



**Prifysgol Abertawe
Swansea University**

A Qualitative Examination of the Factors Influencing the Well-Being of
Student-Athletes During a COVID-19 Affected Academic Year

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Abstract

Limited research attention has been directed towards understanding and exploring the well-being and mental health of university student-athletes, especially within the UK. This study, therefore, investigated the factors perceived to positively and negatively impact the well-being of high-performance student-athletes within a UK university during a COVID-19 affected academic year. Furthermore, this study aimed to understand the factors perceived to impact the help-seeking behaviours of high-performance student-athletes and to provide recommendations that can be implemented to support the well-being of student-athletes. This study employed a qualitative methodology. Specifically, semi-structured interviews were completed with a sample of 27 participants which included 21 high-performance student-athletes (11 male, 10 female), five of their coaches (three male, two female), and one university sports officer (female). Each student-athlete and coach were recruited from six high-performance sports teams including American football, football, hockey, netball, rugby, and swimming. Data were analysed using thematic analysis (Braun & Clark, 2019) and several factors perceived to impact the well-being and help-seeking behaviours of high-performance student-athletes were identified. The factors perceived to impact student-athlete well-being included the pursuit of a dual career, injuries, relationships, leadership, finances, and nutrition. Additionally, although the COVID-19 pandemic had some positive effects on the well-being of student-athletes in the short-term, overall, the restrictions implemented were perceived to have a negative effect. This was due to factors such as lack of control, direction, purpose, and motivation, as well as the removal of resources deemed to be important protective factors including participation in sport and social support. Moreover, it was perceived that previous experience, available resources, established support systems, and stigma influenced the help-seeking behaviours of student-athletes. This study extends previous findings regarding the factors that affect student-athlete well-being and help-seeking behaviours – especially during a COVID-19 affected academic year.

Declarations

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.


Signed.....(candidate)

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This thesis is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.


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The University's ethical procedures have been followed and, where appropriate, that ethical approval has been granted.


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Definitions and Abbreviations

Definitions

Mental Health: “a state of well-being in which an individual realises his or her abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community” (World Health Organization, 2005, p.2).

Mental Health Literacy: “understanding how to obtain and maintain positive mental health; understanding mental disorders and their treatments; decreasing stigma related to mental disorders; and, enhancing help-seeking efficacy” (Kutcher et al., 2016, p. 155).

Mental Illness: “a syndrome characterized by clinically significant disturbance in an individual’s cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning” (American Psychiatric Association, 2013, p. 20).

Student-Athlete: “a person who is a full-time university or high school student, and who participates in athletics or plays sport as an individual or member of a federation, a club, or of a sport association” (Pato et al., 2014, p. 21).

Well-Being: “the balance point between an individual’s resource pool and the challenges faced” (Dodge et al., 2012, p. 230).

Abbreviations

British Universities and Colleges Sports (BUCS)

Higher Education (HE)

Higher Education Institutes (HEI)

Interpretive Description (ID)

National Collegiate Athletic Association (NCAA)

Self-Determination Theory (SDT)

Subjective Well-Being (SWB)

Chapter One

Introduction

This chapter introduces the background of the research topic and sets out the rationale and aims of undertaking this study. Furthermore, this chapter outlines the contribution this study aimed to have within the extant literature.

Background of Study

In recent years there has been an increased research interest towards well-being and mental health, particularly within younger generations such as students, due to rising health concerns (e.g., Gunnell et al., 2018; Pitchforth et al., 2019; Thorley, 2017). As there is an increased number of university students seeking support for their well-being and mental health, it is important to identify and support at-risk populations (Gross et al., 2018). One such population is suggested to be university student-athletes (Moreland et al., 2017). A student-athlete is broadly defined as “a person who is a full-time university or high school student, and who participates in athletics or plays sport as an individual or member of a federation, a club, or of a sport association” (Pato et al., 2014, p. 21). Student-athletes are a unique population who are expected to endure the demands of a dual career (i.e., combined sport and academia; Gomez et al., 2018). Balancing this dual career can be particularly difficult when entering higher education (HE) due to the myriad of changes associated with transitioning into an autonomous student, with newfound independence, new social environments, being away from home, financial challenges, and study demands (Barrable et al., 2018; Lopes Dos Santos et al., 2020). In addition, student-athletes have the added demands of a developing athletic career, which often includes increased training load, pressure to perform, and injuries (Chyi et al., 2018; Cutler & Dwyer, 2020). Furthermore, as an athlete, they are expected to invest time in satisfying their mental, physical, nutritional, and recovery needs (Ryan et al., 2017). Due to the multifaceted nature of a dual career, it can also have psychological, physical, and social benefits

such as increased well-being, life purpose, development of multiple identities (Tekavc et al., 2015), physical health, extended social support networks (Perez-Rivases et al., 2020), reduced stress, better career planning, and increased employment opportunities (Stambulova et al., 2015). However, as a result of the increased well-being concerns among HE students, as well as the noted advantages and disadvantages of a dual career, there has been increased research attention given to the well-being and mental health of the student-athlete population specifically (e.g., Egan, 2019; Morris et al., 2020; Pflum et al., 2017; Purcell et al., 2019).

For many student-athletes, their identity as an athlete precedes their identity as a student (Scaffici & Pellegrino, 2012), however, in reality, very few athletes will make a sufficient financial earning to solely sustain an athletic career. This means that many athletes require alternative employment during or following their athletic career (Park et al., 2013). Additionally, due to the athletic identity they may have developed, there is a concern for the well-being of athletes during their transition out of sport (Park et al., 2013). This can result in low well-being, dissatisfaction, loneliness, and depression (Sanders & Stevinson, 2017), which are all outcomes that can be mitigated by the facilitation of a dual career (van Rens et al., 2018).

