives her *"the mechanisms"* to smile, I wonder if smiles and laughter feel more difficult to come by in other areas of her life. I also wonder if there is something safe and contained about the context of a dance class that enables Akina to have a laugh.

Whilst talking quite extensively on the notion of having fun, JonT says:

> *"You might be physically fitter, but in terms of your moods...it makes no difference. But if I find something which to me comes back ties back to the fun bit, it's like, ah, that was good." (p.35)*

Interestingly here, and perhaps unique from other participants, JonT emphasises the importance of having fun for improving his mood over and above the more physical aspect of PA and the experience of feeling physically fit. I wonder if, as a man in his 60s, JonT finds something youthful and comforting within the experience of having fun. Contributing to this idea, he says:

"So fun, fun is, is being like a child. And I know I've moved away from childhood a long time ago, but I still like the fun bits of it." (p.23)

Having fun seems to be one aspect of JonT's childhood that he can keep in touch with, no matter how much time has passed. I wonder if PA is an acceptable means through which JonT can embrace the fun and carefree nature of being a child. I wonder if reconnecting to the parts of himself that were prevalent as a child satisfies a nostalgia and a longing for the simplicity of childhood life to momentarily return again. This aspect of his experience seems important in improving the way JonT feels. Interestingly, Akina also describes a relationship between having fun and how she feels in relation to her age. She says, *"…it makes you realise you're only as old as you feel." (p.8).* To some extent it seems that, for Akina, having fun and the youthfulness this brings almost revises the reality of her age.

In addition to facilitating positive emotions, some participants describe PA facilitating the release of more difficult emotions, such as stress and anxiety. For example, Tara says:

"So like, boxing became like a release for me, you know, so I was taking it all out on the bag and like, the pads and stuff like that, and then like, so I was just a nicer person when I walked out of the session, because I was able to remove that frustration or anger or whatever, like, just out physically and then without actually like snapping at someone else or things like that." (p.41)

It seems that Tara uses boxing to regulate and remove her anger and frustration. It is almost as if these emotions get transferred across from Tara into the bags. It is interesting that she describes removing these feelings *"physically".* For Tara, there is something in the physical movement that is central to the release. I also wonder if Tara feels more *"able"* to express and *"remove"* her feelings of frustration and anger in more physical ways, as opposed to verbal or other alternatives. Perhaps the boxing ring feels containing and socially acceptable for Tara

to physical express how she feels. To some extent, this experience seems to draw us back to the connection between body and mind.

In addition to facilitating or releasing particular emotions, JonT speaks of PA helping him to tolerate feelings of stress. For instance, he expressed that PA prevented him from becoming *"emotionally hijacked"* by challenging experiences (p.21) and that it enabled him to work through things without *"hitting the roof"* (p.20). Both of these statements suggest that without PA, JonT could feel less emotionally regulated or experience less emotional control. This aspect of his experience feels particularly important to JonT within the context of coping with the stressors of living with a close family member who is ill. Expanding on this, JonT says:

> *"So the stuff that I do acts as a buffer to some of the other things that are going on". (p.42)*

It seems that PA creates space between JonT and his challenges, meaning that they feel less overwhelming at times. From this perspective it seems that, for JonT, PA has an emotionally protective side to it, as opposed to only facilitating the management of his emotions as and when they arise.

3.4 GET 3: Physical Activity Facilitates an Enriching Experience That Also Improves Wellbeing.

This GET captures participants experiences of PA adding something else into their lives that is enriching for them in some way. All participants speak to this through either one or both of the subthemes. In a sense, this third theme moves beyond what PA is doing in the moment – as is considered in themes one and two – and instead considers what participants feel PA enables them to do. To some extent, this theme touches on some of the more indirect ways in which PA influences and benefits psychological wellbeing.

3.4.1 Subtheme 3a: Physical Activity Supports a More Enriching Engagement in Life.

This subtheme captures the ways in which five out of the eight participants experience a more enriching engagement in life through PA. Some describe how PA provides a basis from which other wellbeing-benefiting activities or exercises can then be added into their lives. Others talk about how PA works in conjunction with other wellbeing-related activities. In addition, JonT discusses how PA creates the opportunity for other things to be added into his life in some way. For example, PA offers a time to listen to a podcast that then gives him something else to talk about. In addition, time spent in the gym offers him content that he can then use to creatively make up stories about others in his head. Speaking of these experiences, he says:

> *"…and I create my stories around what's happening, or I'd come back and, or even share about what I'm listening to on the podcast, it gives me something else apart from what's going on in that enclosed space". (p.8)*

Whilst making up stories about other gym goers could be considered a form of escapism, I wonder if it is also indicative of JonT using this time to notice and engage with those around him at a deeper, more creative level. Through the process of storytelling, perhaps he is more dynamically engaging in life. I was also struck by JonT's reference to PA providing him with something separate to what is going on in his *"enclosed space"* at home. There seems to be quite some contrast between this enclosed space and the boundless nature of storytelling whilst he is at the gym and on the 'outside'. Perhaps his storytelling is a useful way for JonT to get relief from the penned-in feeling he seems to describe when he is at home. At the time of the interview, JonT shared that a family member had been ill for some time, and so I also wonder whether engaging in storytelling is an attempt for JonT to escape what could be a painful and stressful reality at home.

Other participants describe PA positively influencing their life beyond their wellbeing. For example, early in her interview, Tara says:

> *"And I feel like it's given me so much enrichment in my life in terms of discipline, routine, team building." (p.1)*

Tara has engaged in lots of different sports at a competitive level since a young age. Given that sport has been such an integral part of her life, Tara feels as though it had taught her important lessons for life. Whilst not referring directly to her wellbeing here per se, I wonder if having discipline, a desire for routine and an ability to work with others as part of a team, helps Tara to engage with life with a sense of competence that ultimately fosters her wellbeing.

Other participants consider how improving their wellbeing through PA led to other, similarly beneficial, knock-on effects. For example, John explains:

> *"…it's obviously all kind of intertwined, but through doing well at school sport and like performing at that level, it then meant that my like mental state generally was better and clearer, which then meant I was able to perform better at school, which then meant my mental health state was even better than it was before." (p.15-16)*

Here John seems to describe a continuous cycle of sport improving his *"mental state",* which in turn improved his performance at school. I wonder if, therefore, PA improves his wellbeing by facilitating other achievements that in turn foster his self-worth. Theo also talks of PA having important knock-on effects:

> *"…the start of the Snowball was obviously running again, then getting back into the weights, get in shape, which then helped me like then, I don't know, like, apply for a job*

I'd enjoy more and getting out and speaking to friends, so like that was this was the start of the snowball, but but now it's just yeah, so there's a lot of factors, what builds my confidence." (p.26-27)

Interestingly here, Theo describes running as *"the start of the snowball".* This implies that running was just one small or initial action that then led to others as part of a process leading to significant change. It seems that, initially, this snowball effect began with the evolution of different physical activities – as running progressed into weights – before other non-PA, life-enriching actions – such as applying for a job – were picked up along the way. To summarise this aspect of his experience, it seems that PA was the first but is by no means now the only activity that influences Theo's wellbeing. Considering the order in which these different influences have come into his life, Theo says:

"…when I had like, my brain was fogged, fogged up, I just couldn't…focus on anything right, and and I just think it was it was out of necessity as opposed to a specific choice. So I don't think I don't think…I don't think I could have started with meditation or start with reading and then maybe got back into fitness. I do think the fitness was the catalyst to kind of getting everything kick started again." (p.39)

For Theo, it seems that, to start with, PA felt like the most accessible thing for him to do. I wonder if this highlights the importance of Theo's body at a time when his mind felt stuck or out of reach. I wonder if through connecting with or activating his physical self, Theo felt able to gradually re-connect with, or to activate, his mind. His use of the words, *"catalyst"* and *"kick start"* also reiterates PA's role in starting the process for him. It gives me the sense of an injection of energy and a progression from a dearth of activity to a sense of being alive.

John also considers how PA is a part of a complete engagement with life. He says:

"…just like eating well drinking loads of water, having a good day at work, doing some exercise, seeing my mates. Like that, if I do all those things, I've had a really good day. So like doing the exercise element of it, it's just like a part of what makes my package of just like having a good day." (p.33)

Whilst doing exercise is a part of what makes up a good day for John, here he highlights that it is not the only thing impacting his wellbeing. PA is a part of a good day *"package",* which suggests that it is a part of a varied and balanced life. For John, it seems that PA is also not the only thing he needs to rely on.

3.4.2 Subtheme 3b: Physical Activity Supports Social Interactions and Connections with Others.

Another key, enriching experience that all eight participants describe as beneficial is the opportunity to socialise with or connect with those around them and their friends. However, the social aspect of PA seems to benefit wellbeing in slightly different ways. Akina talks of making friends through sport activities organised by a mental health charity:

"I think it helped quite a lot. Because it, you don't feel so depressed that you're going through something on your own, that you've found somebody to, because it enables you to talk to people and it just, it just helps." (p.16)

Through meeting others that also suffer with their mental health, Akina seems to feel less alone in her experience and subsequently less depressed. Perhaps sport is a mechanism through which people with similar experiences and difficulties can be brought together. With this in mind, I wonder if, at times, it is the opportunity to connect with others, as opposed to the actual PA itself, that feels most beneficial to Akina's psychological wellbeing. Lucy also touches on this idea. She says:

> *"…probably going to like play lacrosse or something, part of the like positiveness, positivity that comes out of that is actually just like a, I've had a nice social interaction rather than I've exercised." (p.5)*

Here Lucy explicitly suggests that her *"positivity"* following a game of lacrosse is in part down to the social interactions she has had. This seems to highlight that PA is indirectly influencing Lucy's mood through the social opportunities it provides. Robert also explains that, due to his busy lifestyle, PA is a good way of him seeing his friends and *"staying connected to people" (p.26).* Again, it seems that for Robert, PA acts a means through which he maintains a fulfilling social life.

Interestingly, Elena suggests that she is able to connect with others at a deeper level when she is interacting with them through sport. She says:

> *"…I think there's not as much distraction. And, you know, we're just running, we're side by side, you're, you're running, you're just, you're walking and I think it's you know, you're… I think for me, it happens to be that we're outside, we run amongst nature, we're ummm, you know, we're not trying to navigate a restaurant, we're not trying to navigate servers or alcohol, or, you know, whatever it is you're trying to do in a restaurant, there's a different kind of social context...." (p.7)*

At the start of this extract it seems that Elena is struggling to really grasp what it is about doing PA that enables her to connect better with another. Nonetheless, I wonder if her reference to *"just running"* and *"just"* walking indicates that there is a simplicity to the actual activity that then enables the connection with another to be prioritised. Indeed, Elena goes on to compare running and walking in nature to navigating a restaurant – two relatively opposing situations. Perhaps she is trying to stress the importance of being removed from the business of society

when fostering a genuine connection with another. I also wonder if, for Elena, there is something noteworthy in moving with another *"side by side".* Perhaps, for her, this accentuates a sense of unity, in comparison to sitting stationary and opposite someone at a restaurant. Elena also goes on to say:

> *"…you're dependent on each other, for the boat to be in sync to keep the boat moving. If one person messes up, the whole boat is off. You know, there's connection in that as well" (p.7)*

Perhaps it is therefore a kind of co-dependency that promotes a deeper connection for Elena when she is participating in team sports. It also seems that in Elena's experience, you *have* to connect with one another in order to keep moving forward. With this in mind, I wonder if sport promotes connection as a necessity rather than a choice.

Other participants seem to find connection as a result of sharing an experience that is particularly challenging. Talking of his training for a half marathon, John says:

> *"And we were able to kind of like, boost our moods by all relating to the fact that none of us enjoyed it. It was almost like we had a common enemy in running." (p.58)*

It seems that John finds connection through the shared experience of not enjoying PA. For him and those around him, the experience of PA seems to be a common ground or, in this instance, a *"common enemy"* through which the group can connect. It is interesting that sharing an experience of something unenjoyable is effective in improving a group's mood. Perhaps this highlights the importance of social connection as a phenomenon in itself. I also wonder if, for John, there is something comforting in learning that others find the experience of running challenging as well. As a young man who had often strived to be the best, I wonder if sharing a challenging experience with others is protective of his self-esteem.

For other participants, the experience of PA felt helpful for meeting others who enjoyed similar things. For example, Tara said:

> *"And that was such a nice community because like, these runs used to be like on Wednesday morning and Saturday morning. So sometimes on Saturday morning, I used to see some of my friends coming back from like a night out. So just having like a like-minded community who I was running with on, because I'd have to forego the Friday night out to go out running on Saturday morning. So I think so I was able to meet like a like-minded community" (p.3).*

PA seems to give Tara the opportunity to spend time with others who have similar interests and values. She compares and contrasts a "like minded community" with her friends coming back from a night out at the same time that she is going for a run. Perhaps without this running community, Tara might feel left out or isolated from her friends. I also wonder whether finding a like-minded community feels particularly important for Tara who moved to UK from a non-western country. Perhaps finding this group nurtures her sense of belonging whilst living in the UK. Building on this line of thought, JonT, who describes himself as mixed race, says:

> *"…you can see all sorts of different people and I love the community aspect of it. That's kind of like my prime motivation for going to the gym." (p.3)*

For JonT, seeing different kinds of people is important and his *"prime motivation"* for going to the gym. With this in mind, I wonder if JonT feels as though he sees a more diverse group of people at the gym than he does in other areas of his life and society. For JonT it seems that an important part of attending the gym is seeing and feeling comfortable amongst difference. Expanding on this, he says:

"I think it was actually fitting in. So you, you, for me, it felt like I could fit into this group." (p.5)

It seems that the gym is a place JonT feels able to fit into a group. I wonder if this experience of *"fitting in"* is more difficult for JonT to come by elsewhere. During this part of the interview, JonT also talks of finding similarities with others at the gym in relation to different aspects of his identity, including his age, ability and race. As one example, he says:

"And I think there was only one Asian looking person in that place. And she was a a fit individual, fit in terms of fit as opposed to fit in a colloquial kind of fit, looking woman who did all these exercises, and I was like, I can't do that. But funnily enough, even seeing somebody else of the same type made a difference." (p.5)

It seems here that relating to another through just one aspect of his identity makes *"a difference"* to JonT's wellbeing. Whilst the woman he refers to looks fitter than him, and therefore perhaps more able, the fact that she appears Chinese seems comforting for JonT in some way. There seems to be something important about the gym environment bringing together a diverse group of people amongst which JonT can find a sense of connection and perhaps a common ground.

Chapter 4: Discussion

4.1 Introduction

In this discussion chapter, I start by providing a narrative summary of the Interpretative Phenomenological Analysis (IPA) themes that emerged during analysis. I then discuss the key findings, situating them in the existing literature and considering how they might be thought about in relation to different psychological concepts and theories. I then go on to consider some key implications for practice, importantly offering a clinical perspective as a trainee counselling psychologist. I then offer a critical evaluation of the study, considering its key strengths and discussing its methodological limitations. I then consider potentially important future directions, both in relation to further research and also in relation to how physical activity (PA) might become more readily considered and utilised within the counselling psychology and other related fields. Finally, I offer some personal reflections on the research process before concluding the study.

