"*I identified as a rugby player…now I'm a Dad*": Fathers' experiences of physical activity in the postnatal period

Thesis

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Abstract

Background: Fatherhood is a significant life event that has the potential to impact fathers' wellbeing and mental health. However, fathers' experiences have been largely neglected in research and there remains a lack of awareness of paternal postnatal mental health in society.

Aims: This qualitative study aimed to explore fathers' experiences of physical activity during the postnatal period, their particular barriers and support needs when exercising and whether physical activity could be a suitable source of support.

Methods: Qualitative data were collected via thirteen semi-structured virtual interviews with fathers who had a child or children between the ages of one and five and who participated in any form of physical activity. The data were analysed using a reflexive thematic analysis to develop themes that could inform practice.

Findings: Four themes were developed through analysis; "*There is no time for you anymore*: Finding and navigating time for exercise", "*I identified as a rugby player…I'm a Dad now*: The paradox of exercise in the postnatal period", "*It's a quick in and out sort of thing*: Adapting physical activity after children" and the final theme "*It's not where the focus is*: Fathers' wellbeing as secondary to mothers'".

Conclusions: The findings contribute to an increased understanding of fathers' experiences of physical activity during the postnatal period and have implications for healthcare professionals and practice. Physical activity may be a suitable source of support, however, exercising during this time requires fathers to adapt their previous routines and exercise around their family's needs. The fathers' new identity changes their relationship with exercise, which can make physical activity seem less important during this time, as they prioritise their family's needs over their sporting desires. Many of the fathers were also unaware they could develop postnatal mental health problems and unsure of where they could seek support. The implications highlight the need to raise awareness of paternal postnatal mental health and the importance of providing tailored support.

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1. Background Literature and Study Rationale

1.1 Introduction

The postnatal period describes the period of one year following the birth of the child and represents the period of most significant change, where the highest incidence of paternal psychological distress occurs (Larson, 2017; Philpott, 2016). This research explored fathers' experiences of sport and exercise in the postnatal period and whether exercise could be a suitable source of support for this population. Fathers' postnatal mental health problems represent a significant problem in society, with around 10% of fathers estimated to experience postnatal depression (Philpott, 2016; Paulson & Bazemore, 2010). However, their experiences in research have been largely neglected and there are currently no specific treatments or guidelines on how to best manage fathers' wellbeing and mental health (Eddy, Poll, Whiting & Clevesy, 2019; Darwin, Galdas, Hinchliff, McMillan, McGowan *et al.*, 2017). I start this chapter by exploring the current literature on men's mental health, focusing on fathers' postnatal mental health and the great lack of recognition of their mental health needs. I then explore the prevalence of paternal postnatal mental health problems, how their symptoms can differ from mothers and the impact of poor paternal mental health on the whole family unit. In the next section, I explore how changing expectations of fatherhood has impacted fathers' wellbeing and how masculinity can impact fathers' recognition, acknowledgement and help-seeking behaviour for their mental health, as well as the importance of providing tailored treatment. I then explore the benefit of physical activity for wellbeing and mental health and the existing research into physical activity interventions for this population. Finally, I explore the current gaps in research, the potential benefit of this research for Counselling Psychology practice and outline the aims of the study.

1.2 Mental health worldwide and in the UK

The World Health Organisation (WHO, 2018) defines mental health as a state of wellbeing, in which individuals realise their abilities, cope with the stresses of life, and contribute to their communities. Mental health, therefore, is not just the lack of illness, but a positive concept related to social and emotional wellbeing, which impacts peoples' sense of self and ability to form relationships, as well as cope with change (WHO, 2022; Baldwin, 2020; Curran, Rosenbaum, Parnell, Stubbs, Pringle *et al.*, 2017). High levels of psychological wellbeing have been found as a protective factor against declining mental health (Lamers, Westerhof, Glas & Bohlmeijer, 2015). This suggests interventions promoting

wellbeing could act as a protective factor against mental health problems (Baldwin, 2020; Lamers *et al.*, 2015).

However, worldwide mental health problems such as depression and anxiety represent the leading contributors to the global burden of disease (Drew, Morgan, Pollock & Young, 2020). Mental health problems have serious implications as they increase the risk of every major chronic disease and can reduce life expectancy by twelve to fifteen years (Drew *et al.*, 2020). The WHO (2021) reports that depression is the leading cause of disability affecting over 280 million people worldwide.

In the UK, mental health problems are widespread and account for 23% of all ill-health (Mental Health Policy Group, 2014, Sahakian, Malloch, & Kennard, 2010). In addition to the distress experienced by individuals and their families, mental health problems are also an enormous financial cost to society (Baldwin, 2015). The Five Year Forward View for Mental Health report published by the Independent Mental Health taskforce (IMHT, 2016) estimates that mental health problems represent the largest single cause of disability, with the cost to the economy estimated at £105 billion a year, roughly the cost of running the entire National Health Service (NHS). Improving mental health and wellbeing has now become a public health priority for the UK, with a call to action to improve interventions to enhance the mental health and wellbeing of the population (Baldwin, 2015). In particular men's mental health has begun to be recognised as a serious problem with men overrepresented in a variety of psychological and social problems (Drew *et al.*, 2020; American Psychological Association, 2018).

1.3 Men's mental health

Over the past three decades, there has been growing concern about the burden of ill-health experienced by men, with their mental health and wellbeing becoming an important public health issue (Philpott, 2016; Baker, Dworkin, Tong, Banks, Shand *et al.*, 2014). Men's mental health has been identified as a silent epidemic in society, with research finally starting to recognise this long-neglected problem (Porche & Giorgianni, 2020; Baker, 2017). Men's mental health is an under-researched and under-supported area, however further complicated by the unique challenge of engaging men to seek support for their mental health (Drew *et al.*, 2020; McKenzie, Collings, Jenkin & River, 2018). There remains significant concern about men's mental health due to the personal and societal barriers to help-seeking, negative coping mechanisms and high suicide rates (Robertson, Gough, Hanna, Raine, Robinson *et al.*, 2016).

Traditionally, research has consistently found higher rates of mental health problems in women, however, the lower rates found in men does not reflect better mental health (Seidler, Dawes, Rice, Oliffe & Dhillon, 2016). Research now suggests such data underestimates the extent of men's mental health problems, as men are less likely to recognise their emotional or psychological distress and seek treatment (Baker, 2017). Major depression can be considered a gendered construct, as more women are diagnosed with depression clinicians and researchers are more prepared to diagnose it in women (Addis & Hoffman, 2017). Gender bias within diagnosis can reduce diagnosis rates as men's expression of mental health problems can differ from women's (Martin, Neighbours & Griffith, 2013).

Rates of depression in men are also thought to be underestimated as their symptoms of depression are more likely to be expressed in externalizing symptoms such as anger, substance abuse, risk-taking, irritability, and compulsivity (Mahalik & Dagirmanjian, 2019, Martin, Neighbours & Griffith, 2013; Cochran & Rabinowitz, 2000). Women are more likely to be diagnosed with internalizing disorders like depression or anxiety (Smith, Mouzon, & Elliot, 2016). Whilst men are more likely to be diagnosed with externalizing disorders like ADHD or substance abuse, as they do not conform to traditional gender role stereotypes about men's emotionality (Mahalik, Good, Tager, Levant, & Mackowiak, 2012; Cochran & Rabinowitz, 2000). These patterns are often attributed to gender differences in socialization help-seeking, coping, and socioeconomic status, leading to calls that a different set of diagnostic criteria should be used for men (Smith *et al.*, 2016; Cavanagh, Wilson, Caputi & Kavanagh, 2016).

Research now suggests that men experience the same level of mental health conditions as women (Porche & Giorgianni, 2020; Royal College of Psychiatrists, 2015). In particular, men exhibit significantly higher rates of substance use and physical violence (NHS, 2016). Alarmingly, men are three to four times more likely to take their own lives than women in Western countries (Gough & Robertson, 2017). In the UK, the NHS's Five Year Forward View for Mental Health (IMHT, 2016) revealed that suicide in men has increased steadily over the past few years, with suicide now the leading cause of death for men aged between fifteen to forty-nine. The UK Office for National Statistics (2021) revealed that in 2020 75% of suicides were among men, making men three times more likely to take their lives than women, which follows a consistent trend back to the mid-1990s.

One significant life event which has the potential to impact men's wellbeing is fatherhood (Philpott & Corcoran, 2018; Philpott, 2016). Father's experiences are under-researched with their needs frequently unmet, leading to research calling fathers' mental health a public health concern (Ansari, Shah, Dennis, & Shah, 2021; Baldwin, Malone, Sandall, & Bick, 2019; Philpott, 2016).

1.4 Fathers and paternal postnatal mental health

Research has found that fatherhood overall has a protective effect on men's health, however, the transition to fatherhood can be complex and demanding (Philpott & Corcoran, 2018; Philpott, 2016). Transitioning to fatherhood requires fathers to adjust to a complex myriad of social, physical and emotional factors (Shorey & Chan 2020; Rominov, Pilkington, Giallo & Whelan, 2016). This necessitates fathers to alter their normal routines which can negatively impact their wellbeing (Shorey & Chan 2020; Rominov *et al.*, 2016). The postnatal period describes the period of one year following the birth of the child and represents the period of most significant change in men's new role of fatherhood (Philpott, 2016). This is where the highest incidence of paternal psychological distress is thought to occur, particularly in the first three months (Larson, 2017; Philpott, 2016). The increased demands on men's psychological resources can increase their vulnerability to mental health problems during this period (Rominov, Giallo, Pilkington & Whelan, 2018). Fathers experience many of the same challenges and stressors that their female partners do, making this a particularly meaningful yet vulnerable time in a man's life (Philpott, 2016; Baldwin, 2015).

Traditionally, postnatal mental health problems have been associated with mothers, perceived as a result of hormonal changes (Philpott & Corcoran 2018). This has led to an almost exclusive focus on the mental health of mothers in research (Bruno, Celebre, Mento, Rizzo, Silvestri *et al.*, 2020). Postnatal depression (PND) can be defined as a non-psychotic depressive disorder that occurs after the birth of a child, characterised by low mood, lack of interest, anxiety, sleep difficulties, reduced self-esteem and difficulty coping with day-to-day tasks (Massoudi, 2013). It has now been established that PND can also be the result of psychosocial factors, suggesting that fathers can also be affected in the postnatal period (Philpott & Corcoran, 2018; Philpott, 2016). Additionally, recent research has identified hormonal changes in fathers in the perinatal period, such as an increase in the production of prolactin and cortisol and decreases in testosterone levels, suggesting fathers also experience hormonal changes (Ramluggun, Kamara & Anjoyeb, 2020; Saxbe, Edelstein, Lyden, Wardecker & Chopik *et al*., 2017). Fathers are also at risk of experiencing physical problems, high levels of stress and postnatal anxiety (Giallo, Williams, Seymour, Jillard, Peace *et al*., 2020).

However, paternal postnatal mental health is not widely acknowledged or well researched (Philpott & Corcoran 2018). Fathers' postnatal mental health needs remain poorly understood and largely neglected (Goldstein, Rosen, Howlett, Anderson & Herman, 2020; Baldwin, 2015).

Maternal PND has a global prevalence of approximately 17% (Hahn-Holbrook, Cornwell-Hinrichs, & Anaya, 2018) and is recognised as a subtype of a major depressive disorder in the Diagnostic and Statistical Manual for Mental Disorders Fifth Edition (DSM-V) (American Psychological Association; 2013). However, paternal PND is not acknowledged as an official psychiatric disorder; according to the DSM-V, there are no official criteria to make a diagnosis of paternal PND (American Psychological Association, 2013). This is problematic as paternal PND can differ in its presentation compared to maternal PND, as research suggests fathers manifest psychological distress as low self-esteem, hostility or anger, and they may engage in escape activities such as over-working (Baldwin & Bick, 2017; Veskrna, 2010).

In the UK, the National Institute for Health and Care Excellence (NICE, 2014a) currently have no guidelines for paternal postnatal mental health problems. In their updated 2018 guidelines, they recognised that the mental health needs of fathers will inevitably be affected by mental health problems in women (NICE, 2018). This has led to the announcement of nationwide perinatal assessments for partners, in couples where the mother or expectant mother has a mental health diagnosis, as part of the Long-Term Plan for improving mental health (NHS, 2019). However, the guidelines still fail to recommend treatments for paternal postnatal mental health problems. The British Association for Counselling and Psychotherapy (BACP, 2018) recently voiced their support for fathers, stating that fathers must not be forgotten by services. However, many fathers' needs are being unmet as there still exists a general lack of awareness and information about paternal PND in society and these negative attitudes impact fathers' help-seeking behaviour (Pedersen, Maindal & Ryom, 2021, Baldwin & Bick, 2019).

Prevalence of paternal postnatal mental health problems

In a 2015 survey of new parents in the UK, one in three fathers reported being concerned about their mental health (National Childbirth Trust, 2015). A range of risk factors has been found to increase the risk of paternal PND including; previous history of mental health problems, lack of social support, financial stressors, younger paternal age, low income, lower educational level, maternal PND and poor partner relationship (Recto & Champion, 2020; Edward, Castle, Mills, Davis & Casey,

2014; Wee, Skouteris, Pier, Richardson, & Milgrom, 2011). Research into paternal PND is in its infancy, and estimates of its prevalence vary widely from 4-13% (Philpott & Corcoran 2018). However, two recent meta-analyses estimate between 8-10% of fathers' experience PND, with the highest incidence of 25% three to six months after the child's birth (Cameron, Sedov & Tomfohr-Madsen, 2016; Paulson & Bazemore, 2010).

Additionally, for fathers whose partners develop maternal PND, the risk of paternal PND rises to between 25% to 50%, with maternal PND the strongest predictor of paternal PND (Larson, 2017; Goodman, 2004). Alarmingly, this rate of paternal PND is double the rate of depression found in men of similar age ranges (Eddy *et al.,* 2019). Less clinical and research attention has been paid to paternal postnatal anxiety; however, its incidence is believed to be similar (Philpott, Savage, FitzGerald, & Leahy-Warren, 2019). In a meta-analysis of thirty-four studies, the prevalence of anxiety was reported to range between 2-51% during the postnatal period (Philpott *et al.*, 2019).

The considerable variability in the estimates for the prevalence of paternal postnatal mental health is likely due to a number of factors (Bruno *et al*., 2020). As there are no explicit diagnostic criteria for paternal PND, research investigating it have used different definitions, assessment methods and cut-off scores (Bruno *et al*., 2020). This results in differences in the assessment period, a lack of standardised measurements, the use of self-report measures which do not consider gender differences in symptom presentation and single time-point observations (Bruno *et al*., 2020). All these factors contribute to a lack of rigour and bias in the research and could result in the underestimation of fathers' postnatal mental health problems (Bruno *et al*., 2020). Despite the need for further quality research, it is clear that a significant proportion of fathers' will experience postnatal mental health problems.

The most commonly used scale to screen for paternal PND is the Edinburgh PND Scale (EPDS) (Philpott, 2016). Whilst its use with fathers has been validated, recent research by Carlberg, Edhborg and Lindberg (2018) found that the EPDS was not sufficient alone to detect paternal PND. They suggested this may be due to gender differences in PND symptom presentation and expression (Carlberg *et al.*, 2018). Consequently, it is more difficult to assess fathers' mental health needs, as there is no official set of diagnostic criteria for paternal PND and due to inadequate screening tools (Baldwin & Bick, 2017). Fathers themselves are also reluctant to seek support and less frequently encounter health services during this period (Baldwin & Bick, 2017; Philpott, 2016). Therefore, it is likely that the current estimates of paternal PND, stress and anxiety are inaccurate and do not

reflect the true picture of fathers' postnatal mental health, which is significant as these rates are thought to be increasing (Eddy *et al.,* 2019). Consequently, men are under-screened, underdiagnosed, and undertreated for postnatal mental health problems which detrimentally impacts the wellbeing of fathers and their families (Rominov *et al.*, 2016; Philpott, 2016).

Previous research of fathers' experiences

Relatively little is known about the lived experiences of fathers with PND (Eddy *et al*., 2019; Darwin *et al.*, 2017). Qualitative research exploring fathers' experiences of their mental health during the postnatal period is rare, as the majority of the previous research has focused on mothers or fathers' experiences of maternity services (Darwin *et al.*, 2017). This has led to some researchers calling fathers the forgotten parent (Wong, Ho, Wang, & Miller, 2017). However, the growing recognition that fathers do experience psychological distress during the postnatal period has led to the first few qualitative studies into this area (Sockol & Allred, 2018).

Edhborg, Carlberg, Simon and Lindberg (2016) interviewed nineteen fathers in Sweden who self-identified as having depressive symptoms three to six months postpartum. Fathers reported the deterioration of relationships with their partners and the difficulties in balancing the competing demands of family, work, as well as their own needs (Edhborg *et al.,* 2016). Fathers felt invisible and reported that they lacked adequate support to meet the challenge of new fatherhood (Edhborg *et al.,* 2016). Similarly, Darwin *et al.* (2017) also explored fathers' experiences during this period and highlighted how fathers felt excluded by maternity services, whilst they simultaneously questioned their entitlement to support believing the services should focus on women. Fathers also raised the problem of the lack of tailored support available, which has been found in previous research (Darwin *et al.,* 2017; O'Brien, McNeil, Fletcher, Conrad, Wilson *et al.*, 2017).

One common finding in qualitative research is that fathers feel invisible during pregnancy, causing them to repress their feelings (Eddy *et al.*, 2019; Solberg & Glavin, 2018). Solberg and Glavin (2018) interviewed nine Norwegian fathers using qualitative content analysis. The fathers reported feeling overlooked during pregnancy, as they felt unsure of their role as fathers and what they should be preparing for (Solberg & Glavin, 2018). Fathers within this study referred to PND as a female phenomenon, and only a few of the fathers knew that PND could affect men (Solberg & Glavin, 2018). This was despite several of the participants describing their mental health in terms consistent with symptoms of depression (Solberg & Glavin, 2018).

Similarly, Eddy *et al.* (2019) analysed fathers' experiences of PND, using secondary sources such as blogs, websites and chat rooms. They found themes of repressing feelings, being overwhelmed, needing education and adhering to gender expectations (Eddy *et al.*, 2019). Fathers have reported feeling pressure to live up to male stereotypes, which exacerbated them repressing their feelings and made it harder for them to talk about their mental health to their partners (Eddy *et al.*, 2019; Solberg & Glavin, 2018). Edhgborg *et al.* (2016) also found that fathers were uncomfortable when too much emphasis was placed on their mental health. Letourneau, Duffett-Leger, Dennis, Stewart, and Tryphonopoulos (2011) found fathers in their study reported needing help for PND, but barriers such as a lack of information and the stigma associated with men's mental health prevented them. This has all contributed to fathers feeling neglected by their partners, society and the healthcare system, feeling forgotten or insignificant (Eddy *et al.*, 2019).

Within the UK, similar findings were found by Darwin *et al.* (2017) who interviewed nineteen men in the postnatal period, examining their views and direct experiences of paternal perinatal mental health. Darwin *et al.* (2017) identified four themes; 'legitimacy of paternal stress and entitlement to health professionals' support', 'protecting the partnership', 'navigating fatherhood', and 'diversity of men's support networks'. Despite feeling excluded from maternity services, fathers questioned their entitlement to support, believing that services should be focused on mothers. The fathers questioned whether their feelings were legitimate, believing their feelings were either not valid or not as important as their partners' and consequently suppressed their feelings (Darwin *et al.*, 2017). Fathers also preferred to talk about their navigation of fatherhood rather than their mental health and raised the lack of tailored support for fathers (Darwin *et al.*, 2017). This may suggest that interventions that promote wellbeing and emphasise fatherhood and resilience may be more acceptable to this population (Darwin *et al.*, 2017). This research also highlights the need for future interventions that are tailored to men, aligned with their masculine identities and framed around fatherhood (Darwin *et al.*, 2017).

More recently Baldwin *et al.* (2019) interviewed twenty-one first-time fathers with children under the age of twelve months in the UK. The fathers again described a general lack of appropriate support and information for new fathers (Baldwin *et al.,* 2019). Several barriers were identified by the fathers including gaps in service provision, no information about services, being excluded by health professionals, inflexible working practices and self-imposed barriers (Baldwin *et al.,* 2019). Most of the fathers were not asked about their mental health by health professionals during the perinatal period, as they viewed the health professionals as being mainly there for mothers (Baldwin

et al., 2019). Similarly, the fathers expressed a general view that it was difficult for men to talk about mental health problems (Baldwin *et al.,* 2019). As perinatal services were perceived as being mainly for mothers, fathers often reported feeling uncomfortable in female-dominated groups (Baldwin *et al.,* 2019). Positively, the fathers were willing to approach and use health services. However, they were unsure if this was appropriate or if the health professionals they consulted would have the relevant skills or knowledge to deal with their mental health (Baldwin *et al.,* 2019).

There is a clear need for further research into fathers' experiences during the postnatal period to increase understanding for counselling practice. Few fathers seek support from mental health services and they are considered a hard to reach group (Fletcher, Dowse, George, & Payling, 2017). Health professionals also perceive they have a lack of knowledge and skills to work with fathers, as efforts to engage fathers in early intervention programs have had little success (Fletcher *et al.*, 2017). Few studies to date have explored what type of support fathers would like during the perinatal period and new knowledge is needed to explore potential sources of support and ways to engage fathers (Baldwin *et al.,* 2019; Darwin *et al.*, 2017).

Wider impact of fathers' postnatal mental health

Paternal PND is not yet routinely screened for and there are now increasing calls to introduce widespread screening for all fathers (Ramluggun *et al.*, 2020; Philpott & Corcoran 2018). This has the potential to not only benefit the fathers themselves but also mitigate the wider impact of poor paternal mental health on their partners and children (Philpott & Corcoran 2018). Families are considered an emotional unit in which individuals share an interactive and reflective relationship, where depression in one or both partners can impact the entire family (Ansari *et al.*, 2021; Ramluggun *et al.*, 2020). Research has supported this finding that paternal and maternal mental health are interconnected (Ansari *et al.*, 2021; Ramluggun *et al.*, 2020).

Paternal mental health problems are associated with heightened psychological risk for mothers and developmental risk for children (MacDonald, Graeme, Wynter, Cooke, Hutchinson *et al.*, 2021; Philpott & Corcoran 2018). A 2010 meta-analysis found that depressed fathers displayed reduced positive behaviours such as sensitivity and warmth and increased negative behaviours such as hostility and disengagement towards their children (Wilson & Durbin, 2010). For mothers, research has found that prenatal depression in fathers predicted the severity of maternal PND across the first six postnatal months but not vice versa (Paulson, Bazemore, Goodman, & Leiferman, 2016). Fathers'

poor mental health can therefore impact their partner's well-being, increasing their vulnerability to stress and psychopathology and decreasing their overall relationship quality (Philpott, 2016; De-Montigny, Girard, Lacharité, Dubeau, & Devault, 2013).

Similarly, paternal PND also impacts children's wellbeing (Philpott & Corcoran, 2018). A substantial body of research demonstrates how fathers are critical for their children's wellbeing and development, as poor paternal mental health has been found to negatively impact children's cognitive, social and behavioural development (Amodia-Bidakowska, Laverty, & Ramchandani, 2020; Baldwin & Bick, 2017). Research has also found that children were three times more likely to show behavioural problems by the age of three if their fathers experienced depression during their first year of life (Fletcher, Freeman, Garfield & Vimpani, 2011). This impact was independent of mothers' mental health, supporting the crucial role fathers can play in child development (Fletcher *et al.*, 2011).

In the case of maternal PND, it has been suggested that fathers could promote maternal mental health or act as a buffer against the potentially negative effects of maternal depression on the family (Lee, Sanchez, Grogan-Kaylor, Lee, & Albuja, 2018; Sethna, Perry, Domoney, Iles, Psychogiou *et al.*, 2017). As with paternal PND, children exposed to maternal depression are more at risk for impaired emotional and cognitive development as well as depressive disorders in adolescence and adulthood (Bruno *et al*., 2020; Soe, Wen, Poh, Li, & Broekman *et al.*, 2016). Fathers have been reported to play an important role in shielding their children from the negative effects of maternal depression, which could be lost if both parents were depressed (Ramluggun *et al.*, 2020). Ansari *et al.* (2021) argue that prevention is critical for reducing the negative effects of parental mental health problems. The focus of maternity services has been on ways to support the mother-infant dyad (Bruno *et al*., 2020). However, the wider impact of paternal poor mental health and fathers' potential to mitigate poor maternal mental health, suggests it is critical to support fathers' psychological wellbeing to maximise support for mothers and children from within the family (Darwin *et al.*, 2017).

The changing role of fathers

The changing role and expectations of fathers in modern society can significantly impact fathers' wellbeing (Baldwin, 2015). Fatherhood is socially constructed and practices are collectively produced, mediated by cultural norms as well as economic and family policy (Craig, Powell, & Smyth 2014; Ives, 2014). Traditionally, historical western concepts of fatherhood were strongly associated

with the role of provider and protector, as mothers took on the primary caregiving role (Henz, 2019). To the extent that anthropologist Margaret Mead famously commented that "*A father is a biological necessity, but a social accident*" (Minden, 1982, p. 22, cited by Singley & Edwards 2015).

However, recent decades have seen unprecedented social changes, resulting in a great shift in the traditional role of men within families (Philpott, 2016). These changes are related to changing family structure, gender roles and social expectations including; rising divorces rates, women's increased role in the labour force and the decline of traditional patriarchal and masculine authority (Kwon, Oliffe, Bottorff, & Kelly, 2014; Finn & Henwood 2009). This has led to conceptualisations of traditional fatherhood evolving to include expectations that fathers be practically and emotionally involved in the care of their children and form close, loving relationships with their children (Paredes & Parchment, 2021; Henz, 2019; Kwon *et al.*, 2014). This has been called the 'new fatherhood ideal' which emphasises roles more traditionally aligned with maternal parenting expectations (Petts, Shafer & Essig, 2018). Petts *et al.* (2018) investigated data from 2,194 fathers from a US national study on fathers of children aged two to eighteen. They found the less closely fathers adhered to traditional hegemonic masculine norms, the more involved in parenting the fathers were and the less likely they were to engage in harsh discipline (Petts *et al.*, 2018). This highlights how contemporary fatherhood is characterised by expectations that fathers should be highly involved, engaged and equitable partner and parent, as well as contributing significant time to housework (Miguel, Gandasegui, & Gorfinkiel, 2019; Petts *et al.*, 2018).

Contemporary expectations of good parenting also suggest that focused, intensive attention is essential to children's development (Craig *et al*., 2014). As a result, fathers are spending more time parenting children than ever before (Petts *et al.*, 2018). This is reflected in research of Western societies finding since the 1970s increases in the time fathers spend with children (Henz, 2019). In the UK, among fathers of children under five years of age, fathers' childcare time increased from fifteen minutes a day in the mid-1970s to around two hours a day in 1999 (Fisher, McCulloch, & Gershuny 1999, cited by Henz 2019). This has led to many arguing that not only has the context of parenthood shifted, but intensified as well (Craig *et al*., 2014).

This has impacted fathers' wellbeing as research has found that fathers need to manage conflicting tensions of work and family, balancing societal demands to be an involved parent, with the demands of employment to fulfil the breadwinner role (Seward & Rush, 2015; Kwon *et al.*, 2014). Research has found that fathers' work-life conflict has significantly risen over the past three decades (Seward

& Rush, 2015). Research has shown that fathers' involvement in childcare is still affected by their and the mothers' work hours and job constraints, as most men continue to prioritize work over family even after they become fathers (Norman, Elliot & Fagan, 2014). Kaufman (2013) suggested that new fathers add childcare and home responsibilities during non-work hours, leaving their work role relatively unchanged, but their lives more time-pressured. Managing this tension can create potentially stressful challenges for some fathers (Paredes & Parchment, 2021).

Traditionally, fathers have been able to use their father as a role model from whom to learn appropriate fathering skills (Mickelson & Biehle, 2017). However, as the fathering role has changed fathers may not want to use their fathers as role models to the same degree as they did previously, having grown up in a time when fathers were either uninvolved or minimally involved in child-raising (Mickelson & Biehle, 2017). Additionally, mothers are more likely to rely on their partners for support, than compared to previous generations when they relied on family members, potentially adding to the pressure fathers are under (Baldwin, 2015). Fathers have been found to feel unsupported when becoming a father and expressed a wish for a network of fathers where they could receive social support (Mickelson & Biehle, 2017). The additional societal and cultural pressures of being a 'good enough father' and the differences between these expectations and the actual practice of fathers can have a significant impact on their wellbeing (Baldwin, 2015; Wee, Pier, Milgrom, Richardson, Fisher *et al.*, 2013).

Positively, the new fatherhood ideal is associated with increasing engagement by fathers in their children's lives which positively impacts their development (Shafer, Fielding, & Holmes, 2019). Children with more involved fathers tend to have higher overall wellbeing, mental and physical health as well doing better in school (Petts *et al.*, 2018; StGeorge, Fletcher, Freeman, Paquette, & Dumont, 2015; Lamb, 2010). Reinforcing the crucial role fathers play in their children's positive social, psychological, and cognitive development (Petts *et al.*, 2018). Additionally, critical social constructionist and psychoanalytic research have welcomed changes in fatherhood as having the potential to unsettle hegemonic forms of masculinity (Frosh, Phoenix, & Pattman, 2005). This has led to calls for research to focus on ways to promote greater paternal engagement (Petts *et al.*, 2018).

However, while overall father involvement has increased, there may be significant variability in how involved fathers are in the lives of their children (Shafer *et al.*, 2019). Research has found that many fathers struggle to balance hegemonic masculine norms with new fatherhood ideals, as the extent to which fathers assimilate the new ideals of fatherhood is not yet known (Petts *et al.*, 2018). In the UK, traditional gender roles are becoming more fluid and interchangeable, moving towards greater

gender role egalitarianism (Fletcher, 2020; Connolly, Aldrich, O'Brien, Speight & Poole, 2016). However, the traditional male breadwinner/female caregiver model is still dominant with 53% of British mothers of preschool children working part-time and 26% of mothers are staying home full-time to provide childcare (Office for National Statistics, 2019, cited by Pinho, Gaunt, & Gross, 2021). Current research demonstrates the gap between widely shared ideals of new fatherhood and men's limited participation in childcare, as childcare is still disproportionately provided by women (Offer & Kaplan, 2021). Extensive research still finds that women do the majority of domestic chores and childrearing activities, even in countries and societies with more egalitarian and family-friendly ideals and policies (Johansson & Andreasson, 2017; Miller, 2011a). This suggests that fathers' attitudes towards greater gender equality have changed more rapidly than their actual involvement at home (Offer and Kaplan, 2021; Gerson, 2010).

Despite changing expectations for fathers, traditional masculine norms continue to shape their behaviour (Offer and Kaplan, 2021). Recent research has found that fathers who strongly endorse traditional masculinity values are less involved in the care of children (Offer and Kaplan, 2021; Petts *et al.*, 2018). Petts *et al.* (2018) found a negative association between fathers who adhered to hegemonic masculine norms and their endorsement of the new fatherhood ideal. They suggested for fathers who view their masculine identity as more salient may be less likely to perceive father involvement as important for children's wellbeing. In contrast, men who adopted a salient father identity were less likely to adhere to hegemonic masculine norms that contradicted their paternal identity (Petts *et al.*, 2018). Research suggests that adherence to traditional masculinity ideology may be a major barrier to father involvement (Petts *et al.*, 2018). However, the consequences for fathers associated with rejecting masculinity are unknown and suggestions that the new fatherhood ideal may not be appropriate for all fathers (Petts *et al.*, 2018). Some research even suggests that becoming a father can reassert a men's masculine identity, increasing their adherence to traditional masculine norms (Eerola & Mykkänen, 2013; Glauber, 2008). It is not known to what extent fathers adhere to masculine ideologies, and how this relates to ideals of the new father and actual childcare practices (Offer & Kaplan, 2021). Further research is needed to understand this relationship and increase understanding of the pressure modern fathers' face (Paredes & Parchment, 2021).