4.2 Narrative Summary of IPA Themes

For all participants, PA activated an embodied awareness (GET 1). Adopting a focus on the PA itself seemed to bring participants into the 'here and now'. As conceptualized in subtheme 1a, focusing on the activity in the present moment seemed to enable participants to subsequently change or regulate their thought processes in some way. For many, PA enabled a shift of attention away from anxiety provoking or unhelpful thoughts and onto the activity at hand. Participants also suggested that the demands of PA left no space for thoughts other than those relating to what they are doing in the here and now. In other words, the nature of PA seemed to enforce or command a present moment awareness in some way. Relating to this, some participants described their experience of mindfulness as occurring at an unconscious level or occurring without consciously deciding to do so.

Analysis also suggested that, perhaps underpinning this experience of mindfulness, participants experienced a raised awareness of the connection between body and mind. This experience was captured in subtheme 1b. For some participants this connection seemed to be understood in terms of the potential influence of physiological mechanisms on their mind. For others, the connection between mind and body seemed to be understood in less physiological ways. That is, for many, the experience of their body (in terms of the way it moved, felt and functioned etc.) seemed to become reflected in the experience of their mind.

The second GET captured participants experiences of using PA as a way to manage their mood. PA seemed to both elevate positive affect – such as feelings of enjoyment, accomplishment and happiness – as well as relieve negative affect – such as feelings of anger, stress and anxiety. Analysis also showed that PA felt like a particularly reliable resource when it came to managing emotions such as those outlined above. It seems that a raised awareness of the mind-body connection fostered a reliable sense of agency in relation to one's emotions and psychological wellbeing. That is, through using PA, participants described a sense of knowing that they can manage how they feel.

It also seems that the physical challenge that inevitably comes with many forms of PA enhanced participants' beliefs in their own ability to cope, not only physically but also in the face of more psychological adversity. This experience was captured in subtheme 2b, Participants also described feeling more able to cope with and tolerate daily stress. For some participants, this belief in and sense of knowing how to cope provided them with a positive boost in wellbeing itself. This finding seems to suggest that there is something mood enhancing in the experience of having agency.

As summarised by GET 3, participants' experiences also suggested that PA facilitates enriching experiences that also improve wellbeing. For some, this enrichment seemed to come

from PA providing a basis from which other wellbeing-enhancing behaviours could be added into their lives. For example, participants described feeling more able to apply for jobs they'd enjoy more, and more able to socialise with friends. Others spoke about PA preceding other health related behaviours, such as healthy eating. This aspect of participants' experiences is captured in subtheme 3a.

Finally, as summarised in subtheme 3b, all participants described PA as providing them with the opportunity to connect with like-minded others and socialise with those others around them. For some participants, these social opportunities meant that they felt less alone in their experiences of mental health difficulties. For others, PA provided them with a sense of community and a sense of belonging that they might not have found elsewhere.

4.3 Discussion of Key Findings

4.3.1 Enforced Mindfulness

As highlighted in GET 1a, many participants shared that PA enabled them to get away from ruminative or anxiety provoking thoughts. In the existing literature, this experience seems to have been primarily explained by the concept of 'distraction' or the 'time-out hypothesis' (e.g. Bahrke & Morgan, 1978; Breus & O'Connor, 1998). That is, it has previously been proposed that PA offers individuals with a time-out or a distraction from their anxieties and thoughts. Whilst on the surface the mechanism of distraction could be deemed to be reflected in some participants' experiences in this study, in-depth analysis seems to suggest that PA facilitates an experience that goes beyond distraction and to a place of present moment awareness and an embodied mindfulness. That is, instead of simply being distracted, participants seem to become actively aware of what they are doing in the present moment, instead of being preoccupied with the activity of their mind.

The concept of mindfulness originated in Buddhist tradition, and it can be defined as "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally" (Kabat-Zinn, 1994, p.4). Importantly, over the years mindfulness practices, including 'mindfulness-meditation', have been reported to produce positive changes in mental state (Lazar et al., 2005*)* and benefit psychological wellbeing beyond the time that an individual is practising (Hölzel et al., 2011a; Shankland et al., 2021). As a result, numerous mindfulness-based interventions (MBIs) have been developed with the aim to reduce common mental health difficulties, including stress (e.g., Stress-Reduction and Relaxation Program, Kabat-Zinn, 1982; 1991) and depression (Mindfulness-Based Cognitive Therapy [MBCT], Segal et al., 2002). More recently, however, "non-MBIs", such as PA, have also been found to increase mindfulness (Xia et al.,2019). For instance, in one study conducted by Ulmer et al. (2010), it was found that YMCA exercisers who were successful at maintaining an exercise regime over the previous year tended to score higher on mindfulness, as indicated by the Mindful Attention and Awareness Scale and the Frieberg Mindfulness Inventory. In addition, Mothes et al. (2014) conducted an RCT, within which 149 healthy men were randomly allocated to one of two 12-week interventions – aerobic exercise or relaxation training. 'Dispositional mindfulness' – "…the propensity to be aware of one's actions in everyday life" (p.111) was assessed before and following the intervention using self-report measures. Interestingly, dispositional mindfulness increased significantly in the aerobic exercise group, but not in the relaxation or control conditions, and was positively correlated with improvements in mental health. In their grounded theory study, Pickett et al. (2017) also theorized that PA facilitates a "mental focus on the present" (p.23), which might alleviate symptoms of depression and low mood.

Supporting the research mentioned above, participants in this study also describe a mindful awareness, drawing parallels between their experiences of PA and meditation. Importantly, however, when considering participants' experiences at greater depth, the process through which PA appears to facilitate mindfulness and this meditative experience seems multifaceted. First, focusing on PA seemed to enable participants to shift their attention away from troubling

thoughts. I suggest that this experience could be explained by research that has explored the phenomenon of 'attention control'. A primary mechanism of mindfulness training is practising both the ability to sustain attention in the present moment and to move one's attention back to the present moment whenever the mind might wander (Bishop et al. 2004; Mothes et al. 2014). In fact, self-regulating one's attention in this way is thought to be central to Western society's conceptualization of mindfulness (Khoury et al, 2017). In one noteworthy study, de Bruin et al. (2016) compared the effects of daily meditation, physical exercise and heart rate variability-biofeedback (HRV-BF) on attention control, as well as mindful awareness, self-compassion and worrying. Interestingly, they found that physical exercise (and HRV-BF) was as effective as mindfulness meditation in improving all cognitive processes, including mindful awareness and attention control. This similarity in effectiveness is particularly interesting given that mindful awareness and attention control is not explained during PA but is the central target of mindfulness training and meditations. In other words, in the study conducted by de Bruin et al. (2016), PA seemed to enable individuals to self-regulate their attention without needing to be instructed to do so. This particular finding also appears to be supported by this study as the experience of mindfulness was not something participants seemed to consciously decide to pursue.

Research specifically exploring what it is about PA that enables this seamless or automatic shift in, or regulation of, attention seems limited. However, research exploring 'body awareness' does seem to hold some relevance. Body awareness – defined as the attentional focus on and awareness of internal bodily sensations – is thought to be a core mode of action of many MBIs that foster mindfulness (Mehling et al., 2009). Importantly, during PA, it is possible that the repeated exposure to bodily functions and sensations such as breathing, increased heart rate, temperature etc. particularly enhances body awareness (Mothes et al. 2004). Supporting this idea, Skrinar et al. (1986) found that following a six-to-eight-week intensive endurance training, body awareness increased significantly in a sample of thirteen women. Slightly more recently, in addition to finding that mindfulness-based stress reduction

(MBSR) programs lead to an increase in mindfulness and improved wellbeing, Carmody and Baer (2008) found that participants benefitted more from the movement-based components of yoga in comparison to the non-movement-based components. In light of these findings, it was hypothesised that it might have been easier for participants to bring their mindful attention to the body whilst it was moving, in comparison to when it was still during a sitting meditation. Within this current study, participants seem to go one step further and suggest that PA leaves them with no space or no choice to consider anything but the physical movement and the activity that they are doing. With this in mind, I suggest that PA seems to 'enforce' participants to become more aware of their body and, hereafter, the present moment.

When considering this experience of elevated body awareness, it does seem necessary to re-visit the idea that PA benefits wellbeing through the reduction of anxiety sensitivity. As outlined in the introduction chapter of this study, some research has suggested that the process of exposing an individual to a feared anxiety-related bodily sensation, such as a rapid heartbeat, during PA might increase tolerance for similar sensations in the context of anxiety symptoms (Broman-Fulks et al., 2004; Smits et al., 2008). Interestingly, whilst the data collected in this study also points towards the beneficial role of body awareness through interceptive exposure, I suggest that this process seems to enforce an experience of mindfulness, rather than a reduction in anxiety sensitivity. This study therefore offers an alternative explanation for the role of interoceptive awareness, perhaps suggesting a new mechanism that could benefit from further research.

At this point it does also seem important to note and discuss that this relatively automatic and all-consuming experience of mindfulness in this study seems similar to the experience of 'flow', which can be defined as "…the subjective experience of deep, but simultaneously effortless concentration on the task at hand" (Marty-Dugas et al. 2023, p.254). Similar to participants' experiences of mindfulness in this study, when 'in flow', an individual is thought to experience an intense and focused concentration on what they are doing in the present moment.

However, perhaps unique to flow, is the experience of a merging of action and awareness, and a loss of reflective self-consciousness (Nakamura and Csikszentmihalyi, 2002). In light of the experiences shared by participants in this study, I suggest that PA and its physical demands first enforces a relatively immediate embodied awareness and with that a particularly mindful experience. Then, from here on, I suggest that participants' experience perhaps do come to reflect something more similar to that of flow. That is, once their attention has shifted, and a present moment awareness has been achieved, they can then become wholly absorbed and invested in the physical challenge in a less conscious or self-aware sort of way. Importantly, this idea that mindfulness precedes and perhaps facilitates an experience of flow has also been suggested by a recent study conducted by Marty-Dugas et al. (2023). In this study they found preliminary evidence to suggest that a brief mindfulness-based exercise might increase state-level flow during a game-like task. Perhaps this relationship between, and experience of, mindfulness and flow is an area that warrants further research.

Building upon the idea of an 'enforced' body awareness, the analysis in this study also seemed to highlight an elevated awareness of the connection between the body and mind. This finding is in keeping with research that suggests that mindfulness-based interventions increase awareness of the complex interactions between bodily states, cognitions and emotional processes (Michalak et a., 2012). Importantly, this idea that bodily experiences have a direct effect on the mind forms the basis of 'embodiment theory'. According to this theory, the way people think and feel is shaped by their physical bodies, which move in particular ways through the environment (Khoury et al., 2017). A handful of previous studies have been conducted supporting this perspective. For example, Michalak, Mischnat and Teismann (2014) conducted a study that sought to investigate the effects of sitting posture on the tendency of thirty people suffering with depression to recall more negative than positive self-referent material. Participants either sat in a slumped (depressed) or upright (non-depressed) position and were shown sixteen positive and sixteen depression-related words on a computer screen. Participants were asked to create a visual scene for each word, imaging themselves in

connection to it. They were then asked to recall the words presented to them during the imagination task. Results showed that when sitting in an upright, non-depressed position, participants showed an unbiased recall of positive and negative words. However, when slumped, participants recalled more negative words. These findings indicated that even relatively minor changes in the motoric system can create cognitive biases in the those struggling with depression. Analysis in the current study seems to support this research as particular physical movements seems to have an impact on and become mirrored in the functioning of participants' minds.

Importantly, some participants in this study also seem to suggest that a reverse relationship also exists between the body and the mind. That is, how they felt mentally had an impact on how their bodies were able to function. This finding is also supported by existing research. For instance, Michalak et al. (2009) found that induced mood states resulted in marked differences in gait parameters. That is, inducing sad mood into participants led to reduced walking speed, arm swing and lateral swaying movements as well as a slumped posture. These findings support the notion that there is a reciprocal relationship between bodily expression and the ways in which emotions are processed.

In summary, findings from this study support the literature that suggests that PA enables the self-regulation of attention and promotes body awareness, and also highlights the important connection between the body and the mind. It seems that through limiting the attention paid to cognitive processes in favour of bodily sensations, and therefore the awareness of the present moment, PA has the ability to disengage individuals from dysfunctional cognitive patterns that might in turn perpetuate negative mood (Farb et al., 2012; Khoury et al., 2017). With this in mind, mindfulness, and all its associated processes, seems to be an important mechanism underpinning the PA-mental health relationship. Whilst some research, such as that discussed above, has suggested that PA supports mindfulness, to my knowledge this is the first qualitative research study that has explored the possible processes underpinning the

experience of mindfulness (during PA) itself. Consequently, it seems that this is the first study to suggest that PA 'forces' one to become particularly aware of their body and the here and now in some way. With this in mind, 'enforced mindfulness' seems to be a potential new mechanism to arise from this analysis, and one that might precede or facilitate a related experience of 'flow'. Importantly, it also seems to both develop upon and challenge previous research that has more readily emphasised distraction, the time-out hypothesis and anxiety sensitivity as probable mechanisms underpinning the PA and mental health relationship.

4.3.2 Enhanced Belief in One's Ability to Cope and Respond to Stress

As captured in GET 2, PA also provided participants with experiences of feeling able to cope with emotional difficulties or stressors as a result of overcoming challenges experienced during the PA. Importantly, these experiences seem to indicate that participants gain an elevated sense of 'self-efficacy' (Bandura, 1997), a key construct of social cognitive theory that essentially posits that behaviour change is possible when an individual has a sense of control (Luszczynka & Schwarzer, 2005). Importantly, self-efficacy is thought to play a key role in how people think and feel due to its influence on self-related cognitions. For instance, someone with low self-efficacy is more likely to harbour pessimistic thoughts about their ability and therefore give up easily when difficulties arise. In contrast, a person with high self-efficacy will feel more equipped to pursue and solve the problem at hand, and subsequently have more "can do" cognitions (Reide et al., 2023).

When considering participants' experiences in this study more closely, however, they seem to particularly reflect a specific sub-construct of self-efficacy called 'coping self-efficacy'. Coping self-efficacy refers to an individual's belief about their ability to control a stressful situation and regulate their response to it (Bandura, 1997; Craft, 2005). This concept is reflected by participants' experiences in this study, as they described being able to partake in a challenge and respond to it in a way that successfully got them through it without them becoming

overwhelmed. Previous research has supported this idea that PA fosters coping self-efficacy. For example, one earlier study conducted by Craft (2005) found that participants allocated to an exercise condition scored more highly on coping self-efficacy measures in comparison to their controls. In addition, in a qualitative grounded theory study, White (2008) found that PA gave individuals struggling with depression a greater sense of being able to self-regulate and control their symptoms. Similar to this, Pickett et al. (2017) found that PA enabled individuals to feel able to 'take control' of their depressive symptoms by identifying early warning signs and then actively being able to manage them.