However, existing research suggests that the transition to fatherhood can be a profound but vulnerable period in a man's life (Baldwin, 2015). Navigating the traditional breadwinner role with the conflicting expectations and higher involvement in the day-to-day upbringing of children can create new and potentially stressful challenges for fathers (Rusten, Peterson, Underwood, Verbiest,

& Waldie *et al.*, 2019). Fathers' may differ in their ability to manage these incongruent expectations (Scheibling & Marsiglio, 2021). Therefore, further research is needed to explore the relationship between adherence to masculine norms, fathering attitudes, and fathering behaviours (Petts *et al.*, 2018). This is particularly important for this study as adherence to hegemonic masculine norms impacts the manifestations of men's mental health problems and their help-seeking behaviour, as well as their behaviour in relationships (Shafer *et al.*, 2019).

1.5 Masculinity, depression and help-seeking

Over the past three decades, there had been considerable empirical research linking masculinity to a wide range of mental, physical and interpersonal problems in living (Addis & Hoffman, 2020; Schwab, Addis, Reigeluth, & Berger, 2016). The social construction and learning of gender are intimately tied to the way men experience, express and respond to mental health problems (Addis & Hoffman, 2017). The dominant model of male socialisation in Western societies requires men to show stoicism, self-reliance, physical strength, aggression and bravado; while restricting emotionality, discouraging overt displays of affection or distress (Timimi, 2011; Addis & Mahalik, 2003). These socialisation practices teach boys from an early age to be self-reliant, strong and to manage their problems by themselves (Addis & Hoffman, 2017; Timimi, 2011). Connell (1995, cited by De Visser, Mushtaq, & Naz, 2020) introduced the concept of 'hegemonic masculinity' to refer to dominant definitions of traditional masculinity and masculine behaviours. Hegemonic masculinity is ultimately unattainable and detrimental to men's inner lives when they inevitably cannot live up to stereotypic standards (Schwab *et al*., 2016).

This is supported by a large body of research identifying the harmful and restrictive roles masculinity plays in men's emotional lives and associations with poor mental health (Schwab, *et al*., 2016; Addis & Hoffman, 2017). Robust meta-analytic evidence has found that high conformity to traditional masculine roles impacts men's expression and symptoms of depression, as well as more negative attitudes towards help-seeking and treatment (Hoffman & Addis, 2020; De Visser *et al.*, 2020; Schwab, *et al*., 2016; Seidler *et al.*, 2016). Men are also more likely than women to list stigma avoidance as a factor for not seeking care (Smith *et al.*, 2018). This suggests that men who adhere to hegemonic masculine norms may be at a higher risk of experiencing poor mental health and less likely to seek help. It may be difficult for these men to acknowledge their own subjective distress or to seek help, leaving them to suffer in silence (Addis & Hoffman, 2017; Berger, Addis, Green, Mackowiak, & Goldberg, 2013). All of these factors result in men who are less willing to seek

traditional psychological treatment and who report distinctive barriers to receiving psychological treatment (Mahalik *et al.*, 2012; Wong *et al.*, 2017).

However, in contrast, the effect sizes for the relationship between masculinity and mental health outcomes are small; for instance, masculine norm adherence only accounts for approximately 4% of the variance in psychological distress (Hoffman & Addis, 2020; Wong *et al.*, 2017). Additionally, it is not clear whether hegemonic masculine gender norms play a direct causal role in the way men experience, express and respond to depression, including their decisions regarding help-seeking (Addis & Hoffman, 2017). There are also great differences between masculine ideologies, as men are a diverse group with respect to their race, ethnicity, culture, age, socioeconomic status, ability status, sexuality, gender and religious affiliation (American Psychological Association, 2018; Levant & Wong, 2017).

Research linking traditional masculine norms with pathology or deficit within mental health has also been criticised for being overly reductionist (Seidler *et al.*, 2016). Men's social identities all contribute in uniquely and intersecting ways to shape how men experience and perform their masculinity, which in turn can contribute to their relational, psychological and behavioural outcomes in both positive and negative ways (American Psychological Association, 2018). Levant and Wong (2017) have called for research to shift away from the single idea of hegemonic masculinity to recognising the variations among men based on the intersection of different social identities.

Social constructionist theories of multiple masculinities, highlight how masculinity can be fluid, relational and co-exist (Seidler *et al.*, 2016). Seidler *et al.* (2016) suggest traditional masculinity should be interpreted as a valid but singular representation within a constellation of masculinities. The 'Multiple Masculinity' model suggests that an increasing number of culturally constructed ideas of 'what it means to be a man' are available, however, they are always relative to the dominant model, which remains the most prevalent (Timimi, 2011). This posits a more complex interaction between culturally constructed models of masculinity, as individual men may show variations in the way they conform, reject or redefine particular gender norms (Schwab, *et al*., 2016; Timimi, 2011). It has been argued that the costs and benefits of both conformity and non-conformity to these norms largely depends on context (Ramaeker & Petrie, 2019; Mahalik *et al.*, 2012).

Therefore, this study understands masculinity as arrangements of social practices that men engage in that vary depending on the social context (Robertson *et al.* 2016; Roy, Tremblay & Robertson,

2014). These social practices are in alignment or resistance with a dominant set of masculine ideals (Robertson *et al.* 2016; Roy *et al.*, 2014). Furthering this, Sloan, Gough and Conner (2009) argue that masculine ideals are neither entirely good nor bad for the health of men. As it is still not clear whether masculine gender norms play a direct causal role in the way men experience, express and respond to depression (Addis & Hoffman, 2017). Further research is needed to understand how men engage in this active navigation of masculine norms in their daily lives, and the costs or benefits of doing so (Schwab, *et al*., 2016).

A more recent framework 'The Positive Masculinity Paradigm' focuses on men's strengths and emphasises the positive aspects of masculinity (Kiselica, Benton-Wright, & Englar-Carlson, 2016; Kiselica & Englar-Carlson, 2010). For example, self-reliance and responsibility can be helpful when experiencing emotional difficulties (Sagar-Ouriaghli, Godrey, Bridge, Meade, & Brown, 2019). Similarly, from this perspective, men's positive masculinity expressed in the form of male courage and risk-taking may help men seek help for difficulties such as depression (Mahalik & Dagirmanjian, 2019). Recent research suggested that adherence to egalitarianism and a flexible male gender role may act as an insulator against the inability to cope and encourage expressing feelings of depression for men (Paredes & Parchment, 2021). However, contrasting research by Hoffman and Addis (2020) argue that promoting a 'flexible' or 'healthy' masculinity may not be helpful as it could lead men to focus on masculinity as a process goal rather than move them closer towards their own personal values and meaning. Further research is needed to understand the complexities of how men's gender influences their mental health and explore the different types of services men engage with to promote greater participation amongst this population (Seidler *et al.*, 2016; Mahalik *et al.*, 2012).

Men's use of mental health services

Considerable research has identified how men do not use currently available mental health services (Bilsker, Fogarty, & Wakefield, 2018; Ogrodniczuk, Oliffe, Kuhl & Gross, 2016). Even after men overcome barriers to access care, approximately one in four men will prematurely drop out of treatment (Swift & Greenberg, 2012). One suggestion for the disproportionately low number of men served by psychological services is that Western health care systems are inadequately prepared to provide engaging, appropriate, and effective care for many men presenting with mental health concerns (Harris, Diminic, Reavley, Baxter, Pirkis *et al*., 2015; Addis & Mahalik, 2003). Addis and Mahalik (2003) suggest this may be because the services are not in alignment with masculine cultural norms that equate asking for help for mental health problems with shame and weakness.

Research suggests that men have the perception that mental health services are set up mainly to serve women, as aspects of the delivery and language used fails to resonate with men (Ogrodniczuk *et al.*, 2016).

The effects of adherence to traditional masculine norms can also extend to counselling and are labelled treatment-interfering processes, which include significant fear and stigma, leading to difficulties with attendance, engagement and an unstable therapeutic alliance (Richards & Bedi, 2015; Spendelow, 2015). The gender role conflict model proposes that common therapeutic mechanisms of change like introspection, vulnerability, and self-disclosure contradict traditional masculine norms, suggesting men may be less likely to engage or benefit from existing forms of psychological treatment (Seidler, Rice, River, Oliffe, & Dhillon, 2018; Johnson, Oliffe, Kelly, Galdas, & Ogrodniczuk *et al.*, 2012). Men who strongly conform to traditional masculine norms may have to first overcome self-stigma, discomfort, and negative beliefs surrounding help-seeking to benefit from psychological treatment, which has been linked to increased treatment-interfering processes (Seidler *et al.*, 2018; Spendelow, 2015).

Hegemonic masculinity can also influence the therapeutic relationship, as therapists' views about men and masculinity may impact the treatment type or style offered to male clients (Seidler *et al.*, 2018; Mascaro, 2018). Health care professionals report challenges in diagnosing mental health problems, communicating and working with men (Seidler *et al.*, 2018; Mascaro, 2018). Affleck, Carmichael and Whitley (2018) suggest the influence of masculine norms on professionals could be the avoidance of deep inquiry into emotional or psychological suffering with men, which can unintentionally minimise their issues. Given the significant and ongoing challenge of getting men to seek help for mental health problems improving treatment engagement to overcome these barriers is essential (Seidler, Rice, Ogrodniczuk, Oliffe, Shaw *et al.*, 2019). There is a clear need for further research to explore ways to connect with and retain male clients within mental health services (Seidler *et al.*, 2018).

However, positively, more men than ever before are accessing professional psychological support services and research suggests that men will seek psychological help if it is accessible, appropriate and engaging (Spendelow, 2015; Harris *et al*., 2015; Englar-Carlson & Kiselica, 2013). Roy *et al.* (2014) suggest using a salutogenic perspective for men's health, focusing on positive factors that can impact men's health. They argue a salutogenic perspective can counter the current pathologising discourse of masculinity (Roy *et al.*, 2014). This can shift the focus of research to explore solutions to

improve health, rather than focusing on illness or deficit (Roy *et al.*, 2014). In support of this, research has found that men seemed to have a particular preference for collaborative, short-term or group-based treatment (Seidler *et al.,* 2016). Interventions that appear to improve men's help-seeking involve elements such as psychoeducation, management skills, problem-solving tasks, motivating behaviour change, signposting, and content that builds on positive masculine traits (Sagar-Ouriaghli, Godfrey, Bridge, Meade, & Brown, 2019). This has led to suggestions of considering gender norms and tailoring clinical interventions when designing services for men to encourage their greater participation and engagement (Seidler *et al.,* 2018; Mahalik *et al.,* 2012).

Physical activity is gathering increasing interest as a potential intervention for promoting wellbeing. Sport is one context in which men define and portray their masculinity as it is congruent with traditional masculine gender roles (Wasylkiw & Clairo, 2016; Mahalik & Rochen, 2006). Mahalik and Rochen (2006) found men were more likely to report working out or exercising in response to depression and encouraged psychologists to incorporate exercise as part of their treatment. There is growing evidence that community-based programmes that incorporate aspects of conventional masculinized ideals and practices, such as sport and exercise, may appeal to men (Levant & Wong, 2017). Sport-based interventions are now being used in the UK for a range of health issues including men's mental health (Levant & Wong, 2017).

1.6 Physical Activity For Mental Health

Physical activity can be defined as any bodily movement produced by skeletal muscles that require energy expenditure including daily activities, active recreation, sport and exercise (NICE, 2013). Exercise can be defined as a sequence of physical activities that are repetitive and structured, which have the aim to maintain or improve fitness (Rowley, Mann, Steele, Horton, & Jimenez, 2018). Similarly, sport includes all forms of physical activity, which aim at improving physical fitness and mental well-being, forming relationships, or competing at any level (Fletcher, 2020). Within this conceptualisation, sport can be enjoyed recreationally as a leisure pursuit and varies in levels of seriousness (Fletcher, 2020). In this thesis, physical activity, sport, and exercise will be used interchangeably throughout to reflect the diverse exercise and sporting practices.

The NHS (2021) guidelines recommend that adults aim for at least 150 minutes of moderately intense activity per week. This is due to the extensive body of research supporting the health benefits of physical activity for physiological and psychological health (Rowley *et al.*, 2018; Vancampfort, Hallgren, Firth, Rosenbaum, Schuch *et al.*, 2018b). However, a vast proportion of the

UK's population does not meet the NHS's recommendation which can result in serious health implications (Phoenixa & Bell, 2019; Wade, Mann, Copeland, & Steele, 2019).

In particular, exercise is an effective treatment for a range of mental health problems including anxiety, depression, substance disorders, suicidal ideation, posttraumatic stress disorder and disturbed sleep (Ashdown-Franks, Firth, Carney, Carvalho, & Hallgreen *et al.*, 2020; Glowacki, Weatherson & Faulkner, 2019; Vancampfort *et al.,* 2018; Schuch, Vancampfort, Richards, Rosenbaum, Ward *et al.*, 2016; Kvam, Kleppe, Nordhus & Hovland, 2016). Exercise is effective for both general and clinical populations and can be protective against mental health problems, as even modest increases are associated with improved mental health outcomes (Pritchett, Daley, & Jolly, 2017a; Curran *et al.*, 2017).

This has led to both the WHO and NICE (2021) guidelines recognising physical activity as an evidence-based treatment for the treatment, management and prevention of depression (Pritchett *et al.*, 2017a; Poyatos-León, García-Hermoso, Sanabria-Martínez, Álvarez-Bueno, Cavero-Redondo *et al.*, 2017). NICE (2021) has also updated its guidelines, recommending that a group physical activity programme be offered as a treatment for depression. As a consequence, public health initiatives and interventions aiming to increase levels of physical activity are becoming increasingly common (Phoenixa & Bell, 2019; Glowacki, Weatherson, & Faulkner, 2019).

Mechanisms of action

The mechanism of how physical activity is efficacious is not completely understood, however, its positive impact is attributed to a multifactorial combination of biopsychosocial factors (Schuch & Stubbs, 2019; Pickett, Kendrick & Yardley, 2017). Multiple biological pathways have been implicated including the serotonergic and dopaminergic systems and brain-derived neurotrophic factor (BDNF) (Rethorst, 2018; Staton *et al.*, 2015). Physical activity impacts these pathways in multiple ways by improving neuronal activity and survival, as well as modulating neurotransmitters and their re-uptake (Rethorst, 2018; Staton *et al.*, 2015). These actions are thought to reduce stress reactivity, improve our ability to respond to stress and decrease the activation of the sympathetic nervous system (Rethorst, 2018; Staton *et al.*, 2015). Psychosocial mechanisms of benefit include increasing the opportunity for social interaction and social support, whilst psychological factors include improving self-esteem, self-efficacy, body image, rumination and positive coping strategies (Ashdown-Franks *et al.,* 2020; Stanton, Happell & Reaburn, 2015; Mason & Holt, 2012). Qualitative

research has also highlighted how exercise can alleviate symptoms, provide a sense of engagement in life and help rebuild peoples' sense of self, social identity and hopefulness for the future (Pickett *et al.*, 2017; Carless & Douglas, 2008).

Another potential mechanism implicated is behavioural activation (BA). The behavioural theory of depression suggests that people become depressed due to the loss of meaningful and rewarding activity, as withdrawing from life can reduce opportunities to experience positive reinforcement, leading to a downward spiral of depressive feelings (Turner, Hartoonian, Hughes, Arewasikporn, Alschuler *et al*., 2019; Soucy Chartier & Provencher, 2013; Martell, Herman-Dunn & Dimidjian, 2010). BA, a subcomponent of Cognitive-Behavioural Therapy (CBT) is a structured, brief psychotherapeutic treatment for depression, which aims to activate clients by re-engaging people with positive experiences (Lambert, Greaves, Farrand, Price, Haase *et al.*, 2018; Martell *et al.*, 2010). The aim of BA is to reduce avoidance by scheduling daily life activities, as increased participation in pleasurable activities is thought to boost levels of positive affect and decrease depressive symptoms (Turner *et al.*, 2019; Rebar & Taylor, 2017; Chartier & Provencher, 2013). NICE (2021) guidelines include BA as an evidence-based treatment for depression and substantial research supports its efficacy as a stand-alone treatment for depression (Uphoff, Ekers, Robertson, Dawson, Sanger *et al*., 2020; Schuch *et al.*, 2016).

Initial research suggests that BA might represent one mechanism by which physical activity improves depression (Turner *et al.*, 2019). However, it is not yet agreed whether physical activity interventions are a focused form of BA or a stand-alone treatment itself (Turner *et al.*, 2019; Carlbring, Linder, Martell, Hassmén, Forsberg *et al.*, 2013). Both BA and physical activity interventions require clients to schedule and perform activities and share the goal of reactivating clients by targeting the inactivity elements of depression (Soucy, Provencher, Fortier & McFadden, 2017; Nyström, Stenling, Sjöström, Neely, Lindner *et al.,* 2017). Initial research has argued that physical exercise is a focused form of behavioural activation and interventions improve depression by initiating a broader process of BA (Turner *et al*., 2019; Carlbring *et al.*, 2013). However, this has been criticised as not all BA involves physical activity and not all physical activity is inherently reinforcing, suggesting they are distinct but interrelated constructs (Turner *et al*., 2019).

Research has now begun to investigate whether the treatment rationale of BA could provide a useful delivery mechanism for promoting physical activity, capitalising on the dual benefits of both (Lambert *et al*., 2018). Szuhany and Otto (2020) argue that BA is an ideal format for exercise

augmentation as it involves completing activities to improve mood. Combining exercise with BA may be a useful way to introduce exercise into standard clinical practice for health practitioners (Szuhany & Otto, 2020). Initial research has supported the efficacy of integrating exercise and BA for improving depression (Szuhany & Otto, 2020; Lambert *et al*., 2018). A systematic review by Thomas, Thirlaway, Bowes and Meyers (2020) concluded that physical activity interventions are a viable alternative to psychological therapies, provided psychological approaches are incorporated into the implementation design. Further research is needed to understand the mechanisms of physical activity's benefit and to explore ways to incorporate psychological theories into physical activity interventions (Thomas *et al.*, 2020). This is important as physical activity interventions, including exercise referral schemes, are becoming increasingly common as a treatment for mental health problems in the UK.

Exercise prescription schemes

One way to promote physical activity is through prescribing exercise through exercise referral schemes (ERS). ERS aim to increase physical activity by providing access to tailored exercise programmes and contact with qualified professionals in accessible community settings such as leisure centres and gyms (Oliver, Dodd-Reynolds, Kasim, & Vallis, 2021; Murphy, Edwards, Williams, Raisanen, Moore *et al.*, 2012). ERS are a form of social prescribing, which links primary care with sources of support within the community to improve peoples' health and wellbeing (Bickerdike, Booth, Wilson, Farley, & Wright, 2017). Social prescribing programmes are being widely promoted and adopted in the NHS, where primary care professionals refer clients to third-party service providers, who support clients through personalised exercise programmes typically lasting for ten to twelve weeks (Rowley *et al.*, 2018; Bickerdike *et al.*, 2017). The type and mode of physical activities offered in ERS include individual and group supervised gym-based exercise sessions, group aerobic classes, swimming and walking groups (Rowley *et al.*, 2018).

The NHS's Five Year Forward View for Mental Health (IMHT, 2016) has stressed the importance of developing innovative approaches to healthcare like ERS for the long-term sustainability of the NHS (Bickerdike *et al.*, 2017). NICE (2014b) have established guidelines on ERS and highlighted how they may offer other benefits aside from increasing physical activity, such as helping people to socialise, providing affordable access to facilities and a way of getting people involved with their local community. Research does support the benefit of ERS, however further high-quality research is

needed to bridge the gap between research and the implementations of ERS into routine care (Rowley *et al.*, 2018; Stanton, 2018).

The great advantage of exercise interventions compared to traditional mental health treatments is that exercise is accessible, low cost, with no side effects and importantly, is considered non-stigmatising (Ashdown-Franks *et al.*, 2020; Poyatos-León *et al.*, 2017). Exercise does not carry the same stigma as psychotherapy or medications, and ERS are potentially more accessible which is crucial due to the current waiting lists and lack of access to NHS treatment (Powers, Gordon, Asmundson & Smits, 2015). Additionally, ERS can be used as an adjunct to other traditional treatments, with research finding that exercise used to augment CBT or antidepressant treatment resulted in larger improvements in depressive symptoms and suicidal ideation in comparison to CBT or medication alone (Kvam *et al.*, 2016). This is a future opportunity for health practitioners, including Counselling Psychologists, to use exercise as a therapeutic modality to improve traditional psychological services (Kvam *et al.*, 2016). This has led to recommendations that exercise be an integral part of both the promotion and management of mental health problems (Way, Kannis-Dymand, Lastella & Lovell, 2018; Mason & Holt, 2012).

Exercise has also been criticised, as there remain concerns about whether it is suitable for all clients or whether it works equally for all (Schuch & Stubbs, 2019; Way, Kannis-Dymand, Lastella & Lovell, 2018). Research has found that the positive benefit of exercise stopped after exercise cessation, leading to questions about the longevity of exercise's benefit (Kvam *et al.*, 2016). Promoting physical activity in people with mental health problems can also be challenging, as exercise may be perceived as more demanding for people who may lack energy or motivation (Lambert *et al.*, 2018; Blumenthal, Smith & Hoffman, 2012). Motivation can be a major barrier when introducing exercise interventions for mental health problems, and this population may be at higher risk of dropping out of physical activity programmes (Rebar & Taylor, 2017; Farholm & Sørensen, 2016). This can impact peoples' engagement and adherence and potentially the effectiveness of ERS (Rebar & Taylor, 2017).

There have been calls to better understand how to support adherence to inform guidance and tailor schemes to meet individual needs (Oliver *et al.*, 2021). A systematic review by Nyström, Neely, Hassmen and Carlbring (2015) concluded that the most successful physical activity interventions are those which consider individual preferences, tailoring the type, intensity and duration of activity to an individuals' specific needs. Further research is needed to investigate the best ways to engage people with exercise programmes and ways to tailor the approach to client preferences (Ashdown-

Franks *et al.*, 2020; Myers & Midence, 2020; Farholm & Sørensen, 2016; Nyström *et al.*, 2015). Particularly, as exercise prescription schemes and physical activity interventions become more common, further research is needed to explore different formats, delivery and types of ERS to meet the great demand for mental health support (Uphoff *et al.*, 2020; Schuch & Stubbs, 2019).

This is important as fathers may represent one population particularly at risk of low activity due to the demands of early parenthood (Rhodes, Beauchamp, Quinlan, Symons Downs, & Warburton, 2021; Quinlan, Rhodes, Beauchamp, Symons-Downs, Warburton *et al.*, 2017). Physical inactivity is common among parents who face multiple barriers including; new family responsibilities, guilt, lack of social support, work commitments, and scheduling constraints (Young & Morgan, 2017). Parents, particularly those with children under five years of age, typically report less physical activity than adults of a comparable age without children (Rhodes *et al*., 2021; Bellows-Riecken & Rhodes, 2008). Some research suggests fathers may experience similar or even greater declines in physical activity compared to mothers, however, this is contested (Rhodes *et al*., 2021). Fathers' may represent one population who would greatly benefit from ERS to target low levels of activity, however little is known about their experiences during the postnatal period. The majority of research has focused on mothers' experiences of exercising in the postnatal period, with only a little focusing on the parenting dyad or fathers themselves (Rhodes *et al*., 2021).

Exercise interventions in the postnatal period

The effectiveness of exercise for maternal postnatal mental health has been confirmed by research, with meta-analyses concluding that exercise positively improved symptoms of maternal PND, suggesting this could be an effective treatment (Ashdown-Franks *et al.*, 2020; Carter, Bastounis, Guo & Morerell, 2019). A meta-analysis by Carter *et al.* (2019) found a significant moderate treatment effect of exercise over control conditions for postnatal mothers up to fifty-two weeks. Similarly, Ashdown-Franks *et al.*'s (2020) meta-analysis concluded that exercise is helpful for pre- and postnatal depression in mothers, and could act as a successful adjunctive treatment. Pritchett *et al.*'s (2017a) meta-analysis and systematic review highlighted how both individual and group interventions were effective for reducing PND in mothers, providing evidence that potential interventions could be home-based. Qualitative research has also explored women's experiences of exercise for PND and found mothers reported that exercise had a positive impact on their sense of self (Pritchett, Jolly, Daley, Turner & Bradbury-Jones, 2017b). The mothers in this study found that

exercise was not as stigmatising as psychological treatments and viewed as a natural solution before antidepressants (Pritchett *et al.*, 2017b).

However, despite the effectiveness of exercise for depression within clinical and general populations and specifically for mothers with PND, the role of exercise in fathers' postnatal mental health remains unknown (Saligheh, Hackett, Boyce, & Cobley, 2017). Little is known about how to best engage fathers in lifestyle interventions as men are underrepresented in many health interventions (Young & Morgan, 2017; Morgan, Collins, Plotnikoff, Callister, Burrows *et al.*, 2014). Although fatherhood may present a series of barriers to exercise, this may be an opportune time to target fathers in behavioural interventions (Young & Morgan, 2017; Quinlan *et al.*, 2017).

To date, there have been few physical activity interventions specifically targeting fathers. Giallo, Evans and Williams (2018) designed a pilot evaluation programme using a programme called 'Working Out Dads' (WOD) to target fathers' mental health. This programme combined psychoeducation and physical fitness to promote the mental health and parenting self-efficacy of fathers in the early years of parenting (Giallo *et al.*, 2018). WOD involved a manualised six-week group programme including psychoeducation about health, coping and parenting challenges facilitated by a male health professional, followed by a group gym workout provided by a qualified personal trainer (Giallo *et al.*, 2018). It was specifically designed to overcome barriers to health service utilisation by men including holding sessions in the evenings in a fitness environment (Giallo *et al.*, 2018). A pilot evaluation with fifty-seven fathers found a significant reduction in their symptoms of depression and stress from pre- to post-intervention (Giallo *et al.*, 2018). Qualitative comments from the participants highlighted how their confidence had improved and how they had gained skills to manage stress and the more opportunities for peer support from other fathers during this intervention (Giallo *et al.*, 2018).

Few studies to date have explored what type of support fathers would like during the perinatal period (Baldwin *et al.,* 2019). Our current understanding of how to support fathers during this time is severely limited, and new knowledge is needed to explore potential sources of support and ways to engage fathers (Darwin *et al.*, 2017). To address this gap, in-depth qualitative research is needed to explore fathers' experiences of physical activity to develop a richer understanding of whether it can be an appropriate source of support and to explore their particular physical, practical and psychological challenges to exercising (Pritchett *et al.*, 2017b). Findings have the potential to impact

health policies, social support strategies and contribute to our understanding and knowledge of possible interventions for this previously neglected population.

1.7 Relevance for Counselling Psychology

This research is particularly relevant for Counselling Psychology and for generating implications for clinical practice. Fathers are now increasingly being referred to NHS services due to the NHS's (2019) 'Long Term Plan' to offer evidence-based assessment and signposting for fathers and partners of mothers accessing specialist perinatal mental health services, to support fathers' mental health needs. This suggests more fathers are likely to come into contact with Counselling Psychologists who are themselves increasingly being employed in the NHS. This is significant as our current knowledge base about fathers' experiences and support needs, which differ from mothers', is insufficient. Practitioners lack an appropriate evidence base to draw from when offering psychological support and when developing appropriate interventions for this client group. Given increasing referrals, the high numbers of fathers impacted by their own or their partners' poor mental health, as well as the lack of knowledge for providing tailored support for fathers, it seems important for Counselling Psychologists and the wider therapeutic community that research explores fathers' experiences of the postnatal period and potential sources of support.

This research is also highly aligned with the values of Counselling Psychology which recognise the importance of promoting health and wellbeing (Woolfe, Strawbridge, Douglas & Dryden, 2010). This is in contrast with the medical model more widely used by the NHS which is deficit-orientated and strongly focused on pathology (Rowley *et al.*, 2018; Friedrich & Mason, 2017). In contrast, Counselling Psychology, with its relational ethos, aligns itself with recovery-based principles and engages with subjectivity and intersubjectivity, aiming to improve overall quality of life (Rowley *et al*., 2018; Kasket, 2017). This involves conceptualising people holistically and considering all aspects of their lives, reaching them in whatever environment most suits them (Owen, 2010).

Counselling Psychology philosophy encourages open-mindedness to view physical activity from a broad perspective, recognising the importance of integrating the body and mind into treatment and cultivating mind-body awareness (Owen, 2010). Given the vast evidence supporting the benefit of physical activity for wellbeing, it is important for Counselling Psychologists when working with clients, regardless of the treatment setting, to consider encouraging clients to engage in physical activity of some form (Ashdown-Franks *et al.*, 2020; Owen, 2010). Using physical activity

interventions as a way to successfully adjunct traditional treatments may also become a future avenue to improve traditional psychological services (Kvam, Kleppe, Nordhus & Hovland, 2016). Counselling Psychologists can also advocate for this population by advising and contributing to initiatives and physical activity interventions, engaging with primary care settings, health professionals, and commissioners (Owen, 2010). It is hoped this research will support health care practitioners to expand their understandings of what supporting this population may look like and ways to tailor interventions to support fathers' unique needs.

The wider discipline of Counselling Psychology also has an active role to play in promoting fathers' wellbeing and improving access to mental health support. Counselling Psychology embraces a pluralistic and interdisciplinary attitude to research to produce collaborative, integrative and novel interventions (Nielsen Jones & Nicholas, 2016). Additionally, social justice is one of the defining features of Counselling Psychology and the British Psychological Society's Division of Counselling Psychology (2005) has stated the importance of advancing social justice within research, to ensure the equal distribution of resources and participation by all groups (Fouad, Gerstein & Toporek, 2006; Speight & Vera, 2004). This research hopes to promote social justice and contribute directly to Counselling Psychology practice by increasing our understanding of an under-researched and under-supported population (Philpott, 2016). Whilst this research does not aim to evaluate a treatment for paternal postnatal mental health problems, it is hoped this research will support Counselling Psychologists and health care practitioners to widen their perspectives of potential sources of support for this population and explore how physical activity can impact fathers' wellbeing.

1.8 Research aims, objectives and questions

Fathers' postnatal mental health represents a significant problem in society; however, their experiences have been largely neglected in research (Philpott, 2016). Given the prevalence of psychological distress and how fathers' experiences differ from mothers' during this period, future research is needed to explore fathers' mental health needs and interventions to promote their wellbeing (Sockol & Allred, 2018; Darwin *et al.*, 2017). Physical activity has been found as effective for mothers experiencing postnatal mental health problems (Ashdown-Franks *et al.*, 2020; Carter *et al.*, 2019). Whilst initial evidence suggests that physical activity interventions may benefit fathers, further research is needed (Giallo *et al.*, 2018).

Given this lack of research, in-depth qualitative research is needed to explore the unique challenges faced by fathers to inform health professionals and future services supporting fathers. The proposed study aims to provide an in-depth qualitative exploration of fathers' experiences of physical activity in the postnatal period to develop a richer understanding of whether it can be an appropriate source of support for enhancing fathers' wellbeing. There are currently no clinical guidelines for supporting fathers experiencing postnatal mental health problems or interventions to improve their wellbeing. Therefore, findings have the potential to impact practice and health policies, as well as contribute to our understanding and knowledge of possible interventions for this previously neglected population.

The following research questions will be explored:

- What were fathers' experiences of physical activity during the postnatal period?
- In what ways do fathers feel that physical activity impacted their wellbeing or mental health during the postnatal period?
- What support needs, requirements, or barriers did fathers experience when participating in physical activity during the postnatal period?

2. Methodology

2.1 Theoretical Framework

To meet the aims of this study a qualitative research methodology was chosen to explore the subjective experiences of fathers, aiming to generate rich data and to give a voice to a previously neglected population (Braun & Clarke, 2013). Qualitative research refers to both the use of qualitative techniques for data collection and analysis, and to a wider paradigm for conducting research, known as 'Big Q' research (Braun & Clarke, 2013). Within this paradigm subjective and intersubjective experiences are centralised, assuming there is no one correct version of reality (Braun & Clarke, 2013). There is also a strong commitment to making epistemological assumptions explicit through efforts to be reflexive (Rawson, 2017). A qualitative approach is also most suited to research questions based on understanding experiences and meaning-making (Braun & Clarke, 2013).

Qualitative research can be divided into two positions, experiential and critical (Reicher, 2000, as cited by Clarke & Braun, 2013). Experiential research validates the meaning, perspectives and experiences expressed in that data, where participants' interpretations are prioritised, accepted and focused on (Clarke & Braun, 2013). Whereas critical qualitative research takes an interrogative stance towards meanings and experiences, seeking to understand the effects of representations expressed (Clarke & Braun, 2013). For this research exploring a neglected population, an experiential approach was most appropriate to access individuals' subjective worlds and to provide rich data which can contribute to our knowledge base to allow for insights into marginal and invisible groups within psychology (Braun & Clarke, 2013). Therefore, an experiential qualitative research methodology was deemed most appropriate to meet the aims of this study.

It is important within qualitative research that there is a fit between the research aim, theoretical assumptions, epistemological position and method of data collection and analysis to ensure the overall research design is coherent (Braun & Clarke, 2013; Willig, 2013). Thematic analysis was chosen as an appropriate method as it belongs to the experiential qualitative research tradition centred on exploring participants' subjective experiences and sense-making (Willig, 2013). Additionally, it is ideal for this research as it is a straightforward, flexible and accessible method widely used in counselling and psychotherapy research (Braun & Clarke, 2020; McLeod, 2011).

Thematic analysis is a method, not a methodology and so can never be atheoretical (Braun & Clarke, 2020). The ontological and epistemological assumptions that guide the data collection and analysis must be acknowledged as the theory underpinning it informs how it can be used and implemented (Braun & Clarke, 2020; Clarke & Braun, 2018; Braun & Clarke, 2012). In line with an experiential thematic analysis, a critical realist ontology was used for this research with a contextualist approach, to explore lived experiences embedded in context. Critical realism sits on the ontology continuum between, realism, which assumes there is one reality that is knowable and 'out there', and relativism, which assumes there are multiple versions of reality that are socially constructed (Braun & Clarke, 2013). Situated between these positions, critical realism assumes the existence of reality and recognises that access to society is mediated by particular socio-cultural meanings (Clarke, Braun, & Hayfield, 2015). Participants provide access to their particular version of reality with any research produced providing an interpretation of this reality (Clarke, Braun, & Hayfield, 2015). This position was important to this study, as a critical realist perspective enables subjective experience to be treated as legitimate, as lay knowledge is positioned as equal to 'expert' knowledge (Pilgrim & Rogers, 1997).

Before deciding to use TA, I explored the appropriateness of other analytical methods in particular Idiographic phenomenological analysis (IPA). IPA is a qualitative research approach that seeks to understand in detail how individuals experience phenomena within a specific context (Smith, Flowers & Larkin, 2009). IPA, as proposed by Smith *et al.* (2009), is informed by three key areas of the philosophy of knowledge: phenomenology, hermeneutics and idiography. IPA is useful for understanding under-examined phenomena and for providing a detailed understanding of phenomena from a specific perspective (Smith *et al.*, 2009). Additionally, IPA positions individuals as the experts on their experiences who offer researchers insight into their thoughts and feelings by telling their story using their own language (Reid, Flowers & Larkin, 2005). One of the theoretical underpinnings of IPA is idiography, which ensures IPA has a commitment to in-depth analysis of lived experiences, ensuring the experience of each participant is present in the final analysis (Smith, 2017; Smith *et al.*, 2009). Therefore, IPA is fundamentally concerned with understanding people's everyday experience of reality, in detail, to gain an understanding of the phenomena in question, which at first glance could be an appropriate methodology for this research (Smith *et al.*, 2009).

However, in contrast, the aims of this study were not about understanding fathers' experiences but exploring their experiences and meanings, supporting the use of thematic analysis (Braun & Clarke, 2020). Braun and Clarke (2020) recommend the use of thematic analysis over IPA when the analytic

focus is on identifying themes across the data set, rather than the unique features of individual cases. Additionally, they advocate for thematic analysis with larger samples over ten, and when the analytic interest is on how personal experiences are located within wider socio-cultural contexts (Braun & Clarke, 2020). Therefore, an experiential thematic analysis was chosen for this research as it would offer a more suitable method for exploring the research aims (Braun & Clarke, 2020).

2.2 Research Design and Data Collection

Braun and Clarke (2013) highlight how the richest data can be produced by achieving the best fit between the participant group and interview mode. Men can be a hard-to-engage research population, especially when researching sensitive topics such as their experience of their mental health (Braun & Clarke, 2013). Fathers are also a time-poor population, and so participants were offered a choice of interview mode to best suit their individual needs to improve recruitment. Giving participants the choice of interview mode can also help create a more equal relationship between the researcher and participant (Hanna, 2012). Due to these considerations, at the beginning of this project, I decided to use an online qualitative survey and qualitative interviews.

Qualitative surveys

Online qualitative surveys are particularly suited for experiential research as they enable quick and easy distribution which can generate rich and detailed data (Terry & Braun, 2017; Braun & Clarke, 2013). A key advantage of surveys is their openness and flexibility to address a wide range of research questions of interest to social research (Braun, Clarke, Boulton, Davey, & McEvoy, 2020). As participants are typing responses in their own words, qualitative surveys can produce rich and complex accounts and offer a wide lens on topics, capturing a diversity of perspectives, experiences or meaning-making, which is particularly useful for research exploring an unexplored area (Braun *et al.*, 2020).

Wilkinson, Iantaffi, Grey, Bockting and Rosser (2014) highlight how using online methods can increase access to members of a hard-to-reach population, arguing that online qualitative data collection can be equivalent to face-to-face interactions. Online surveys allow a greater distribution to a large geographical area and are ideally suited to sensitive research as they offer participants the highest level of privacy and anonymity which can encourage greater disclosure (Braun *et al.*, 2020; Terry & Braun, 2017).

Online surveys may also seem preferable to interviews for time-poor fathers, as it allows the flexibility of starting and completing the survey in their own time, giving participants more control over their participation (Braun, Clarke, Boulton & Davey, 2020; Terry & Braun, 2017). This is considered less burdensome for people with caregiving requirements, like fathers, who may require the flexibility of online surveys to participate at all (Braun *et al.*, 2020). Similarly, online qualitative surveys can give voice to people who may not choose to participate in face-to-face research due to the sensitive nature of the topic (Braun *et al.*, 2020). These factors are crucial for this research trying to access a hard-to-engage population and due to the sensitive nature of the research exploring participants' previous mental health experiences, which can make recruitment challenging (Terry & Braun, 2017). Additionally, the survey was used to recruit participants for the qualitative interview, by asking participants at the end of the survey to contact the researcher if they were interested in further sharing their experiences in an interview.

Qualitative Interviews

Participants were also recruited for qualitative interviews, where data was collected through qualitative, semi-structured interviews. This allowed the researcher to explore predetermined questions whilst enabling participants to raise topics the researcher had not previously considered (Braun & Clarke, 2013). Qualitative interviews are ideally suited to experience-type research questions and can empower participants to provide rich, in-depth responses about their subjective experiences (Braun & Clarke, 2013). In contrast to qualitative surveys, qualitative interviews allow an in-depth exploration of participants' responses and explore unplanned questions about areas that are important to the participant (Braun & Clarke, 2013). Offering interviews also helps combat the main disadvantage of online surveys which require participants to have literacy skills which may exclude or discourage participants with limited literacy skills from participating (Braun *et al.*, 2020).

Participants were initially offered the choice between interviews conducted face-to-face, or via Skype or telephone calls. Whilst face-to-face interviews are traditionally considered the gold standard, virtual interviews such as using Skype or telephone calls can be useful in accessing sensitive topics from hard-to-engage research populations, such as for this research (Braun & Clarke, 2013). Telephone and online interviews provide the most feasible alternative to face-to-face interviews and offers participants a space that is both private and familiar, whilst also being accessible by the researcher (Hanna & Mwale, 2017). Similarly, to online surveys, virtual interviews

allow the recruitment of participants from a wider geographical area and offer participants more privacy which can help them feel comfortable disclosing sensitive information (Braun & Clarke, 2013). Virtual interviews also have the advantage of being more convenient and empowering for participants, allowing scheduling to be flexible which is particularly important for this time-poor population (Braun & Clarke, 2013).

Survey and Interview Questions

The survey and interview questions were developed to explore the experiences of participants while paying particular attention to their mental health experiences in the postnatal period, their physical activity routines and any sources of support they received during this time. The inclusion criteria were that participants had to be over the age of eighteen, a resident of the UK and be able to communicate proficiently in English. Participants also had to have a child aged between one and five to participate. This was to reduce the risk of the research causing distress to participants and to ensure participants were reflecting back on their experiences, rather than currently being in the postnatal period themselves. The participants were asked during the interviews and survey to include all forms of physical activity they participated in and how frequently they participated. During recruitment, it was deliberately not specified the type of sport or exercise, the intensity, frequency or performance level fathers participated in. This was to encourage participation from as many participants as possible and to capture experiences from different sports and varying participation levels and intensity, to capture broad experiences of sport and exercise.

At the beginning of the survey and during the interviews, participants were asked demographic questions, see Appendix A, to ensure that they were eligible to participate and to reduce risk by ensuring that participants did not fall within the exclusion criteria. Open-ended questions were used to give participants the freedom to respond in their own time and provide responses exploring their own experiences (Terry & Braun, 2017). Braun *et al.* (2020) argue a smaller number of questions work best for surveys focused on lived experience seeking detailed responses to avoid participant fatigue or disengagement. Data was collected and collated using the Qualtrics online survey software and participants were instructed to answer the questions in their own words, in as much depth as they chose. Ten questions were included within the qualitative survey, aiming to generate rich, detailed answers without causing participants question fatigue (Braun & Clarke, 2013). At the end of the survey, participants were provided with details of relevant support services available and further information on the study. Finally, participants were asked if they were interested in further

sharing their experiences in an interview with the researcher. Participants were asked to email the researcher directly stating their interest to maintain their confidentiality.

2.3 Project challenges, development and changes

Data collection was started in February 2020 and participants were initially offered the choice between completing an online survey, a face-to-face or a virtual interview. Terry and Braun (2017) suggest a suitable sample for a project of this nature would be a sample of up to one hundred participants for the qualitative survey and a sample between six to fifteen participants for the qualitative interviews depending on the richness of the data collected (Clarke, Braun, & Hayfield, 2015). Posters advertising the study were placed in gyms and around sports pitches, and posters were set to be placed in nurseries.

However, in March 2020 due to the COVID-19 pandemic, the UK went into lockdown and my family and I were left shielding, which required adapting this initial data collection approach. Recruitment efforts had to focus solely on online methods using social media groups like Facebook and Twitter and emailing charities focused on men's and fathers' mental health. The online survey remained open, however, the face-to-face interviews were changed to online interviews. One interview was cancelled as the participant no longer had childcare available due to the pandemic, and it was clear that careful consideration would be needed to adapt participation to suit this population in these new circumstances.

Therefore, participants were offered virtual online interviews using telephone or Skype. Virtual interviews have the advantage of being more convenient and empowering for participants, allowing scheduling to be flexible which is important for this population (Braun & Clarke, 2013). This was particularly important during lockdown when usual childcare arrangements were impacted and many fathers were looking after children whilst the interview was being held. Consequently, participants were given the option to stop and restart the interview at any time to allow for unexpected interruptions or childcare needs, which many participants ended up using. This was designed to encourage participation and not to exclude any participants who were without their usual childcare due to lockdown. This received a lot of positive feedback from participants and several interviews had to be paused when children woke up or ran into the room.

To trial the interview questions, a pilot interview was held with a family friend who enjoyed physical activity and had an eighteen-month-old son. The interview was surprisingly short as many of the questions resulted in a one-word answer or a short sentence. When asked for feedback about the study the participant said he did not think the study was relevant to him and did not think he was a 'good' participant to speak to as he had never had a mental health problem or experienced postnatal mental health problems. He also said he would not have participated if he had seen the study advertised due to its associations with mental health which he felt did not apply to him.

However, this father was an ideal participant for this study, and despite his claim that his wellbeing was not impacted, his description of his experiences in the postnatal period suggested his wellbeing was significantly impacted. The participant felt his experiences were '*normal'* and '*something everyone goes through'*, and therefore not worthy of further consideration. The impact and possible consequences of this will be explored later in the discussion section. After consideration with my supervision team, we decided to encourage participation by fathers who may not participate due to the study's association with mental health by changing the wording used in the recruitment poster and the survey and interview questions. On the recruitment poster sentences including '*explore your mental health and wellbeing*' were removed and changed to '*explore your experiences'*, see Appendix B. The interview questions were also altered, for example, the question "*Did you experience any mental health problems during the postnatal period, either self-diagnosed or diagnosed by a health professional? Can you tell me about your experiences*?" was changed to a more open "*What your experiences of the postnatal period*?" and included a few sentences beforehand explaining common signs of postnatal challenges including a lack of sleep, relationship changes and adjustments to routine, see Appendix C for the revised interview schedule. This seemed to boost recruitment as six participants were recruited for the online interviews after this change.

However, it was a different result for the survey. The survey was left open for as long as possible to allow for recruitment, however, only twenty participants were recruited, and of the twenty only thirteen participants completed the entire survey. The responses from the online surveys were very thin and not sufficient for analysis, as the participants' responses were a short phrase or on average less than twenty words. It is not clear why this method of data collection was not preferred by the fathers. Efforts were made to limit the questions to avoid question fatigue. However, the length of the survey may have been off-putting for participants or they may not have preferred this method of interview mode. This could also reflect how fathers are a particularly time-poor population that was

further impacted by the pandemic with limited childcare. From the survey responses, three participants were recruited for further participation in the qualitative interview.

Consequently, a decision was made with my supervisory team to stop the survey and solely focus on collecting further participants for the qualitative interviews. The rest of the participants were recruited directly for the qualitative interviews from various online social networking websites and in sports clubs' social media pages based around the UK. The interviews ranged from forty-five minutes to an hour and a half and ended with an opportunity for the participant to raise anything they felt was important for me to know. This resulted in exploring topics outside of the scope of this study including the impact of miscarriage on fathers' mental health and the impact of lockdown on physical activity and wellbeing.

2.4 Recruitment and Participant demographics

Recruitment Methods

Participants were recruited using purposive sampling to create a homogenous sample (Clarke, Braun, & Hayfield, 2015). During the lockdown, participants were recruited solely through online methods, and snowball sampling was used to recruit participants, utilising word-of-mouth and advertising through local sporting teams I have previous contacts at. Participants were also recruited by advertising the study poster in online social networking websites, in groups specifically created to support fathers' mental health, and in sports clubs' pages based around the UK. Some sports clubs agreed to advertise the study in their newsletters or posts, whilst others allowed me to advertise the study myself on their pages. All participants were recruited via sports teams' online pages and no participants were recruited from sites deliberately targeting men's mental health or fathers' mental health, the implications of this will be discussed later.

Participant demographics

A sample of thirteen participants was recruited for the qualitative interviews, following Clarke, Braun, and Hayfield (2015) recommendations for a sample size between 6 to 15 participants depending on the richness of the data collected. Their demographic data are shown in Table 1.

All participants were aged between thirty to forty-four, with a mean age of 36.9. Six of the participants had one child, five participants had two children and two participants had three children, with the eldest child aged ten years old and the youngest child aged one year old. Of the participants with one child, four of them had a child under the age of two. All participants identified as heterosexual and all but one were married. Twelve identified as middle class and one with no class category, with all of the participants working full-time. The participants played a range of individual and team sports at different levels of frequency and intensity including; running, rugby, cricket, weight lifting, swimming, hockey, cycling, football and gig rowing.

Participant Demographics		
Ages	30 – 44 years	Average 36.9, SD 4.1
Racial/ Ethnic background	White British White (Other) Indian	9 (69%) 3 (23%) 1 (8%)
Social Class	Middle Class No class category	12 (92%) 1 (8%)
Sexuality	Heterosexual	13 (100%)
Relationship status	Married Separated/Divorced	12 (92%) 1 (8%)
Employment status	Full-time employed	13 (100%)
Sport or Exercise (Some participants participated in multiple sports)	Cycling Cricket Football Gig rowing Golf Gym Hockey Rugby Running Swimming Weight training	3 2 1 1 1 1 2 2 6 2 1
Number of children	Three children Two children One child	2 (15%) 5 (39%) 6 (46%)
Ages of child/children	1 – 10	Average 3.9, SD 2.7

Table 1: Participant demographics

2.5 Ethical considerations

Ethics is an integral part of all aspects of research (Braun & Clarke, 2013), however, it was particularly important for this research which could result in participant distress when exploring

their experiences of the postnatal period and their mental health. This risk was reduced by excluding participants whose child was under the age of one, so participants were reflecting back on their experiences and not currently in the postnatal period themselves. Research has found the highest incidence of paternal PND occurring from three to six months of the postnatal period (Paulson & Bazemore, 2010) and so participants were not recruited from this stage of the postnatal period. Participants were also asked during recruitment not to participate if they felt discussing their experiences would cause too much personal distress.

During data collection, before starting the online survey, participants were shown the participant information sheet which explained what their participation would entail, sources of further support, and information about their right to withdraw from the study, see Appendix D. Participants were also shown a privacy notice which explained how their personal data would be used before, during and after participation in the research, see Appendix E. Participants were then asked to complete the consent form, see Appendix F, on which they indicated their consent by selecting the option of 'Yes', before starting the main part of the survey, and were prevented from continuing if 'No' was selected. Participants were also asked to email the researcher themselves if they were interested in participating in a follow-up interview to maintain their anonymity.

Before the interviews, participants were emailed several resources including a participant information sheet, see Appendix G, the research privacy notice and a consent form they were asked to complete and return to the researcher before the start of the interview, see Appendix H. After the interviews participants were debriefed and allowed to ask any final questions and the sheet containing sources of support was highlighted. Participants were also invited to choose their own pseudonyms if they so wished, to ensure their identities remained confidential and reported anonymously in the research, which is considered the best practice to preserve their anonymity (Braun & Clarke, 2013). All participants asked for a copy of the research to be emailed to them upon completion. This research received ethical approval from the University of the West of England, Faculty Research Ethics Committee (FREC), see Appendix I.

2.6 Analysis

It is important within qualitative research that there is a fit between the research aim, theoretical assumptions, epistemological position and method of data collection and analysis to ensure the overall research design is coherent (Braun & Clarke, 2013; Willig, 2013). Thematic analysis was

chosen as an appropriate method as it belongs to the experiential qualitative research tradition centred on exploring participants' subjective experiences and sense-making (Willig, 2013). Additionally, it is ideal for this research as it is a straightforward, flexible and accessible method widely used in counselling and psychotherapy research (Braun & Clarke, 2020; McLeod, 2011).

Braun and Clarke's (2006) thematic analysis is a method that can be used to focus on participant's experiences and how they make sense of the world, identifying themes and patterns of shared meanings and experiences across a dataset (Braun & Clarke, 2013; Braun & Clarke, 2012). Braun and Clarke's (2006) approach is fully qualitative, one in which qualitative techniques are underpinned by a qualitative research philosophy that emphasises researcher subjectivity, reflexivity and the situated and contextual nature of meaning (Clarke & Braun, 2018). Thematic analysis can be applied across numerous data sets which lends itself well to this research, enabling various data collection methods to be considered that best suit the target population (Braun & Clarke, 2006). These qualities of thematic analysis were particularly important for this study interested in exploring experiences rather than testing pre-existing theories (Braun & Clarke, 2012).

An experiential thematic analysis was chosen for this research as it would allow for the research to have actionable outcomes with implications for clinical practice (Braun & Clarke, 2020). In line with this contextualist thematic analysis, data analysis was conducted using a semantic and inductive approach to coding and theme development, staying grounded in the data whilst also giving voice to participants (Clarke, Braun, & Hayfield, 2015; Braun & Clarke, 2013).

The interviews were audio-recorded and transcribed orthographically using the notation system as suggested by Braun and Clarke (2013). The data was analysed using thematic analysis following the six phases outlined by Braun and Clarke's (2006) method. The first phase is data familiarisation, which involves an in-depth engagement with the data set. I began familiarising myself by transcribing the recordings and checking the transcripts for accuracy, listening to the audio recordings repeatedly. I then read and re-read the transcripts and made notes of my initial analytic observations (Braun & Clarke, 2006). Phase two involves systemically coding the data in relation to the research question, coding at a semantic and latent level to stay close to and give voice to participants' experiences, see Appendix J for an example of initial coding for a participant (Braun & Clarke, 2006; Clarke, Braun, & Hayfield, 2015). I coded exhaustively, not limiting the number of codes a data extract could have and coded broadly for as many potential patterns as possible, trying to engage at a deep level for quality coding (Clarke & Braun, 2018; Braun & Clarke, 2006). See

Appendix K for an example of the codes for one participant, roughly clustered into groups with similar meanings, after phase two of data analysis.

The third phase involves searching for themes, see Appendix L for an initial thematic map, trying to create a plausible and coherent thematic mapping of the data, ensuring themes have a central organising concept underpinning them (Clarke, Braun, & Hayfield, 2015). In Phase four the initial themes were reviewed in relation to the coded data and the entire data set, ensuring there is a good match between them all (Braun & Clarke, 2006). In this phase, I reviewed my candidate themes, modifying some and collapsing others into each other. To help in this endeavour I used thematic maps, to refine my candidate themes and to help improve my understating of the relationships between themes (Clarke, Braun, & Hayfield, 2015). See Appendix M for my final thematic map.

In the fifth phase, themes are defined and named, and theme definitions are written to clarify the essence of the theme, to develop and enrich the analytic narrative. In the final phase, the report is produced, combining data excerpts and analytic commentary, to create a coherent, logical and interesting account of the story being told by the data, using the themes to provide an organizing framework for analysis (Braun & Clarke, 2006). Braun and Clarke (2013) highlight whilst these phases are distinct, due to the nature of this approach the different stages should be used flexibly.

2.7 Reflexivity

Qualitative research paradigms emphasise the active role of the researcher in the research process and in constructing knowledge as well as the importance of embracing researcher subjectivity (Clarke, Braun, & Hayfield, 2015; Clarke & Braun, 2013). The research process is informed by the unique standpoint of the researcher and their evolving engagement with their data (Clarke & Braun, 2013; Clarke, Braun, & Hayfield, 2015). However, Braun and Clarke (2013) argue in order to use subjectivity as a research tool, it needs to be thought about and considered. Reflexivity is one such way as it requires reflecting critically on the process of producing knowledge and the researcher's active role in producing knowledge reflecting their social and cultural beliefs (Braun & Clarke, 2013; Grant & Giddings, 2002).

One of the central influences of this research was my training as a Counselling Psychology trainee, who embraces the central tenants and guiding philosophies of Counselling Psychology. Counselling Psychology differs from other disciplines in that it emphasises gaining knowledge from experiential

or phenomenological approaches, valuing the human experience in guiding research methodology (James, 2017). The Division of Counselling Psychology Guidelines for Professional Practice (2005) highlights how Counselling Psychologists' seek to engage with subjectivity and intersubjectivity, respecting first-person accounts as valid in their own terms; not assuming superiority over any way of experiencing, feeling, valuing or knowing. Counselling Psychology values individual meaning and choice, practising reflexively, requiring a high degree of reflexivity and self-awareness to be sensitive to the process around them (Kasket, 2017). As a Counselling Psychology trainee, I was heavily influenced by these philosophical principles, which in turn influenced the research produced and methods used for my research design and analysis.

I was initially drawn to exploring the impact of physical activity on mental health and wellbeing due to my passion for playing sport and being in nature. I grew up in a sporty family and was encouraged to play a multitude of sports from an early age. I continue playing sports to this day and use exercise as a way to manage my mental health and wellbeing. I strongly believe in the importance of any type of physical activity for our mental health which is also present in my work with clients as a Counselling Psychology trainee. However, I had not had prior experience with fathers' postnatal mental health either personally or clinically. I was drawn to explore fathers' experiences as they are an under-researched population who may benefit from alternative support than traditional individual psychotherapy.

It was important to consider how my characteristics may have influenced the interviews as the research process can be understood as a collaboration between the researcher and the participant (Braun & Clarke, 2013). My positive regard for the importance of exercise may have influenced the formation of the interview questions, assuming exercise would always benefit participants and possibly setting a positive tone for exercise during analysis. I shared 'insider status', where some group identity is shared with participants, as many participants also used exercise as a way to manage their mental health (Braun & Clarke, 2013). I am also similar to participants in the respect that I am white, middle-class and of a similar age.

However, I also had several differences with participants and 'outsider status', the most significant being that I have never had children and have not experienced the postnatal period myself. Also, due to my gender, I was aware that I was a woman interviewing men about their personal experiences of their mental health, within a society that focuses on mothers during the postnatal period. I am also a similar demographic in age, class and ethnicity to their partners, which may have

influenced their responses when exploring their difficulties in the postnatal period. It was clear participants were aware of my gender and potential to become a mother, as they made comments like: "*when you guys have babies you know your body goes through a lot of changes…there should be a lot of focus on….women because you guys…are amazing and (.) you know work and you look after the baby and you have to breastfeed and you have to (.) you know (.) get the baby out you know sometimes through caesarean and it's just a lot"*. My gender may have impacted the participants' responses or made them hesitant to explore some of their experiences if they felt '*my'* potential experiences as a mother in the postnatal period might have been worse than theirs.

I also recognise that my understandings of fatherhood influenced my approach to the research. I grew up in a two-parent household, where my parents were married and both played an equal role in my upbringing. Despite exercising frequently before children, both my parents' activity levels significantly decreased after having children. I was therefore expecting for participants' activity levels to decrease and for this adjustment to be a difficult transition. Throughout my research, I have monitored and reflected on my beliefs, by keeping a reflexive journal as recommended by Braun and Clarke (2013) to reflect and challenge my assumptions and expectations during the interviews and analysis.

3. Analysis and discussion

I developed four themes in the analysis, two themes comprised of three subthemes and two themes comprised of two subthemes. Table 2 below provides an overview of the themes developed, also see Appendix M for the final thematic map. The next section outlines and explores each theme and subtheme in turn, illustrated by verbatim extracts from participants.

Themes	Subthemes
Theme 1: "*There is no time for you anymore*": Finding and navigating time for exercise	**1.1 "Your *Time fractures*": Giving away your time**
	1.2 *'Trying to ensure equity'*: Balancing time with your partner
	1.3 "*It's not fair leaving her*": Exercise as a selfish decision
Theme 2: *"I identified as a rugby player…I'm a Dad now"*: The paradox of exercise in the postnatal period	**2.1 "*You re-evaluate your goals and what's important*": Changing identities and re-shuffling priorities**
	2.2 *"Key to my wellbeing….[and an] extra thing to worry about*": Changing relationships and the paradox of exercise
Theme 3: *"It's a quick in and out sort of thing"*: Adapting physical activity after children	**3.1 *"Stick her in the pram and go for a run"*: Exercising with and around children**
	3.2 "*I became a parent then I was the outlier*": The difficulty of team sports
	3.3 "*Everything just carries on without you":* The loss of social support
Theme 4: "*It's not where the focus is*": Fathers' wellbeing as secondary to mothers'	**4.1 "*We need to be rock solid*": Fathers' focus on their partners' wellbeing**
	4.2 *"There's literally nothing for the father":* Exclusion from support

Table 2: Overview of themes and subthemes

Theme 1: "*There is no time for you anymore*: Finding and navigating time for exercise"

The first theme was developed through participants' discussion of the main barriers to physical activity in the postnatal period, which was overwhelming identified as time. In this theme participants describe the difficulty of finding time for exercise and their experience of navigating novel time pressures and the importance of preserving '*family time'*. This theme will also explore the challenge of balancing time away from their family with their desire to be an equitable partner and '*hands-on father'*. Research has long found fathers as a time-poor population (Henz, 2019; Bellows-Riecken & Rhodes, 2008). However, the final subtheme explores how participants positioned engaging in physical activity as a '*moral'* and *'selfish'* decision, making the decision of whether to exercise in the postnatal period for fathers, far more complicated than previously thought.

1.1 "*Your Time fractures"*: Giving away your time

Participants readily identified time as the main barrier to participating in sport and exercise in the postnatal period. Participants reflected on how the new and varied pressures of fatherhood impacted their free time and their time available for leisure activities. All the participants in this study, bar one, reduced or stopped their participation immediately after their children were born. The participant who continued exercising was training for an international competition and immediately stopped his participation after this competition. The participants' accounts seemed to be accompanied by a sense of loss and they reflected on feeling out of control, lacking control over their time or schedules.

Participants frequently found juggling competing demands from work and family difficult, as fulfilling both commitments, often resulted in the loss of their free time and time for physical activity. As Dinesh illustrates: "*you have to share your time that's quite hard….time is more valuable than money and anything in the world it's just time is just the most simple thing and it's just something you don't have"*. For Dinesh, time became his '*biggest challenge'* to manage and his most valuable commodity after children. Dinesh reflects on how time is '*the most simple thing'* before children, but as a father something you lose. Dinesh acknowledges how this makes fatherhood sound '*terrible'* but reinforces how difficult losing time for himself was. Steve adds: *'there's a lot more pressure on your time…a lot more expectation as well of what you should do with your time"*. Steve highlights the new '*expectations'* on him as a father and the pressure he feels due to others' opinions about how he chooses to spend his time.

Changing social expectations has encouraged fathers to become more equitable partners who are directly involved with their children both emotionally and practically (Henz, 2019; Kwon *et al.,* 2014). In the UK, fathers' childcare time has increased from 15 minutes a day in the mid-1970s to around two hours a day in 1999 for fathers with children under five years of age (Fisher, McCulloch, & Gershuny 1999, cited by Henz, 2019). Alongside parenting itself becoming more intensified, this has led to greater time pressures on parents than ever before (Kwon *et al.*, 2014; Craig *et al*., 2014).

Many participants described how they underestimated the impact of having a child on their life and available time:

> Tony: "*you don't think about this before a baby...you don't think he's going to affect you that much …the reality of it is that when it happens you actually need to start thinking about compromising and giving away the time you used to you know the things you enjoy doing which for me is mostly going to the gym and seeing friends…I personally underestimated it massively"*

> Paul: "*You know well prior to kids….I'd be out the bike all the time er running with friends (.) and all the rest of it um (.) with kids that that's you know (.) almost stops completely I've I've seen similar friends go through the same process as well (.) um cause it's very difficult it's not until the kids become a bit older….that you can have that time to go and exercise again"*

Tony and Paul reflect on the difference in their participation in physical activity before and after having children, with both reducing their levels of participation. Toni's use of the words '*giving away'* and '*compromising'* invoke a sense of loss and highlights the difficulty of his experience as time pressures result in the loss of his enjoyable activities; socialising and exercising. Paul also raises this, calling this change a '*process'* that all fathers go through. This experience seems to last several years as Paul suggests it is not until children become older that fathers can try to participate in sport and exercise again. Despite the negative consequences of this, participants spoke about reducing exercise and giving up their free time as a requirement of being a father.