Importantly, this study seems to add to these findings by also suggesting that believing in one's ability to cope is protective of mental distress in some way. For instance, participants expressed that their difficulties with mental health did not get so bad anymore because they knew that they were able to bounce back from them. In other words, in addition to enabling individuals to identify and take control of early symptoms, participants in this study suggest that it prevents them from worsening in the first place. In addition, analysis in this study also suggests that PA elicits a sense of control over anxiety symptoms, as well as over symptoms more readily associated with depression. Whilst some research has lent support to the idea that PA enhances general self-efficacy in relation to the experience of anxiety (e.g., Katula et al., 1999; Marquez et al., 2002) research suggesting the impact of 'coping self-efficacy' on anxiety symptoms appears to be missing from the literature. Together, these supplementary findings in this study make sense given that perceived coping deficits are central to anxiety related distress (DeBoer et al., 2012) and given that low self-efficacy in the form of learned helplessness is a key manifestation of low mood (Ryan, 2008; APA, 1994). Through enhancing one's confidence in being able to cope and self-regulate, it seems that mental distress can be prevented, and existing manifestations of anxiety and low mood can also be diminished.

4.3.3 Mastery Experiences During Behavioural Activation Facilitate Positive Mood

As captured in GET 2 (subtheme 2c), for many participants in this study improvement in wellbeing also seemed to be underpinned by the facilitation of positive affect or emotions, including happiness and enjoyment. This finding is in line with previous self-report studies that have found that higher positive affect scores are associated with PA (e.g., White et al., 2009; Pasco et al., 2011; Maher et al., 2021). In addition, data derived from previous qualitative studies has also pointed towards the role of positive affect underpinning the beneficial effects of PA (e.g., Crone, 2007; Crone & Guy, 2008). In fact, in light of conducting a grounded theory analysis, Pickett et al. (2017) hypothesised that enjoyment, specifically, could be an important standalone mechanism that underpins the PA and depression relationship. Extending this suggestion to this sample, seven out of the eight participants in this study talked about the importance of enjoyment or having fun in the process of PA improving their wellbeing as well.

When striving to understand how and why PA seems to elevate positive affect, one might consider the previously proposed mechanism of behavioural activation. Behavioural activation is an intervention often used within CBT that seeks to highlight the impact of behaviours on mood and psychological wellbeing (Chartier & Provenche, 2013). Importantly, as grounded in behavioural theory, behavioural activation supposes that an increase in pleasurable and meaningful activity boosts levels of positive affect. This is thought to be important because, in addition to negative affect being detrimental to mental health, the building of positive mood is also deemed to be important for recovery and wellbeing (Chartier & Provenche, 2013). Whilst behavioural activation and PA are distinct, the processes of carrying out or reaching a goal, overcoming barriers or challenges and experiencing success during PA are very consistent with the overarching behavioural activation theme of increasing engagement in something that is meaningful, pleasurable and rewarding. In addition, in keeping with behavioural activation strategies, data from this study suggests that the opportunity for incremental success through PA fosters positive affect through feelings of accomplishment, reduced anergia and, again, experiences of self-efficacy (Turner et al., 2019). This study therefore seems to support the

idea that behavioural activation is an effective mechanism through which PA might cultivate positive affect and wellbeing.

To note, data in this study seems to particular emphasise the role of self-efficacy in mediating the relationship between behavioural activation and positive affect. This is because, participants in this study shared that having an understanding that they were able to reliably manage their wellbeing through PA was mood enhancing in itself. For instance, participants explained that when planning to be physically active, they understood that it was going to make them feel better and that this made them feel better already. Similarly, having the opportunity to tackle the onset of psychological symptoms provided participants with a positive boost in wellbeing itself. In other words, it seems that believing in one's ability to manage, control and boost wellbeing seems to be mood enhancing alone. These findings seem to both support and further contextualise previous quantitative research that has suggested that behavioural activation is an underpinning mechanism of the PA-mental health relationship (e.g., Turner et al., 2019), as they seem to emphasise the importance of mastery experiences in the facilitation of positive mood.

4.3.4 Physical Expression Relieves Emotional Distress

In comparison to reported experiences of positive affect, the data collected in this study, and outlined in subtheme 2b, spoke less to the notion that PA might improve mental health and wellbeing through the alleviation of negative affect. Nonetheless, participants did describe feeling able to release some tension through PA. This findings challenges previous studies that have suggested PA benefits positive affect, only. For instance, in one cross-sectional study including 276 women, Pasco et al. (2011) found no association between PA habits and negative affect. Likewise, Maher et al. (2021) found that, during the COVID-19 pandemic, PA was associated with positive affect, only. However, both of these studies did not include participants with mental health difficulties, and both relied on self-report measures. Because

of this there is risk that, firstly, participants overestimated their experience of positive affect, and secondly, that reduction of negative affect might be most relevant to, or most apparent for, those with mental health difficulties.

When considering participants' accounts of emotional release more closely in this study, it seems as though PA provided them with an opportunity to express their emotions, perhaps in more favourable or socially acceptable ways. With this in mind, I wonder if it is through the safe facilitation of emotional expression that PA is able to reduce the experience of negative affect. The literature considering the general experience of emotional expression during PA seems limited. However, research in dance and trauma does suggest that PA allows for the physical expression of repressed or suppressed emotions, leading to feelings of relief from emotional distress (Manford, 2014; Tomaszeqski et al., 2023).

Dance was formally adapted into "dance therapy" or "dance movement therapy" ([DMT], Payne, 1992) in order to facilitate therapeutic change using psychomotor expression. Whilst many theories in psychology are thought to have influenced the field of dance therapy (including psychoanalytic, Gestalt, object relations, humanistic and family systems), it is largely based on the assumption that unconscious material is stored in the body and can be more easily accessed through physical expression (Levy, 1988; Mills & Daniluk, 2002). In one phenomenological study, Mills and Daniluk (2002) set out to understand the lived experience of dance therapy in women suffering from childhood trauma. Interestingly, the women in this study expressed that, unlike in more traditional talking therapies, movement and bodily expression offered them a way to bypass defensive reactions to discomfort. One participant expressed that, after moving and showing some emotion physically, she felt more able to put her experiences into words. Related to this, other participants talked of movement being a safer and more gentle way of beginning to work on painful therapeutic issues. All women also told stories of an "emotional release", which they also experienced to some degree in more traditional forms of therapy. However, what the women believed was unique to dance therapy,

was the opportunity to discharge some of the physical energy that accompanies the experience of emotions. Whilst in this current study participants' experiences of release were not, to my knowledge, related to trauma, and nor was it achieved through dance, I wonder whether some forms of PA, such as boxing, might have provided participants with similar opportunities to physical discharge tension and express potentially painful emotions. To my knowledge, this type of physical catharsis has not been explored in the more general PA-mental health literature, and therefore, I suggest that it warrants further exploration.

4.3.5 Behaviour Bundling and Motivation for Personal Growth

As captured in GET 3a, participants also talked of PA co-occurring with other behaviours (such as eating well or drinking lots of water) that also benefit their wellbeing. In other words, it seemed as though for some participants, improvements in wellbeing were not always attributed to the experience of PA alone. Instead, it seemed as though PA was one of several wellbeing related behaviours. In order to try and make sense of participants' experiences, I turn to a body of behavioural science research that has explored the concept of health 'behaviour bundling' (Spring et all., 2012) – a term that has been derived from the observation that health behaviours (which include physical activity, nutrition, drinking and smoking) do not occur in isolation (Conry et al., 2011). Within the field of behavioural science, this research has aimed to guide intervention development for the treatment of life-threatening diseases that are thought to be, in part, affected by risky health behaviours. As part of this research, and of most relevance to this study, the complementary relationships between different health behaviours and the mechanisms that might underpin them have been explored. Interestingly, it has been suggested that changing one behaviour might make room for other behaviours that are in some way interconnected. The mechanisms underpinning this interconnection do not appear to be well understood; however, one hypothesis is that many lifestyle behaviours are served by the same neural circuitry that calls upon shared self-regulatory resources and aims (Spring et al., 2012). Because of this, Spring et al. (2010) suggest that a change in one

health behaviour is likely to be accompanied by another. I therefore tentatively suggest that this physiological explanation might explain the perceived bundling of PA and other health behaviours in this study.

Related to this idea, some participants also talked of PA leading to other behaviours outside of those that are referred to as "health behaviours" in the literature. For instance, participants described feeling more able to apply for jobs they'd enjoy more, or more able to go out and socialise with friends. I propose that this aspect of participants' experience might be understood from a motivational perspective. One leading motivation theory – self-determination theory ([SDT], Ryan & Deci, 2000) – is a general theory of human motivation that has been applied to various domains including health, education and sport (Ng et al., 2012). At its core, SDT proposes that there are three basic psychological needs for autonomy (the feeling of being the origin of one's own behaviours), competence (the experience of mastery and feeling effective) and relatedness (feeling understood and cared for by others). Together, these needs are considered as essential nutriments for the development of the internal motivation for personal growth and ultimately psychological health and wellbeing (Teixeira et al., 2012). Importantly, it seems plausible that PA offers opportunities for each of these needs to be realised. For instance, participants' experiences in this study suggest that PA provides experiences of mastery, thus meeting the human need for competence. Participants also talked of PA providing a sense of control, or a sense of knowing what it is they need to do to support their wellbeing, and a sense of wanting to keep doing it. I suggest that this fulfils a need for autonomy. Participants also described how PA enabled them to connect with those around them, thus seemingly fulfilling the need for relatedness as well. From here, I suggest that, in line with SDT, an intrinsic motivation for personal growth is likely to be fostered and consequently additional behaviours associated with such growth are more likely to be adopted.

4.3.6 A Binding Agent Supporting Social Connection and a Sense of Community

As outlined in subtheme 3b, all participants also talked, in some away, about PA enabling them to socialise and feel connected to others around them. This finding is, in part, supported by previous research that has suggested that social support is an important mechanism underpinning the PA-mental health relationship (e.g., Harvey et al., 2010; Hallgren et al., 2017; Miller et al., 2019). For instance, in one randomized controlled trial of 946 people, Hallgren et al. (2017) found that a 12-week exercise intervention led to greater reductions in depressive symptomology in those who also had greater access to supportive social relationships. Importantly, analysis in this study seems to further contextualize these existing findings by suggesting different processes through which PA actually fosters these feelings of support. For example, participants expressed that PA enabled them to meet others who were experiencing similar struggles to their own. Interacting with those who had similar mental health struggles seemed to be a comforting part of participants' experience of PA. In addition, it seemed that sharing an experience of doing something difficult or unenjoyable with others fostered feelings of connection during PA. To my knowledge, this particular experience of connecting with others through the challenges of PA is not something that has been considered by existing research. However, research considering the impact of 'dysphoric experiences' might have some relevance to this finding. Interestingly, whilst considering the tendency for football fans to become united through defeat, Newson et al. (2023) suggested that dysphoric experiences – or events that are experienced as distressing or painful – can serve as an especially strong binding agent amongst human groups. Whilst challenging PA experiences might not necessarily qualify as wholly "dysphoric", I wonder whether sharing painful experiences with others during PA drives the tendency for individuals, such as John, to feel particularly socially connected.

Finally, one participant from an ethnic minority group spoke of PA enabling them to feel as though they could "fit in". Interestingly, this feeling of fitting into the group seemed to be experienced despite there being only one other person at the gym who appeared to be the

same ethnicity as them. With this in mind, there seemed to be something about the experience of being at the gym that fostered feelings of belonging, despite there being a relative lack of others from the same ethnic minority group. This experience is in keeping with the idea that sport and PA can act as a socializing agent that facilitates the integration of people from different cultural backgrounds (Sage et al., 2003). In fact, when writing about the integrative role of sport in multicultural societies, Hatzigeorgiadis et al. (2013) suggest that, at a community level, sport and PA protect against social exclusion, and instead facilitate inclusion and the promotion of various groups and minorities. This might be because, according to Social Identity Theory (Tajfel et al., 1971), once people identify themselves as members of a group, a sense of collective identity develops. With this in mind, perhaps when identifying with others in a team or with others at a gym, issues associated with difference or diversity become less relevant in some way. This seems important given that a sense of community and belonging is essential for subjective wellbeing (Corvino et al., 2023).

4.3.7 Seligman's PERMA Model of Wellbeing

Of note, the aforementioned key findings of this study appear to fit with Seligman's (2011) 'PERMA' model of wellbeing. Within this model, Seligman identifies five key components of wellbeing that are intrinsically motivating and that purportedly give rise to human flourishing. These components are 'positive emotion' (P), 'engagement' (E), 'relationships' (R), 'meaning' (M) and 'accomplishments' (A), hence the 'PERMA' acronym. Interestingly, when considering this study's key findings, PA appears to be a particularly effective mechanism through which each of these components can be realised. For instance, PA seems to be experienced as a particularly reliable resource for promoting positive emotions. It seems to also promote 'engagement' through enabling participants to become completely absorbed in a given physical activity. It also seems to promote 'relationships' by supporting social connections and a sense of community, and it seems to give some participants an experience of 'meaning' through providing them with a sense of purpose within their day. Finally, it seems that PA is

particularly effective at fulfilling the 'accomplishment' component of wellbeing, as participants in this study described experiences of achievement, mastery and an increased belief in their ability to cope. With this in mind, it does seem reasonable to suggest that PA appears to be a particularly valuable activity in addressing all components of wellbeing, and the PERMA model provides us with one succinct way to understand these findings.

4.4 Key Applications to Clinical Practice

4.4.1 An Alternative to Mindfulness-Meditation

As discussed, analysis indicated that PA seems to cultivate an 'enforced mindfulness' that participants found relieving in different ways, and this finding could have important implications for practice. Of course, a large body of research has shown that mindfulness and MBIs can be efficacious in improving common mental health problems, including symptoms of anxiety, depression and stress (Aghaie et al., 2018). Studies suggest that the mechanisms through which mindfulness has its beneficial effects include changes in rumination, worry, self-regulation and compassion, to name a few (Zhang et al., 2021). However, with that being said, there is also a small body of research that indicates that some mindfulness interventions – such as meditation practices – are not always effective. For example, Lomas et al. (2015) conducted a qualitative analysis of the experiential challenges associated with meditation practice. Importantly they found that, firstly, participants talked of meditation as a difficult skill to learn and practise. More specifically, participants reported the inability to concentrate on their inner experience without getting distracted, whilst also finding the process somewhat repetitive and dull. Some also shared that meditation was difficult to integrate easily into their everyday life. Perhaps more seriously, some participants described experiencing difficult thoughts and feelings during meditation, which were subsequently hard to manage. Unfortunately, in some instance, participants talked of these issues exacerbating mental health issues, including anxiety and depression.

Building on these findings, Banerjee et al. (2018) found that trait rumination and worry prior to starting a mindfulness-based self-help (MBSH) intervention were both associated with poor psychological engagement. Importantly, rumination and worry are habitual, relatively stable and perseverative thinking styles implicated in the maintenance of depression and generalized anxiety (Kertz et al., 2015). Because of this, the authors hypothesised that when first engaging in mindfulness practice, people who tend to ruminate and worry might become absorbed in their thoughts, which could in turn lead to lower mood and/or heightened anxiety. Of course, one of the intentions of mindfulness is to help individuals develop the skills to notice the mind wandering and re-focus attention; however, negative experiences during the early stages of practice could lead to disengagement.

Because of this, it seems important to consider that mindfulness-meditation practices that focus on thoughts or emotions might not always be appropriate or helpful initial interventions for those suffering with heightened anxiety and/or low mood (Lomas et al., 2015). Instead, exercises that focus on physical sensations, such as breathing, might be more appropriate as it is less likely that an individual becomes overly immersed in their negative thoughts and feelings. With this in mind, I suggest that PA could and should be deemed as a suitable and useful intervention for practitioners who are hoping to promote mindfulness in individuals suffering with persistent ruminative or worrying thoughts. Through cultivating a mindfulness that is grounded in the body, one suggests that it could be a potentially easier and ultimately more effective intervention, especially during the early stages of treatment. Then, if symptoms were to improve, more typical mindfulness practices that focus on 'decentring' from the context of emotions and thoughts could be more confidently explored.