This requirement seemed to reflect an expectation or assumption that fathers should revel in their new child and not want any time away, the default being spending as much time as possible at home. This was reflected by participants who reiterated their commitment to being a father and how their children were their main priority. However, this seemed to result in the fathers feeling

'*selfish'* or '*self-centred'* for still wanting time to themselves. This was particularly the case for first-time fathers, as this was their first experience of giving away and losing control over their time. It seemed difficult for participants to justify any time for themselves with their family commitments:

> Eric: "*the guilt of…wanting my own time [laughs] and…as I say I'm not getting the opportunity to go and do the things I would wanna do which is like (.) the strangest thing because (.) you know I wouldn't have ever said that I was selfish but…all of a sudden I was having to give my time where I never had to or never even considered having to give it before….that yeah was quite difficult"*

> Paul adds: *it's pretty challenging….it's a very sort of significant change especially with child number one (.) you go from being sort of er (.) you know not self-centred but (.) all of a sudden everything is turned upside down and the flexibility to do as you please isn't there anymore (.) so that's a real difficult adjustment to make….not being able to (.) do the things you want to do all the time (.) is a bit of a challenge and that that does take some adjusting (.) and when it comes to sport and exercise (.) if that's taken away as well which it is it's also quite difficult to take (.) so I think um you have to sort of almost on purpose make a decision (.) to go and be active (.) to kind of get through it a little bit*'.

Eric illustrates the difficulty of balancing time for himself with his family, feeling '*selfish'* for even wanting time for himself. This speaks to social norms for fathers around the importance of prioritising family time and the expectation that parents sacrifice their time for their family (Henz, 2019). Similarly, Paul found losing control over his time a difficult adjustment and a *'challenge'* to overcome. Paul reflects on how being unable to do his usual activities was a '*difficult adjustment*', yet willingly makes this sacrifice even when it later impacted his wellbeing. His use of the words *'taken away'* seems to invoke a sense of powerlessness and lack of agency, as he felt he had no choice, with his needs becoming secondary to his family's. Paul's main coping strategy for his mental health before having children was physical activity and stopping exercising during his children's early years had a negative consequence on his mental health. Due to this, Paul shared how he and his partner decided that he needed to start exercising again to support his wellbeing through this period. Paul's experience demonstrates how reducing physical activity can come at a cost, as parental time pressures are significantly associated with depression in parents (Roxburg, 2012).

The expectation for fathers to give up their free time results in fathers who sacrifice their leisure time to prioritise family and work commitments:

> James: "*Yeah it almost completely dropped off….it's just not enough time space or anything….so the exercise almost completely dropped off (.) just cause it's the first thing to go for me is like leisure time (.) um still concentrating on the family concentrating on work and it's only really since like (.) early on this year….that I started training again regularly*"

James demonstrates how time pressures result in him reducing exercise as a result of prioritising his work and family commitments. Exercise for participants, as James highlights, is *'the first thing to go'* as family and work commitments seem more important and more rigid and inflexible. Fathers have long been found to be a time-poor population and exhibit high levels of inactivity (Henz, 2019; Braun & Clarke, 2013). A lack of time is one of the most commonly cited barriers to physical activity for parents, particularly for parents with children under the age of five, as all participants in this study had (Bellows-Riecken & Rhodes, 2008). The participants demonstrate how adding increased childcare responsibilities to existing occupational and household duties, intensified their time constraints, resulting in fathers feeling that they had no free time and leaving them little time for leisure activities, like exercise (Mailey, Phillips, Dlugonski & Conroy, 2016).

1.2 *"Trying to ensure equity"*: Navigating time with your partner

This subtheme was developed from participants' discussions about lacking time for themselves, which directly led to participants emphasising how they tried to balance time with their partners. Participants reflected on the importance of being fair in their relationships and how their partners also needed time away, trying to ensure there was some balance between them. Charles demonstrates this:

> "*I know that I need to be on the list I also make sure…that she should put herself on her list as well so if she needs a bit of time and to do whatever….it is to switch off so the two of us work complementary to the other quite well as a team"*.

At any level of participation, participating in sport relies heavily on support from other family members or partners (Fletcher, 2020). The time pressures on parents and the necessity of one parent providing childcare at all times forced participants to navigate how time was spent with their

partners and decide what was worth spending time on. For some participants, this created conflict or strained their relationship, as Toni remarked*: "you need to try and work it out….that puts a lot of pressure in the relationship".* Steve reiterated this, highlighting how this can be difficult:

> "*having those conversations about what (.) you know what are you going to do with your time? What are we doing?....we both well aware that you've got to have time for yourself…. Trying to ensure equity is is and was a bit difficult….I think that has been (.) what me and my wife has found that difficult over the last sort of three years at times um the difference of (.) the different views and the difference of opinions um regarding you know involvement and level of involvement"*

Steve found it difficult navigating his and his wife's differing views about how they should spend their time, particularly on his level of involvement in rugby. Steve highlights how they were both aware that they needed time to themselves but *'ensuring equity'* was more difficult. Steve emphasises how he wanted to be equitable and fair in these decisions, ensuring his wife also had time to herself. This was also mirrored by Eric who found it difficult to balance time away for his partner:

> "*balancing me being at home (.) me giving….[wife] then an opportunity to be able to go out and when we started expressing and being able to…feed him off a bottle and things like that…it was that balance I think definitely was the (.) the initial thing…that really was at the forefront for both of us*"

Eric highlights how he needed to be at home looking after his child to allow his wife an opportunity to leave. However, managing her time away became easier when she started expressing milk, which allowed her to leave for longer periods. Partners and spouses play a critical role in influencing the sporting practices of fathers (Fletcher, 2020). In the UK, traditional gender roles are becoming more fluid and interchangeable, moving towards greater gender role egalitarianism (Fletcher, 2020; Connolly *et al.,* 2016). The participants' desire to share time with their partners and prioritise their partner's time away in this study seem to reflect more egalitarian approaches to parenting.

The fathers spoke about the importance of discussing and listening to their partners for the benefit of their partnership (Fletcher, 2020). However, some participants felt they needed permission or approval from their partners to be able to leave for exercise. As Nick comments: "*to be fair like um*

my wife was yeah really good about the sort of um letting me go out for a run". Nick's use of the word '*letting'* speaks to the permission he felt he needed to leave. Mothers are frequently regarded as the child's primary caregiver in the majority of families despite living in societies with gender-equal family policies (Gunnarsdottir, Petzold & Povlsen, 2013). Participants positioned their partners as the primary caregivers to their children and this seemed to impact the power dynamics of their relationship and the fathers' ability to exercise. Despite positioning their role as secondary, the participants seemed to advocate for the idea that fathers and mothers should share equal responsibilities inside and outside the home, which is a distinctive characteristic of the new-involved fatherhood (Miguel *et al.,* 2019).

However, this desire seemed to make it more difficult for participants to then justify exercising during this period. For some fathers, the decision was taken out of their hands:

> Paul: *"I didn't [laughs] (.) it was made for me (.) no it's being a bit that's being a bit harsh but yeah from the moment you get the kids you know you've got to prioritise um (.) you know the family (.) needs over sort of friends and doing sp- you know exercise for leisure….it's providing support and (.) you know childcare so it it if the baby's not sleeping during the night (.) then um my wife would have to catch up on sleep which basically meant I was there to look after the baby (.) um (.) and it's very difficult to kind of you know if she's at the end of her tether and absolutely knackered I can't then say 'right bye I'm off out for two hours on a bike ride' [laughs] it doesn't kind of work that way so what were the barriers (.) the barriers were the preservation of one's relationship I suppose (.) which again comes back down to priorities and the needs of the family over your kind of um sporting desires"*

Paul felt his partner decided for him that he would stop exercising, however, he immediately voices his support for her decision, emphasising the importance of putting his family's needs before his own. Paul provides an example of when it would be difficult for him to leave as his wife had had no sleep and he felt he needed to support her. This comes at the cost of exercising with his friends, but Paul reiterates how this decision was necessary for '*preserving'* his relationship. Fathers have been found to worry about relationship breakdown in the perinatal period, the period from conception to one year after birth, due to their own and the mothers' mental health (Fletcher, StGeorge, Newman & Wroe, 2020). In this period of adjustment for fathers, time for themselves seemed hard to come by, but importantly something to be negotiated and approved by their partners.

However, many of the participants' partners were supportive of them continuing to exercise, despite any potential difficulty them leaving caused, as they recognised the importance of physical activity for their partners' wellbeing and mental health. As illustrated by Tony: "*she's been (.) very helpful and accommodating in terms of helping me you know exercise cause I think she knows as well that you know it's good for me"*. Similarly, Peter reflected on his wife's support: "*Yeah...she always has been but I think…part of that is because (.) um (.) she recognises that um (.) you know er the importance of you know um that on my lifestyle and mood [chuckles]*". Tony and Paul suggest that their partners' support was because they recognised the benefit of physical activity on their mood and wellbeing. For many of the participants who used physical activity as their main coping strategy for their mental health, it was important for them to find ways to continue exercising after having children. Their partners frequently supported them in this, particularly as they progressed through the postnatal period.

1.3 *"It's not fair leaving her"*: Exercise as a selfish decision

In this final subtheme, participants described how their decision to leave for exercise became a 'moral' decision, with a seemingly 'right' and 'wrong' choice. Participants emphasised how leaving to exercise was a personal and therefore selfish decision, despite acknowledging the importance of physical activity for their wellbeing. Participants described their feelings of guilt when leaving, knowing their partners would be alone coping with their children, as Scott illustrates: "*it's just not fair on (.) the um partner really…it puts [wife] under a lot of strain and it basically I don't feel that great for doing it (.) I know she's left looking after him".* Scott felt guilty and selfish for leaving his family temporarily, knowing his partner will be under strain coping with their children whilst he was away. Other than time pressures, participants' expectations of their involvement with children seemed to be the biggest barrier to physical activity (Fletcher, 2020).

Many of the participants spoke about how leaving was considered unfair or would result in undue pressure on their partners:

> Tony: "*you need to compromise because…sometimes it's not fair leaving her and she also wants to exercise and do her own thing so you just have to compromise"*.

Eric: "*you know I'm gonna go and play golf for like (.) three or four hours (.) and through that whole time I can't help I can't be there (.) um you know if he's crying that whole time there's no respite for my wife".*

Daniel: "*the only barrier would have been myself (.) the guilt I felt for doing it….being away from home being able to….actually go for a run whereas you know the mum wouldn't have been able to"*.

Tony describes how he needed to compromise and miss out on rugby matches to be '*fair'* in his relationship, as his wife needed time away too. Similarly, Eric highlights his feelings of guilt of not being able to offer help if there were problems and the unfairness of his partner potentially struggling whilst he was having fun. For Daniel, guilt was his main barrier to exercise, particularly when his partner was not able to. This echoes previous research which found barriers of inadequate time and feelings of guilt associated with high levels of inactivity in fathers (Bellows-Riecken & Rhodes, 2008). Cohen (2016) describes sporting guilt, as the feelings of guilt that arise from prioritising sport over family or life responsibilities.

Due to this, many of the participants positioned exercising as a selfish decision, that reflected their morals as a partner and father. The participants seemed isolated in this decision, as they had to individually decide the costs and benefits of leaving;

Steve: "*The main barriers I think probably are time and um (.) I dunno how to say it probably the emotional right or wrong or or moral right or wrong whether it's morally right to go (.) and play or to stay at home or selfishness you know (.) its' it's its just purely your choice isn't it um and that for me is the…biggest er barrier is (.) you know I find it hard…it's the moralistic side of it….whether I should or shouldn't be playing or not….when it's it's put it as succinctly you choose to play rugby with your friends over spending the afternoon with us (.) ultimately that is the choice isn't it um and you know you can dress it up in any any mental social emotional physical wellbeing package whatever however you wish to but that's ultimately the choice that you make either (.) you go for three hours to roll around in the mud and then have a beer with fifteen other guys or do you know go to the Stately home with your wife and kids and have quality time that will never come back*"

For Steve, leaving to play is a '*moral'* decision, which reflects his character, where staying with his family is the '*right'* choice and leaving to play rugby is the '*wrong'* choice. Steve positions time for exercise and time for family as opposite ends of a spectrum, with no flexibility in this decision, an either-or choice, that he must make as an individual. Despite the benefits, for Steve, exercise is a selfish decision that only benefits him. Steve emphasises how spending time with his family is more important. This was echoed by many of the participants who reiterated how time with their family was finite and something they could lose out on, particularly as their children aged. Paul describes this choice:

> *"it depends how…self-centred you want to be because I've had some friends (.) who you've you know have had kids and they just said to their wife 'see you later I'm out' [chuckles] and they've kind of gone and done the long bike rides or road runs…you'd just sort of (.) enforce the fact that you're going to go out and do this….so it depends on how far on spectrum you want to be really*".

For Paul, exercising seems to be positioned on a spectrum of selfishness, where some fathers '*enforce'* that they are leaving. Paul seems to see this as a selfish decision that fathers make purely for themselves.

However, it was not just the fathers who considered leaving to exercise a selfish decision. James shares an experience of leaving for a bike ride with his friends at four-thirty in the morning, before his children were awake:

> "*my wife when I got home (.) she was furious [chuckles] cause it was so hard getting everybody ready in the morning on her own (.) and she said you know it's just selfish that I just disappeared off to do my own thing and left her to it (.) you know and I get that…I'm very conscious of the fact that if I'm spending time somewhere else I'm (.) you know I'm taking that time away from my family … I understand how important it is to spend (.) that time (.) and you know and I know it won't last forever"*

James seems to agree with his wife's feelings, despite his efforts to minimise the impact by leaving before his children were awake. Similarly, James reinforces how spending time exercising comes at the cost of time for his family, which is his main priority. Exercise seemed to be conceptualised by participants as something that 'takes away', rather than something that benefits and so deciding to

exercise was considered selfish or made participants feel guilty. Guilt as a barrier to physical activity has been primarily associated as a unique barrier to mothers, rooted in cultural assumptions around mothers' primary role of taking care of others before themselves (Mailey, Huberty, Dinkel & McAuley, 2014). However, it is now recognised that guilt is a barrier to physical activity for fathers as well as mothers (Mailey *et al.*, 2014). This was supported by the participants in this study who viewed their family as their main priority and so reported feeling guilty for taking time away from their families to be active (Mailey *et al.*, 2014).

Fletcher (2020) suggests how choices are made and who makes them, reflect the ways families use, reinforce, and rewrite their value systems and identities. The fathers seem to be aware of the unequal division of childcare in their partnerships. For most of the participants, their partners stayed at home during the postnatal period, taking maternity leave, and so took a far greater share in childcare. Mothers are still spending more time taking care of children than fathers, despite increases in fathers' childcare and decreasing gender disparities (Gunnarsdottir *et al.*, 2013). Research has found despite fathers' intentions to be equal partners prior to birth, their full involvement was only for the duration of their two weeks of paternity leave and therefore temporary in nature, with mothers ultimately left "*holding the baby*" (Miller, 2011a, p.1107). This suggests, whilst fathers are more involved than previous generations, their involvement remains largely disproportionate compared to the role of the mother (Miller, 2011b).

This is highlighted by the inequality within leisure time, as research suggests that sport and leisure are gendered, with fathers having more time than mothers (Fletcher, 2020). When it comes to exercise, mothers spend an average of one hour and twenty-six minutes less time on physical activity than fathers every two weeks (Nomaguchi & Bianchi, 2004). Fathers also seem to have greater agency to choose how they spend their time, with dominant societal norms depicting mothers as the primary caregiver (Fletcher, 2020). The participants in this study seemed to be aware of this discrepancy and took care to try to balance time between them and their partners. This offers one explanation for the participants' feelings of guilt or selfishness when leaving to exercise due to the already unequal distribution of time between them and their partners.

Theme 2: "*I identified as a rugby player…I'm a Dad now":* The paradox of exercise in the postnatal period

The second theme, with its two subthemes, was developed through participants' discussion about their reduced participation in physical activity and how they reached this decision. The theme captures participants sense-making around their changing identity and subsequent changing relationship with physical activity. Participants seemed to minimise the impact of stopping exercise by asserting the importance of their family's needs and how they needed to prioritise their family's needs over their own. Due to this change, exercise becomes a paradox; participants recognise the importance of physical activity for their mental and physical health. However, due to their new identity as fathers and changed priorities, exercise becomes another '*thing to worry about'* and less important than before children.

2.1 "*You re-evaluate your goals and what's important*": Changing Identities and re-shuffling priorities

This subtheme captures participants' reflections about how their identity changed after becoming a father. Sport and exercise can be an important marker of men's identity and most of the participants had been participating in physical activity for a significant proportion of their lives (Fletcher, 2020). However, the transition to fatherhood and identity change led participants to re-evaluate their priorities and their relationship with physical activity. Nathan reflects on his transition to fatherhood: *"there was a real mental shift in terms of…..me as a grown-up really…..all of a sudden there's this a small pink thing that's relies on me …. for (.) taking care of her and making sure that she's got as good a future as I can give her and that's huge"*. Nathan use of the words '*mental shift*' highlights how this is largely a psychological shift for fathers, requiring them to become more responsible to provide for their children.

In the next two extracts, Charles and Peter describe how their identities changed after children and the resulting impact on their participation in sport and exercise:

> Charles: "*in those years pre-children it was just part of my life and part of my social network and part of what I did and how I identified myself I think probably in my twenties um I identified myself as a rugby player whereas I identify probably myself more as a Dad now".*

> Peter: "*Um (.) yeah but…I think it changed from probably from….getting married [laughs] it changes (.) each each life thing it probably changes…..from getting married cause obviously (.) um um your priorities changed and then having the first child it definitely changed and then yeah I suppose having [son] as well just um (.) your time fractures…um I suppose prior to having children if I was racing and wanted to run my best (.) um but then the last few years I've not been um (.) as bothered as about that I've been happy if I've been able to go…and take part*"

Charles highlights how being a rugby player was central to his identity in his twenties, encompassing his social life, leisure time and exercise routine. However, his identity changes after becoming a father and playing rugby became less important to him. He now identifies himself primarily as a father, signalling his formation of a fatherhood identity (Baldwin & Bick, 2019). This impacts how Charles exercises as he reduced his participation in rugby and focused instead on maintaining his fitness and health. Peter also experiences this change and reflects how his participation changed with each major life event from marriage to children. These transitions changed Peter's relationship with running, from running competitively to just being grateful to participate. Becoming a father is a crucial life-course transition, and fatherhood must be integrated into the male identity (Torche & Rauf, 2021). Fathers can experience a significant change in their self-identity which can impact many domains of life, including their physical and mental wellbeing and the quality of the relationship with their partner (Höfner, Schadler, & Richter, 2011; Barclay & Lupton, 1999).

The participants' change in identity, resulted in the fathers re-evaluating their priorities, with exercise falling far below their family's needs. James demonstrates this change: *"your whole world changes…all of a sudden all of these other things that seemed really important ten minutes ago now they don't matter at all and you've got one little screaming priority now…"*. Similarly, Nathan reflected on decreasing his participation after his daughter was born: *"I said this is what needs to happen rather than something I resented it was something I actually said no this is (.) this is because I have a priority and this is what that priority is"*. For Nathan, decreasing his participation was a necessary step due to his new priorities rather than something he resented. Many of the participants commented that their reduction in sport and exercise was necessary as a result of their new identity and changed priorities. Fathers' experiences of transitioning to fatherhood are underreported in research (Teague & Shatte, 2018). However, fathers have been found to shift their priorities during this time, predominantly changing their attitudes around work, socialising and leisure time, as they experience the postnatal period as demanding (Miller, 2011b). The participants

emphasised how this transition was important to ensure they were prioritising their family, as the next two data extracts demonstrate:

> Eric: *"push come to shove the priority would always be….family that would always be number one….but did I want to get back? Course I wanted to get back and did I want to (.) um (.) you know was that because then I was missing…my social interaction group I was missing my own time (.) you know if you talk about mental health and things like.….I know how important some of these things can be to people um (.) and it was an element….but my family would have always come first"*

> James: "*the family has always been a priority and unfortunately sports has tended to take a back seat (.) if (.) you know if I'm struggling for time or I've got no energy then I'd rather (.) stay home and being with the kids than (.) than try and drag myself around a run and I think a bit of laziness comes in (.) certainly but er (.) yeah I mean it is tough to stay active all the time when….you've only had (.) two hours sleep [chuckles]"*

For Eric, despite the benefits of exercise and his desire to return to playing football and golf, his family had to be his main priority. Similarly, James provides an example of how exercise came second to family life when time pressures or tiredness resulted in him staying at home with his children. James initially positions this as laziness, however, reflects on the difficulty of regularly exercising with sleep deprivation. Previous research has also found this, with first-time fathers reporting that their new identity and responsibilities forced them to change their priorities and mindset, impacting their lifestyles and leisure time (Baldwin *et al.,* 2019). The participants describe how their new identity and re-shuffled priorities meant they focused on the needs of their partner and child, over their own (Baldwin *et al.,* 2019). For the fathers in this study, this new fatherhood identity results in physical activity becoming less important, seemingly making it harder to justify leaving home to exercise.

2.2 "*Key to my wellbeing….[and an] extra thing to worry about*": Changing relationships and the paradox of exercise

This sub-theme was developed from comparing how participants spoke about the importance of exercise in their general lives to the way they positioned exercise as unimportant and just another '*thing to worry about*" in the postnatal period. During the interviews, participants spoke extensively

about the benefits of physical activity specifically in the postnatal period; from providing an escape or release, enabling them to regain their identity before children and providing social support. For many participants, physical activity is key to their life, identity and wellbeing. As Nathan demonstrates; "*it has basically been the foundation for most of my life….sport in general has been absolutely been integral to almost every single aspect of my life"*.

Participants frequently spoke about the benefit of exercise for their mental health and wellbeing and the varied benefits of exercising:

> James: "*I used to think of kind of like my therapy…..I mean if I'm stressed (.) um a run is a really good idea even if I don't feel like it…it's either that or medication and I'd rather not take any medication….I think it performs that role for a lot of people*".

The participants also raised the specific benefits of physical activity during the postnatal period. As the participants frequently used physical activity as an outlet or escape from the demands of work and family life:

> Dinesh: *"it's a way to forget about problems perhaps that occur in general life….kids are great but they are very stressful let's be honest…so it helped me to….mentally get away from it temporarily".*
>
> Nathan: *"Absolutely without a shadow of a doubt it is an outlet for er the day to day frustrations that gradually build up as part of (.) let's say work and family life….it's a chance for me to (.) um let off some steam have a bit of light hearted banter with the team and that sort of thing so it again (.) it is a (.) a mental and physical outlet for everything that kind of builds up during the course of the working week*"
>
> Peter: *"so I I I suspect that I (.) um ran (.) um you know to keep myself um sane or whatever [laughs]"*

Nathan demonstrates the importance of exercise for giving him to have an outlet for frustrations that build up during the week due to his family and work and a way to relax and socialise. Similarly, despite the hyperbole, Peter's use of the word '*sane'* highlights the importance of exercising, to offset the pressures of the postnatal period.

James also reflected on how exercising helps him be a better father for his children:

> "*it's quite pivotal really to me if I (.) I've gone through periods where I've stopped exercising for (.) you know cause a baby was born or because (.) work's too busy or anything like that and I always end up overweight and miserable (.) so I know that my best (.) sort of condition is where I'm (.) regularly exercising….they're my priority whilst I still realise that exercise is very important for me (.) I'm better for them (.) if I'm (.) more chilled out because I've (.) been for a run or whatever (.) and also I think it's about setting an example"*

For James, the benefits of sport and exercise are clear, and he reflects on the physical and mental consequences when he stops exercising. James also highlights how he feels a better father when he is exercising, as it boosts his mood, which helps him be more relaxed with his children. Additionally, James reiterates how he wants to be a role model and set an example for his children to be active, which many of the participants also raised.

Another benefit of physical activity in the postnatal period was that it allowed participants to reconnect with their identity before having children. Dinesh highlights this, as for him exercise was the "*connection between your old world and the new world"*. Dinesh splits his life into before and after children, whilst playing hockey allows him to reconnect to the adult he was before becoming a father. The next two data extracts further illustrate how sport and exercise allowed participants to reconnect with their identity before fatherhood:

> Charles: "*it was a little bit of time to be me again and to have myself and to um (.) you know to I guess remember who (.) who I was as a person….before children….it's easy as a parent…to get caught up in….that's the only thing in my life now…I never really wanted that….my family is top of the pile but I am I'm also a big believer in um what I often say I'm on the list as well I need to find a little bit of time for myself as well….it's quite important to me"*

> Steve: *"I think um (.) with a lot of mums it's like that identity as well isn't it you're not Daddy anymore you're Steve again you know and um (.) it's yeah it's back to (.) probably back to familiarity as well isn't it that er something that you can control (.) something that you're in charge of something that you dictate um (.) as opposed to being dictated to by somebody that's a quarter of your size um (.) and ultimately more important than you are as well"*.

For Charles, playing rugby, running, cycling and swimming, provided him with time to reconnect to the person he was before children. Charles highlights whilst his family is his top priority, finding time for himself is also important. Steve also found exercising allowed him to regain an identity apart from being a father, and he highlights how playing rugby gave him back a sense of control and decision making, compared to having to acquiesce to his children's needs. Many of the participants recognised how sport and exercise allowed them to feel in control compared to the uncertainty and unpredictability of raising children.

However, despite the clear benefits of physical activity for participants, exercise for fathers in the postnatal period becomes unimportant due to their new identity and priorities as highlighted in the previous subtheme. James demonstrates this: *"exercise almost completely dropped off (.) just cause it's the first thing to go for me"*. Similarly, Paul reflects: *"You know well prior to kids….I'd be out the bike all the time er running with friends…with kids that that's you know (.) almost stops completely…you can see ….peoples' participation really dropping off (.) after kids"*. Paul reflects that most fathers go through this process and seems to reflect a social norm that fathers stop exercising to focus on their families.

Nine of the participants greatly reduced or stopped exercising after their child was born. Of the three that did not, one father started running with a fellow father from his NCT group to cope with the impact of the postnatal period on his wellbeing. Another was training for an international competition six weeks after his son was born and stopped training immediately afterwards. The final participant was going through a separation and increased his participation in exercise to cope. For the fathers who reduced their participation, their return to sport and exercise ranged from a few months to years. However, some fathers never returned to their sports or previous exercise routines.

Tony demonstrates how exercise became another thing to schedule:

> *"It's enough for you to try to deal with a family a job and a baby yeah so for people….to have that (.) extra thing to worry about and try to fit in to their schedule and their lives…might be added pressure that they may not need".*

Tony calls exercise an additional '*pressure'* to schedule highlighting how exercise can feel too much for fathers to manage in the postnatal period. For some participants, this loss was positioned as a

short-term sacrifice, and they took solace in knowing that in the future they could return to exercise as the next data extracts illustrate:

> Eric: "*I knew (.) it was gonna come back at some point…there was always that element of well I am gonna be able to go back and participate….it didn't play on my mind too much like you know over that first month where it wasn't happening….I always knew…it was going to happen….at some point"*
>
> James: "*I was aware that it wasn't a permanent thing (.) you know like 'I will be able to (.) get back into it eventually but when we're less' (.) cause it's quite intense looking after babies at the beginning cause they're so (.) needy….it's very intense (.) and so I think I just concentrated on that…..thought you know….I will get back to it*"
>
> Paul: *"there is that light at the end of the tunnel where you know it's a short period of time and then you can get your life back to a certain extent where activities can pick up and (.) you can have all of that but certainly in that twelve-month period it's really tough (.) it's really tough"*.

All three participants highlight how they saw the loss of exercise as a short-term sacrifice knowing they would return to it at some point. This seems to have made their loss more manageable. Participants highlight the intensity of the postnatal period for parents, particularly during the initial stages when their children were very young and the great impact it had on their lives. This subtheme links into the previous subtheme and theme highlighting how time pressures and changing priorities in the postnatal period greatly impacts fathers' participation, despite the clear benefit of physical activity for their wellbeing.

Theme 3: "*It's a quick in and out sort of thing*": Adapting physical activity after children

This theme has three sub-themes and was developed through participants' discussion about how they adapted their participation in physical activity after having children to be able to continue to participate. In this theme, participants discuss how they changed their participation in team sports by dropping down teams or changing sports entirely to make their participation more manageable around their family life. Team sports were highlighted as something that became difficult to attend after children due to set training times and matches as well as the total time required to play in

matches. The consequences of these adaptations meant a loss of social support for fathers as well as a loss of their social position in their clubs and a reduction of their overall experience participating in sport and exercise.

3.1 "*Stick her in the pram and go for a run*": Exercising with and around children

This subtheme captures participants' reflections on how they adapted their physical activity routines after having children. The participants particularly highlighted how they adapted their routines around their children's schedules and when possible included their children in the physical activity. One way of managing this was to exercise before their children woke up or after they had gone to bed, as Peter illustrates: "*since I've had children…I get up early so I'll get up….and get the run done before the kids wake up".* Participants identified the time when their children were asleep as time available for themselves as the next two data extracts demonstrate:

> James: *"I did go the gym this morning but I did get the kids up ready for school and what have you before we did that…I usually exercise before they get up or after they've gone to bed (.) even sort of during lockdown I'd (.) you know I've been busting all day to do a training session but (.) I don't really wanna take time away from the family so I'd end up (.) wait till they've all gone to sleep and then go downstairs and train (.) on the turbo-trainer or whatever"*

> Charles: "*I need to find a little bit of time for myself as well….sometimes that means I miss out on sleep….my pre-lockdown my time for swimming was at half past nine on a Thursday evening and I'd get home at quarter to eleven (.) and um (.) during lockdown….um I would get up in the morning to go for a bike ride before my wife went for work which meant being on the bike by five-thirty so I could get back by seven-thirty so she go that type of thing so you know I'd forego….other things like sleep or rest time to…exercise cause it's quite important to me"*

Linking to the previous themes, James illustrates how he positions exercise as something taking away from family time and so adapts his routine to exercise before his children wake up and after they go to sleep. James provides an example of exercising at home, which many of the participants identified as something they found helpful to still exercise whilst minimising their time away from home. Charles recognises the importance of physical activity for his wellbeing and so sacrifices sleep

and leisure time after work to prioritise exercise without impacting time when his children are awake. This results in Charles exercising at five-thirty in the morning when his children are asleep and ensuring he returned in time to take over from his wife before she leaves for work.

For many of the fathers, one way of exercising after children was to incorporate exercise into their existing routines. As Charles demonstrates: "*I'm quite good at (.) um turning these things into my life the way my life is run so….go you know use the gym at work during lunch"*. Charles incorporates exercise into the time he is already away from his family, so exercise does not take away from family time. Nick further demonstrates this:

> Nick: "*well for me it would have been allowing me to build it in as a part of my life…..now I find the only way I can make exercise work for me if it is (.) if it is part of my life so as I said um cycling to the train station to make cycling part of my commute or um er so the swimming sessions that I do…on a Thursday night I go swimming while I finish the coaching the rugby session on a Thursday so rugby finishes…about nine o'clock…I drive….to the leisure centre and then do forty-five minutes there er and then so it's so it's you know once I'm home I tend to I like I'm….home*".