4.4.2 Psychological Wellbeing is More Than the Absence of Negative Affect

Twentieth-century psychology seemed to adopt a dominant concern with mental illness rather than wellbeing (Joseph, 2017). In line with this, many existing psychological treatments have also adopted a focus on reducing negative affect or depressed mood, at the cost of repairing a lack of positive affect (Chartier & Provencher, 2013). For instance, whilst the early stages of CBT might involve encouraging clients to engage with pleasurable activities (through behavioural activation), the main focus of treatment tends to go on to changing patterns of negative thinking that are detrimental to emotional health (Alsayednasser et al., 2013). Whilst still useful in many ways, treatments like this are bound to be ineffective at repairing instances of low positive affect, which is relevant to mental distress, especially that associated with depression and low mood.

Seeking to counter this, positive psychology has focused and succeeded on putting the study of wellbeing back on the agenda of psychological science (Joseph, 2017). Writing on positive psychology in 2000, Seligman and Csikszentmihalyi said that “practitioners need to recognize that much of the best work they already do in the consulting room is to amplify strengths rather than repair the weaknesses of their clients” (p.8). Whilst strengths and positive affect are different concepts, I wonder if amplifying positive affect rather than only alleviating negative affect could also make up some of the best work in our therapy rooms. This idea seems particularly important to the field of counselling psychology. Over recent years, some argue that the gulf between clinical and counselling psychology is diminishing due to the gradual adoption of a more medical model (Joseph, 2017). With this in mind, attending more readily to positive psychology might offer a new impetus for the profession of counselling psychology to help regain its sight of traditional emphasis on wellbeing. Given that analysis in this study indicates that PA is capable of readily facilitating positive affect – in the form of energy, happiness, enjoyment and feelings of accomplishment – I suggest that considering PA is one, out of many, possible ways that counselling psychologists could do this.

One process through which PA boosted positive affect in this sample was through the provision of mastery experiences. With this in mind, it seems important to highlight that should a practitioner look to implement a PA intervention as a means of fostering positive affect, incorporating a mastery experience, such as practising a behaviour, is likely to be most effective because it provides observable evidence for personal improvements or the attainment of particular goals (Luszczynska & Schwarzer, 2005). In other words, I suggest that PA is likely to have its greatest influence on positive affect through facilitating self-efficacy in optimally challenging situations. Of course, this level of challenge will be unique for every client and should be determined on a case-by-case basis.

4.4.3 Release Clients From the Constraints of the Therapy Chair

As outlined above, PA seems to provide a reduction in negative affect that is experienced as an emotional release. Drawing on research exploring dance movement therapy, I suggested this might be due to the enhanced ability to access and express painful emotions during physical movement. With this in mind, Mills and Daniluk (2002) suggest that is important for the psychotherapist to liberate clients from the constraints of the therapy chair, and from having to verbally articulate their feelings and concerns. Whilst dance is, indeed, one mode through which specially trained therapists can do just that, it seems important for other practitioners, such as counselling psychologists, to also consider incorporating nonverbal, expressive, PA interventions into their practice if it is clinically justified. Assimilating expressive interventions into someone's treatment plan could be particularly helpful if they become resistant of accessing emotionally challenging material, or if a client is struggling to articulate or make sense of their experience through words. Alternatives to dance interventions might include gentle movement through yoga or walking therapy.

4.4.4 Non-Clinical Support is also Important for Wellbeing

As discussed, PA also seemed to elicit experiences of social support that alleviated participants' feelings of isolation and instead fostered feelings of inclusion and deeper connection. These findings seem to align with existing associations that have been made between social networks and improved mental health and wellbeing (Webber & Fendt-Newlin, 2017; Bjørlykhaug et al., 2022). From a clinical perspective, these findings seem to highlight the notion that non-professional support could be an important factor in the treatment of mental health difficulties and in the nurturing of psychological wellbeing (Hallgren et al., 2017). That is, whilst professional support will inevitably continue to play a central role in the treatment of mental health, non-clinical support offered by family, friends and peers could be an important influence on an individual's road to recovery. However, despite this, research suggests that a gap remains in the mental health services between providing treatment and effectively addressing psychosocial wellbeing. In order to reduce this gap, Webber and Fendt-Newlin (2017) suggest that mental health professionals need to consider and/or increase their knowledge about the likes of community engagement opportunities. Based on the findings in this study, and other research highlighting the impact of PA on social support, I suggest that PA interventions, groups or clubs should be more readily considered as a potentially rich and effective community-based source of support.

4.5 Critical Evaluation of The Study

4.5.1 Strengths

As explored in greater detail in the methodology chapter, this research demonstrates quality and validity according to Yardley's (2000) suggested evaluative criteria. It cultivates a 'sensitivity to context' through a thorough engagement with existing literature and through an openness to unexpected findings and the socio-cultural context of the research participants. The prolonged engagement with the research topic, and a thoroughness in data collection and analysis, also conveys the research study's 'commitment and rigour'. In addition, inclusion of

raw data and clear descriptions of the research process adheres to Yardley's principles of 'transparency and coherence'. With that being said, Yardley (2000) argues that it is not sufficient to develop a sensitive and thorough analysis if the findings have little impact. With this in mind, this study's 'impact and importance' will now be considered in some more detail below.

Existing research exploring the PA and mental health relationship is predominantly quantitative. With this in mind, this study set out to offer a more phenomenological, in-depth, subjective and contextualised exploration of the research phenomenon. In line with this aim, this study unearthed new ideas about the experience of improving psychological wellbeing through PA, and consequently, some pre-existing macro-accounts have been enriched or, in some instances, challenged. For example, through closely exploring the phenomenological experiences of participants finding relief from troubling thoughts, this study has developed theories of anxiety sensitivity and distraction and subsequently suggested a role of an 'enforced mindfulness' that is underpinned by body awareness and attentional control. It is through this offering of new ideas that this study has been able to contribute to psychological knowledge and hopefully positively impact both theory and practice within the counselling and psychotherapy professions (Ponterotto et al., 2017).

Building on this latter point, this study has been conducted from a scientist-practitioner perspective, and I believe that this is another key strength. The scientist-practitioner model is the preferred model for the training, ongoing practice and professional development of counselling psychologists (Blair, 2010). Importantly, according to this model, research and practice should not be implemented as two separate skills but rather synthesised so that each continually informs the other (Jones & Mehr, 2007). As a scientist-practitioner, I have approached this study with this integration at the forefront of my mind. For instance, whilst I have used my practitioner experience to make sense of some of my participants' experiences, I have also used the findings from this study to inform my suggestions for possible applications

to clinical practice. This feels particularly important given that, to date, PA does not seem to have been applied to clinical practice at a rate that is congruent with its value (Daley, 2002; Callaghan, 2004; Czosnek et al., 2019). Importantly, I hope that my explicit integration between research and practice might help to narrow the gap between the scientific knowledge of PA and its use within mental healthcare, including psychotherapy.

Finally, this study explored the lived experience of improving psychological wellbeing in the face of 'common mental health difficulties'. Because of this, participants in this study experienced a range of difficulties, including those that might be defined as 'depression' and 'anxiety'. This is different to the large majority of research in this field, which appears to have focused on the relationship between PA and either 'depression' or (less so) 'anxiety'. Whilst diagnostic categories do provide a common language for researchers (Murphy, 2017), in practice, categorizing distress in this way is thought to be potentially damaging and ultimately theoretically flawed (Johnstone, 2013). Perhaps most notably, diagnostic categories have been criticised for their ignorance of co-morbidity, oversight of cross-cultural perspectives and their loss of personal meaning. Because of this, counselling psychology as a profession emphasizes, instead, the social psychological processes underpinning distress (Murphy, 2017). With this in mind it felt natural for this research study to also steer clear from defining mental health difficulties into distinct categories of distress. That is, it felt important for my research to reflect the original assumptions and values held within the counselling psychology field. Given that this more open and inclusive conceptualization of mental distress seems more fitting with the way counselling psychologists work, I also hope that this might render the findings more applicable to, and impactful on, our field and our clinical practice.

4.5.2 Methodological Limitations

In addition to some of the procedural challenges considered within methodology chapter, this study is not without its methodological limitations. Perhaps most notably, research has

suggested that IPA studies are too dependent on language (Willig, 2022). Given that phenomenological analysis works primarily with text – such as interview transcripts – language tends to be the means through which participants are expected to communicate their experiences to the researcher. Willig (2022) suggests that this can be problematic for the following reasons. Firstly, language is thought to construct rather than describe reality. Because of this, participants' words are likely to be just one particular version of any given experience. Secondly, phenomenological research methods rely on individuals being able to articulate their experiences in a coherent and sophisticated manner. This raises the question of how many people are able to use language in such a way that captures the subtleties and nuances of their physical and emotional experiences.

In fact, during the data collection stage of this study, I noticed that some participants did experience difficulties with putting their lived experiences into words. This is perhaps unsurprising given that this study explored a particularly embodied experience. With this in mind, it seems that having immersed myself in interview transcripts, and primarily attended to my participants' words, the study has risked missing out on potentially important aspects of lived experience that might be more readily conveyed through the body. Speaking to this further in her paper, "The body's disclosure in phenomenological research", Finlay (2006) warns that within much phenomenological research, the body is "strangely absent" despite it not only connecting us to the world but also offering us a way to understand it (p.19). In order to overcome this limitation, Finlay (2006) suggests that, as researchers, we must actively attend to the participants' expressive bodily gestures as they may reveal something about their experience. She writes, "expressive bodily gestures are a point of entry because they are not just a reflection of a person's subjective feelings – they are the feelings" (p.23). In line with this, Toombs (1993) describes how listening well involves close observation of facial expressions, gestures, tone of voice and so forth. In addition, Finlay (2006) emphasises the importance of embodied self-awareness. That is, she highlights the importance of being reflective of our own embodied reactions to our participants narratives.

Importantly within this study I did make sure to attend to my participants' non-verbal communication. For example, when transcribing the research interviews, I made notes of non-verbal cues such as hesitation, moments laughter and I attended to my participants' tone of voice. However, it must be noted that all my interviews were conducted online, and with this, I recognise that the opportunity for bodily empathy was probably reduced. With this in mind, I was sure to remain particular mindful of my own embodied experiences during each interview so that I could use my own bodily reactions as an alternative source of insight.

4.6 Future Directions

Through exploring the participants' lived experiences of PA in depth, this study has generated some potentially new or contrasting psychological mechanisms that seem to underpin the experience of improving psychological wellbeing through PA. I suggest that each of these warrant further exploration. For example, research should explore the concept of 'enforced mindfulness' as it seems to build upon previously suggested mechanisms, including distraction and the time-out hypothesis. Underpinning this enforced mindfulness, this study also pointed towards an elevated experience of body or interoceptive awareness. As already highlighted, this finding seems to suggest an alternative experience to that of a reduction in anxiety sensitivity, and it therefore warrants further investigation. This study has also suggested that PA might contribute to a reduction in negative affect through providing opportunities for emotional expression. This idea has, to my knowledge, primarily been considered in relation to dance, only, and therefore perhaps future research could also explore this experience in relation to more general forms of PA.

In addition and following on from my 'methodological limitations' discussion above, I also propose that it might be enriching for the methodology of future research to use the body more readily as a key avenue through which the research phenomenon is explored. This seems

important given that this study has shed light on the particularly embodied way through which PA has an influence on psychological wellbeing. According to Merleau-Ponty (1962), the true essence of embodiment cannot be fully grasped through introspection or reflection, and instead should be explored by observing and describing bodily actions, movements and gestures. In their book, 'Embodied Research Methods', Thanem and Knights (2019) suggest that ethnographic fieldwork could be one method through which the inner experience of the body can be accessed more readily. This is because it offers opportunities to observe how people move within a given space, and how they express their emotions through physical gestures etc. In addition, when immersing oneself into an environment with participants, the researcher is likely to be able to probe into research participants' reflections about their lived experiences as and when they arise. In the context of this research topic, I wonder if future research could, therefore, take place from within a gym environment, for example, or through attending community sport events, such as Park Run. Through closely witnessing participants' experiences of PA, aspects of their embodied experience might be more readily observed.

With that being said, future research could also place more emphasis on the body through more actively or consciously embodying interviews and conversations with participants. As highlighted in the methodological limitations section, this can be done perhaps most easily by conducting research interviews face to face. Building on this, Thanem and Knights (2019) also suggests that instead of reproducing interview transcripts in the simpler manner of question and response, researchers could write them up as the social, face-to-face and embodied encounters that they really are. This might mean including change of body posture, eye contact (or lack of) etc. In order to support this process, Thanem and Knights (2019) suggest that videography might be an effective means of recording and documenting the more embodied aspects of an interview. Therefore, in addition to audio recording research interviews, as was done in this study, future research could consider videography as an effective means of capturing the more embodied aspects of the research interviews. This

seems important given that some participants in this study found it difficult, at times, to put their lived experience of PA succinctly into words.

Finally, as highlighted in the introduction chapter, the use of PA within mental health care is suboptimal (Daley, 2002; Callaghan, 2004; Czosnek et al., 2019) and many have suggested that practitioners' insufficient knowledge about the effects of PA stand out as a prominent barrier (e.g., Way et al., 2018; Hitschfeld, 2011; Vasilj, 2018; Kleeman et al., 2020). Whilst I hope that this study has contributed to the body of research exploring the PA-mental health relationship, and in a format that mental health practitioners, such as counselling psychologists, can arguably more readily use, I also suggest that this research and knowledge should be incorporated into mental health, counselling and psychology training courses. Across the three years that I have been training as a counselling psychologist, PA and the embodied nature of mental health, has been somewhat absent from the professional doctorate course. With this in mind, it seems that if PA is to become a more prevalent therapeutic tool, future work in this area should explore how PA can more readily become a part of the training curriculum.

4.7 Reflexivity

Within the methodology chapter, I reflected on the challenge I felt when striving to grasp a balance between my descriptive and more interpretative noting. Interestingly, I would say that this tension between the descriptive and the interpretative, and between the idiographic and the whole, re-appeared during the write up of this study. In fact, during this discussion chapter, I became aware and somewhat hesitant about the need to 'analytically generalise' (Smith, 2018) my findings to an established concept or theory. To begin with, I worried that this part of the study undermined the underpinning philosophy of IPA, which is to produce an in-depth and idiographic account of the lived experience of a given phenomenon. If I began to analytically generalise, would I not lose the idiographic nature of IPA? However, I soon

realised that during the write I still needed to pass around the 'hermeneutic circle', to move between the descriptive and the interpretative, the particular and the whole. In fact, whilst this process felt complex at first, I came to realise that it enabled me to situate my findings amongst the relevant existing literature – which is arguably important for evidence-based practice – whilst also noticing the unique and novel aspects of this study's findings that could then enrich or even challenge some of these pre-existing macro-accounts.

As I reflect on this circular process, I also notice similarities between it and my therapeutic practice. For example, when formulating a client's distress, I will often move between viewing my client's difficulties through the lens of a particular theoretical model and striving to understand their unique experiences without any pre-existing, theory-informed assumptions. From this perspective, throughout the production of this study, some of my clinical and research skills have come to feel somewhat aligned. This has, to some extent, made this professional doctorate feel complete. Perhaps this is unsurprising given the principles of the scientist-practitioner model.

From a more personal perspective, undertaking a research study of this size has inevitably been challenging. However, it has also felt rewarding and inspiring and made me reflect upon my own clinical practice. Despite a pre-existing interest in this area, I had – in line with what research suggests – originally felt unsure about when and how I could utilise PA as part of my clinical practice. Whilst this study has not specifically explored the implementation of PA as part of mental health treatment, exploring participants' lived experiences of improving their wellbeing through PA has, as outlined earlier in this chapter, shed light on when and how it might be a useful as part of my clinical work. Even within my current context of working with eating disorders and, at times, exercise addiction, I have found this research thought provoking. For instance, it has helped me to think about what psychological experiences my clients might be over relying on exercise for, which ultimately has then enabled me to intervene with alternative strategies that might provide similar experiences whilst posing less of a

physical risk. Outside of my eating disorder practice, I also look forward to considering PA and, with this, more curiously attending to the more embodied aspects of my clients' psychological distress.

4.8 Conclusion

4.8.1 Summary of the Discussion of Key Findings

The beneficial effects of PA on psychological wellbeing are well documented. However, this study offers a more in-depth and contextualised understanding of the psychological mechanisms underpinning this wellbeing enhancing experience. Firstly, analysis in this study suggests that PA facilitates an experience of 'enforced mindfulness', through forcing one's attention away from (sometimes problematic) cognitive processes and onto bodily sensations. This in turn seems to foster a present moment awareness and, perhaps ultimately, an experience that seems akin to 'flow'. Importantly, the qualitative data pointing to this experiences seems to build upon previously proposed mechanisms including distraction and the time-out hypothesis. Secondly, PA seems to foster a coping self-efficacy, which refers to participants' perceived ability to cope. In this study, this experience was highlighted by participants apparent experience of feeling able to regulate their response to the challenges PA can present. Believing in this ability also seemed to be protective of the onset of more severe emotional distress. In addition, having a sense of control or perhaps agency over wellbeing provided participants with a positive boost in mood itself. This might suggest that it is largely through the experience of self-efficacy that the mechanism of behavioural activation might actually have its effect. This study also suggests that PA enables the safe, physical expression of difficult emotions, which ultimately alleviates negative affect. It also seems that following the adoption of PA, participants experience an increase of motivation for other wellbeing-enhancing behaviours. With this in mind, improvement in wellbeing through PA might 'just' be the start of a larger snowball effect. Finally, it seems that, building on previous

research examining social support, by offering an opportunity for a group of people to face both physical and emotional adversity together, PA can enhance feelings of social connection. This observation offers a new perspective on one way through which PA fosters a sense of social support. In addition to this, this study suggests that PA is an important socialising agent that facilitates the integration of people from different cultural and ethnic backgrounds.

4.8.2 Final Comments

Traditional treatments of common mental health difficulties – including psychotherapy and pharmacotherapy – are not always effective, and this poses a considerable cost to the NHS. With this in mind, it seems obvious to me that alternative interventions, such as PA, should be more seriously considered within the mental health and psychology fields.

By conducting an in-depth exploration of the lived experience of improving wellbeing through PA, I suggest that this study has further contextualised our understanding of the PA-mental health relationship. Importantly, given that I have played an important role in the co-construction of this understanding from a counselling psychologist's perspective, I have also been able to suggest a handful of ways in which PA might have an effective role within the context of clinical practice. For example, I suggest that PA could be used as an alternative to mindfulness meditation, as a different means for emotional expression and as a non-clinical source of support. I hope that this aspect of this study might, in some way however big or small, support the gradual inclusion of PA as part of more routine mental health care.

I also hope that this study might inspire counselling psychologists to put the study of wellbeing – as opposed to psychopathology – back up near the top of their agenda. Given that over recent years the counselling and clinical psychology fields have started to overlap (Joseph, 2018), I hope that studies such as this one offer counselling psychology a reminder of how valuable re-placing an emphasis on wellbeing could really be when it comes to supporting

those with common mental health difficulties. This study has shown that the acquisition of psychological wellbeing is far more than the alleviation of negative affect – an emphasis that might be favoured by the medical model – and instead a process underpinned by experiences of self-efficacy, social connection, motivation for growth, body awareness and the mind-body connection, to name a few. Given that PA seems adept at facilitating psychological wellbeing through each of these experiences, I conclude that it deserves to be more readily explored with our clients and utilised within mental health care and the counselling psychology field.

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Appendices

Appendix A – Recruitment Poster

Physical activity comes in many different forms. In this study, we are interested in any form of physical activity that is ***intentional.*** So, in addition to things such as attending an exercise class or going for a jog, getting off the tube one stop early to walk the rest of the way home would also class as intentional physical activity.

For more information about this study, or to volunteer to take part, please contact Menna Rose, Trainee Counselling Psychologist at [redacted]

Your participation would involve one interview which would last approximately 60-90 minutes long.

This study has been reviewed by and received ethics clearance through City, University of London.

If you would like to complain about any aspect of the study, please contact the Secretary to the Senate Research Ethics Committee on 020 7040 3040 or via email: Anna.Ramberg.1@city.ac.uk
City, University of London is the data controller for the personal data collected for this research project. If you have any data protection concerns about this research project, please contact City's Information Compliance Team at dataprotection@city.ac.uk.

Appendix B – Participant Information Sheet

Participant information sheet

What is the lived experience of using physical activity to promote psychological wellbeing?

Researcher name: Menna Rose
Supervisor name: Dr Aylish O'Driscoll

What is the purpose of this information sheet?

We would like you to invite you to take part in a research study that aims to develop a deeper understanding of the experience of using physical activity to promote psychological wellbeing in the face of some form of mental health difficulty. However, before you decide whether or not you would like to take part, it is important for you to understand why the research is being done and what it would involve for you as an individual. Please take your time to read the following information and to discuss it with others if you wish. Please do not hesitate to get in contact with us if anything is not clear to you, or if you would like any more information. This information sheet is for you to keep.

What is the purpose of the study?

The study is being undertaken as part of the DPsych Counselling Psychology programme at City, University of London.

This study wants to develop a more in-depth understanding of the personal experience of using physical activity to promote psychological wellbeing. This is because whilst existing research has shown that physical activity has beneficial effects on common mental health difficulties, less is known about the personal experiences of using physical activity to promote our own wellbeing.

Why should I take part?

If you believe that you have used physical activity to promote your psychological wellbeing in the face of some form of common mental health difficulty, then we would greatly appreciate your participation. By further exploring your experience, we hope to develop a better understanding of the physical activity and mental health relationship and add to the current body of related research.

What is meant by common mental health difficulties?

Importantly, we will not define what we mean by common mental health difficulties so that you can volunteer to take part based on your own assessment of what this means and on your own assessment of your difficulties. We also do not mind whether you are currently experiencing a mental health difficulty, or whether your struggles are a thing of the past. What

does matter to us is that you have used physical activity to promote your psychological wellbeing during these more difficult or challenging times.

What is meant by physical activity?

Physical activity can be defined as any bodily movement produced by skeletal muscles that results in energy expenditure. In daily life, physical activity can be put into different categories such as occupational, sports, conditioning and household activities. However, for the purpose of this study, physical activity must be *intentional.* For example, in addition to things such as attending an exercise class or going for a jog, consciously getting off the tube one stop early to walk a part way home would class as intentional physical activity. In comparison, walking around the house doing the daily or weekly chores would not as this is perhaps a more subconscious or unintentional form of physical activity.

Do I have to take part?

Participation in the project is voluntary. If you do decide to take part, you will need to sign a consent form. Nonetheless, you will still be free to withdraw at any time throughout the duration of the research interview, and you will be able to withdraw your research data up to three weeks after the interview has been completed. It is also in your right to avoid answering any interview questions which you feel are too personal or distressing.

How will it be decided whether it is suitable for me to take part?

You will be required to have a pre-interview telephone call that will help determine whether it is suitable for you to participate in the study. During this call, you will be asked to complete two questionnaires that are designed to assess your attitude towards exercise and eating/nutrition. The researcher would like to know these things because they are interested in those who have particular attitudes to physical activity and nutrition. Given the small sample size of the study, it is also important that those included have similar attitudes in these two areas.

It is important to note that the outcomes of these questionnaires are non-diagnostic. This means that these questionnaires cannot be used to diagnose or label you with any particular difficulties. Furthermore, the researcher is unable to give you any direct advice should these questionnaires raise any concerns. Nonetheless, the researcher can discuss your outcomes with you and, if necessary, signpost you to an appropriate professional, such as your GP, for appropriate support.

What will happen if I do take part?

If you are to be included within the study, you will be required to take part in one interview that will last for approximately 60-90 minutes. During this interview you will be encouraged to talk about your experiences of using physical activity to promote your psychological wellbeing. This interview will take place face-to-face at a location of your choice in London. Proof of a double vaccination or a negative lateral flow will be required prior to the interview taking place. You will also be required to social distance and wear a face mask at all times (unless you are

exempt). For those unable or uncomfortable to meet face-to-face, the option of conducting an interview online will be offered.

What are the possible disadvantages and risks of taking part?

It is possible that reflecting on your use of physical activity during a potentially more challenging time in your life might evoke some difficult feelings and emotions. Should this ever become too much for you, the interview can be paused or terminated, and the researcher will be able to provide you with resources and signpost you to appropriate sources of support.

What are the possible benefits of taking part?

Research has suggested that research participants may find it valuable to participate in a research interview and to talk about something that is meaningful too them. It is therefore possible that this study has some immediate, individual benefit on you as a participant! In addition, by participating in this study you might also help deepen our knowledge of the physical activity and mental health relationship. If so, this might enable physical activity to be more readily implemented as a mental health treatment and this could (indirectly) benefit future patients and the wider community.

Will my taking part in the study be kept confidential?

During the pre-interview telephone screening call you will be asked to choose a name that you will be given throughout the write up of the study. This name will ensure that your data will not be identifiable. We will also change any identifiable characteristics of your interview. The interviews will be recorded using a Dictaphone and later transcribed for analysis. These transcripts will be stored securely on an encrypted laptop. The records will then be kept for 10 years in line with City University's guidelines, before being safely destroyed.

What will happen to the results?

The data collected through the interviews in this study will be presented in the final thesis. This thesis might include direct quotes from participants, but anonymity will be maintained by removing any identifiable characteristics. The end thesis might be published publicly on Figshare, of which you can request access to. The study might also be published in an academic journal and be presented at research conferences. A two-page summary of the key findings form the study will also be produced by the researcher, and you will be offered the opportunity to opt-in and receive this summary after your research interview is completed.

Data privacy statement

City, University of London is the sponsor and the data controller of this study based in the United Kingdom. This means that we are responsible for looking after your information and using it properly. The legal basis under which your data will be processed is City's public task. Your right to access, change or move your information are limited, as we need to manage your information in a specific way in order for the research to be reliable and accurate. To safeguard your rights, we will use the minimum personal-identifiable information possible (for further information please see https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-

the-general-data-protection-regulation-gdpr/lawful-basis-for-processing/public-task/). City will use your name and contact details to contact you about the research study as necessary. The only people at City who will have access to your identifiable information will be Menna Rose and Dr Aylish O'Driscoll (research supervisor). City will keep identifiable information about you from this study for 10 years after the study has finished. You can find out more about how City handles data by visiting https://www.city.ac.uk/about/governance/legal. If you are concerned about how we have processed your personal data, you can contact the Information Commissioner's Office (IOC) https://ico.org.uk/.

Who has reviewed the study?

This study has been approved by the Psychology Research Ethics Committee at City, University of London.

What if there is a problem?

If you have any problems, concerns or questions about this study, you should ask to speak to a member of the research team. If you remain unhappy and wish to complain formally, you can do this through City's complaints procedure. To complain about the study, you need to phone 020 7040 3040. You can then ask to speak to the Secretary to Senate Research Ethics Committee and inform them of the name of this project.

You can also write to the Secretary at:

[redacted]
Research Integrity Manager
City, University of London, Northampton Square
London, EC1V 0HB
Email: [redacted]

Insurance

City, University London holds insurance policies which apply to this study, subject to the terms and conditions of the policy. If you feel you have been harmed or injured by taking part in this study, you may be eligible to claim compensation. This does not affect your legal rights to seek compensation. If you are harmed due to someone's negligence, then you may have grounds for legal action.

What should I do if I want to take part?

If you would like to take part in this study please contact the researcher, Menna Rose, at [redacted]. Please also contact the researcher if you have any questions or would like further information.

Thank you for taking the time to read this information sheet. Please take your time in considering if you would like to take part in this study. If you do wish to take part, please contact Menna Rose to continue.

Appendix C – Emotional Support Resources

Emotional Support Resources

If you are feeling distressed after your research interview, consider following one of the actions below:

- Contact your GP
- Contact one of the mental health support services listed below.
- Accept a follow-up call from the researcher in two days time to have a check-in and see how you are feeling.

Emotional support services:

- **Samaritans – call 116 123**
  - If you need to talk to someone, contact a Samaritan 24 hours a day, 365 days **a year.**
- **Campaign Against Living Miserably (CALM) – call 0800 585858**
  - Call CALM if you need to talk or find information and support.
- **Shout – text 85258**
  - Text shout 24 hours a day, 7 days a week to receive support over text message.
- **Mind – call 0300 123 3393**
  - Call Mind's 'infoline' – an information line that provides an information and signposting service from 9am to 6pm, Monday to Friday.
- **NHS 111**
  - Call NHS 111 if you need help but are not in immediate danger.

If you are feeling particularly distressed, and are worried about keeping yourself safe, call the emergency services on **999.**

Appendix D – Screening Call Questions

Screening call questions for insight into the phenomenon of interest guide:
Questions might include, but are not limited to, the following: 1. Could you tell me a little more about your use of physical activity? For example, how often are you physically active, what physical activity do you do, etc.? 2. How would you describe your mental health, both past and present? 3. How would you describe the relationship between your physical activity and your psychological wellbeing?
Screening call questions for risk of current psychological distress guide:
Questions might include, but are not limited to, the following: 1. Are you experiencing a high level of stress or emotional distress currently? If yes: 2. Is this distress currently interfering in your life in anyway? 3. Are there any reasons you can think of that might make participating in an interview on physical activity and psychological wellbeing too difficult for you? If yes: 4. What do you think can be done to help with this? 5. Do you think participation in this study at this time is still appropriate?