For Nick, the only way he was able to continue exercising was by incorporating it into his existing routine when he was away already from his family. Nick describes how once he was home, he did not want to leave again and so ensured he had exercised before arriving home. Dinesh also provides an example of adapting his exercise: *"So sometimes I've decided not to even go for a run at all and just maybe do a little bit of exercise at home which won't be as impactful but um see I think physically it has there's definitely case of put up"*. Dinesh highlights how sometimes exercising at home is the only way to make it feasible, which would not have as much as a physical impact, however, still allows him to exercise. His use of the words "*put up"*, demonstrate how exercise again comes second to his family's needs. Running buggies were also highlighted as way participants could exercise whilst including their children, negating the need for their partner to be present to provide childcare and a way to avoid feeling like they were taking away from time with their family, as Steve illustrates:

> *"I do everything I can to try and combine it um (.) so you know we've got running prams…I sort of started doing a lot more when my daughter when [daughter] was young….like my wife was obviously still breast feeding and up during the night so….we'd get up I'd give*

[daughter] a bottle stick her in the pram and then go for a run um with her in the pram um and then with [son]…I sort of continued last year and then (.) I'm less inclined at the moment because they're er they're getting heavier and it's getting harder….I'm er not one of those er Strava warriors but I do get quite a few comments from when I run (.) run a lot slower and I have to highlight that I'm pushing two kids on those runs".

Steve ran with both of his children in a running buggy, which impacted the speed and duration of his runs, however, became a useful method for him to incorporate running with his children. It was clear that for the participants who continued to participate in physical activity in the postnatal period, it required careful planning and adaptations to minimise the impact of being away from their families.

3.2 "*I became a parent then I was the outlier*": The difficulty of team sports

This subtheme captured participants' reflections on participating in team sports during the postnatal period and how they managed to continue playing after children. Team sports were identified by the participants as difficult to participate in due to the inflexible set times and due to the substantial amount of time required to attend training and matches. This was contrasted against individual sports like running or cycling which require less time away from home. Paul illustrates this:

"*cricket takes about four hours to have a game maybe even longer it's not really compatible with family life (.) the same can be said for any kind of team sport really even football (.) you know by the time you've sort of (.) gone somewhere gone to the game got changed played the game got changed come back you're probably talking four hours away".*

Paul compares the greater amount of time team sports take to only an hour or two to exercise individually. Paul argues that team sports are not compatible with family life due to the amount of time they take to participate. Charles provides an example of how rugby training clashed with his children's evening routine. Charles: "*I think…certainly for rugby because it because of when it is (.) it's training is during when bath and bedtime and it just is you know there's no two ways around time you can get away with the meals but it's during bath and bedtime and matches are on a Saturday afternoon and that when they're up…"*. Charles highlights how both training and matches are set times that clash with his family's routines, making it much harder for him to participate as he was needed at home.

Therefore, for participants who wanted to continue playing team sports, they had to adapt their participation, which often meant dropping down teams. This meant playing at a lower standard, which reduced the amount of training and matches participants were expected to attend. This gave participants greater flexibility to play around their family's needs, as the next two data extracts illustrate:

> Steve: "*Ultimately I dropped down I wasn't playing rugby every Saturday (.) you know but it….went from me being Captain of the twos and playing once every so often to just playing twos once every so often and then just playing a bit of twos and then playing a bit of twos and a bit of vets you know it's just it's a natural progression….my participation dipped (.) since having children (.) but I wouldn't blame the children for that and wouldn't say that I've been forced into having a reduction it's what you do it's my choice".*

> Charles: "*during the first year of my elder one….I gave up first team rugby and I started just playing second team rugby cause I didn't have to commit to training so….I stopped going to the formal training sessions quite as much I would probably go to (.) maybe one in every four whereas before I was going to at least three out of four before that and then….when my younger one then in that first year I stopped playing that level of senior rugby at all I only starting playing vets and they only play sort of five or six times a year anyway so so my (.) yeah with both my children my participation in rugby dropped off….that was the barrier I guess family time is not you know it's not time because I could find six hours a week if I wanted to exercise but the training times for rugby are set and there's no two ways you know that's when they are and so um (.) yeah you can't change that so I couldn't (.) I couldn't commit to those times….I suppose um and your standardised times isn't it it works for most people but there are always outliers and when I become a parent then I was the outlier*".

Steve calls his changing participation, from Captaining his team to just playing a few times a year in a veteran's team, a "*natural progression*". He emphasises how this is something he chose to do and not something he blames his children for. The fathers were keen to highlight how changing and reducing your participation is a social norm for fathers and something they were expected to do and not something they blamed their families for.

Charles also dropped from being a first-team player to playing in a veteran's team, which was only feasible as they played a few times a year. Charles illustrates how time was not his main barrier as

he could have found time in his schedule, but the inflexible set times for training and matches in team sports. These were times that most members could attend, which meant that he became an '*outlier*'. The use of the word outlier hints at how isolating being a father can feel in a team when they are the only member who cannot regularly attend training and matches. Charles coped with this by taking up individual sports like running and cycling, to give him more control over his schedule and stopped playing rugby apart from a few times a year. This subtheme highlights why many fathers stop playing team sports after having children. This may be something that sports clubs could investigate to provide ways to increase the retention of fathers with young families by providing more understanding and flexible participation.

3.3 "*Everything just carries on without you*": The loss of social support

This subtheme captured participants' reflections on the consequences of adapting their participation and physical activity routines. As discussed in the previous subtheme, adapting participation resulted in participants changing sports, dropping down teams or stopping participating in their usual group activities. This impacted participants' overall enjoyment of their sport, as Dinesh demonstrates:

> "*there was less of it….sometimes there's quite a nice build up to it….before it was like oh well I can leave the house a little bit earlier to go watch…another team play…or meet up with someone earlier but no it's actually you have to leave (.) as late as possible time……so it's less of it it's less focused on sports and yeah you have to be adaptable around it….then sometimes I don't go for the lunches afterwards because I'm going home instead because it's you know you want to have dinner with the kids….things like that it's a quick in and out sort of thing"*

Dinesh illustrates how after children his overall experience playing hockey was reduced, with fewer opportunities to socialise with his team. To minimise his time away from his family, Dinesh stopped socialising before and after matches, which left him feeling like participating became a "*quick in and out sort of thing"*. The loss of social support was something participants highlighted as a negative consequence of changing their participation. Many of the participants used sport and exercise as a way to socialise before having children. However, when they stopped participating, the resultant loss of social support was a difficult experience for the fathers. Nathan reflected: "*So (.) for those who …. I was only friends with because I socialised with them I pretty much haven't seen since*".

Nathan shared that he missed the '*banter*' and the social element of hockey, however, spending time with his family compensated for this loss. In the next two data extracts, Paul and James illustrate the difficulty of their losing their social support:

> Paul: *"being unable to go and sort of join your friends for cycle rides or for runs and things (.) um is quite challenging….because after a while you sort of stop getting invited to things….it can be quite difficult to come back into it and back into the fold (.) but also when you do start going back on bike rides in particular your fitness is just completely ruined so it's very difficult to keep up (.) with your friends you know"*

> James: *"cause you just don't see them (.) um (.) they're all very nice and you know I I still speak to them all the time on social media and things (.) but er (.) yeah cause it is odd cause (.) just like everything carries on you know (.) same as if you just didn't (.) if you just stopped going out with your friends everything just carries on without you (.) [laughs]"*

Paul highlights how he stopped getting invited to bike rides when he reduced his participation in the postnatal period. He also highlights how it was difficult to re-join his cycling group when he was able to return due to his loss of fitness. A sense of loss was also demonstrated by James who found his decreased participation impacted his relationship with his teammates, as he felt like they carried on without him.

The change in participation also impacted participants' social standing in their sports clubs and teams, as the next two extracts illustrate:

> Steve: *"when you do come back or when you do speak up at time people can be like you know who are you and why are you speaking up cause….they've not necessarily got the background of (.) the fact that you know I started playing for the club when I was four….that I've got heavy involvement in the club…..I'm not as big a part of the club as I was obviously but I'm still a part of that club and I've still got an identity within it (.) um I think (.) I hope [chuckles]"*

> Charles: "*I spent about ten years in the first team and….had (.) some really close friends you know it's amazing how quickly the face of the team changes and you don't feel part of it anymore um and yeah I felt that straight away moving into the second team meant that I (.) I*

had a different social circle from the first team….very quickly…..there were a few players that just didn't know me didn't know who I was and a coach as well….at one of the few training sessions I turned up and there was a new coach and he asked me my name and I was like I'd played here….for thirteen years and I was I was almost embarrassed to tell him (.) um and so yeah so that that totally changed (.) I mean it didn't stop me from going….but certainly that was a real er eye-opener kick in the teeth summin' like that really…. I suppose it changed my status I guess my social status at the club"

Steve and Charles demonstrate the difficulty they had when returning to their sports team, finding their position and status in the club altered in their absence. This impacted their relationship with their teammates and their behaviour as Steve illustrates by being more hesitant to speak up during matches. Charles also provides an example of having to introduce himself to a new coach, despite playing in his club for thirteen years and the embarrassment this caused him. Both the loss of social support and changed position in the club is something the participants had to navigate during the postnatal period and upon their return to participating in more regular physical activity.

Social support can be defined as the interpersonal resources accessed and mobilized when dealing with the everyday stresses of life, which can act as a buffer to protect individuals from adverse effects, enhancing their ability to cope (Gao, Chan, & Mao, 2009). A lack of social support has long been found as an important factor in developing maternal PND (Nakamura, Melchior & Van der Waerden, 2019; Zhang & Jin, 2016). However, research has also confirmed that a lack of social support can be a predictor of PND in fathers as well (Ansari *et al.*, 2021; Mao, Zhu, & Su, 2011; Gao *et al.*, 2009). This suggests the participants' reduced participation in physical activity, and their subsequent loss of social support may have a wider impact on their wellbeing than previously thought. This may be something sports clubs could be more aware of to support fathers in the postnatal period and to help facilitate their return to sport.

Theme 4: "*It's not where the focus is*": Fathers' wellbeing as secondary to mothers'

This final theme captured participants reflections on the sources of support they had in the postnatal period and the barriers they faced when seeking support. The first subtheme explores how participants felt pressure to support their partners, to '*step up'* and act as '*providers'* for their families. This meant the fathers were not focusing on themselves and felt that their wellbeing was secondary to their partners. Participants also felt unentitled to support, believing the limited support

should focus on mothers. Many of the participants were also unaware that fathers could develop PND, making it harder for the fathers to recognise their mental health needs and access support. The second subtheme explores how fathers felt excluded and invisible to health care professionals and support services, seeing them as focused on mothers. The fathers also highlight how sources of support available for mothers, were not something they could access as fathers. In line with previous research, this theme highlights the great lack of tailored support available for fathers (O'Brien *et al.*, 2017).

4.1 "*We need to be rock solid*": Fathers' focus on their partners' wellbeing

This subtheme was developed through participants' discussion of the sources of support they had during the postnatal period and the varied pressures they felt to '*step up'* and focus on supporting their partners. It seemed to be explicitly and implicitly emphasised to participants that their role during the pregnancy and postnatal period was to focus on supporting the mother and to act as the provider. Many of the participants, therefore, felt their wellbeing was secondary to their partners' and did not consider themselves a priority. This seemed to make it harder for fathers to feel entitled to support as they acknowledged the greater physical and mental changes their partners were going through. Participants subsequently did not focus on their own emotional needs as they felt that their partners needed more emotional support, as demonstrated in the next three data extracts:

> Paul: "*there isn't really much of a role for the father other than to support the mother….everything is geared up towards mother"*.
>
> Daniel: *"My role was to support her (.) more (.) especially in these first few months….my main role was to make sure she was okay so you know cooking all the dinners making the keeping the house tidy (.) and just giving her a break when she needed it"*
>
> Nathan: "*I found myself er welded to the house anything and everything either baby or mother needed I was going to be the one who provided and I think for fathers in particular that role of provider is (.) kind of (.) more important than many would think because….for those who….Breast-feed their kids there's a situation where the fathers almost feel they don't have role of play in keeping the child healthy (.) because it's all on the Mum….I think there's a lot of emphasis on the Dad to kind of (.) step up a bit more in other aspects so you*

know making sure that the house is er tidy as it can be…you know creating an environment for the mother and daughter (.) as relaxing as it can be cause it's stressful"

All three participants seemed to suggest their role as fathers during the initial months of the postnatal period was to support their partners, protecting the mothers' wellbeing. This seems to position the father's role as secondary, focused on supporting their partners. As Nathan highlights, some fathers feel they lack a clear role when their partners are breastfeeding and so become involved by providing emotional support or instrumental support through taking care of household tasks like cooking and cleaning as Daniel describes (Rempel, Rempel, & Moore, 2017). Fathers have also been found to focus on alleviating stressors so that their partners could breastfeed successfully to provide a peaceful environment (Rempel *et al.*, 2017).

Fathers have consistently been found to not consider themselves a priority and feel that their wellbeing is secondary to their partners (Eddy *et al.*, 2019; Darwin *et al.*, 2017; Shorey, Dennis, Bridge, Chong & Holroyd *et al*., 2017). First-time fathers in Singapore felt their partners needed more emotional support and so did not focus on their own emotional needs (Shorey *et al.*, 2017). Fathers emphasise the need to support their partner and protect their partnership as central to navigating fatherhood (Darwin *et al.*, 2017).

However, this feeling seemed to make it difficult for participants to seek support or feel entitled to any support. Participants seemed to feel guilty asking for support, as they recognised that their partners were going through greater changes and so emphasised how the focus and support 'should' be on the mothers. Luke provides an example of this:

"I didn't really feel like anybody was looking out for me but I also didn't really feel like I needed to be looked out for….you know I wasn't giving birth um I wasn't carrying a human being I wasn't being forced to give up my career you know there's lots of stuff that (.) doesn't that does happen to mum that doesn't happen to Dad so it didn't really feel like I was missing that [support]".

Luke suggests the greater changes mothers face in the postnatal period, necessitates greater focus and support. He states that no one was looking out for him but justifies it by listing the many changes that mothers go through which fathers do not. This echoes previous qualitative research which interviewed nineteen fathers between five and ten months during the postnatal period (Darwin *et al.*, 2017). They found the fathers experienced psychological stress after the birth of their

child, however, focused on their wives' needs, and questioned whether their feelings were legitimate (Darwin *et al.*, 2017).

In this study, this belief seemed to make it very difficult for participants to suggest that they needed support. During the interviews, participants emphasised how difficult it was for their partners, before hesitantly or apologetically stating that fathers also needed support:

> Nathan: "*it is mentally very very taxing particularly for the mother….and then from the from the Dad's perspective its you're not just trying to maintain your own mental health but trying to support your wife's as well"*

> Tony: "*the attention should…be on the women….when you have babies…your body goes through a lot of changes you know….but nowadays in the modern world that we live in…the father is no different than the mother…but I think there should be a lot of focus…..on women because…you know are amazing and….work and you look after the baby and you have to breastfeed and you have to…get the baby out you know sometimes through caesarean and it's just a lot but I think you know the fathers do go through a lot you know emotionally and support their wives and stuff but (.) there's just an expectation that we need to be rock solid and be able to deal with it"*

Nathan highlights how difficult the postnatal period is for mothers before emphasising the difficulty fathers experience when supporting their partners and themselves. Tony's weaving narrative of the difficulty mothers' experience whilst also trying to emphasise how fathers also *'go through a lot'*, highlights how fathers can feel less entitled to the limited support available. Fathers have been found to live up to traditional male stereotypes around being strong and suppressing negative emotions during this time (Eddy *et al.*, 2019). This had the consequence of fathers believing that their feelings were not valid or important and further suppressing their feelings (Eddy *et al.*, 2019). A systematic review concluded that fathers had a more difficult time asking for support from significant others or professionals than mothers (Holopainen & Hakulinen, 2019). Fathers' feeling of illegitimacy may be one barrier fathers experience when trying to access support (Holopainen & Hakulinen, 2019).

The possible negative consequence of this is that fathers will not recognise or acknowledge when their mental health deteriorates. This was highlighted as of the thirteen participants, only seven

participants knew that fathers could experience postnatal mental health problems. Participants mostly found out about paternal postnatal mental health problems through privately accessed National Childbirth Trust classes or online sources. However, these were difficult to find or '*throw away'* comments, as many of the participants had to source this information themselves. The next three data extracts demonstrate how fathers' wellbeing in the postnatal period was treated as lesser compared to the mothers':

> Charles: *"I think when we did the NCT classes….I think it was mentioned….it was more like it was in the fine print"*.

> Luke: *"Oh at NCT (.) I would have thought….it's also quite Mum focused but I think it probably was mentioned there…..not a lot to be fair not a lot you know everyone's sooo like it's so hammered into you to watch out for PND in the in mothers that it wasn't really something that came up about dads"*

> James: *"I knew about it cause I read about it….online somewhere probably an article on Facebook or something….but then you're you have just a lot of people saying that it's rubbish (.) um (.) not true cause nothing (.) biologically happens to you"*

Charles use of the words *'fine print'* hints at how fathers' wellbeing is minimised and considered secondary to the mothers. Luke provides another example of how watching out for maternal PND is '*hammered'* into parents, whilst in contrast fathers' wellbeing was barely mentioned. James highlights how negative attitudes still exist around fathers' mental health associated with traditional understandings that PND is gender-specific (Pedersen *et al.*, 2021). This is in line with current research as there remains a great lack of understanding and education about fathers' postnatal mental health. Research has found that maternal PND is still more easily identified than paternal PND by male and female participants (Swami, Barron, Smith, & Furnham, 2019). Recent research by Pedersen *et al.* (2021) interviewed eight Danish fathers who had experienced PND. They found that three of the fathers believed only women could develop PND and five of the fathers had only heard about PND in relation to maternal PND (Pedersen *et al.*, 2021). Additionally, three of the fathers after receiving a diagnosis of paternal PND found it difficult to access any information as most of the information available is directed at mothers (Pedersen *et al.*, 2021). Believing that PND is a gender-specific condition might prevent fathers from recognising its symptoms and thus pose a barrier to seeking help (Pedersen *et al.*, 2021).

This subtheme highlights how fathers still face many barriers when trying to access support. Fathers' attitudes towards their mental health and their lack of knowledge about paternal mental health can influence their help-seeking behaviour. There remains a lack of awareness and information about paternal PND in society (Pedersen *et al.*, 2021). This could affect fathers' ability to recognize, cope and manage PND and is potentially one of the greatest barriers in the process of help-seeking (Pedersen *et al.*, 2021). These findings support previous research calling for better education and information about paternal PND as one of the key elements in future interventions directed towards new parents and parents-to-be (Pedersen *et al.*, 2021).

4.2 "*There's literally nothing for the father*": Exclusion from support

This subtheme was developed through participants' reflections on lacking support during the postnatal period and how they felt excluded as fathers. The fathers' lack of priority for their wellbeing explored in the previous subtheme was mirrored by their experiences of health care professionals and the support systems around them. Participants highlighted the lack of support fathers received and how no one checks on them.

When the participants were asked if their wellbeing was asked about by a health professional the participants responded incredulously:

> Dinesh: *"Was I ever asked? No (.) No….No definitely not"*
>
> Tony: "*Errr probably not no what me being asked?....No no nah [laughs] No I think it's just it's just er (.) taken as granted I think…it's not it's not where the focus is right"*
>
> Nathan: "*No…? [chuckles] …. um (.) I yeah I'll be honest my focus wasn't really on me*"

The participants highlight how the focus is on mothers, not fathers, as their wellbeing is '*taken for granted'*. Similarly, participants emphasise how they were not expecting to be checked on as James demonstrates: *"you know it is true that no one (.) no one is really interested (.) in how you are….I hadn't really expected anything (.) maybe if I'd asked for it might have been but (.) I dunno it I was never under the impression that there was anything on offer"*. James demonstrates how he was not aware of any support for fathers and did not expect to be offered any.

This is supported by extensive previous research finding that fathers often feel excluded, insignificant, forgotten, and invisible by society, health care professionals and their partners (Eddy *et al.*, 2019; Darwin *et al.*, 2017; Edhborg *et al.,* 2016). Fathers have expressed feelings of being excluded and not viewed by society as having the same value as mothers (Edhborg *et al.*, 2016). Fathers have also reported feeling forgotten during this time by the health care system and lacking adequate support to meet the challenges of new fatherhood in the postnatal period (Eddy *et al.*, 2019; Edhborg *et al.*, 2016). Darwin *et al.* (2017) found that fathers felt excluded by maternity services however, as reported in the previous subtheme, questioned their entitlement to support, believing that the pressured services should focus on the mothers.

Fathers have called for health care professionals to have a greater understanding of PND, to avoid missing the symptoms of maternal and paternal PND (Letourneau *et al.*, 2011). Fathers wanted to increase public awareness of paternal PND to promote earlier recognition of symptoms and encourage individuals and families experiencing mental health problems to seek support and treatment (Letourneau *et al.*, 2011). However, fathers have also raised the problem of the lack of tailored support available for men (Darwin *et al.,* 2017; O'Brien *et al.*, 2017).

In this study participants felt that support for fathers was lacking:

> Luke: "*there is also a big old gap for for what there is for men"*
>
> Paul: "*There wasn't really a lot of support (.) at all really…..no I suppose….being a bit blunt about it support for the father is kind of lacking*"
>
> Charles: "*No def- definitely not….I suppose it was what I expected…..I think…a lot of that support goes the way of the mother I think doesn't it that how is you know how is she and the making sure that she is supported I suppose*"
>
> Scott: *"I mean there wasn't really anything….external…cause obviously there's stuff for…basically for [son] and [wife] but there's nothing really for (.) fathers….you kind of get ignored as the father….[wife]'s had quite….a lot of PND (.) checks but again there's was nothing really….thinking about it….you kind of get isolated actually….you actually are kind of isolated as fathers"*

Participants highlighted how they did not encounter health professionals which limited their opportunities for welfare checks, as Nick demonstrates: *"It's one of those…things where you're not here when the mother's being asked but not the fathers"*. Even when the fathers were present during these appointments, they emphasised how they felt side-lined and invisible. This has also been highlighted in previous research by Darwin *et al.* (2017) and Shorey *et al.* (2017) finding fathers felt unsupported by health care professionals, whom they thought considered them as bystanders.

The next two data extracts demonstrate participants' experiences of being side-lined by health professionals:

> Eric: "*No cause I didn't really come in contact with the professionals (.) I think we had…one visit when I happened to be there (.) um and that was really all around kind of like [son]'s weight and [son]…I think it was a little bit more focused on the mother I don't think like you know there wasn't really a section where it was like and how's dad?"*

> Paul: "*all through the scans and all the rest of it (.) er of course the birth procedure as well….there's a lot of focus on the mother everything is geared up to the mother (.) and I think it did occur to me I did make this observation a while ago thinking well it's all focused on the mother and probably quite rightly so but (.) there's literally nothing for the father (.) you know the midwives or other people you don't even get (.) even looked at you know it's like 'just sit over there in the corner'….it's all geared towards the mother really*"

Participants were also unsure of where to go for support, with their GP overwhelming identified as where they would go to first, as Charles demonstrates: *"If my mental health had started declining….I would have gone to my GP first I think because that's (.) that's all I can think of whereas I dunno if my wife might have gone to a um to a sort of midwife or something like that um like a pregnancy service or a young mothers service there isn't a young fathers service to go to I guess"*. For Charles, the only option would have been to go to his GP, whereas he identifies multiple avenues his wife could have sought relevant support from.

When reflecting on the support their partners accessed the fathers gave numerous examples including midwives, health care professionals, NCT groups, online communities and baby and toddler groups. However, these were often places fathers could not access or were excluded from, as Steve highlights:

> *"I don't think there is any support (.) out there that is (.) that is well known or (.) well-advertised you know…if I was if I was struggling um (.) I would turn to my team mates um or my or my support network…the countless numbers of Facebook groups or (.) communities or whatever that you're apart of I don't think I've ever seen a (.) you know a Dad's group….there isn't that (.) I don't think there is that (.) that (.) network out there"*

Steve highlights how even if support was available for fathers, it was often not well known. Steve struggled to find online communities for fathers, suggesting the support network for fathers is lacking compared to ones available for mothers. Participants also frequently did not meet other fathers, as Eric found: "*[wife] maybe got more of her support was….these baby and toddler groups….that was how she kind of made her baby friends…but I mean for me….I never really met the blokes I never really met (.) you know the Dads"*. This meant the fathers often missed out on meeting other fathers and building new support networks of people going through similar experiences.

Participants also highlighted how there were few groups available for fathers:

> James: "*it would be nice to have (.) events to involve the kids with….it would be cool if I could just….go for a bike ride with him on the back or something (.) with some other dads and their kids but it's not really a thing is it? there's lots of like mummy day classes and playgroups and things but it's not really something you're expected to do and I remember I took him to…..baby sensory……and um I was just viewed with complete (.) suspicion and contempt whilst I was there (.) I was really uncomfortable….they looked at me like I had two heads when I walked in…… they made me feel really uncomfortable"*

James implies there are not the same opportunities for fathers to join in with groups or classes. However, if they do, fathers often feel excluded and ostracised as they are not expected to attend. Baby and toddler groups and soft play centres were particularly identified by participants as somewhere where they were made to feel excluded and unwelcome.

The implications of this subtheme and the findings of previous research suggest that fathers do not feel that there is support available for them. Fathers do not feel entitled to support or expect support to be offered, believing the limited support available should focus on mothers (Darwin *et al.*, 2017). Additionally, avenues of support and support groups available for mothers are not available for fathers or female-dominated making access for fathers more difficult. This is significant as lacking

information about where to access support or what services are available can be a major barrier for fathers' help-seeking (Giallo *et al.*, 2020; Letourneau *et al.*, 2011). This highlights the great need to improve access to support for fathers experiencing postnatal mental health problems and to provide more tailored support for fathers.

4. Summary and Conclusion

4.1 Summary of Findings

This research aimed to explore fathers' experiences of physical activity during the postnatal period, their particular barriers and support needs when exercising and whether physical activity could be a suitable source of support. This has been achieved by exploring fathers' experiences in the postnatal period through qualitative interviews, providing rich and detailed accounts. The fathers' spoke about the postnatal period as something to endure stoically, to survive, as they all expected it to be a very difficult period. However, the fathers emphasised how it had been more difficult for their partners' physically and mentally and therefore in comparison did not consider their wellbeing a priority.

At the core of this study is how fathers negotiate their involvement in sport when faced with the varied demands of fatherhood (Fletcher, 2020). Exploring fathers' experiences led to the development of four themes. The first theme explored the main barrier to physical activity as time and their experiences of losing time for themselves. Participants had to navigate the new responsibilities and expectations on them as fathers with intensified time constraints, meaning exercise was the *'the first thing to go'* (James). The fathers emphasised the importance of balance and fairness in sharing time with their partners, reflecting more egalitarian parenting ideals (Fletcher, 2020). The final subtheme within this theme explored how deciding to exercise became a 'moral' decision, reflecting their values as a father, with a clear 'correct' decision to make by staying at home. Participants described their feelings of guilt and selfishness when leaving, despite the many benefits physical activity brings them. Highlighting guilt as another barrier to exercise. The second theme explored how participants' identities changed after becoming fathers and how this impacted their relationship with exercise. As found in previous research, the fathers emphasised how their world changed, along with their identities from men to fathers, with their family becoming their main priority (Torche & Rauf, 2021). This had a complex impact on their relationship with exercise, as they acknowledged the importance of it for their wellbeing, however, due to their new identities, it became unimportant and '*just another thing to do*' (Tony).

The third theme explored how the participants adapted their exercise routines to be able to continue participating after children. For some fathers, this meant including their children on runs or bike rides or altering the timings of their activities to avoid key times during their children's morning and evening routines. Team sports were identified as something that became very difficult after

children, due to the inflexibility of timings and the length of time required for training or matches. This led to many of the fathers dropping down teams or changing sports entirely. These adaptations and changes resulted in a great loss of social support for the fathers and reduced their overall participation. Exercise for many of them became a '*quick in and out sort of thing*' (Dinesh). Participants missed out on seeing friends, which is significant, as a loss of social support is a predictor of postnatal depression in fathers (Nakamura *et al.*, 2019; Zhang & Jin, 2016). This suggests the reduction in participants' participation and their subsequent loss of social support may have a wider impact on their wellbeing than previously thought.

The final theme, "*It's not where the focus is*: Fathers' wellbeing as secondary to mothers'" captured how participants' felt their wellbeing was not a priority. This seemed to make it more difficult for the fathers to feel entitled to support, believing the limited support available should focus on mothers. Many of the participants were unaware that fathers could develop PND, making it harder for them to recognise their mental health and access support. The fathers' also felt excluded and invisible to health care professionals and support services, seeing them as focused solely on mothers. Participants also highlighted the disparity in the support available to them. In line with previous research, this theme highlights the great lack of tailored support available for fathers (O'Brien *et al.*, 2017). This theme also highlights the stigma around fathers' mental health and the need to raise awareness of paternal postnatal mental health and provide tailored support (Darwin *et al.,* 2017; O'Brien *et al.*, 2017). These findings contribute to an increased understanding of fathers' needs during the postnatal period to inform healthcare practise and policy, as well as the potential role of psychologists in shaping these services. These implications will first be explored more fully before discussing the limitations of this study and the possible avenues for future research.

4.2 Implications for practice

The findings of this study support previous research that suggests the postnatal period can be a difficult adjustment for fathers, who often feel forgotten and excluded by the healthcare systems focused on mothers (Rominov *et al.*, 2018; O'Brien *et al.*, 2017). By exploring sport and exercise as a potential source of support this study contributes to the limited knowledge of fathers' experiences in the postnatal period and their support needs, which can contribute to healthcare policy, practice and therapeutic practice.

Implications for Sporting bodies

Sport and exercise may be an appropriate source of support for fathers. However, it is clear from this study that fathers face many challenges and obstacles when exercising in the postnatal period. Team sports were particularly highlighted as something difficult to participate in, due to inflexible times and the large amount of time required to attend training and matches. This resulted in many of the fathers dropping down teams and losing their social position in the club, which is important as a lack of social support is a predictor of paternal PND (Ansari *et al.*, 2021). This may be something that sports clubs can try to address to facilitate the retention of fathers, by offering fathers more flexible times for training or reducing expectations of their attendance during the initial months of the postnatal period. Additionally, many sports clubs now have an appointed social officer or mental health officer to support their members, and this could be one way of improving awareness of paternal postnatal mental health problems and trying to combat the stigma surrounding men's mental health within sports clubs.

In the future sports organisations may play an integral role in promoting mental health and increasing physical activity among people at risk of, or experiencing mental health problems (Curran *et al.,* 2017). Many novel initiatives in the UK have been established to directly address and support men's and fathers' mental health. For example, mental health charities like Mind's "Get Set to Go" programme helps people with mental health problems overcome barriers when trying to increase their physical activity (MIND, 2021). To date, more than 3,500 people have been supported to take part in specially designed physical activity projects (MIND, 2021). Additionally, the Sands United football club was co-founded in 2019 by two fathers who lost children due to stillbirth (SAND, 2021). The football club now has over thirty teams competing across the UK and remains connected to the Stillbirth and Neonatal Death Charity (SANDS) as a unique way for fathers and other bereaved family members to come together through a shared love of sport to find a support network where they can talk about their grief (SAND, 2021).

Another example is 'DADSvDADS' (2021) a football league based around the UK that allows fathers to attend weekly games, all year round, connecting with other fathers to keep healthy. Their tagline is "Play Football Around Busy Lives" and specifically targets busy fathers to encourage them to keep playing (DADSvDADS, 2021). Similarly, 'Team Talk' was launched in 2019 by Derby County Community Trust aimed to support men who suffer from mental health problems across the city, using a football club as a hub to offer a safe, secure space where men can talk about their feelings

with other men (Team Talk, 2019). The project seeks to combat the stigma associated with mental health problems by harnessing the power of football (Team Talk, 2019). Professional football clubs are also now being used as settings for the delivery of interventions to promote mental health reflecting the growing interest in using sports clubs as vehicles for health promotion (Curran *et al.*, 2017).

Organisations and projects like these examples may be one source of support for men and fathers which can address traditional barriers and encourage men to seek support for their mental health. However, to capitalise on these opportunities, funding providers and commissioners must provide appropriate resources to clubs, to encourage the effective delivery and the incorporation of psychological principles into the design (Thomas *et al*., 2020; Curran *et al.*, 2017). Promoting mental health in community settings through ERS, sports clubs and teams may play an integral role in the long-term sustainability of the NHS and mental health treatment (Curran *et al.,* 2017; Bickerdike *et al.*, 2017).

Implications for Healthcare Practitioners & Policy Development

In this study, fathers' interactions with health professionals and maternity services were infrequent. This was consistent with previous research finding that fathers do not utilise maternity services and feel excluded as parents, seeing them as for mothers (Rominov *et al.*, 2018; Edhborg *et al.*, 2016). However, healthcare practitioners and maternity services have an important part to play in engaging fathers and providing relevant and accessible information to combat the stigma and lack of awareness of paternal postnatal mental health problems in society. This is particularly important as more fathers are likely to be assessed and referred to perinatal services under the NHS's (2019) new guidelines to assess partners of mothers experiencing postnatal mental health problems. Health professionals need to be more aware of fathers' mental health and support needs and how their expression of symptoms may differ from mothers.

There also needs to be a great improvement in the inclusion of fathers in perinatal services. Services and policymakers need to consider how fathers want to be supported and what services they would like to access, tailoring the services offered for this population (Baldwin, 2020). This could result in providing novel sources of support such as support groups or physical activity interventions which recognise and consider fathers' mental health needs. This is likely to have a positive impact on engagement and encourage help-seeking behaviour by fathers during this period. Given the long

wait to access psychotherapeutic interventions in maternity services, it would be helpful for health professionals working in these settings to improve their awareness of community services and alternative sources of support for fathers (Llewellyn, Cousins & Tyson, 2020). Health professionals should be encouraged to engage in outreach initiatives that could support fathers such as local support groups and sport and exercise interventions to ensure that this population does not continue to be forgotten (Eddy *et al.*, 2019).

Implications for Counselling Psychologists

There are several implications for therapeutic practice and Counselling Psychologists working with this population. Firstly, to be aware of the great lack of knowledge about paternal postnatal mental health problems in society and by fathers themselves. Many fathers remain unaware that they can develop paternal postnatal mental health problems and will not seek support. The stigma associated with men's mental health also remains prevalent in this population and this may be a time when fathers do not acknowledge their own mental health or needs. This is particularly important due to the increasing number of fathers referred to NHS services.

Within psychological services, Counselling Psychologists can act as advocates for this population and ensure they are offered tailored support. This could be in a variety of ways such as psychoeducation, destigmatising paternal postnatal mental health in therapeutic work, or contributing to novel interventions that support fathers' mental health. Men have been found to prefer collaborative, short-term or group-based treatment that involves elements such as psychoeducation, problem-solving tasks, signposting, and content that builds on positive masculine traits (Sagar-Ouriaghli *et al.,* 2019; Seidler *et al.,* 2016). It is essential to educate health professionals working with this population about differences in how fathers' symptoms may present and ways to tailor support to their unique needs. Counselling Psychologists can also promote the importance of physical activity for wellbeing and the importance of mind-body awareness within practice (Owen, 2010). Using exercise as a therapeutic modality to improve traditional psychological services maybe a future opportunity for Counselling Psychologists to improve wellbeing (Kvam *et al.*, 2016).

At a wider level, Counselling Psychologists can advocate for this population by advising and contributing to initiatives and physical activity interventions, to promote a focus on wellbeing and encourage multidisciplinary collaboration within the mental health care system (Woolfe *et al.*, 2010). This could include collaborating with social prescribing programmes, primary care, health

professionals, sports clubs, leisure centres or charities to promote the importance of physical activity for wellbeing and mental health (Owen, 2010). This fits well with the values of counselling psychology, particularly the commitment to social justice not just at an individual but also at a systemic level (Kasket, 2017). Strengthening the connection between physical activity and health systems is necessary to improve levels of physical activity, however, this is only possible by improving access and providing appropriate pathways (Oliver *et al.*, 2021). It is hoped this research will support Counselling Psychologists to expand their conceptualisations of what supporting this population may look like and ways interventions can be tailored to suit fathers' unique needs.

4.3 Limitations and Opportunities for Future Research

Homogenous Sample

The sample of men who participated in this research was predominantly white British, heterosexual, married, middle-class, and with an average age of thirty-six. Therefore, there was a limited representation of minority groups and experiences of fathers in different circumstances such as those separated, non-biological fathers or those with joint or partial custody agreements. Non-English speaking fathers were also excluded from this study. The findings and conclusions therefore cannot be assumed to transfer over to other groups of fathers differing in culture, ethnicity, socioeconomic status or age. Future research is needed to consider how to engage more participants from socially disadvantaged and marginalised sectors of society.

This is important as different identities can impact parenting beliefs, intentions and behaviours. One example of this is that all participants in this study, bar one who identified as having no class, identified themselves as middle-class. Research has previously found differences in father involvement between classes, with parents' education level positively associated with childcare time (Bonke & Esping-Anderson, 2011). Craig *et al*. (2014) argue the normative view amongst middle classes is that young children need constant and sustained parental attention. It is possible that the sample used in this study may be more focused on childcare than other populations and therefore experienced more time pressure. However, the vast array of previous research has found fathers a time-poor population and time pressures as a major barrier to exercise (Henz, 2019; Bellows-Riecken & Rhodes, 2008).

Additionally, this study included any fathers with a child or children between the ages of one and five, comparing first-time fathers with fathers of two and three children. Efforts were made to only

recruit fathers from this time frame to increase the likelihood of participants having similar experiences and being offered the same support options had they sought it. However, as this was a retrospective study it may be that the fathers' accounts of their experiences differed due to different time frames of recollection and the differing age of their children. For example, one father had children aged ten and five years old, whilst another had a single child who had just turned one. Historical recollections may have changed or faded impacting participants' accounts (Kelly, Thelwell, Barker & Harwood, 2018). Thus, the preciseness in the recall of experiences may have differed, raising the potential for memory bias (Kelly *et al.*, 2018). One way for future research to mitigate this is to interview fathers all at the same time point in their child's lives.

Research has also suggested that first-time fathers are the most vulnerable when adjusting to fatherhood in the postnatal period (Baldwin, 2015). It may be that the first-fathers in this study had different levels of support needs compared to fathers of multiple children, which may pose a different adjustment in itself. There remains a great gap in the research comparing the support needs of first-time fathers and fathers of multiple children, and further research is needed to explore these differences in experiences and potential differing support needs.

Recruitment Challenges

Recruitment for this study was very challenging and necessitated adjusting methods of data collection partway through to suit the target population. It is still not clear why the participants did not favour the online survey. Online surveys have been used successfully in previous research with male populations to explore sensitive topics like their mental health (Braun & Clarke, 2013). Additionally, my initial recruitment strategy of advertising the study on social media charities aimed at supporting men's and fathers' mental health yielded no results. Only through advertising the study on sports clubs' social media pages did I manage to recruit participants. This resulted in participants who were very passionate about sport and exercise, which could have more negatively impacted their experiences of reducing their participation. This could have impacted the findings of this study if the participants were not a representative sample, although importantly it is not the aim of qualitative research to be generalizable (Braun & Clarke, 2013). It is important that future research examines different methods of data collection and ways to increase men and fathers' participation in research, to improve our current knowledge about their mental health and support needs.

Men's Mental Health, Stigma & Research challenges

The difficulties in recruitment were likely due to the stigma surrounding men's mental health which remains prevalent in society (Chatmon, 2020). In this study, stoicism was apparent in the participants' responses and many participants seemed more comfortable describing their mental health by talking about stress, anger or frustration, which has been found in previous research (Eddy *et al.*, 2019; Darwin *et al.*, 2017). The participants viewed the postnatal period as something to '*get through'* without acknowledging the impact it had on their wellbeing, as the next few data extracts demonstrate:

> Dinesh: *"you just get on with it (.) um (.) because you have to*"
>
> Leo: "*you've just gotta get through it*"
>
> Tony: "*So you know you just pick yourself up and you just keep on moving forwards and (.) you know give yourself no options to just let yourself go down….you don't go down*"
>
> Steve: *"I think it's even still now (.) even still now there's an awful lot of just (.) 'suck it up don't you' it's how bad is bad?"*
>
> James: *"I mean sort of like there isn't an option to be (.) just sit here and feel sorry for myself"*
>
> Nathan: "*I think at the time recognising that I was (.) recognising that I needed support would have been half the battle because (.) I would have probably been you know I can I can do this I'm mentally I think of myself as mentally strong I don't think I've got any problems whatsoever I I think actually (.) er for me back then being adult enough to open up and say I have a problem at all would have been a pretty massive first step*"

It is clear from the participants' accounts that many of them felt they had no option other than to cope and *'keep going'* during this period and did not acknowledge the impact on their wellbeing. Many of the participants were attracted to this study due to the sport and exercise element and consequently did not feel that their mental health was greatly impacted during the postnatal period. This may have impacted the data collected if the sample did not experience poor mental health. The

participants might have not been a representative sample of fathers and the study may have lacked an in-depth exploration of participants' wellbeing or experiences of poor mental health.

Despite the participants' assertions that their wellbeing was not impacted, it was clear from their responses that their wellbeing was significantly impacted. Participants described their mental health in terms consistent with symptoms of depression and anxiety, which was unacknowledged at the time. Half of the participants had no awareness that fathers could even experience paternal postnatal mental health problems. As found in previous research, the fathers in this study were also reluctant to express their support needs when they believed their partners' needs were more significant and did not want to detract from the limited support available (Darwin *et al.*, 2017). Together, these factors potentially made it harder for participants to acknowledge the impact of the postnatal period on their wellbeing and mental health. Whilst it was not the aim of this research to solely focus on fathers' experiences of postnatal depression, their reluctance to acknowledge the impact on their wellbeing might have impacted how they described their wellbeing and support needs. This raises a significant problem for research exploring fathers' mental health in the postnatal period. If fathers do not know about paternal postnatal mental health problems and struggle to recognise or acknowledge their own poor mental health, it may be much harder to research this population than previously thought.

Further Research Opportunities

Research into fathers' experiences, mental health and support needs in the postnatal period is still in its infancy. Paternal postnatal mental health has not yet been fully explored or understood and there is still not an assessment scale or short interview specifically designed for use with fathers (Sockol & Allred, 2018). It is clear to address this gap, further research is needed to widen our knowledge about fathers' experiences from different ages, classes, ethnic and cultural backgrounds and child-raising circumstances and their unique support needs. Further research is also needed to explore the lack of awareness surrounding fathers' mental health and ways to improve and promote fathers' recognition, awareness, knowledge and help-seeking behaviours in relation to paternal postnatal mental health (Eddy *et al*., 2019; Darwin *et al.*, 2017).

Given the prevalence of psychological distress among fathers and how fathers' experiences and needs may diverge from their partners', interventions for paternal postnatal mental health should consider their unique needs and urgently explore this area in further research. Initial research

suggests tailoring support to masculine ideals may make accessing support more acceptable to fathers (Seidler *et al.,* 2019; Mahalik *et al.,* 2012). However, further research is needed to explore this area and how paternal inequality within the healthcare system impacts fathers' help-seeking behaviour.

This research contributes to expanding this knowledge base by exploring one potential avenue of support, physical activity. Sport and exercise may be more acceptable to fathers' as a potential source of support due to its alignment with masculine norms and as a non-pathologising intervention (Levant & Wong, 2017; Powers *et al.*, 2015). There are multiple avenues for future research to explore in this area including; the efficacy of exercise interventions targeting fathers, ways to tailor ERS for fathers' needs, the differences in the benefit provided by individual compared to team sports, and ways for sporting bodies and sports teams to increase their retention of fathers.

4.4 Final Conclusions

The fathers in this study highlighted how physical activity can benefit wellbeing during a time of change and turmoil. Fatherhood is an important yet vulnerable time as many fathers' needs are unmet (Baldwin, 2015). The lack of awareness of paternal postnatal mental health and lack of support impact fathers' help-seeking behaviour and acknowledgement of their mental health needs (Pedersen *et al.*, 2021; Baldwin & Bick, 2019). Future research is needed to explore fathers' specific mental health needs and appropriate interventions to promote their psychological wellbeing (Sockol & Allred, 2018; Darwin *et al.*, 2017). Alternative, tailored sources of support like sport and exercise interventions may be more appropriate and well-received by populations like fathers who are considered hard to engage for a multitude of different factors. I hope that this study will contribute to our knowledge of fathers' experiences in the postnatal period and ways to promote wellbeing for this population. Finally, I hope it will promote the future role of Counselling Psychology as a way to bridge disciplines and encourage multidisciplinary collaboration in future research to promote wellbeing and mental health.

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6. Appendices

Appendix A – Participant Demographic Questionnaire

Appendix B – Recruitment Posters

Appendix C – Revised Interview Schedule

Appendix D – Participant Information Sheet on Qualtrics

Appendix E – Privacy Notice for the Interviews and Survey

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Appendix I – UWE Faculty Research Ethics Committee approval letter

Appendix J – Sample of Initial Coding

Appendix K – Example of coding

Appendix K – Example of coding

Appendix L – Initial Thematic Map

Appendix M - Final Thematic Map

Appendix N - Poster

Appendix O – Journal Article

Appendix A – Participant Demographic Questionnaire

Demographics

This research starts with some questions about you. This is to give me an idea about the kind of people who are participating in this research. I would be grateful if you could answer the following questions:

1. How old are you?

2. Do you have a child aged between one and under five?

   Yes ☐ If no, you are not eligible to participate in this study ☐

3. Do you have more than one child? If so what are their ages?

4. How do you describe your racial/ethnic background?

5. How would you describe your social class? (E.g. Working class, middle class, upper class, no class category)

6. How do you describe your sexuality?

7. What is your current relationship status?

   Single Partnered Civil Partnership Married Separated Divorced/Civil Partnership dissolved Other _____-

8. I am (please select all that apply):

   Full-time employed Part-time employed Full-time Student Part-time student Unemployed Carer Full-time father/Stay-at-home-father Other _____

9. If you work, what is your occupation?

Appendix B – Recruitment Posters

Original Poster

Are you a Father with a child aged between one and five?

Does sport or exercise play a role in your life?

Would you be willing to share your experiences of your wellbeing and mental health during the postnatal period, the first year of your child's life?

I am a Counselling Psychology student at the University of the West of England. For my doctoral research, I am exploring the **role of sport and exercise in fathers' postnatal mental health and wellbeing**. I am interested in this area because of the lack of research into fathers' experiences as well as the few support services available for fathers.

I am inviting people to share their experiences through an **online interview or survey.** If you are a **father with a child aged between one and five, who participates in any form of sport or exercise**, I would be interested in your experiences.

The **online interviews** are conducted via Skype or a telephone call, and should last no longer than forty-five minutes. If you are interested in sharing your experiences this way, please email me at: **samantha2.holley@live.uwe.ac.uk** for further information and to arrange a time convenient for you.

If you are interested in sharing your experiences via the **online survey** please copy and post the following link into your browser:

https://uwe.eu.qualtrics.com/jfe/form/SV_abq3je7LdAcoDFr

SCAN ME

For an online interview, please email me at:
samantha2.holley@live.uwe.ac.uk

To access the survey, copy and paste the following link:
https://uwe.eu.qualtrics.com/jfe/form/SV_abq3je7LdAcoDFr

Revised Poster

Appendix C – Revised Interview Schedule

Semi-Structured Interview Schedule

- Can you tell me something about yourself and your family?
    - What activities do you enjoy together?
    - How long have you been with your partner/wife?

- What sport or exercise do you participate in? How long have you participated in it for?
    - When did you start?
    - What level do you play at?
    - What role does it play in your life?

- What does sport and exercise mean to you in relation to your wellbeing?
    - And what about your psychological wellbeing or mental health?
    - Physical health?

The postnatal period is the first year after the birth of your child and research has found that this can be the most challenging period for fathers and have the greatest effect on their wellbeing, which includes your mental and physical health. During this time fathers are adjusting to their new role, well as navigating relationship changes, work & family commitments, changes to regular routine, sleeplessness, and time constraints, which can all affect wellbeing.

- What were your experiences of the postnatal period? (with your most recent child)
    - Did this change after the first few weeks? Months?
    - What was most difficult about it?
    - Did you have a different experience with your other children?

- Did you experience any changes in your wellbeing during the postnatal period?
    - Did it affect your psychological health? Physical health?
    - How did this impact your life? Relationships? Work? Social life?

- Can you tell me about your psychological wellbeing during the postnatal period?
    - Common experiences fathers report include anxiety, mood changes, lack of energy or motivation, relationship changes, appetite or sleep changes, what were your experiences?

- What was your participation in sport or exercise like during the postnatal period?
    - How did this affect your wellbeing or mental health?
    - Did your participation change or adapt?

- If the impact of your sport or exercise was helpful during the postnatal period, what specifically was helpful about it?
    - Social support?

- Were there any barriers to participating in sport or exercise after the birth of your child?

- What sources of support did you use during the postnatal period?
    - E.g. Friends, Family, GP, Midwife, Health visitor...
    - Where you ever asked about your wellbeing or health during this time?
    - Were you aware that fathers can experience postnatal mental health problems?

- If there was a support service for fathers involving sport or exercise, what would be important for it to include?
    - E.g. Group session or individual support, face-to-face/online support, structured/unstructured

- Would you have used a support service for fathers centered around sport and exercise?

- Is there anything else that you think is important for me to know about your experiences? Or anything that I haven't asked about?

Appendix D – Participant Information Sheet on Qualtrics

Fatherhood and Experiences of Sport and Exercise

Online Survey Participant Information Sheet

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please contact me if there is anything that is not clear, or if you would like more information.

Please read the following information carefully and if you would like more information contact me, at samantha2.holley@live.uwe.ac.uk. Alternatively, my research is supervised by Programme Director and Senior Lecturer, Zoe Thomas. If you have any further questions you can contact her at the Department of Health and Social Sciences, University of the West of England, Frenchay Campus, Coldharbour Lane, BS16 1QY, tel: 0117 32 83794, or email: Zoe2.Thomas@uwe.ac.uk

Who is the researcher and what is the research about?

Thank you for your interest in this study, my name is Samantha Holley and I am a Counselling Psychology student at the University of the West of England. For my doctoral research thesis, I am exploring men's personal experiences of fatherhood, mental health and the role of sport or exercise during the postnatal period. The postnatal period is the period of time from a child's birth until their first birthday. Fatherhood is a significant life event which can affect men's wellbeing and there is a growing concern over fathers' postnatal mental health, which so far has been overlooked by research and support services.

To explore this area, I will be collecting data using an online survey, which includes a range of questions about your experiences. I hope the results of this study will help increase understanding of father's experiences of fatherhood during this time and the role of sport and exercise.

If you agree to take part in this study you will be asked a series of questions about your experiences through an online questionnaire. The questions are open-ended so you can give as much or little information as you like, in your own words. If you feel able, it would be very helpful for my research if you can give as detailed answers as possible. There are no right answers, and you are expert as I am interested in the range of experiences people have experienced. The boxes will expand to provide as much space you need. In the beginning, there will be some short questions about your demographic information. This is to give me some idea of the range of people taking part in the study.

Who can take part in the study?

If you are aged 18 or over, participate in any sport or exercise, and have had a child who is aged between one and five, I would be interested to hear about your experiences.
The survey will ask a range of questions about your experiences; including your mental health and wellbeing during the postnatal period. The purpose is to gain an understanding of the pressures and difficulties during this time, however, if you feel discussing your experiences would be too distressing please do not participate in this study further.

Will I be identifiable?

All of your answers will be anonymous. You will be asked to give information such as your age, ethnicity and relationship status, but no identifiable information such as your name. It is possible I may quote some of your anonymised answers in my research thesis, presentations or publications.

How long will it take to participate?

Depending on the length of your answers, the survey should take approximately 30 minutes. It is also possible for you to save your answers and finish the survey at another more convenient time.

What benefits and risks are there in taking part?
If you take part, you will be helping us to gain a better understanding of men's experiences of the postnatal period, the impact on their wellbeing and the role of sport and exercise during this time. We do not foresee or anticipate any significant risk to you in taking part in this study. The questions ask you to think about and describe your past experiences of your mental health during the postnatal period. You may find the experiences of sharing your experiences helpful, but it may also bring up some difficult thoughts, feelings or memories for you.

If you feel uncomfortable at any time you can stop the survey and complete at a later time if you still wanted to continue. If you find that you feel distressed, support is available from the following organisations:

- **Samaritans**, helpline: 116 123 (Free call) – Providing confidential listening support
- **Dads Matter UK (**https://www.dadsmatteruk.org/) - a charity supporting parents experiencing depression, anxiety and posttraumatic stress.
- **Family Lives** (https://www.familylives.org.uk/) - a charity offering a range of national and local services to support parents and families across the country, as well as a confidential helpline on 0808 800 2222.

Do I have to take part and can I withdraw once I've started?
You do not have to take part in this research. It is up to you to decide whether or not you want to be involved. If you do decide to take part, you will be given a copy of this information sheet to keep and will be asked to sign a consent form.
If you do decide to take part, you can withdraw from the research without giving a reason by emailing me (samantha2.holley@live.uwe.ac.uk) with your unique participant code that you will create at the beginning of the survey.

However, after a certain point in time, I will no longer be able to remove your responses, such as once I have started data analysis or submitted my thesis. If you want to withdraw from the study please contact me within a month of participating in this survey. As a reminder participation in this research is voluntary and all information provided will be anonymised where possible.

How will my data be used?
All the information we receive from you will be treated in the strictest confidence. All information will be kept confidential and anonymised and stored securely in accordance with the University's and the Data Protection Act 2018 and General Data Protection Regulation requirements. Your anonymised data will be analysed together with other interview and file data, and we will ensure that there is no possibility of identification or re-identification from this point.

The collected data will be analysed using qualitative methods to see if there are any patterns in the responses from participants about their experiences. Any themes or meanings will be discussed in my thesis which will be made available on the University of the West of England's open-access repository. A hard copy of the Report will be made available to all research participants if you would like to see it. Anonymised results may also be used in conference papers or peer-reviewed academic papers. Key findings may also be shared both within and outside the University of the West of England.

The information you provide will be treated confidentially and any personally identifiable details will be stored separately from the data and not included in the finished work.

Who has ethically approved this research?
The project has been reviewed and approved by the University of the West of England University Research Ethics Committee. Any comments, questions or complaints about the ethical conduct of this study can be addressed to the Research Ethics Committee at the University of the West of England at: Researchethics@uwe.ac.uk

What if I have more questions or do not understand something?
If you would like any further information about the research please contact in the first instance, me at: samantha2.holley@live.uwe.ac.uk. Alternatively, you can contact my supervisor Zoe Thomas, Programme Director and Senior Lecturer, Zoe2.Thomas@uwe.ac.uk

Consent
Before the first question appears, you will be asked to give your consent to participate in this study. This is to give you a moment to reflect on how you feel sharing your experiences during this study.

Thank you for agreeing to take part in this study.

You will be given a copy of this Participant Information Sheet and your Consent Form to keep.

Appendix E – Privacy Notice for the Interviews and Survey

Privacy Notice for Research Participants

Purpose of the Privacy Notice

This privacy notice explains how the University of the West of England, Bristol (UWE) collects, manages and uses your personal data before, during and after you participate in the role of sport and exercise in men's postnatal mental health. 'Personal data' means any information relating to an identified or identifiable natural person (the data subject). An 'identifiable natural person' is one who can be identified, directly or indirectly, including by reference to an identifier such as a name, an identification number, location data, an online identifier, or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

This privacy notice adheres to the General Data Protection Regulation (GDPR) principle of transparency. This means it gives information about:

- How and why your data will be used for the research;
- What your rights are under GDPR; and
- How to contact UWE Bristol and the project lead in relation to questions, concerns or exercising your rights regarding the use of your personal data.

This Privacy Notice should be read in conjunction with the Participant Information Sheet and Consent Form provided to you before you agree to take part in the research.

Why are we processing your personal data?

UWE Bristol undertakes research under its public function to provide research for the benefit of society. As a data controller we are committed to protecting the privacy and security of your personal data in accordance with the (EU) 2016/679 the General Data Protection Regulation (GDPR), the Data Protection Act 2018 (or any successor legislation) and any other legislation directly relating to privacy laws that apply (together "the Data Protection Legislation"). General information on Data Protection law is available from the Information Commissioner's Office (https://ico.org.uk/).

How do we use your personal data?

We use your personal data for research with appropriate safeguards in place on the lawful bases of fulfilling tasks in the public interest, and for archiving purposes in the public interest, for scientific or historical research purposes. We will always tell you about the information we wish to collect from you and how we will use it. We will not use your personal data for automated decision making about you or for profiling purposes.

Our research is governed by robust policies and procedures and, where human participants are involved, is subject to ethical approval from either UWE Bristol's Faculty or University Research Ethics Committees. This research has been approved by the Faculty Research Ethics Committee, with the reference number of: UWE REC REF: HAS.19.10.051 on the 15th November 2019, contact for further information or queries at: researchethics@uwe.ac.uk. The research team adhere to the **Ethical guidelines of the British Educational Research Association (and/or the principles of the**

Declaration of Helsinki, 2013) and the principles of the General Data Protection Regulation (GDPR).

For more information about UWE Bristol's research ethics approval process please see our Research Ethics webpages at: www1.uwe.ac.uk/research/researchethics

What data do we collect?

The data we collect will vary from project to project. Researchers will only collect data that is essential for their project. The specific categories of personal data processed are described in the Participant Information Sheet provided to you with this Privacy Notice in the section titled "Will I be identifiable "and "How will my data be used".

Who do we share your data with?

We will not share your personal data, in accordance with the attached Participant Information Sheet and your Consent.

How do we keep your data secure?

We take a robust approach to protecting your information with secure electronic and physical storage areas for research data with controlled access. If you are participating in a particularly sensitive project UWE Bristol puts into place additional layers of security. UWE Bristol has Cyber Essentials information security certification.

Alongside these technical measures there are comprehensive and effective policies and processes in place to ensure that users and administrators of information are aware of their obligations and responsibilities for the data they have access to. By default, people are only granted access to the information they require to perform their duties. Mandatory data protection and information security training is provided to staff and expert advice available if needed.

How long do we keep your data for?

Your personal data will only be retained for as long as is necessary to fulfil the cited purpose of the research. The length of time we keep your personal data will depend on several factors including the significance of the data, funder requirements, and the nature of the study. Specific details are provided in the attached Participant Information Sheet in the section titled "How will my data be used". Anonymised data that falls outside the scope of data protection legislation as it contains no identifying or identifiable information may be stored in UWE Bristol's research data archive or another carefully selected appropriate data archive.

Your Rights and how to exercise them

Under the Data Protection legislation you have the following **qualified** rights:

(1) The right to access your personal data held by or on behalf of the University;
(2) The right to rectification if the information is inaccurate or incomplete;
(3) The right to restrict processing and/or erasure of your personal data;
(4) The right to data portability;
(5) The right to object to processing;
(6) The right to object to automated decision making and profiling;

(7) The right to complain to the Information Commissioner's Office (ICO).

Please note, however, that some of these rights do not apply when the data is being used for research purposes if appropriate safeguards have been put in place.

We will always respond to concerns or queries you may have. If you wish to exercise your rights or have any other general data protection queries, please contact UWE Bristol's Data Protection Officer (dataprotection@uwe.ac.uk).

If you have any complaints or queries relating to the research in which you are taking part please contact either the research project lead, whose details are in the attached Participant Information Sheet, UWE Bristol's Research Ethics Committees (research.ethics@uwe.ac.uk) or UWE Bristol's research governance manager (Ros.Rouse@uwe.ac.uk)

v.1: This Privacy Notice was issued in April 2019 and will be subject to regular review/update.

Appendix F – Participant Consent Form on Qualtrics

Consent Form

Thank you for agreeing to take part in this research.

Please ensure that you have read and understood the information contained in the Participant Information Sheet and asked any questions before you start this page. If you have any questions please contact a member of the research team, whose details are set out on the Participant Information Sheet.

Before you begin, I would like to emphasize that, your participation is entirely voluntary, you are free to refuse to answer any question, and you are free to withdraw if you decided you no longer want your answers to be included. However, please note, there is a point beyond which it will be impossible to withdraw from the research.

I would also like to highlight that you are the expert and there are no right or wrong answers as I am interested in everything you have to say.

In order to participate it is essential that you agree with all of the following statements and consent to take part:

- I have read and understood the information in the Participant Information Sheet which I have been given to read before asked to complete this form;
- I have been given the opportunity to ask questions about the study;
- I have had my questions answered satisfactorily by the research team;
- I agree that anonymised quotes may be used in the final report of this study;
- I understand that my participation is voluntary and that I am free to withdraw at any time until the data has been anonymised, without giving a reason;
- I agree to take part in the research

☐ By ticking this box, I conform that I agree with the statements above and consent to take part.

Appendix G – Participant Information Sheet for the Interviews

Participant Information Sheet

Fatherhood and Experiences of Sport and Exercise

Participant Information Sheet
You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Do please contact me if there is anything that is not clear, or if you would like more information.

The researcher and the study
Thank you for your interest in this study, my name is Samantha Holley and I am a Counselling Psychology student at the University of the West of England. For my doctoral research thesis, I am exploring men's personal experiences of fatherhood, their mental health and the role of sport or exercise during the postnatal period, which is the period from the child's birth until their first birthday. Fatherhood is a significant life event which can affect men's wellbeing and there is a growing concern over fathers' postnatal mental health, which so far has been overlooked by research and support services.

If you agree to take part in this study you will be asked a series of questions about your experiences. You are free to give as much or little information as you like. However, it will be very helpful for my research if you feel you are able, to give as detailed answers as possible.

Please read the following information carefully and if you have any queries or would like more information contact me, at samantha2.holley@live.uwe.ac.uk. Alternatively, my research is supervised by Programme Director and Senior Lecturer, Zoe Thomas. If you have any further questions you can contact her at the Department of Health and Social Sciences, University of the West of England, Frenchay Campus, Coldharbour Lane, BS16 1QY, tel: 0117 32 83794, or email: Zoe2.Thomas@uwe.ac.uk

Who can take part in the study?
If you are aged 18 or over, participate in any form of sport or exercise, and have had a child who is aged between one and five, I would be interested to hear about your experiences.
The interview will ask a range of questions about your experiences; including your mental health and wellbeing during the postnatal period. The purpose is to gain an understanding of the pressures and difficulties during this time, however, if you feel discussing your experiences would be too distressing please do not participate in this study further.

How long will the interview take?
The interview is likely to last for one hour. The aim is to explore your experiences in detail so it is possible that it will take longer. If you only have a limited amount of time available, please let me know and I will make sure we finish when you need too.

Where will the interview take place?
We will agree to a place that feels most comfortable to you, such as a quiet room in the University of the West of England, your home or a quiet café. It is also possible for us to speak over the phone or using Skype so the interview can be held at a time and place that is convenient for you.

Will I be Identifiable?

I will audio-record the interview and store it securely as an encrypted file. I will then transcribe it and anonymise your information (removing or changing any details that can identify you). The audio-recording will be deleted once the research is complete. It is also possible I may use anonymous quotations from your interview in my doctoral thesis, presentations or publications.