Appendix E – Screening Call Questionnaires

Exercise Addiction Inventory (Terry, Szabo & Griffiths, 2004)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Exercise is the most important thing in my life.	1	2	3	4	5
Conflicts have arisen between me and my family and/or partner about the amount of exercise I do.	1	2	3	4	5
I use exercise as a way of changing my mood (e.g., to get a buzz, to escape, etc.).	1	2	3	4	5
Over time I have increased the amount of exercise I do in a day.	1	2	3	4	5
If I have to miss an exercise session, I feel moody and irritable.	1	2	3	4	5
If I cut down the amount of exercise I do and then start again, I always end up exercising as often as I did before.	1	2	3	4	5

SCOFF Questionnaire (Morgan, Reid & Lacey, 2000)

1. Do you make yourself **S**ick because you feel uncomfortably full? YES/NO
2. Do you worry you have lost **C**ontrol over how much you eat? YES/NO
3. Have you recently lost more than **O**ne stone in a 3-month period? YES/NO
4. Do you believe yourself to be **F**at when others say you are too thin? YES/NO
5. Would you say that **F**ood dominates your life? YES/NO

Appendix F – Emotional Distress Protocol

Emotional distress protocol

For participants who are experiencing acute distress but are not at risk of imminent danger, consider the follow actions:

a. Encourage the participant to contact their GP/ mental health/ wellness support services.
b. Offer, with participant consent, for the researcher to do so.
c. Offer a follow-up call from the researcher requesting the individual's phone number for this purpose.
d. If the researcher judged that the participant is in imminent danger, consider the following actions:
e. Request the participant's address to call emergency services.
f. Offer a follow-up call from the researcher requesting the individual's phone number for this purpose.

If the participant appears to be in imminent danger, consider the following actions:

a. Request the participant's address to call emergency services.
b. Offer a follow-up call from the researcher requesting the individual's phone number for this purpose.

Appendix G – Interview Schedule

Interview schedule:

1. Could you start by telling me what drew you to this study?
2. Tell me about your experience of physical activity.
3. What motivates you to be physically active.
4. How do you feel before physical activity?
5. How do you feel when you exercise?
    a. What do you feel in your body?
    b. What are you thinking about when you exercise?
    c. How do you make sense of this?
6. How do you feel after exercise?
    a. What do you feel in your body after you exercise?
    b. How do you make sense of this?
7. How do you feel/think when you don't exercise or when you are unable to?
    a. How do you make sense of this?
8. Is there anything else you would like to add with regards to your experiences of physical activity?

Possible prompts and probes:

- "How did that make you feel?"
- "Can you tell me more about?"
- "Can you tell me more about this feeling of…?"

Appendix H – Debrief Sheet

What is the lived experience of using physical activity to promote psychological wellbeing?

DEBRIEF INFORMATION

Thank you for taking part in this study. Now that your participation is complete, we would like to tell you a bit more about it.

The beneficial effects of physical activity on psychological wellbeing and mental health are well documented. However, despite the recognised benefits, research suggests that physical activity is not being used to help treat mental health difficulties enough. With this in mind, it has been suggested that developing a better understanding of the ways in which physical activity might benefit psychological wellbeing could promote the use of physical activity as a mental health treatment or as an add-on to existing therapies.

We hope that you found participating in this study interesting. However, we do appreciate that some topics of discussion might have evoked some more challenging feelings and emotions. We would therefore like to offer you a follow up phone call in two days time to check-in and see how you are doing, or to see if anything has subsequently come up for you.

In the meantime, if you do wish to reach out for further emotional support, please refer to the handout attached to this debrief sheet which consists of a number of different organisations that could offer you further emotional support.

If you have any other questions, or if any part of this research has raised concerns for you, please do not hesitate to contact us at the following:

- Menna Rose at [redacted].
- Dr Aylish O'Driscoll (research supervisor) at [redacted].

Ethics approval code: **ETH2122-0198**

Appendix I – Informed Consent Form

INFORMED CONSENT

Name of principal investigator/researcher: Menna Rose

Name of responsible institution: City, University of London

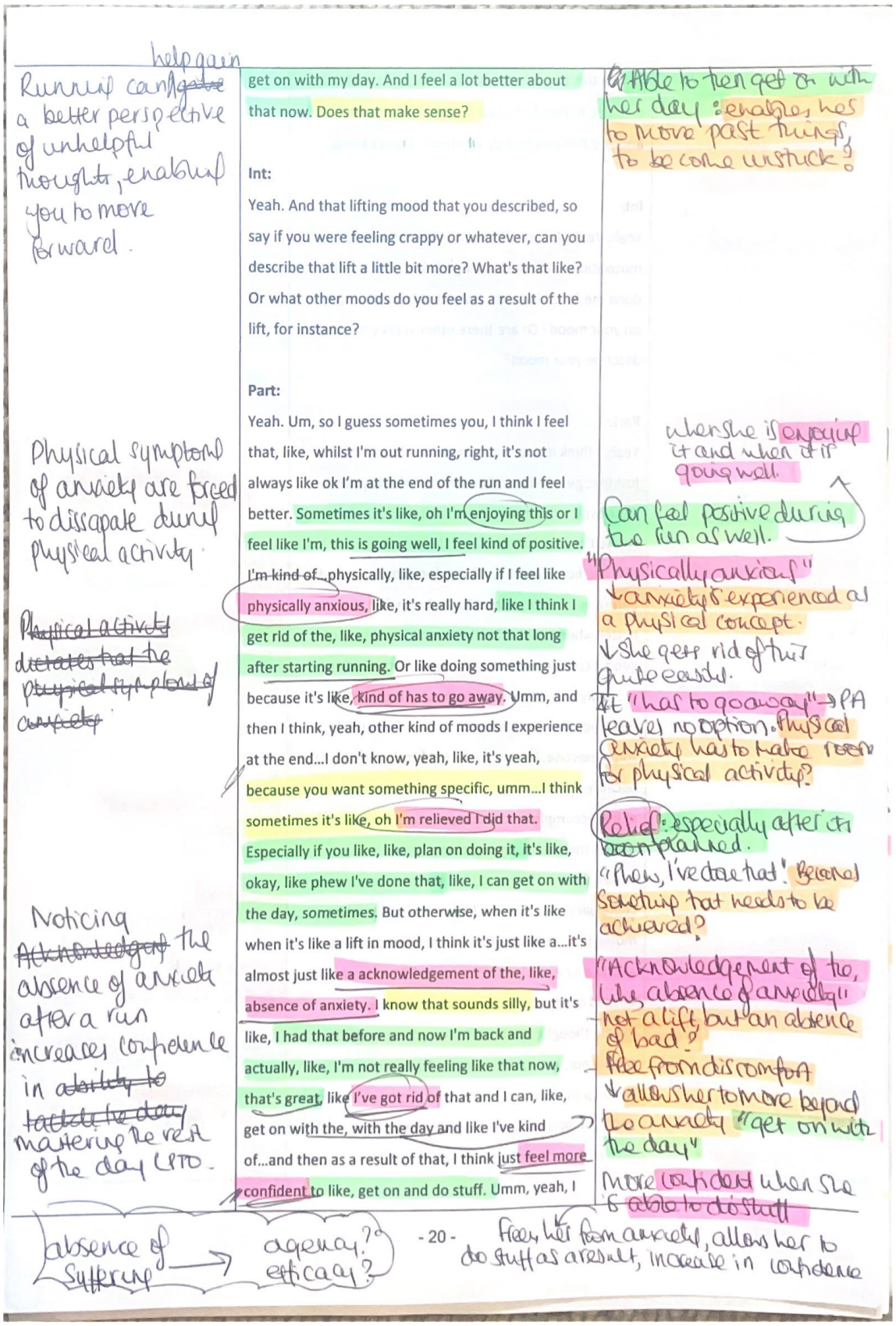
REC reference number: ETH2122-0198

Title of study: *What is the lived experience of using physical activity to promote psychological wellbeing.*

		Initials
1	I confirm that I have read and understood the participant information sheet for this study. I have had the opportunity to consider the information and ask questions which have been answered satisfactorily.	
2.	I understand that my participation is voluntary and that I am free to withdraw from the research interview at any time without giving a reason and without being disadvantaged.	
3.	I understand that I will be able to withdraw my research data up to three weeks after having completed the interview.	
4.	I agree to the interview being audio recorded, transcribed and stored securely on an encrypted devise.	
5.	I agree to City recording and processing this information about me. I understand that this information will be used only for the purpose(s) explained in the participant information sheet and my consent is conditional on City complying with its duties and obligations under the General Data Protection Regulation (GDPR).	
7.	I understand that after the end of the study, City will securely hold my transcripts (primary research data) for a minimum of 10 years before it is safely destroyed.	
8.	I agree for my direct quotes to be used in the write up of the study, and that these quotes will be made anonymous.	
9.	I understand that my anonymous data will be made open access through journal publication.	
10.	I agree to take part in the above study.	

Name of Participant	Signature	Date
Name of Researcher	Signature	Date

Appendix J – Example Transcript Analysis



get on with my day. And I feel a lot better about that now. Does that make sense?

Int:

Yeah. And that lifting mood that you described, so say if you were feeling crappy or whatever, can you describe that lift a little bit more? What's that like? Or what other moods do you feel as a result of the lift, for instance?

Part:

Yeah. Um, so I guess sometimes you, I think I feel that, like, whilst I'm out running, right, it's not always like ok I'm at the end of the run and I feel better. Sometimes it's like, oh I'm enjoying this or I feel like I'm, this is going well, I feel kind of positive. I'm kind of...physically, like, especially if I feel like physically anxious, like, it's really hard, like I think I get rid of the, like, physical anxiety not that long after starting running. Or like doing something just because it's like, kind of has to go away. Umm, and then I think, yeah, other kind of moods I experience at the end...I don't know, yeah, like, it's yeah, because you want something specific, umm...I think sometimes it's like, oh I'm relieved I did that. Especially if you like, like, plan on doing it, it's like, okay, like phew I've done that, like, I can get on with the day, sometimes. But otherwise, when it's like when it's like a lift in mood, I think it's just like a...it's almost just like a acknowledgement of the, like, absence of anxiety. I know that sounds silly, but it's like, I had that before and now I'm back and actually, like, I'm not really feeling like that now, that's great, like I've got rid of that and I can, like, get on with the, with the day and like I've kind of...and then as a result of that, I think just feel more confident to like, get on and do stuff. Umm, yeah, I

think it's like confidence and kind of like self-assurance, like, I don't need to, like stress about X, Y, and Zed, I can just like carry on with the day. And like, I can do it, you know, like I can do Tuesday, it's just Tuesday, whereas probably before I went for a run, I was like, I can't do Tuesday, like Tuesday is too much, like, I have to do this at 11 o'clock, and I can't do it. And it's like, that's insane, of course you can do Tuesday. You get back and you're like, yeah, I can do Tuesday. Does that make sense?

Int:

Yeah and that um, because I hear what you're saying is sometimes there's kind of like that absence then of the anxiety afterwards, you kind of notice that it disappears.

Part:

Yeah.

Int:

What what do you think about that makes you, because then I think you said you felt, you know, you have confidence due to that kind of disappearance, a bit more self-assured, why, why, what do you think it is about that disappearance of the anxiety that makes you feel more confident or whatever?

Part:

I think it's like a, probably a anxious tenant to in itself, but like a, phew I have control over that. Like, I don't need to stress about being anxious, I have control over being anxious. I'm not anxious now. Which in itself is definitely an anxious thing, but we can ignore that. But I think it's that, I think it's like, I feel self-assured, because I've managed to control

Confidence · Self-assurance · Lack of stress · "carry on with the day" - sense of her capable to more bearable anxiety? → Increase in tolerance? "I can't do it" → to "Yeah, I can do Tuesday" increase capacity, belief in ability, tolerance? Less overwhelmed ·

'Anxious tenant in itself' "Phew, I have control over that" don't need to stress about being anxious - anxiety over anxiety - agency/control over anxiety through PA? Needing control I dpat of her anxiety · Self-assurance - because she has "controlled tension"

Physical activity provides a relieving sense of control over anxiety ·

Appendix K – Example PET Table 'Elena'

PET 1: ENRICHES CONNECTIONS WITH OTHERS
PET Subtheme 1a: Shared experiences facilitates connections with others. The group experience is the core element of physical activity. (p.3) *"I love that, that I essentially go by myself, but it's in a group setting".* Physically moving with others automatically facilitates an implicit connection. (p.7) *"If...I'm exercising with more than one person, it's this shared connection."* The beneficial impact on wellbeing seems unanimous. (p.34) "*And I notice it, for example, in my husband, if he is exercising, he has an improvement in mood"* You have to connect with others to keep moving forward. (p.7) *"You're dependent on each other, for the boat to be in sync, to keep the boat moving."* Motivated by connecting and having fun with another. (p.4) *"That's what got me doing it to being with is doing it with other people. And it was fun."*
PET Subtheme 1b: Creates quality time with others Creating time to be with friends is most important. (p.4) *"Initially it was just more about committing to doing something with my friends"* Provides quality time for deeper conections and friendships. (p.5) *"You're really spending quality time together, and we talk... so I gain this really great connection with my friends"* There's a simplicity to sharing a run with a friend, which is in stark contrast to other social contexts. (p.7) *"We're just running, we're side by side…we're not trying to navigate a restaurant..."* Physical activity provides social opportunities. (p.7) *Then there's a social component to it afterwards".*
PET Subtheme 1c: Facilitates co-dependent relationships with others It allows you to commit to another, and another to commit to you. (p.8) *"We have a, you know, we're, we're choosing to be in a boat together."* Dependable running partnership. (p.2) *"I have a running partner, who we run every sngle run together"*
PET 2: IMPROVEMENT IN WELLBEING INVOLVES THE WHOLE BODY

PET Subtheme 2a: Wellbeing is an embodied experience.

The high is a whole-body experience. (p.31)
"I get this emotional, physical, emotional feeling"
Just physically moving facilitates a shift in emotional wellbeing. (p.15)
"I just started feeling better because I was just moving"
Stress is a build-up of energy that can get expended through physcial exertion. (p.16)
"I can expend that energy, get rid of that energy"

PET Subtheme 2b: Preserving physical wellbeing is comforting

Feels responsible to preserve your health for your family. (p.42)
"And also for my family...I want to be healthy for them".
Maximising long-term health is in line with personal values. (p.43)
"I definitely know that I want to be healthy. And that my exercise will help me with that."
Maintains a sense of youthfulness for longer. (p.41)
"I wamt to be able to ride bikes, and I want to kick a ball and play basketball"
Puts you at ease in relation to weight and appearance. (p.33)
"If I don't do what I usually do, then I do start thinking about the weight component"
Feeling physically competent impacts our emotional wellbeing. (p.35)
"My mind is connected to how my body works and how my body feels"
Feeling well in your body is important for emotional wellbeing. (p.44)
"I feel anxious that I don't feel well in my body"
Feeling comfortable in your physical body is a prerequiiste to emotional wellbeing. (p.45)
"I feel both physically uncomfortable and emotionally uncomfortable until I can feel physically comortable in my clothes"
Other areas of life, such as travel, feel more leisurely. (p.41)
"It allows me to travel and experience things much easier than a lot of people."

PET 3: SUPPORTS PRESENT MOMENT AWARENESS

PET 3a: Enhances awareness of physical surroundings

Using a variety of senses facilitates a grounding experience. (p.21)
"Stop and smell the roses, you know, we'll look and we'll be like, oh my gosh, do you see this?"
Increased awareness of physical self and surroundings. (p.19)
"I really am thinking only about rowing. And I might be paying attention to what's around me".
Walking fulfills a love for being outside in a beautiful setting. (p.9)
"I loved the setting. It was beautiful."
Increased present moment awareness. (p.18)
"I'm paying attention when I'm exercising to where I am."
Physical activity provides a time to practIse being mindful. (p.21)
"Over time, it's become just part of my habit".