How will my data be used?
All the information we receive from you will be treated in the strictest confidence. All information will be kept confidential and anonymised and stored securely in accordance with the University's and the Data Protection Act 2018 and General Data Protection Regulation requirements. Your anonymised data will be analysed together with other interview and file data, and we will ensure that there is no possibility of identification or re-identification from this point.

The collected data will be analysed using qualitative methods to see if there are any patterns in the responses from participants about their experiences. Any themes or meanings will be discussed in my thesis which will be made available on the University of the West of England's open-access repository. A hard copy of the Report will be made available to all research participants if you would like to see it. Anonymised results may also be used in conference papers or peer-reviewed academic papers. Key findings may also be shared both within and outside the University of the West of England.

What benefits and risks are there in taking part?
If you take part, you will be helping us to gain a better understanding of men's experiences of the postnatal period, the impact on their mental health and wellbeing and the role of sport and exercise during this time.

We do not foresee or anticipate any significant risk to you in taking part in this study. The questions ask you to think about and describe your past experiences of the postnatal period and your experiences of your mental health and wellbeing during this time. You may find the experiences of sharing your experiences helpful, but it may also bring up some difficult thoughts, feelings or memories for you.

If you feel uncomfortable at any time you can stop the interview or ask for us to move on to another question.
If you find that you feel distressed then support is available from the following organisations:

- **Samaritans**, helpline: 116 123 (Free call) – Providing confidential listening support
- **Dads Matter UK** (https://www.dadsmatteruk.org/) - a charity supporting parents experiencing depression, anxiety and posttraumatic stress.
- **Family Lives** (https://www.familylives.org.uk/) - a charity offering a range of national and local services to support parents and families across the country, as well as a confidential helpline on 0808 800 2222.

Will I be able to change my mind?
If you decide you no longer want to take part in this study, you will be able to withdraw by emailing me. Please note, that I will no longer be able to remove your data after a certain point, for example, once I have submitted my thesis. I strongly encourage you to contact me within a month of participation if you wish to withdraw your data.

Who has ethically approved this research?
The project has been reviewed and approved by the University of the West of England University Research Ethics Committee. Any comments, questions or complaints about the ethical conduct of this

study can be addressed to the Research Ethics Committee at the University of the West of England at: Researchethics@uwe.ac.uk

What if I have more questions or do not understand something?
If you would like any further information about the research please contact in the first instance, me at: samantha2.holley@live.uwe.ac.uk. Alternatively, you can contact my supervisor Zoe Thomas, Programme Director and Senior Lecturer, at: Zoe2.Thomas@uwe.ac.uk.

Consent
Before we start the interview, I will invite you to sign a consent form. This is to ensure you have read the information about the study and that you agree to participate in it.

Thank you for agreeing to take part in this study.

You will be given a copy of this Participant Information Sheet and your Consent Form to keep.

Appendix H – Interview Consent Form

Consent Form

Thank you for agreeing to take part in an interview for my research exploring fathers' experiences of sport and exercise during the postnatal period. This consent form will have been given to you with the Participant Information Sheet. Please ensure that you have read and understood the information contained in the Participant Information Sheet and asked any questions before you sign this form. If you have any questions please contact a member of the research team, whose details are set out on the Participant Information Sheet.

In order to participate it is essential that you agree with all of the following statements and consent to take part:

- I have read and understood the information in the Participant Information Sheet which I have been given to read before asked to sign this form;
- I have been given the opportunity to ask questions about the study;
- I have had my questions answered satisfactorily by the research team;
- I agree that anonymised quotes may be used in the final Report of this study;
- I understand that my participation is voluntary and that I am free to withdraw at any time until the data has been anonymised, without giving a reason;
- I agree to take part in the research

If you consent to participate in this research, please sign and date the form. You will be given a copy to keep for your records.

Name (Printed)…….

Signature……. Date…….

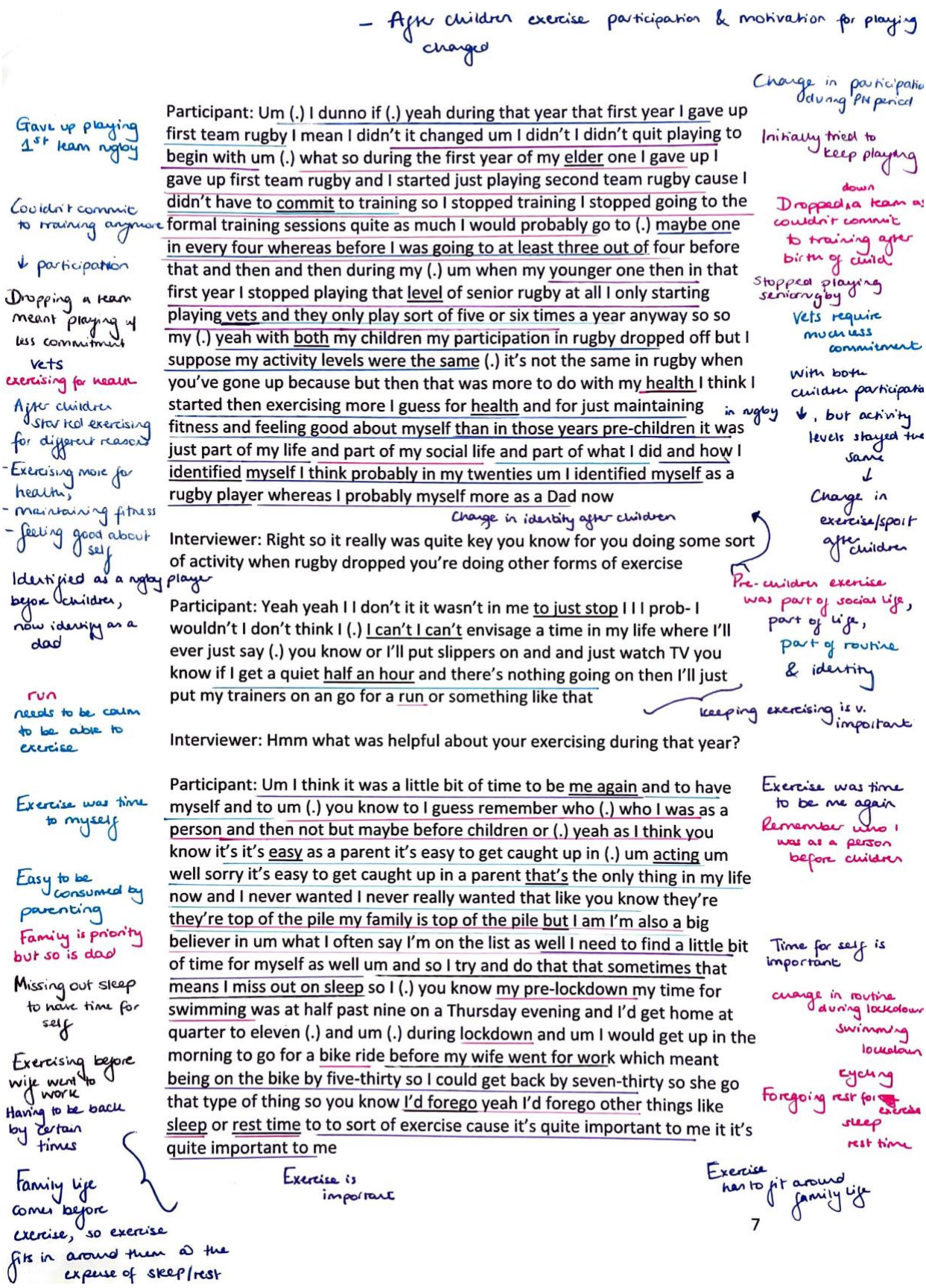
Please return the signed copy of this form to me.

Appendix I – UWE Faculty Research Ethics Committee approval letter

Appendix redacted, due to personal identifying information.

Redacted appendix continued.

Appendix J – Sample of Initial Coding



Difficulty to justify leaving family to go & play sports

Interviewer: Were there any barriers during that year to participating?

There were barriers to playing

Participant: I think to cer- yeah certainly for rugby because it because of when it is (.) it's training is during when bath and bedtime and it just is you know there's no two ways around time you can get away with the meals but it's during bath and bed time and matches are on a Saturday afternoon and that when they're up and so (.) you know that's a difficult sell to you know to your wife who whether she's been on maternity leave or back at work and she's also worked a four day week or something like that and she's tired and I'm there saying I'm gonna go

Training

Bath & Bedtime

Bath & Bedtime saturdays Matches

Maternity leave

Leaving to go play sports is seen as sexists

Barriers for rugby due to set training times during children's evening routines

Time

Children's routines are inflexible

Training during evening routines

Dinner time not as important as evening routine

Tiredness

Unfair to leave wife she's done the same amount of work

Needing to get wife's agreement to go

Interviewer: Yeah I'm off

Assumption that parenting should be equal

21m 35s Participant: I'm gonna go and take half a day of our two day at least half a day of our two days that we have off together to spend time with my mates and that type of thing and that and that's why my participation levels in rugby changed you know during during both of them you know I changed with my elder one I changed so that I was more local and not training as much and my second one where I just played I just committed to five or six games throughout the year and so that was the barrier I guess family time is is not you know it's not time because I could find six hours a week if I wanted to exercise but the training times for rugby are set and there's no two ways you know that's when they are and so um (.) yeah you can't change that so I couldn't (.) I couldn't commit to those times

social element of sport

participation levels changed

Rugby

More local

Games

Family time

Rugby

Set times in team sports

Sports impacts family time

Time together is limited

First + training & didn't travel as far

Then only played a few games a year

↑ impact of subsequent children on sport

Team sports have inflexible times which makes it more difficult to participate

Interviewer: Hmm so set times became too tricky

Participant: Yeah I guess I guess so I never really thought of like that but yeah it's um I suppose um and your standardised times isn't it it works for most people but there are always outliers and when I become a parent then I was the outlier

Standardised times

Change in identity when became a parent

change in R. w/ sports club

when became father became an ~~ma~~ outlier in the club

Interviewer: Hmm yeah did that change your relationships at the club and with your kind of teammates?

Participant: Absolutely yeah er that's another good point I um (.) [sighs] people people used people to said that to me all the time when I when I was going through the rugby club I spent about ten years in the first team and um and I had (.) some really close friends for that whatever reason work commitments or or some bad injuries some of them some of them quit or they weren't able to play anymore and they all said you know it's amazing how quickly the face of the team changes and you don't feel part of it anymore um and yeah I felt that straight away moving into the second team meant that I (.) I had a different social circle from the first team and (.) I very quickly in less than a season there were a group of of first teamers quite that I have been a first team captain and er a fairly senior (.) first team captain for

Changed R. w/ club & team mates

Rugby club

First team

Work commitments

Bad injuries

Second time

Social circle

First team captain x2.

Long commitment to club

Deep roots within club

work commitments injuries impact sport

Transient nature of team sports

Not feeling part of team when ~~teammates~~ players leave

Loss of friends when teamates leave club

Changing teams ➔ meant creating new friendships / Loss of friendships

Appendix K – Example of coding

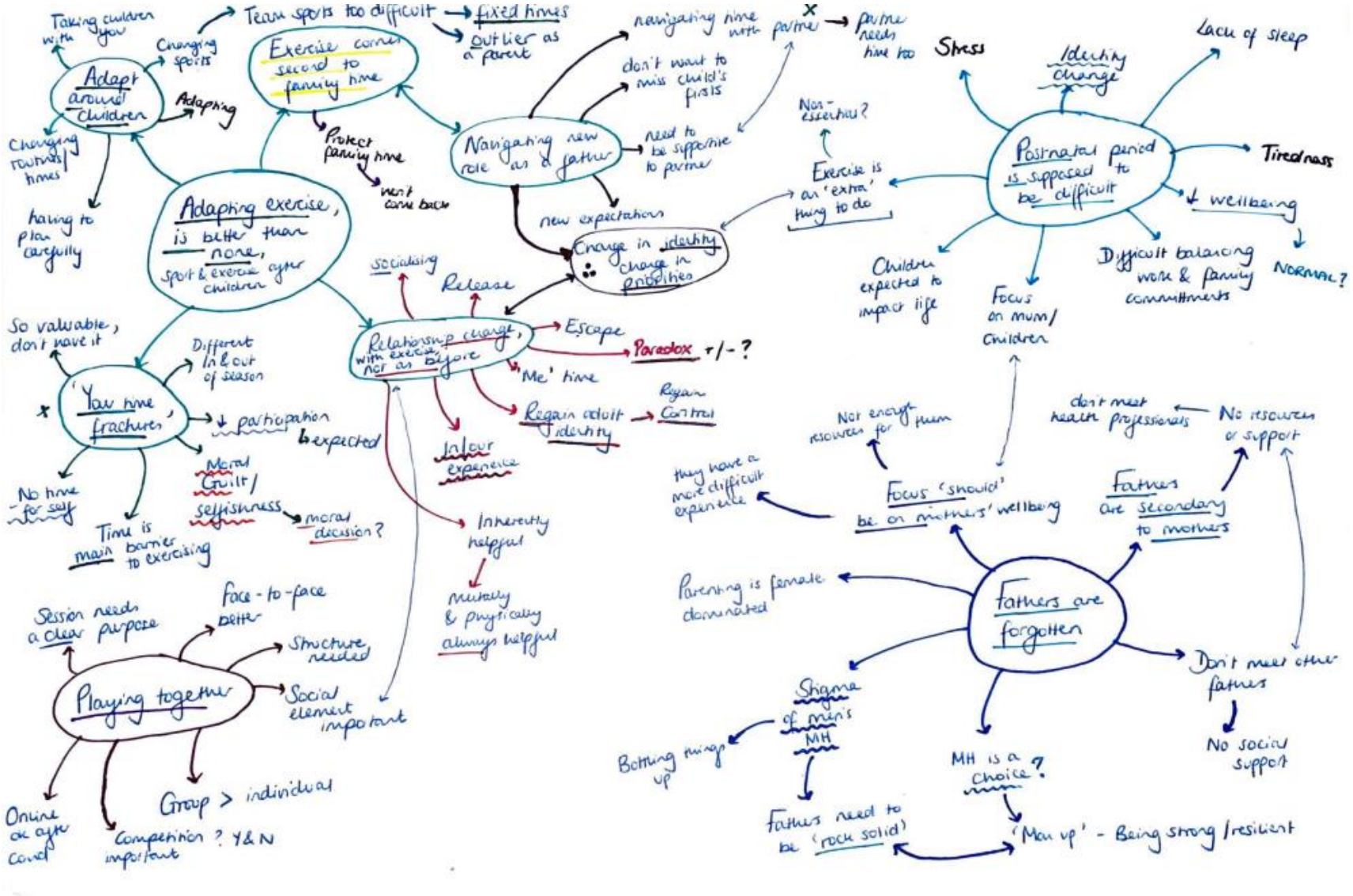
The columns below contain all of the codes for one participant, which have started to be developed by grouping the codes with similar meanings or topics.

Difficulty of postnatal period impacted decision to have further children	Exercise has personal meaning
Tiredness	Exercising is important/crucial for his life
Postnatal period is difficult	Higher Wellbeing if exercising regularly
Paternity leave is insufficient	Benefit of exercise for mental health
Difficult to return to work and function at previous level	Exercising improves general mood and sleep
Your life is put on hold	Mood negatively impacted when doesn't exercise
Life stops with children	Burning calories - positive
Babies get easier after six months	Not as content with self without exercise - Impacts self-esteem?
Six months is a threshold	Exercises to improve mental health
Children get progressively easier as they grow	Exercising to earn food/Offset calories consumed
After the postnatal period life gets easier	Exercise as an equation to balance food consumed
With each developmental stage children become easier	Needs to earn food?
After weaning children fathers can have more of a role	Exercise and being active is integral to life
After weaning fathers can get more involved	Physical activity is positive
Fathers may feel they have less of a role during breastfeeding	Physical activity boosts wellbeing
At eighteen months' children are much easier	Exercise allows you to regain your adult identity - 'not just Dad'
First six months are the hardest	Exercise allows you to remember life before children
Unpredictability of children is difficult	Easy for parents to be absorbed by children - negative thing
After six months develop a routine	Did not want life to be absorbed by children
Life becomes easier with a routine	Purpose of exercising changes after children
Tried to establish routine but have to be baby led	Before children part of social life/identity/enjoyment
Some people prefer/want 'two under two'	After children exercising mostly for physical health/fitness/wellbeing
Two under two' is more/less difficult	
Deliberate age gap between children	Flexibility of support is important
Wanted a break from intense postnatal period	Need to build exercise into life
First child was the easiest	Team sports have set times - no flexibility
No difference in experiences between children	Only way to exercise if part of life e.g. commute/lunch hour/before coming home
Important to establish routines with children	Exercising to not impact family time
Younger child has had to fit into oldest child's routine	Set times makes it difficult to participate - need flexible timings
Children wake up early	Different ways of attending - open/multiple/appointment based
Most demoralising experience was when routine got knocked back by baby	Pre-lockdown online support was foreign
Baby leads your life	Post-lockdown online support/classes would be welcomed
Being baby led is important	Would have used support group
Not knowing what is coming next can be difficult	
Restarting your routine becomes easier each time	Own wellbeing is important - needs to be considered too
After six months new challenges start – e.g. teething	Wife's wellbeing is important - priority too
Teething is difficult	Wife needs time to herself as well
Lack of sleep impacts wellbeing 'sleep walking through life'	Wife 'switches off' in different ways to him - shopping/family time
Have little sleep in the first six months	Time for self is important

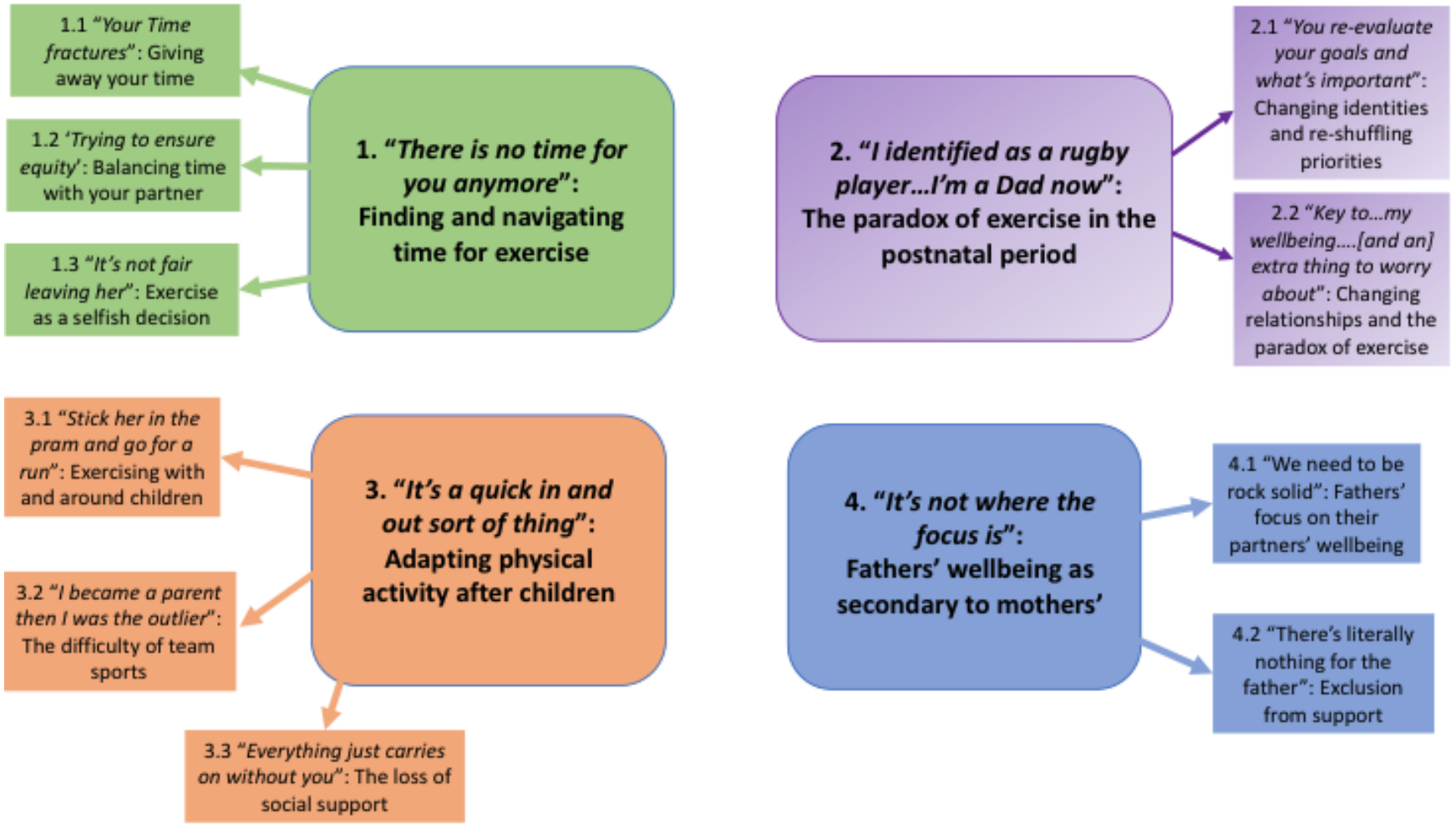
Difficult to function with no sleep Gain experience and confidence as child grows Family were a source of support Family helped with childcare Childcare can be very expensive Teamwork with wife - important Approached children as a team Loved being a Dad from beginning Helping with feeding Enjoyed being an active Dad Picking up multiple illnesses from daughter at nursery Avoided illness with second High drop out of players in their early 30s Experience makes people better players Sports clubs could do more to improve retention of young dads Sports clubs have a responsibility to players Important to retain skills and experience of older players Due to experience don't need to be as physically fit Assumption that physically decline in early 30s You work together as a team - teamwork important Good social support from team Support from other fathers at work Support from other fathers is helpful as going through same experiences Going through same experiences at the same time - helpful Exercising with other fathers was helpful If children are same age - feel closer to the fathers After children motivation for playing changed After children participation changed Family is top priority Identity changed after children Identified as a rugby player Now identifies as a Dad Pre- children sport was way of life/social life/identity Family life comes before exercise - exercise fits in around life High drop out of players in their early 30s Experience makes people better players Sports clubs could do more to improve retention of young dads Sports clubs have a responsibility to players Important to retain skills and experience of older players Due to experience don't need to be as physically fit Assumption that physically decline in early 30s	Family time is important Family time is a barrier to participating in exercise/team sports Set times become difficult Inflexibility of set times make it difficult to attend Standard times work for most team players Fathers become outliers - isolated? Set times to return to family by i.e. for bedtime/tea time More difficult to play rugby with children Rugby clashes with children/family's needs Many barriers to participation Children's routines are inflexible Difficult to 'justify' time away from family Exercising/playing sports are unfair/selfish Sports take away from family time Leaving wife alone is selfish/unfair Children need to be asleep/occupied to be able to exercise Very active person - tries to be as active as possible Feels the need/urge to exercise daily Reducing participation in rugby due to physical impact Participated in multiple sports to spread physical impact on body P.E teacher - always involved in sports Coach and player Exercises multiple times a week Training and matches Difference in participation requirement between 'in-season' and 'out of season' Timing of when child is born can affect the impact on participation – less if born out of season Incorporates exercise into life Impact of lockdown - negative Changed exercise routine - more individual Incorporates exercise into life - so it doesn't become an 'extra' thing to do Exercise can be an additional thing to schedule - negative - guilt? Exercise can be an additional thing to schedule Running with wife Cycling with friends Missing sleep to still have time to self Exercising at odd times around family life Early morning bike rides whilst children asleep Returning before wife goes to work Forgoing sleep and rest to find time to exercise Family life comes before exercise - exercise fits in around life Didn't allow participation to drop Incorporates exercise into life - makes it feasible Running with buggy Park Runs - positive experience

You work together as a team - teamwork important	Park Runs helpful as finished by 9:30am
Good social support from team	Friendly atmosphere at Park Runs
Sports clubs could do more to retain this age group	Including children in exercise
	Taking children to park runs
	Park Runs are a family event
Sports clubs lose young fathers - unique to team sports?	Park Runs provide social support - get to know other runners
Lose fathers with young children - as cannot commit time	
	Unaware of other fathers struggling/having difficulty
Increasing individual fitness resulted in better rugby performance	Unaware of other fathers seeking support
	Did not know who to contact for support
Felt on the outside of club - excluded/isolated	Not sure if would have sought support if mental health had declined
Lost position in club/identity in club	
Had to change role in club to still be a part of it/be remembered E	Probably would have coped by himself
	Stigma of men's mental health
Become an outlier as a parent - isolating?	GP source of professional support
Change in participation changed relationship with teammates	GP is the only option for fathers
	Mothers have more options when seeking support
Outlier as a parent - isolation	Mothers can go to maternity services/midwives/new mother services
Loss of social support	
Had to make new friends - new social circle	Limited support available for fathers
Becoming a 'newbie' again	Wellbeing was not checked/asked about
Embarrassing not being known by coach - shame?	Not asked about wellbeing by a health professional
	Lack of support was not missed
Position in club changed- negative experience	Assumed would get no support/not be focused on
Took new management/coaching role to regain position	Did not seek support
	Fathers' wellbeing is not a priority
Deliberate change to feel included again	Fathers' wellbeing is not a priority - for society/health practitioners/fathers themselves
Change in social status at club due to reduced participation	The focus is on mothers - protecting their wellbeing
	PND is something mothers experience
Participation changed with each child	
Trained less with children	Did not feel excluded by maternity services
Only played local matches - couldn't commit travelling time	Positive experience in hospital
	Aware fathers can experience postnatal mental health problems through readings on parenthood
After second child stopped playing	
Played vets as only play a few times a year	NCT classes
Veteran teams require less commitment	NCT classes mentioned fathers' mental health
Lots of fathers on the veteran team	Fathers wellbeing mentioned but not important/prioritised/secondary
Gave up playing in the first team in the postnatal period	Given information about fathers' mental health
Reduced participation	
Could not commit to training times	Found support from other fathers at work
Dropping down teams reduced expectations of participation/less commitment needed to play	Support from other fathers is helpful as going through same experiences
Vets on play a few times a year	Going through same experiences at the same time – helpful
Playing vets is more manageable	
Participation in team sports decreased	Exercising with other fathers was helpful
Participation in individual sports increased	If children are same age - feel closer to the fathers
Activity levels stay the same overall – but participation changed	
	Social aspect of rugby important
Individual sports are easier/more manageable with a family	Wants to be a member of sports teams
	Prefers to exercise with others
In thirties wanted to change to individual sport due to time limits & family commitments	Social support - Rugby provides social life
	Rugby is a team sport
Sacrifice - important to make	Doesn't have to be with others to exercise
Personal sacrifice part of being a father	Playing multiple team sports from young age
	Rugby provides main social sport

Appendix L – Initial Thematic Map



Appendix M - Final Thematic Map



Appendix N - Poster

Poster presented virtually at the 2021 Welsh Division of Counselling Psychology Annual Conference

The Role of Sport and Exercise in Fathers' Postnatal Mental Health: A Thematic Analysis

UWE Bristol | University of the West of England

Background and Rationale

Fathers' postnatal mental health problems represent a significant public health crisis, with meta-analyses estimating 8.4-10.4% of new fathers experience postnatal depression, double the rate of depression found in men of similar age ranges.

However, there are currently no clinical guidelines for supporting fathers, and qualitative research about their experiences is rare.

Previous qualitative research found fathers experienced the deterioration of their relationships as well as difficulties in balancing the competing demands of family, work, and their own needs during the postnatal period (Darwin *et al.*, 2017). Fathers also reported feeling invisible and excluded by maternity services, highlighting the lack of tailored support available for them (O'Brien *et al.*, 2017).

Fathers are considered a hard to reach group, where traditional psychotherapeutic approaches may not be appropriate for this population.

Sport and exercise has been found effective for mothers experiencing postnatal mental health problems. However, the role of sport and exercise for fathers' postnatal mental health is currently unknown.

In-depth qualitative research is needed to explore fathers' postnatal mental health and develop a richer understanding of whether sport and exercise can be an appropriate source of support.

Research Aims

- The role of sport and exercise for fathers' mental health and wellbeing during the postnatal period.
- The way(s) in which fathers feel sport or exercise impacted their mental health in the postnatal period.
- The particular requirements or barriers fathers experienced when participating in sport or exercise during the postnatal period.

Methodology

- This study will use an experiential qualitative approach to explore the subjective experiences of fathers.
- Ten fathers from the UK, who participate in sport and exercise, with a child or children aged between one and five, were recruited using purposive sampling.
- Data was collected through qualitative, semi-structured interviews, held over the phone or via Skype. The interviews were audio-recorded and transcribed orthographically.
- The data collected will be analysed using thematic analysis following Braun and Clarke's (2006) method. An experiential thematic analysis will be used with a critical realist ontology and a contextualist epistemology, using a semantic and inductive approach to coding and analysis.

Current Stage & Preliminary Analysis

Data collection has now finished and the interviews are currently being transcribed.

Preliminary analysis revealed all fathers reported a change in their priorities after the birth of their child and consequently adjusted their usual sport and exercise routine. For some fathers, this resulted in changes in their relationships and the deterioration of their existing support networks. Time and guilt at being away from home were the most commonly reported barriers to exercising.

Another finding was that fathers also reported feeling secondary compared to mothers' needs, and many participants were unaware that fathers could even experience postnatal mental health problems.

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Appendix O – Journal Article

"*I was a rugby player…now I'm a Dad*": A Thematic Analysis Exploring Father' experiences of physical activity in the postnatal period.

Authors: Samantha Holley, James Byron-Daniel, Zoe Thomas

Keywords: **Paternal postnatal mental health, fathers' experiences, physical activity, thematic analysis**

Abstract

Background: The transition to fatherhood is a significant life event that has the potential to negatively impact fathers' wellbeing. However, fathers' experiences during the postnatal period remain largely neglected in research.

Aims: This qualitative study aimed to explore fathers' experiences of sport and exercise during the postnatal period, as well as whether physical activity could be a suitable source of support.

Methods: Qualitative data were collected via thirteen semi-structured virtual interviews with fathers who had a child or children between the ages of one and five and who participated in any form of physical activity. The data were then analysed using a reflexive thematic analysis to develop themes.

Findings: Four themes were developed through analysis; "*There is no time for you anymore*: Finding and navigating time for exercise", "*I identified as a rugby player…I'm a Dad now*: The paradox of exercise in the postnatal period", "*It's a quick in and out sort of thing*: Adapting physical activity after children" and the final theme "*It's not where the focus is*: Fathers' wellbeing as secondary to mothers'".

Conclusions: The findings contribute to an increased understanding of fathers' experiences of physical activity during the postnatal period and has implications for healthcare professionals. Sport and exercise may be an appropriate source of support. However, exercising in the postnatal period requires fathers to make many adaptations to their existing routines and exercise around their family's needs. Becoming a father also changes fathers' identity and relationship with exercise which can make exercise seem less important. Fathers also felt their wellbeing was unimportant and

unentitled to seek support. This highlights the need to need to raise awareness of paternal postnatal mental health and the importance of providing tailored support.

1 Introduction

The transition to fatherhood can be complex and demanding, filled with adjustments that can negatively impact fathers' wellbeing (Philpott & Cocoran, 2018; Rominov *et al.*, 2016). The postnatal period describes the period of one year following the birth of a child where the highest incidence of psychological distress occurs (Larson, 2017; Philpott, 2016). Fathers experience many of the same stressors that mothers do, making this a particularly meaningful yet vulnerable time in a man's life (Philpott, 2016; Baldwin, 2015). However, fathers' experiences in research have been largely ignored, leaving fathers' needs frequently unmet (Ansari *et al.*, 2021; Eddy *et al.*, 2019).

1.1 Fathers' Postnatal Mental Health

Traditionally, postnatal mental health problems have been associated with mothers, perceived as a result of hormonal changes (Philpott & Corcoran 2018). However, it has now been established that fathers also experience hormonal changes in the postnatal period and postnatal depression (PND) can develop as a result of psychosocial factors (Philpott & Corcoran, 2018; Saxbe *et al*., 2017). Estimates of the prevalence for paternal PND vary between 8-10% and postnatal anxiety between 2-51% (Philpott *et al.*, 2019; Cameron, Sedov & Tomfohr-Madsen, 2016; Paulson & Bazemore, 2010). Fathers also have a 25%-50% increased risk of developing PND, if their partner develops maternal PND (Larson, 2017).

Fathers' poor mental health can also have a wider impact on their families, as it negatively impacts children's cognitive, social and behavioural development and is associated with heightened psychological risk for mothers (MacDonald *et al.*, 2021; Amodia-Bidakowska, Laverty, & Ramchandani, 2020; Baldwin & Bick, 2017). As part of the NHS's Long-Term Plan (2019), fathers will now be offered perinatal assessments if their partner has a mental health diagnosis due to their increased risk for paternal PND. However, the National Institute for Health and Care Excellence (NICE, 2014) currently have no guidelines for paternal postnatal mental health problems.

Qualitative research exploring fathers' experiences is rare, however, it has highlighted how fathers feel invisible and lack support to meet the challenge of new fatherhood (Edhborg *et al.,* 2016).

Fathers also felt excluded by maternity services, whilst questioned their entitlement to support believing the services should focus on women (Darwin *et al.*, 2017). There exists a general lack of awareness and information about paternal PND in society whichimpacts fathers' help-seeking behaviour (Pedersen, Maindal & Ryom, 2021, Baldwin & Bick, 2019).

1.2 Fatherhood, Masculinity & Help-seeking

Considerable research has identified how men do not use mental health services (Bilsker, Fogarty, & Wakefield, 2018; Ogrodniczuk *et al*., 2016). One suggestion for this is that health care services are not in alignment with masculine cultural norms that equate asking for help for psychological problems with shame and weakness (Harris *et al.,* 2015; Addis & Mahalik, 2003). Hegemonic masculine norms refer to dominant conceptualisations of traditional masculinity that requires men to show stoicism, self-reliance, aggression and bravado; while restricting emotionality (Timimi, 2012; Addis & Mahalik, 2003). Adherence to these norms roles impacts men's expression of depression, as well negatively impacting their attitudes towards help-seeking behaviour (Hoffman & Addis, 2020; Seidler *et al.*, 2016).

However, research linking traditional masculine norms with pathology or deficit has been criticised for being overly reductionist (Seidler *et al.*, 2016). Men's social identities contribute in intersecting ways to shape their masculinity, which can contribute to their psychological outcomes in positive and negative ways (American Psychological Association, 2018). Positively more men are accessing psychological support services than ever before and research suggests that men will seek psychological help if it is accessible, appropriate and engaging (Spendelow, 2015; Harris *et al*., 2015; Englar-Carlson & Kiselica, 2013). Men seemed to have a particular preference for collaborative, short-term or group-based treatment (Seidler *et al.,* 2016). This has led to suggestions of considering gender norms and tailoring clinical interventions when designing services for men to encourage their greater engagement (Seidler *et al.,* 2018; Mahalik *et al.,* 2012).

Physical activity is one potential intervention that is gathering increasing interest for promoting wellbeing. Sport is one context in which men define and portray their masculinity as it is congruent with traditional masculine gender roles (Wasylkiw & Clairo, 2016; Mahalik & Rochen, 2006). Growing evidence supports community-based programmes that incorporate aspects of conventional masculinized ideals and practices, such as sport and exercise, as more appealing to men (Levant & Wong, 2017).

1.3 Physical Activity & Mental Health

Physical activity can be defined as any bodily movement produced by skeletal muscles that require energy expenditure including daily activities and active recreation (NICE, 2013). An extensive body of research supports the health benefits of physical activity for physiological and psychological health (Rowley *et al.*, 2018; Vancampfort *et al.,* 2018; Pritchett, Daley, & Jolly, 2017). The mechanism of how physical activity is efficacious is not completely understood, however, its positive impact is attributed to a multifactorial combination of biopsychosocial factors (Schuch & Stubbs, 2019; Pickett, Kendrick & Yardley, 2017). Qualitative research has also highlighted how exercise can alleviate symptoms, provide a sense of engagement in life and rebuild peoples' sense of self (Pickett, Kendrick & Yardley, 2017; Carless & Douglas, 2008).

The World Health Organisation and NICE (2021) recognise physical activity as an evidence-based treatment for the treatment, management and prevention of depression (Pritchett, Daley, & Jolly, 2017; Poyatos-León *et al.*, 2017). Public health initiatives and interventions aiming to increase levels of physical activity are becoming increasingly common (Phoenixa & Bell, 2019; Glowacki, Weatherson, & Faulkner, 2019). A great advantage of exercise interventions compared to traditional mental health treatments is that exercise is accessible, low cost, with no side effects and is considered non-stigmatizing (Ashdown-Franks *et al.*, 2020; Poyatos-León *et al.*, 2017).

This is important as fathers may represent one population particularly at risk of low activity due to the demands of early parenthood (Rhodes *et al*., 2021; Quinlan *et al.*, 2017). Physical inactivity is common amongst parents who face multiple barriers, particularly those with children under five years of age (Rhodes *et al*., 2021; Bellows-Riecken & Rhodes, 2008). Fathers' may represent one population who would greatly benefit from interventions to target low levels of activity. However, our current understanding of how to support fathers during this time is severely limited, and new research is needed to explore potential sources of support and ways to engage fathers (Darwin *et al.*, 2017).

1.4 Current study

To address this gap, this study aimed to explore fathers' experiences of physical activity in the postnatal period, to develop a richer understanding of whether it can be an appropriate source of support for enhancing wellbeing and mental health. As well as exploring their particular support

needs, requirements, or barriers to exercise during this time. Findings have the potential to impact health policies, social support strategies and contribute to our understanding and knowledge of possible interventions for this previously neglected population.

2. Method

2.1 Research Design

A qualitative research methodology was chosen to explore the subjective experiences of fathers, aiming to generate rich data and to give a voice to a previously neglected population (Braun & Clarke, 2013).

2.2 Participants and recruitment

Due to the UK lockdown, participants were recruited solely through online methods. Recruitment utilised snowball sampling through advertising online on sports teams' social media pages, fathers' online support groups, utilising word-of-mouth and local sporting teams.

Participants were invited to participate if they were over the age of 18, a resident of the UK, able to communicate proficiently in English, participate in any form of sport or exercise and have a child aged between one and five. Specifying the age of their child was to ensure that participants were reflecting on their back on their experiences, rather than still being in the postnatal period. It was also deliberately not specified the type or intensity of sport or exercise to encourage participation and capture broad experiences of physical activity.

Thirteen participants were recruited for the qualitative interviews, following Clarke, Braun and Hayfield's (2015) recommendations. All participants were aged between thirty to forty-four (mean age: 36.9, SD: 4.1). Six of the participants had one child, five participants had two children and two participants had three children. The participants played a range of individual and team sports at different levels of frequency and intensity including; running, rugby, cricket, weight lifting, swimming, hockey, cycling, football and gig rowing. See Table 1 below for further details of the sample recruited.

Participant Demographics		
Ages	30 – 44 years	Average 36.9, SD 4.1
Racial/ Ethnic background	White British White (Other) Indian	9 (69%) 3 (23%) 1 (8%)
Social Class	Middle Class No class category	12 (92%) 1 (8%)
Sexuality	Heterosexual	13 (100%)
Relationship status	Married Separated/Divorced	12 (92%) 1 (8%)
Employment status	Full-time employed	13 (100%)
Sport or Exercise (Some participants participate in multiple sports)	Cycling Cricket Football Gig rowing Golf Gym Hockey Rugby Running Swimming Weight training	3 2 1 1 1 1 2 2 6 2 1
Number of children	Three children Two children One child	2 (15%) 5 (39%) 6 (46%)
Ages of child/children	1 – 10	Average 3.9, SD 2.7

Table 1: Participant demographics

2.3 Data Collection

Data were collected using semi-structured online interviews and participants were offered the choice between virtual online interviews using telephone or Skype. Virtual interviews can be more empowering and convenient for participants, allowing scheduling to be flexible which was particularly important for this population as many were without their usual childcare arrangements (Braun & Clarke, 2013). Participants were given the option to stop and restart the interview at any time to allow for unexpected interruptions or childcare needs, which many participants used. The interviews ranged from forty-five minutes to an hour and a half.

Ethical approval for this study was received from the University of the West of England, Faculty Research Ethics Committee. Before the interviews, participants were emailed several resources

including; a participant information sheet, sources of further support, information about their right to withdraw, GDPR information, and a consent form. After the interviews participants were debriefed and sources of support were highlighted. Participants were also invited to choose pseudonyms to ensure their identities remained confidential and reported anonymously in the research (Braun & Clarke, 2013).

2.4 Data Analysis

A reflexive thematic analysis was used to analyse the data following the six phases outlined by Braun and Clarke's (2006) method. Thematic analysis was chosen as an appropriate method as it can focus on participants' experiences and how they make sense of the world, identifying themes and patterns of shared meanings across a dataset (Braun & Clarke, 2013; Braun & Clarke, 2012). In line with this contextualist thematic analysis, data analysis was conducted using a semantic and inductive approach to coding and theme development, staying grounded in the data whilst also giving voice to participants (Clarke, Braun & Hayfield, 2015; Braun & Clarke, 2013).

3. Results

Four themes were generated during analysis: "*There is no time for you anymore*": Finding and navigating time for exercise, "*I identified as a rugby player….I'm a Dad now*": The paradox of exercise in the postnatal period, "*It's a quick in and out sort of thing*": Adapting physical activity after children and the final theme "*It's not where the focus is*": Fathers' wellbeing as secondary to mothers'.

3.1 Theme 1 - "There is no time for you anymore": Finding and navigating time for exercise

Participants identified the main barrier to physical activity as time, as the new and varied pressures of fatherhood impacted their time available for leisure activities. All participants reduced or stopped their participation immediately after their children were born, as Dinesh describes: "*you have to share your time that's quite hard….time is more valuable than money and anything in the world it's…the most simple thing and…something you don't have"*. Participants described how they underestimated the impact of having a child on their lives:

> "*you don't think about this before a baby...you don't think he's going to affect you that much…the reality of it is that when it happens you actually need to…give away the*

time…(on) *the things you enjoy doing which for me is mostly going to the gym and seeing friends"* (Tony)

Toni's use of the words '*giving away'* and '*compromising'* invoke a sense of loss and highlight the difficulty of the loss of his enjoyable activities. There seemed to be an expectation on the fathers to sacrifice their leisure time to prioritise family and work commitments, which resulted in participants feeling selfish when they wanted time to themselves:

"*the guilt of…wanting my own time [laughs] and…not getting the opportunity to go and do the things I would wanna do which is like (.) the strangest thing because (.) you know I wouldn't have ever said that I was selfish but…all of a sudden I was having to give my time where I never had to or never even considered having to give it before….that yeah was quite difficult"* (Eric)

"*It's just not enough time….exercise almost completely dropped off (.) just cause it's the first thing to go for me…still concentrating on the family concentrating on work and it's only really since…early on this year….that I started training again*" (James)

Eric felt '*selfish'* for wanting time for himself, whereas for James exercise was *'the first thing to go'*, as his family and work commitments were more important than his own time. This highlights social norms around prioritising family time and the expectation for fathers to sacrifice their time for their family (Henz, 2019). Fathers have long been found to exhibit low levels of physical activity, and a lack of time is one of the most cited barriers for parents, particularly with children under the age of five (Henz, 2019; Bellows-Riecken & Rhodes, 2008).

The participants also seemed to be highly aware of their partners' limited time and the importance of being fair with their partners. Some participants found navigating this tension difficult:

"*having those conversations about what…are you going to do with your time? What are we doing?…..Trying to ensure equity is is and was a bit difficult….what me and my wife has found that difficult* (is)….*the different views and…opinions um regarding…level of involvement"* (Steve)

Traditional gender roles are becoming more fluid and moving towards greater gender role egalitarianism in the UK (Fletcher, 2020; Connolly *et al.,* 2016). Participants seemed to advocate for the idea that fathers and mothers should share responsibilities equally, which is a distinctive characteristic of the new-involved fatherhood (Miguel *et al.,* 2019). However, this seemed to make it more difficult for participants to justify exercising, as it became a '*moral*' decision, with seemingly a '*right*' and '*wrong*' choice. Participants described their feelings of guilt if they left to exercise, knowing their partners would be alone coping with their children:

> "*you need to compromise because…it's not fair leaving her and she also wants to exercise and do her own thing so you just have to compromise"*. (Tony)

> "*it's just not fair on (.) the um partner really…it puts [wife] under a lot of strain…I don't feel that great for doing it (.) I know she's left looking after him".* (Scott)

Therefore, many of the participants positioned exercise as a selfish decision, and deciding whether to exercise or not was based on the morals they hold as a partner and father:

> "*The main barriers I think probably are time and….the emotional right or wrong….whether it's morally right to go (.) and play or to stay at home or selfishness you know (.) its' purely your choice isn't it…that for me is the…biggest barrier…the moralistic side of it….whether I should or shouldn't be playing…..when it's it's put it as succinctly you choose to play rugby with your friends over spending the afternoon with us (.) ultimately that is the choice isn't it um and you know you can dress it up in any mental social emotional physical wellbeing package….but that's ultimately the choice"* (Steve)

Guilt as a barrier to physical activity has been primarily associated with mothers, however, it is now recognised that guilt can be a barrier to physical activity for fathers as well (Mailey *et al.*, 2014; Bellows-Riecken & Rhodes, 2008).

The participants' guilt seemed to reflect their awareness of the unequal division of childcare in their partnerships. For most of the participants, their partners took maternity leave and a greater share of childcare during the postnatal period. Mothers are still spending more time taking care of children and less time exercising than fathers, despite increases in fathers' childcare and decreasing gender disparities (Gunnarsdottir, Petzold & Povlsen, 2013). This offers one explanation for the participants'

feelings of guilt when deciding to exercise. Despite fathers being a time-poor population, this suggests the decision to exercise in the postnatal period is more complicated than previously thought.

3.2 Theme 2: "I identified as a rugby player…I'm a Dad now": The paradox of exercise in the postnatal period

The second theme was developed through participants' reflections about their reduced participation in physical activity and how they reached this decision. Participants spoke extensively about the benefits of physical activity in the postnatal period; from providing an escape or release, social support, allowing them to regain their identity, to participants highlighting the many physical and mental benefits physical activity brings. For many participants, sport and exercise were key to their identity:

> Nathan: "*it has basically been the foundation for most of my life….sport in general has been absolutely been integral to almost every single aspect of my life"*.

> James: "*I used to think of kind of like my therapy…..if I'm stressed (.) um a run is a really good idea even if I don't feel like it…it's either that or medication….I think it performs that role for a lot of people….I've gone through periods where I've stopped exercising for (.) you know cause a baby was born….I always always end up overweight and miserable…my best (.) sort of condition is where I'm (.) regularly exercising…. I'm better for them (.) if I'm (.) more chilled out because I've (.) been for a run"*

Physical activity also allowed the fathers to reconnect with their previous identities:

> "*it was a little bit of time to be me again and to have myself and to…remember who (.) who I was as a person….before children….it's easy as a parent…to get caught up in….that's the only thing in my life now...my family is top of the pile but…what I often say I'm on the list as well I need to find a little bit of time for myself….it's quite important to me"* (Charles)

> *"I think um (.) with a lot of mums it's like that identity as well isn't it you're not Daddy anymore you're Steve again….it's back to….something that you can control"* (Steve)

However, despite these many benefits, physical activity became less important for the participants. Nine of the participants reduced or stopped exercising after their child was born. Of the three that continued, one father started running with another father to cope, another was training for an international competition and stopped immediately afterwards, and the final participant separated from his partner and increased his participation to cope.

This change in participation seemed to be a result of their new identities and changed priorities. Many of the participants reflected on how their identities changed after having children:

> "*pre-children it was just part of my life…and part of what I did and how I identified myself I think probably in my twenties um I identified myself as a rugby player whereas I identify…myself more as a Dad now"* (Charles)

> "*I think it changed from probably from….getting married [laughs] it changes….each life thing it probably changes…..cause obviously your priorities changed….prior to having children…I was racing and wanted to run my best….but then the last few years….I've been happy if I've been able to go…and take part*" (Peter)

Becoming a father is a major life transition for men, with the fatherhood identity needing to be integrated into the male identity (Torche & Rauf, 2021). This can impact many areas of fathers' lives including their mental and physical health and the quality of their relationships (Höfner, Schadler, & Richter, 2011; Barclay & Lupton, 1999).

The participants seemed to cope with the loss of sport and exercise by asserting the importance of prioritising their family's needs over their own:

> *"family that would always be number one…but did I want to get back? Course I wanted to get back….because then I was missing…my social interaction group I was missing my own time (.) you know if you talk about mental health and things….but my family would have always come first"* (Eric)

> "*the family has always been a priority and unfortunately sports has tended to take a back seat (.) if (.) you know if I'm struggling for time…I'd rather (.) stay home and be with the kids"* (James)

Fathers' experiences of transitioning to fatherhood are underreported in research (Teague & Shatte, 2018). However, fathers have been found to shift their priorities, predominantly changing their attitudes around work, socialising and leisure time, as they experience the postnatal period as difficult (Miller, 2011).

However, whilst participants recognised the importance of physical activity for their mental and physical health, it became a paradox and less important due to their new identity. Tony demonstrates how exercise can become another thing to schedule:

> *"It's enough for you to try to deal with a family a job and a baby...for people…to have that (.) extra thing to worry about and try to fit in to their….lives you might be added pressure that they may not need".*

For some participants, their loss was positioned as a short-term sacrifice, and they took solace in believing this was a short-term arrangement:

> "*I was aware that it wasn't a permanent thing (.) you know like 'I will be able to (.) get back into it eventually*" (James)

> *"there is that light at the end of the tunnel where you know it's a short period of time and then you can get your life back to a certain extent"* (Paul)

Despite the clear and varied benefits of physical activity for the fathers, due to their changed identities and priorities, exercise became far less important to them in the postnatal period. This has the consequence of changing their relationship with physical activity, as well as how they participate in sport and exercise. Some of the participants never participated in their sports again or continued their previous exercise routines.

3.3 Theme 3: "*It's a quick in and out sort of thing*": Adapting physical activity after children

This theme captured participants' reflections about how they adapted or changed their physical activity routines after having children. Exercising in the postnatal period seemed to require the fathers to make careful adaptations to their routines around their family's schedule to minimise the

impact of them being away. In particular, the fathers reported exercising before their children woke up or after they went to bed as a useful way to continue exercising:

> *"I usually exercise before they get up or after they've gone to bed…I don't really wanna take time away from the family so I'd end up (.) wait till they've all gone to sleep and then go downstairs and train"* (James)

> "*I would get up in the morning to go for a bike ride before my wife went for work which meant being on the bike by five-thirty so I could get back by seven-thirty…I'd forego….other things like sleep…to exercise cause it's important to me"* (Charles)

Exercising when their children were asleep, seemed to ensure fathers felt they were not taking away from '*family time'* or leaving their partners to cope by themselves, making spending time for themselves more acceptable. The participants identified exercising at home through online workouts or using gym equipment as far more feasible as it reduced the overall amount of time a workout took.

Some participants ensured their exercise was completed during the day or during their commute to ensure when they returned home, they could focus on their family:

> "*I'm quite good at (.) um turning these things into my life the way my life is run….you know use the gym at work during lunch"* (Charles)

> "*the only way I can make exercise work for me…if it is part of my life so…cycling to the train station to make cycling part of my commute…once I'm home I tend to like* (that) *I'm….home*" (Nick)

Participants identified team sports as something that became very difficult after children due to their inflexibility. Team sports have set start times and require more time overall to attend training and matches than participating in exercise at home. This inflexibility left participants with little choice and so many of them dropped down teams which reduced the expectations on their attendance or stopped playing entirely:

"*cricket takes about four hours...maybe even longer it's not really compatible with family life (.) the same can be said for any kind of team sport really….by the time you've…gone to the game got changed played the game got changed come back you're probably talking four hours away"* (Paul)

"*during the first year of my elder one….I gave up first team rugby and I started just playing second team rugby cause I didn't have to commit to training….when my younger one then in that first year I stopped playing that level of senior rugby at all I only starting playing vets and they only play sort of five or six times a year anyway…that was the barrier I guess family time…it's not time because I could find six hours a week if I wanted to exercise but the training times for rugby….I couldn't commit to those times….standardised times….works for most people but there are always outliers and when I become a parent then I was the outlier*" (Charles)

This was significant as changing their participation reduced fathers' opportunity to socialise and receive social support from their teammates. It also seemed to reduce their overall experience as participants minimised their amount of time away by arriving as latest as possible and leaving as soon as possible, as participating became "*quick in and out sort of thing"* (Dinesh). This also impacted participants' social support:

"Being unable to go and…join your friends for cycle rides or for runs…is challenging….because after a while you…stop getting invited to things….it can be quite difficult to come back into it…bike rides in particular your fitness is just completely ruined so it's very difficult to keep up…with your friends" (Paul)

"You just don't see them…everything just carries on without you (.) [laughs]" (James)

This also impacted participants' social standing in their clubs as a result of dropping down teams as Charles demonstrates:

"*I spent about ten years in the first team and…it's amazing how quickly the face of the team changes and you don't feel part of it anymore…I felt that straight away moving into the second team meant…..there were a few players that just didn't know me….at one of the few*

training sessions I turned up and there was a new coach and he asked me my name and I was like I'd played here….for thirteen years and I was almost embarrassed to tell him"

Social support can act as a buffer to protect individuals from the adverse effects of life stress and poor mental health (Gao, Chan, & Mao, 2009). In this study, the participants' loss of social support as a result of adapting their routines is significant, as a lack of social support is a predictor of paternal PND (Mao *et al.,* 2014; Gao, Chan, & Mao, 2009). This is significant as fathers' reduced participation during the postnatal period could be having a wider impact on their wellbeing than previously thought.

3.4 Theme 4: "*It's not where the focus is*": Fathers wellbeing as secondary to mothers'

The final theme was developed through participants' reflections on the sources of support they had during the postnatal period and the barriers they faced when seeking support. It seemed to be explicitly and implicitly emphasised to fathers that their role was to focus on supporting their partners. Participants felt pressure to '*step up'*, which resulted in their wellbeing becoming unimportant:

"*there isn't really much of a role for the father other than to support the mother"* (Paul)

"My role was to support her…especially in these first few months….to make sure she was okay…you know cooking all the dinners…the keeping the house tidy….giving her a break when she needed it" (Daniel)

"*Everything either baby or mother needed I was going to be the one who provided...for fathers in particular that role of provider is….important...there's a lot of emphasis on the Dad to kind of (.) step up….more in other aspects"* (Nathan)

Previous research has also found that fathers do not consider themselves a priority, with their wellbeing considered secondary to their partners (Eddy *et al.*, 2019; Darwin *et al.*, 2017; Shorey *et al.,* 2017). Fathers emphasise the need to support their partner and protect their partnership as central to navigating fatherhood (Darwin *et al.*, 2017).

However, this seemed to make it harder for participants to acknowledge their own mental health needs when their partners were experiencing greater physical and mental challenges (Eddy *et al.*, 2019). Due to this fathers' felt unentitled to support which might have posed a barrier to help-seeking (Holopainen & Hakulinen, 2019). Participants often emphasised how difficult it was for mothers, before stating that fathers also needed support:

> "*it is mentally very taxing particularly for the mother….and then…from the Dad's perspective you're not just trying to maintain your own mental health but trying to support your wife's as well"* (Nathan)

> "*the attention should be very much be on the women…but nowadays in the modern world that we live in…the father is no different than the mother…fathers do go through a lot you know emotionally and support their wives and stuff but (.) there's just an expectation that we need to be rock solid and be able to deal with it"* (Tony)

This was exacerbated by the participants' lack of knowledge about paternal PND. Of the thirteen participants, only seven knew fathers could experience postnatal mental health problems. The lack of awareness about paternal PND in society could affect fathers' ability to recognize, cope and manage PND, which may pose a barrier to help-seeking (Pedersen, Maindal & Ryom, 2021). Even when fathers are diagnosed with PND, it is difficult for them to access information, as most of the information available is directed at mothers (Pedersen, Maindal & Ryom, 2021).

The fathers' lack of care for their wellbeing was seemingly mirrored by the systems around them and their treatment by health care professionals. Many of the participants felt fathers lack support:

> "*There wasn't really a lot of support…..support for the father is kind of lacking*" (Paul)

> *"I mean there wasn't really anything…for (.) fathers….you kind of get ignored….*[wife]*'s had quite….of PND (.) checks but…there's was nothing* [for fathers]*….you actually are kind of isolated"* (Scott)

Fathers have previously raised the lack of tailored support available for men (Darwin *et al.,* 2017; O'Brien *et al.*, 2017). However, participants also frequently did not encounter health professionals which limited opportunities for welfare checks:

"It's one of those things where you're not here when the mother's being asked but not the fathers" (Nick)

Even when the fathers were present during appointments, they emphasised how they felt side-lined and invisible to the health care professionals:

"*I didn't really come in contact with the professionals…we had…one visit when I happened to be there and that was really all around kind of like [son]'s weight…and…a little bit more focused on the mother….there wasn't really a section where it was like and how's dad?"* (Eric)

This has also been highlighted in previous research by Darwin *et al.* (2017) and Shorey *et al.* (2017) finding fathers felt unsupported by health care professionals. Participants were also unsure of where to go for support:

"If my mental health had started declining….I would have gone to my GP….because that's (.) that's all I can think of whereas…if my wife might have gone to a…midwife or something like that um like a pregnancy service or a young mothers service there isn't a young fathers service to go to" (Charles)

When reflecting about the support their partners accessed the fathers gave numerous examples including midwives, health care professionals, NCT groups, online communities and baby and toddler groups. However, these were often places fathers could not access or felt excluded from (Darwin *et al.*, 2017; Edhborg *et al.*, 2016). Fathers, also simultaneously questioned their entitlement to support, believing that the pressured services should focus on the mothers.

Participants noted the lack of classes, support groups or online communities specifically for fathers, leaving them lacking options when trying to access support:

"*it would be nice to have (.) events to involve the kids with….go for a bike ride with him on the back…with some other dads and their kids but it's not really a thing is it? there's lots of like mummy day classes and playgroups and things but it's not really something you're expected to do"* (James)

Avenues of support and support groups available for mothers are either not available for fathers or female-dominated making access far more difficult. This has been found in previous research and suggests the support available for fathers is lacking (Eddy *et al.*, 2019; Darwin *et al.,* 2017). This highlights the great need to improve support for fathers, particularly if they are experiencing poor mental health and the need to provide more tailored support.

4. Implications

4.1 Clinical Implications and conclusions

These findings suggest physical activity may be an appropriate source of support, however, there are many challenges and obstacles for fathers exercising in this period. Fathers identified the main barriers of time and guilt, as their new identities impacted their relationship with exercise. This made exercise less important to fathers during this time, despite recognising the importance for their mental health. For participants that continued exercising it necessitated careful adaptations by changing sports, dropping down teams, exercising at home, exercising around children's routines or including their children in their workouts. This has implications for interventions trying to encourage fathers' participation by ensuring services accessible through flexible timings, times outside of work hours or providing online classes that can be participated in from home.

Team sports were highlighted as something difficult to participate in, which may be something that sports clubs can address to facilitate the retention of fathers. Physical activity interventions and sports organizations may play an integral role in promoting wellbeing by increasing physical activity in community settings (Curran *et al.,* 2017; Bickerdale *et al.*, 2017). However, to capitalize on this funding providers and commissioners must provide appropriate resources to these services to encourage their effective delivery (Thomas *et al*., 2020). Promoting mental health in community settings through physical activity may play an integral role in the long-term sustainability of the NHS and mental health treatment (Curran *et al.,* 2017).

The study also highlighted how many fathers felt unsupported during this time. Fathers highlighted their limited support options, and many were even aware that fathers could develop postnatal mental health problems. Fathers' interactions with health professionals were infrequent which is consistent with previous research finding that fathers do not fully utilise maternity services and feel excluded as parents (Edhborg *et al.*, 2016; Rominov *et al*., 2019). However, healthcare practitioners

and maternity services have an important part to play in engaging fathers and providing relevant and accessible information to combat the stigma and lack of awareness of paternal postnatal mental health in society. This is particularly important as more fathers are likely to be referred to perinatal services. Health professionals also need to be more aware of how fathers' mental health and support needs may differ from mothers. There needs to be a great improvement in the inclusion of fathers in these services, to combat the assumption that they are solely for mothers. Services and policymakers need to consider how fathers want to be supported and what services they would like to access during the perinatal period. This could result in providing novel sources of support and interventions like male-only support groups or physical activity interventions which recognise and consider fathers' mental health needs. This is likely to have a positive impact on engagement and encourage help-seeking behaviour by fathers.

4.2 Limitations and suggestions for future research

Limitations

The sample of men who participated in this research were predominantly white British, heterosexual, married, middle-class, and with an average age of thirty-six. Therefore, a limited representation of minority groups and experiences of fathers in different circumstances such as those separated, non-biological fathers or those with partial custody agreements. Non-English speaking fathers were also excluded from this study. The findings and conclusions therefore cannot be assumed to transfer over to other groups of fathers differing in culture, ethnicity, socioeconomic status or age. Future research is needed to consider how to engage more participants from socially disadvantaged and marginalised sectors of society.

Additionally, this study included fathers with a child or children between the ages of one and five. However, as this was a retrospective study it may be that the fathers' accounts of their experiences differed due to different time frames of recollection. Thus, their preciseness in the recall of their experiences may have differed, raising the potential for memory bias (Kelly *et al.*, 2018).

Recruitment for this study was very challenging, likely due to the stigma around men's mental health which remains prevalent in society (Chatmon, 2020). Participants were more comfortable describing their mental health by talking about stress, anger or frustration, which has been found in previous research (Eddy *et al.*, 2019; Darwin *et al.*, 2017). The fathers were also reluctant to express their support needs when they believed their partners' needs were more significant (Darwin *et al.*, 2017).

Together, these factors potentially made it harder for participants to acknowledge the impact on their wellbeing and mental health in the postnatal period. This raises a significant problem for research exploring fathers' mental health. If fathers do not know about paternal postnatal mental health problems and struggle to acknowledge their own mental health, it may be much harder to research this population than previously thought.

Further Research Opportunities

Research into fathers' experiences, mental health and support needs is still in its infancy. Paternal postnatal mental health has not yet been fully explored or understood and there is still not an assessment scale or short interview specifically designed for use with fathers (Sockol & Allred, 2018). Further research is needed to widen our knowledge about fathers' experiences from different ages, classes, ethnic and cultural backgrounds and child-raising circumstances and their unique support needs. Further research is also needed to explore the lack of awareness surrounding fathers' mental health and ways to improve fathers' awareness and help-seeking (Eddy *et al*., 2019; Darwin *et al.*, 2017). Given how fathers' needs may diverge from their partners', interventions for paternal postnatal mental health should consider their unique needs.

This research contributes to expanding this knowledge base by exploring one potential avenue of support, physical activity. Sport and exercise may be more acceptable to fathers' due to its alignment with masculine norms and as a non-pathologising intervention (Levant & Wong, 2017; Powers *et al.*, 2015). There are multiple avenues for future research to explore in this area including the efficacy of exercise interventions for fathers.

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