Supports ongoing mindfulness throughout the day. (p.38)
"I'm also more mindful, when I'm not exercising."

PET 3b: Shifts attention away from unhelpful thoughts

An intense focus on the physical activity reduces ruminative thoughts. (p.19)
"All you can do is focus on these five minutes…there's no space really to be drifting off and thinking about whatever else"
Attention shifts from worry thoughts to the beauty of external surroundings. (p.19)
"I'm paying attention to the beautiful scenery…I'm not thinking about, Oh, my God, I need to unload the dishwasher."
Less distracting thought processses facilitate a purposeful approach to each day. (p.39)
"It helps me to be more productive. My mind is clear."

PET 4: A WAY TO MANAGE EMOTIONS

PET 4a: Creates a dedicated period of time each day for self-care

An hour of peace and freedom prepares you to then manage stressors during the day. (p.36)
"That one hour of time being outside in the fresh air in the sunshine, exerting energy, helped manage my stress"
Enables you to take a break from work. (p.9)
"It was my sort of way of getting a break"
Creates a therapeutic space for processing and reflection. (p.17)
"It's therapeutic for me, in a sense. Like I don't, you know, I work through a lot of stuff"
Creates a personal space free from pressures of the external world. (p.39)
"Just take a break for a little bit. From all the other things that I need to do."
Time with no external responsibility nourishes a sense of self. (p.15)
"One hour where I could be back to my old self"
A protected part of each day. (p.40)
"I like that part of my day. I like that it's just for me"
Provides dedicated time to yourself each day. (p.6)
"The everyday sort of dedicated time"

PET 4b: Reduces stress and anxiety

Reduces level of suffering. (p.48)
"I'm less anxious. I'm less agitated."
Alleviates stress so the day feels more manageable. (p.16)
"Just a stress reliever"
Releases tension. (p.32)
"I feel physically like I've exerted energy."

PET 4c: *Facilitates* the experience of positive emotions

Exercise provides fun and enjoyment. (p.2)
"I don't do any form of execise unless I'm having fun and enjoying it"
Physical activity improves mood. (p.6)
"I will go for a walk or go out on my bike, or something, to help me with my mood"
Increase in energy and readiness. (p.34)
"I have more energy, I have more space for taking on more things."
Feeling accomplished is energizing. (p.32)
"I feel energy from expending all that energy…I feel like I've accomplished something"
There is pride in her emotional and physical journey. (p.22)
"I can go back and go, yeah, but look at what I'm doing now"
The intensity of the experience facilitates feelings of accomplishment. (p.31)
"I feel super accomplished. I've done something that's really super hard."
Facilitates feelings of gratitude and happiness. (p.21)
"I feel happy. You know, grateful."
Realizing your potential is enjoyable and confidence boosting. (p.11)
"I was trying all of these different things…And, and really loving it and feeling good about myself. Like, Oh, my God, I can I can do this."

PET 5: CULTIVATES BELIEF IN ONE'S ABILITIES

PET 5a: Cultivates belief in ability to push through a challenge

Instills that you can have difficult feelings, whilst behaving effectively. (p.27)
"It's teaching me that I can do hard things, and also have these feelings of this kind of sucks"
You can still experience happiness and enjoyment in the face of adversity. (p.27)
"The happiness and enjoyment and, you know, mindfulness, that far outweighs the negative part of it for me"
Successfully beginning to run increases a willingness to be bad at something new. (p.25)
"You're willing to take more chances and try new things"
You can overcome a challenge if you engage with the positive aspects of the experience. (p.27)
"Enjoying it, being in the moment, happiness, all of those things take me through the challenge."
The mind is a separate entity that can be overriden during challenging times. (p.29)
"It's more of my mind saying, okay, it's time you're done. And then I have to say, no, no, your body is fine."
Increases self-compassion and persistence in the face of potenital failure. (p.24)
"I don't beat myself up, you know, I just, I'm just trying, I'm doing the best that I can"
Able to push yourself to the limit. (p.30)
"You're really pushing yourself to the limit"

Facilitates a confidence that enables you to push your own boundaries. (p.11)
"I did a boot camp, which was incredibly hard and difficult… And I think because I had been running, I started doing that."
Successfully completing a running program facilitates confidence in one's own abilities (p.10)
"It just what happened with that five couch to 5k Running programme is it opened my mind that I could do it."

PET 5b: Cultivates belief in agency over wellbeing

There is certainty in being able to saisfy one's own needs. (p.46)
"Yeah, I now exactly what I need to do. Yeah. I know exactly what I need to do."
Provides a sense of agency over wellbeing. (p.40)
"You know, it's something I'm choosing to do. I guess I'm making a conscious descision to go out and do this"
Having agency over wellbieng is motivating. (p.44)
"It's the motivator to to get me back to it because I know I can get back to it quickly"
Provides something to commit to and aim for. (p.10)
"And we committed and we did it, we signed up for a 5k race, we trained together."
Increases awareness and understanding of emotional wellbeing. (p.48)
"That also helps me to know…okay, if I don't do this, I'm going to be short temepered with my son"
Reduction in arousal makes you feel more capable of achieving your goals. (p.36)
"I feel calmer. And like I can now tackle the things I need to tackle."

PET 6: DIFFICULT TO VERBALISE

PET 6a: Difficult to verbalise an embodied experience

It is difficult to verbalize the experience. (p.31)
"Umm...I cannot put words to it."
It is difficult to explain. (p.47)
"Back to the thing I can't explain."
The impact of movement feels real and definite, but it is difficult to articulate how and why. (p.34)
"Umm…I feel like I'm lacking the knoweldge or infromation that I need to describe"
Need to strive to make sense of the experience. (p.30)
"Why is it? I don't know. I mean…ummm…uhh…why…I think umm…"
There is a deisre to understand and put the experience into words. (p.38)
"I knew it was gonna be a lot of like, intense, using my brain, but it's so good. It's so good to put words to it."

PET 6b: Easier to verbalise a physiological experience

It is difficult to explain without attributing it to chemical changes in the brain. (p.28)
"I don't know. I mean, I feel like there must be some sort of…there must be some sort of chemical."
Chemical changes explain the unexplainable. (p.47)
"Back to the thing I can't explain…. It's whatever that internal chemical thing is happening."
A reduction in arousal feels like something chemical is happening in the body. (p.37)
"I feel like there's some explanation for it that's happening physically inside my body in my brain"
The benefits to physical health are more definitely described. (p.42)
"So I know that there is a connection between being physically active, watching your what you eat, watching your weight, and your long term health."
The physical benefits of physical activty are clear. (p.9)
"I became more aware of how activity impacts for sure your health, your physical health."

PET 7: PHYSICAL ACTIVITY IS ONLY ONE PIECE OF THE PUZZLE

Medication reduces intensity of suffering, and then exercise enhances wellbeing. (p.17)
"It takes the edge off…And that, the icing on the cake so to speak...is to get out and exercise"
Exercise cannot be solely relied upon. (p.17)
"I don't think I could go off the antidepressant and solely rely on exercise"
Without antidepressants, the benefits feel temporary. (p.47)
"I think it helps kind of temporarily"
Exercise is just one factor that contributes to change. (p.25)
"Maybe it comes from aging as well, that you just sort of, and just living life"
Therapy and clinical experience also increased awareness and understanding of emotions. (p.24)
"Over time with lots of therapy, and you know, whatever, my clinical background, I've learned about the connection between my mind and my body and my emotions"

GET 1: Physical activity activates an embodied awareness.	
1a: Present moment awareness gives the mind a rest.	
Theo	Page 16: "*When you're there to train, you're there to train and, and nothing else should really kind of take your focus away".* Page 21: *"I just chuck some music on and I'm not really like my mind's not racing. I'm very, very focused".* Page 21: *"…when the fog clears, I'm just kind of everything kind of just starts to flood back through again. But but it's not I'm not thinking about like, I suppose that is quite interesting, I'm not really thinking about umm any like the bad times or anything. It's just like normal things that go through my head"*
John	Page 24: *"I'm so void of any thought other than the sport I'm doing and like how I'm performing".* Page 25: *"Nothing at all crossed my mind. Which was just like bliss."* Page 27: *"My main…mental benefit comes from the focus element of being on the sport".* Page 28: *"When you're only focusing on one thing, you just completely get out of that spell of going off on these weird tangents".* Page 31: *"…like that's great. That's a really positive thing…as opposed to ah you dickhead you snoozed your alarm…"* Page 46: *"My main…mental benefit comes from the focus element of being on the sport".*
Lucy	Page 2: "*Also will have just kind of like crazy thinking cycles and then be like, okay, I need to like go and do something to try and break that".* Page 7: *"It's definitely not meditating, but like that kind of way…. just kind of like sit with your thoughts, go for a run, relax type vibe".* Page 7: *"Yeah, kind of just like take get things out of your brain"* Page 16: *"A bit like a reset point like post exercise, like very chill and you're not thinking about that much".* Page 18: *"Like I'm not gonna be thinking all these like crappy things. Instead, it's like what can I do that's like positive with my brain"* Page 19: *"I was really hung up thinking about this, and I've been for a run and actually, it's not that big of a deal"*
Elena	Page 19: *"I really am thinking only about rowing. And I might be paying attention to what's around me".* Page 19: *"All you can do is focus on these five minutes…there's no space really to be drifting off and thinking about whatever else"* Page 38: *"I'm also more mindful, when I'm not exercising."* Page 39: *"It helps me to be more productive. My mind is clear."*
Robert	Page 15: *"I'm just thinking, am I doing, am I making sure like I'm doing it properly, like safely"*
JonT	Page 12: *"…I can release the mind from going down a particular track."* Page 13: *"It puts you somewhere, somewhere else to send your mind to. And so that to me is a form of freedom."*

	Page 26: *"I'm focusing on the movement that they're doing. And so I don't think about anything else."*
Akina	Page 10: *"I guess when I'm playing sport, I'm not so anxious…I think because I'm doing something to take my mind off it".* Page 12: *"You've got yourself into a zone. And you're just concentrating on whatever it is you're doing at that particular moment in time"*
Tara	Page 17: *"Focus on your breath, inhale, exhale. So it kind of takes away from the external noise".* Page 18: *"So it just allows me to concentrate on the physical, like pushing myself to those limits, which is what allows me to get away from my thoughts as well".* Page 18: *"I think it's kind of what getting in the zone is for me when I'm fully in tune with my muscles, with my breathing, and the activity I'm doing in the moment".*
1b: Physical activity activates the mind-body connection.	
JonT	Page 11: *"Yeah, so I was learning mentally as well as physically".* Page 14: *"Doing something that's different gives me the freedom to think differently."* Page 16: *"And so there are certain movements, which start to, to free, start to maybe calm, start to feel more comfortable."* Page 22: *"And for me that flexibility of moving bodily, it's connected to the flexibility of your mind."* Page 28: *"The vagus drops you back down from a sympathetic to a parasympathetic state…this is to me how it connects the physical and the mental".* Page 44: *"The body is moving and the mind is moving".*
Lucy	Page 16: *"Physical activity takes a little energy out of your brain. And then you come back and you just, like, chill".* Page 22: *"It's like, yeah, just kind of like a tightness in, in your body. And in your mind."* Page 25: *"I feel like my body feels physically active and good and then it kind of like engages your mind".* Page 25: *"The kind of like fluidness of, of movement, like helps your body to kind of just like, relax".* Page 29: *"I feel like my body feels physically active and good and then it kind of like engages your mind"*
Elena	Page 15: *"I just started feeling better because I was just moving".* Page 31: "*I get this emotional, physical, emotional feeling".* Page 35: *"My mind is connected to how my body works and how my body feels".* Page 44: "I feel anxious that I don't feel well in my body".
Theo	Page 10: *"That's like I guess the physical first physcial reaction".* Page 11: *"…if there was actually sort of some sort of chemistry going on, but either way, like, if like, it feels real".*

	Page 18: *"when my heart rate gets up to a certain level then it kind of just seems to like kind of evaporate".* Page 24: *"…I guess like my peak like shape I suppose. Then it's like I'm like confident walking in most times".* Page 24: *"Look good, feel good kind of thing."* Page 29: *"Just being stronger, like having more strength, like lifting more weights progressively doing that, then that will then like build confidence".* Page 30: *"If I am running and getting like that sort of getting the heart rate up, it's the same thing. I mean, that's just euphoric in itself anyway."* Page 40: *"if you really look fit, you look healthy, people will receive you a lot better".* Page 43: *"I think the physical aspects of seeing progressing from the weights definitely affects confidence a lot more."* Page 44: *"…feeling better like obviously bigger uh as a guy…"*
Tara	Page 3: *"…what I wanted to do for my PhD also came about while I was running, so…I've always thought of running as meditation in motion…it's a very cyclical sport, you know, you're just doing one thing for an extended period of time. So think it gives me a lot of like, clarity, mental clarity, as well."* Page 9: *"I think it had a very direct impact on how I felt about myself mainly. Because I was also trying to lose weight".* Page 10: *"I started getting compliments, and, oh, you look so fit now, and, you know, things like that. So that kind of also then boosted my self-esteem".* Page 16: *"I was just so like mentally drained out that I didn't have like the physical strength to go and work out. And then that's something that didn't make me feel good".* Page 21*: "It makes me feel stronger and yeah, just more like, secure in myself".* Page 37: *"if I've been like anxious about something else, or my mind has been somewhere else, it's very, very certain that my workout won't be 100%"*
John	Page 22: *"There's just like a bit more to me, there's just like, your, like, your muscles are tenser."* Page 57: *"The physical benefits you get from running as well were obviously just like improving my mental headspace".*
GET 2: A reliable resource for managing how one feels.	
2a: Knowing that physical activity will be there is containing.	
John	Page 4: *"I go there because I'm like, I know this is good for me. I know it's gonna help."*

	Page 7: *"I've got this to do, I've got that to do…and it kind of keeps yourself a little bit focused, and like, I'm not completely going off the rails".* Page 17: *"There are so many things you need to control in your life that when all of those things lined up…it's like, like I'm doing really well".* Page 26: *"There's no confusion. It's just like, boom, I need to do that now, I need to do that now, I need to do this"* Page 32: *"You just got like rose tinted glasses on…because it's like, well, I'm here, I'm doing this.".* Page 33: *"You understand that it's going to make you feel better. So that means that you feel better already."* Page 57: *"And then when I got structured with the running programme…just everything was just so much better. Like my day-to-day was just so much better".* Page 63: *"Having structure was so good for just, just basically just like diarising physical and mental benefits of exercise".* Page 63: *"I'm just doing it. There's no ifs or buts about it".*
Lucy	Page 35: *"I'm in control of what's happening. I know, I'm going to do my work. I know, I'm gonna, like, have do some fun stuff. And then I also know that I've like, also got the time to like, take for myself to like, go for a run or whatever. And I think it's like, yeah, it's like, a comfort in like having that kind of like control over what I'm doing and just kind of set up."*
Elena	Page 6: *"The everyday sort of dedicated time".*
Robert	Page 7: *"I went back with a completely different routine and then it all kind of changed".* Page 9: *"But then also quite like knowing what's going to happen in a week if that makes sense. So maybe, maybe that is some kind of anxiety or something about the unexpected or unknown".* Page 9: *"…because if you're playing rugby one day, that would mean you'd have to, like you'd have the whole of Wednesday off so that'd mean you'd have to do uni work on the Monday and Tuesday, for example".* Page 12: *"Because it was kind of just the friends, the routine and it was just, it made my life busy again".*
Tara	*Page 34: "This at least gives my day some structure, then, you know, like having that scheduled workout and creating things according to that plan"*
2b: Physical activity enhances belief in one's ability to cope.	
Theo	Page 11: *"I know now how to kind of tackle it. And when I tackle it I get like a real good, like, positive boost."* Page 26: *"no it's like a case of I know…the longer I stay in the space, for example, the better it's going to get".* Page 32: *"you know, getting out of bed and going out to do that particular task, because at one point in my life it was what seemed impossible".*

	Page 42: *"There's definitely progressions in terms of like that, the like what I'm capable of coping within certain situations".* Page 47: *"if I can get myself out of that, I can get myself out of anything".*
Lucy	Page 18: *"I think it's just like, oh, like, if I feel like I've accomplished something, I feel motivated, like, I did, did a good job, well done. Like, oh, I can do something else with this kind of like, I can do stuff. I can do this too, whatever. Oh, I ran what what that distance before breakfast - great. Now I can do X, Y and Zed this morning or whatever, I don't know."* Page 19: *"Oh, I ran what that that distance before breakfast - great. Now I can do X, Y and Zed this morning"* Page 21: *"Like, I don't need to stress about being anxious, I have control over being anxious".* Page 32: *"It's like, I'm in control of this rhythm, I'm enjoying it and I can kind of like, keep going."* Page 35*: "I've got control over what I'm doing…and also just like a comfort in like, oh, it's Tuesday, I'm gonna do this, and then I'm gonna do this".* Page 35: *"It's just like reassurance that like I'm not letting my work take over my life."* Page 36: *"I'll be totally fine if it's a bit too hilly or like, oh, it's a bit, yeah, like, I'll be fine".*
Tara	Page 4: *"Everything just seems to be working in sync, like you become a well-oiled machine".* Page 15: *"We're not limited in any way, like in terms of our physical performance and things like that, you know, like, we're limitless".* Page 20: *"I really, really enjoy improving myself. And you know that feeling of invincibility".* Page 39: *"You are pushing yourself through it, you are pushing your body to that limit to a certain extent. So I think it definitely leaves you mentally resilient".* Page 40: *"…I think that's where that resilience then comes from, because you've put your body through the hard stuff, and you know that you can handle it and you know that you can do it again. And you're just gonna get strong each time you're able to, like, take that beating and then come back up."*
Elena	Page 10: *"It just what happened with that five couch to 5k Running programme is it opened my mind that I could do it."* Page 25: *"You're willing to take more chances and try new things".* Page 27: *"It's teaching me that I can do hard things, and also have these feelings of this kind of sucks".* Page 27: *"Enjoying it, being in the moment, happiness, all of those things take me through the challenge."* Page 29: *"It's more of my mind saying, okay, it's time you're done. And then I have to say, no, no, your body is fine."* Page 36: *"I feel calmer. And like I can now tackle the things I need to tackle."*

	Page 40: *"You know, it's something I'm choosing to do. I guess I'm making a conscious decision to go out and do this".* Page 46*: "Yeah, I know exactly what I need to do. Yeah. I know exactly what I need to do."*
John	Page 21: *"Self-reassurance of just like, yeah, I know, I can keep doing this…I know I can reach this next level".* Page 34: *"It's like, wow, you've actually made an active decision to put yourself out of your comfort zone here so like, well done."* Page 39: *Because I was like, my body was less prepared to go on a 5k run than it was just to go to the gym, it's more of a challenge. It's more of like a feat. It's like, I've done something that I'm not necessarily physically designed to do well, and I've gone and done it."* Page 61: *"I have done something that I didn't think that I was going to do…and like, I'm just going out and I'm like getting it done."*
Akina	Page 16: *"I think because you can succeed. If you can achieve one goal, you can achieve another goal".*
Robert	Page 19: *"I could maybe do a harder challenge knowing that I've kind of maybe already done something successfully in the day. So I kind of maybe feel more confident about taking that on."*
2c: Physical activity can be relied upon to manage emotions.	
Theo	Page 28: *"don't think there's a time I've exercised, and my head's been cleared but then my mood hasn't improved".*
Lucy	Page 1: *"A kind of structured exercise routine, like, makes me or like, enables me to kind of keep that [anxiety] under control".* Page 6: *"Also just kind of like flushed out any kind of like, I don't know, like anxiety or negative vibes"* Page 12: *"Feel like really like positive at a time where there wasn't very much to feel positive about".* Page 19: *"I can't think of a time where I've like, been out and done exercise and kind of come home and been like, I feel worse than I did before".* Page 23: *"I've significantly reduced the kind of crappy feeling I had enough to a level that I can actually like function and do my day".*
Elena	Page 2: *"I don't do any form of exercise unless I'm having fun and enjoying it".* Page 21: *"I feel happy. You know, grateful."* Page 31: *"It's 45 minutes, I'm in and out. I feel like I've accomplished a lot. I'm set for the day. I love the feeling that I have the minute I get off that bike, I feel super accomplished. I've done something that's really super hard."* Page 32: *"I feel energy from expending all that energy…I feel like I've accomplished something".*

	Page 36: *"That one hour of time being outside in the fresh air in the sunshine, exerting energy, helped manage my stress".* Page 48: *"I'm less anxious. I'm less agitated."*
Tara	Page 5: *“I like switching it up. I like mixing. I'm not like training for anything specific right now. So I just do what I enjoy".* Page 6: *"Like I always gravitated towards it, I enjoy doing it".* Page 8: *"I just think it was something I enjoyed doing, you know?"* Page 25: *"So for me, it's like, almost like my happy place over here"* Page 41: *“So like, boxing became like a release for me, you know, so I was taking it all out on the bag and like, the pads and stuff like that, and then like, so I was just a nicer person when I walked out of the session, because I was able to remove that frustration or anger or whatever, like, just out physically and then without actually like snapping at someone else or things like that.”*
John	Page 8: *"But the level of enjoyment that you get, by being good at something..."* Page 11: *"I was at a level where I was getting 10 out of 10 satisfaction, fulfilment.* Page 33: *“…the prior recognition of the effects before the effects actually come in, is what I would say. That you understand that it's going to make you feel better. So that that means that you feel better already.”*
Akina	Page 7: *"And it was important that I did these things for me, because I always enjoyed doing it".* Page 8: *"I think it makes you realise you're only as old as you feel. And I think mainly because I'm enjoying what I'm doing".* Page 9: *“I think when I’m doing dance it umm it makes me laugh. Because I'm trying to copy what the dance teacher is showing us but I'm sort of lagging behing a bit in time. And that gives me the mechanisms to smile about it…”* Page 13: "*I guess I just feel calmer".*
Robert	Page 32: *“…I feel kind of, like, I've been successful with everything. And then that kind of makes me feel happy and makes me feel better, and then kind of makes me feel motivated to kind of get on with the rest of the day.”*
JonT	Page 9: *"A bit freer, a bit more relaxed. Possibly a bit happier. Umm, less constrained."* Page 21: *"It is being able to, to look objectively at things that are difficult. And not get emotionally hijacked by it."* Page 21: *"And so I know for a fact that this chronic stress that I'm experiencing has, the, what I'm doing makes a difference."* Page 21: *"As opposed to hitting the roof with um with being I mean this fight or flight mode fairly quickly."* Page 23: *“So fun, fun is, is being like a child. And I know I've moved away from childhood a long time ago, but I still like the fun bits of it.”* Page 28: *"It's a bit like a rubber band that's not pulled tight…so you can pull it tight if you wish, but it's, it's relaxed".*

	Page 35: *"You might be physically fitter, but in terms of your moods...it makes no difference. But if I find something which to me comes back ties back to the fun bit, it's like, ah, that was good."* Page 42: *"So the stuff that I do acts as a buffer to some of the other things that are going on".*
GET 3: Physical activity facilitates an enriching experience that also improves wellbeing.	
3a: Physical activity supports a more enriching engagement in life.	
Theo	Page 11: *"And then that motivates me to do something else…but it was a snowball effect when it happened".* Page 26: *"…the start of the Snowball was obviously running again, then getting back into the weights, get in shape, which then helped me like then, I don't know, like, apply for a job I'd enjoy more and getting out and speaking to friends, so like that was this was the start of the snowball, but but now it's just yeah, so there's a lot of factors, what builds my confidence."* Page 37: *"a different list of things that are, that's just my, my baseline for each day".* Page 39: *"…when I had like, my brain was fogged, fogged up, I just couldn't…focus on anything right, and and I just think it was it was out of necessity as opposed to a specific choice. So I don't think I don't think…I don't think I could have started with meditation or start with reading and then maybe got back into fitness. I do think the fitness was the catalyst to kind of getting everything kick started again."* Page 44: "*it is the difficult situations and social situations that obviously help grow and, and then progress up the ladder".*
John	Page 15: *"…it's obviously all kind of intertwined, but through doing well at school sport and like performing at that level, it then meant that my like mental state generally was better and clearer, which then meant I was able to perform better at school, which then meant my mental health state was even better than it was before."* Page 33: *"…just like eating well drinking loads of water, having a good day at work, doing some exercise, seeing my mates. Like that, if I do all those things, I've had a really good day. So like doing the exercise element of it, it's just like a part of what makes my package of just like having a good day."*
Robert	Page 4: *"It helps me kind of eat properly and sleep properly and do all those kinds of things. It's all kind of feed into just, I think feed into a like good mental state maybe?"* Page 8: *"Everything kind of I'd say, grew out from there".*
JonT	Page 6: *"And listening to my podcast. It was a good place for that."*

	Page 8: *“…and I create my stories around what’s happening, or I’d come back and, or even share about what I’m listening to on the podcast, it gives me something else apart from what’s going on in that enclosed space”.* Page 10: *"I've got something else that's new and exciting to me, to, to communicate".* Page 36: *"...the input that you get from your eyes and nature makes a difference. I know that the smells make a difference. And I know the sounds make a difference…".*
Tara	Page 1: *“And I feel like it’s given me so much enrichment in my life in terms of discipline, routine, team building.”* Page 3: *"We did this make the world listen campaign in Bombay where my face was on billboards, you know, like things which I would have never imagined for myself".* Page 26: *"I feel like sport has given me so much in my life in terms of how I am as a person".* Page 40: *"It's impacted my life in so many ways. You know, literally like to what I do as a career".*
3b: Physical activity supports social interactions and connections with others.	
JonT	Page 3: *"I love the community aspect of it."* Page 3: *“…you can see all sorts of different people and I love the community aspect of it. That's kind of like my prime motivation for going to the gym.”* Page 4: *"...they were familiar faces, familiar characteristics that get me going, Oh, yeah, so there is that person again."* Page 5: *“I think it was actually fitting in. So you, you, for me, it felt like I could fit into this group.”* Page 5: *“And I think there was only one Chinese looking person in that place. And she was a a fit individual, fit in terms of fit as opposed to fit in a colloquial kind of fit, looking woman who did all these exercises, and I was like, I can't do that. But funnily enough, even seeing somebody else of the same type made a difference.”* Page 11: *"I guess this probably fits into the belonging piece for me, I can copy this stuff, and it's good."* Page 32: *"I'm going there to help set out the flags, or to be one of the people standing waving at you, because it's all very, very communal."* Page 34: *"I can remember...a few of the people that said good morning to me...Whereas if you said to me, so what is your personal best, how many minutes did you take to run that 5k? I’d say yeah, yeah I did it in 20 minutes or whatever, it doesn't make a blind bit of difference to how I feel."*
Theo	Page 2: *"You'll be meeting up with loads of people, different ages, different groups, different backgrounds and stuff".*

	Page 10: *"Then in terms of like social aspects, I kind of just, it was just little things, just how I was like, communicating my brother, like I was like, maintaining eye contact a little more than I used to".* Page 14: *"I want to start a run club on a Wednesday to have more of a social aspect because I think that's quite good. But for the most part, I'm solitary".*
Tara	Page 3: *"And that was such a nice community because like, these runs used to be like on Wednesday morning and Saturday morning. So sometimes on Saturday morning, I used to see some of my friends coming back from like a night out. So just having like a like minded community who I was running with on, because I'd have to forego the Friday night out to go out running on Saturday morning. So I think so I was able to meet like a like minded community"* Page 6: *"I like being around people and things like that, as well. So I think, you know, the team sports gave me that".* Page 8: *"Even though training was like, quite rough, but it was like, just all of us together, was like a bond that you had, you know".* Page 26: "*It just generally makes me a happier person, you know, which allows me to then be nicer to people, to you know, socialise".*
John	Page 4: *"I also find that like, the, the hour before and the hour after the game of just like the kind of like the social anticipation…".* Page 4: *"I find that sense of camaraderie really rewarding."* Page 5: "*Being able to like you know bounce off people when you're there or you know, have a conversation."* Page 9: *"We could all like talk about it during school, like after the game, before the game whatever."* Page 23: *"I'm able to feel like I've really contributed to other people winning as well as me."* Page 58: *"And we were able to kind of like, boost our moods by all relating to the fact that none of us enjoyed it. It was almost like we had a common enemy in running."*
Elena	Page 2: *"I have a running partner, who we run every single run together".* Page 3: *"I love that, that I essentially go by myself, but it's in a group setting".* Page 4: *"That's what got me doing it to begin with is doing it with other people. And it was fun."* Page 4: *"Initially it was just more about committing to doing something with my friends".* Page 5: *"You're really spending quality time together, and we talk... so I gain this really great connection with my friends".* Page 7: "*Then there's a social component to it afterwards".* Page 7: *"…I think there's not as much distraction. And, you know, we're just running, we're side by side, you're, you're running, you're just, you're walking and I think it's you know, you're… I think for me, it happens to be that we're outside, we run amongst nature, we're ummm, you know, we're not trying to navigate a restaurant, we're not trying to navigate servers or*

	alcohol, or, you know, whatever it is you're trying to do in a restaurant, there's a different kind of social context....” Page 7: *“…you're dependent on each other, for the boat to be in sync to keep the boat moving. If one person messes up, the whole boat is off. You know, there’s connection in that as well”.* Page 8: *"We have a, you know, we're, we're choosing to be in a boat together."*
Lucy	Page 5: *“…probably going to like play lacrosse or something, part of the like positiveness, positivity that comes out of that is actually just like a, I’ve had a nice social interaction rather than I’ve exercised.”* Page 44: *"Just kind of like get on with people so well if you can, like, kind of like read their minds when you play sport together".*
Robert	Page 4: "*My siblings and I would always play sport at the weekends".* Page 11: *"So it kind of it all kind of like sprouted from there because I made different group of friends".* Page 26: *"It's kind of quite a good way of seeing friends and kind of staying connected with people."* Page 27: *"Like seeing friends and, not necessarily doing anything particular but just kind of hanging out with your mates and feeling connected."*
Akina	Page 3: *"And you're able to make friends. Which can help get you out of isolation".* Page 4: *"Because when you're out doing sports you get to meet other people, and you tend to make friends with those people".* Page 16: *“I think it helped quite a lot. Because it, you don’t feel so depressed that you’re going through something on your own, that you’ve found somebody to, because it enables you to talk to people and it just, it just helps.”* Page 16: *"It helps you to get out of isolation, and it helps you to make friends".*