The pursuit of a dual career is often perceived to be a time-consuming endeavour due to student-athletes spending approximately 30 hours per week studying and an additional 20 to 30 hours on their sport (Aquilina, 2013). This leaves student-athletes tasked with finding an optimal balance between the extensive demands and time commitments of the two pathways. The inability to find and maintain this balance can lead to mental and physical health risks (DeFreese et al., 2021) resulting in outcomes such as low well-being (Healy et al., 2020; Korhonen et al., 2020; Moreland et al., 2017), overload, burnout (DeFreese et al., 2017), identity foreclosure and dropout (Stambulova et al., 2015).

Moreover, with the beginning of the COVID-19 pandemic, countries around the world issued a range of control and preventative measures in an attempt to stop the spread of the virus

including lockdown, self-isolation, university and school closures, discontinuation of non-essential services, and social distancing guidelines (Li et al., 2021). These restrictions have had a particularly negative effect on the student, and student-athlete populations, bringing with it uncertainty, disruptions to daily routines, cancellation of sport, online course delivery, as well as the removal of social support systems (Abenza-Cano et al., 2020; Hagiwara et al., 2021), likely affecting well-being and mental health (Graupensperger et al., 2020). Now, more than ever, there is a need to understand the protective factors for student-athlete well-being as well as the determinants of help-seeking behaviours of the population. Help-seeking behaviour is often vital to protect an individual from the negative effects of low well-being and mental ill-health (Drew & Matthews, 2019). Despite this, it is suggested that student-athletes in particular, are often unwilling to seek professional help, in part due to the associated stigma (Moreland et al., 2017). It is therefore imperative to address this stigma, and other determinants in order to increase the help-seeking behaviours of student-athletes.

Rationale of Study

Although there has been an acknowledgement within the literature regarding the importance of maintaining a dual career, as well as the potential negative impacts it can have on student-athletes, there are still many gaps within the literature. These gaps relate to the effect that a dual career can have on the well-being of student-athletes (Beauchemin, 2014; Guidotti et al., 2015; Morris et al, 2020). There is especially limited research that has explored the well-being of the UK-based student-athlete population (Shannon, Breslin, et al., 2019) as much of the academic research conducted has been with student-athletes in other nations such as the USA and Australia (Stambulova & Ryba, 2014). As the HE system (including the governance of sport) in the UK differs from that of countries such as the United States, much of the research conducted with student-athletes is not necessarily applicable to student-athletes within the UK (McKenna & Dunstan-Lewis, 2004). American Higher Education Institutes (HEI) have a well-

established approach to the management and development of their student-athletes, which aims to support the success of a dual career (Gomez et al., 2018). However, the sporting systems within US universities are far more commercialised than in the UK, with many American-based student-athletes training and performing at a level equivalent to a professional athlete (Brown et al., 2015). The National Collegiate Athletic Association (2020a) found that Division I student-athletes spend, on average, 33 hours per week on sport, reaching over 40 hours in sports such as American football and baseball, along with approximately 35.5 hours per week in academia. However, those athletes tend to have access to a highly supportive system, in which their sporting endeavours are prioritised, and opportunity for specialised athlete mental health care is available. Whereas UK student-athletes are reported to spend approximately 6 hours on sport per week and 12 hours on academic work (Cross, 2004), with priority afforded to academia, and available well-being services designed to offer general support to all HE students. However, if the student-athlete performs at a higher / elite level, the hours spent on their sport can increase to 20 to 30 hours per week (Ryan et al., 2017). Even across Europe, there are differences in sports systems, societal norms, and cultural traditions (Lupo et al., 2015) making it difficult to compare well-being data to student-athletes within the UK.

Research Aims and Objectives

Very little research attention has been directed towards understanding the factors that affect the well-being of performance student-athletes in the UK, despite the knowledge that they experience extensive dual demands, and are affected by stigma and poor help-seeking behaviour. Accordingly, there is limited evidence-based research to inform interventions and strategies, which can be developed to support the well-being of performance student-athletes and help them flourish in their dual careers. In addition, during such unprecedented times, it remains unclear how COVID-19 has affected the well-being and mental health of UK-based student-athletes specifically. This study, therefore, aims to: i) examine the factors perceived to

positively and negatively impact the well-being of UK-based high-performance student-athletes; ii) explore the impact of the COVID-19 pandemic on high-performance student-athletes' well-being; iii) understand the factors that affect the help-seeking behaviours of these student-athletes and; iv) utilise the findings to develop recommendations that can be implemented to support the well-being of high-performance student-athletes within the UK HE system.

Contribution to Knowledge

The current study aims to understand the factors that positively and negatively affect the well-being of UK high-performance student-athletes during a COVID-19 affected academic year. Hence, the study aims to contribute to the extant literature in several ways. First, and as stated, as limited research attention has been given to the well-being of high-performance student-athletes, this study aims to address (in part) the need for a comprehensive understanding of the factors that positively and negatively affect student-athlete well-being. Secondly, of the research that has been conducted with the student-athlete population, much of this research has focused on American collegiate athletes where their demands differ from student-athletes within the UK. This means that the factors that affect the well-being of American student-athletes may not apply to UK-based student-athletes. This study will therefore contribute to knowledge by providing insight into the factors that affect high-performance student-athlete well-being within a UK setting. Thirdly, as there is limited understanding of the factors that affect student-athlete well-being in the UK, there is also a limited understanding of appropriate support mechanisms, which can protect or buffer the effects of a dual-career on student-athlete well-being. This study aims to provide recommendations that may be used to support performance student-athletes within the UK, going forward - particularly in regard to addressing stigma and help-seeking behaviours. Fourthly, with the novelty of the COVID-19 pandemic, this research is undertaken to

understand the positive and negative impact that the restrictions have had on the well-being of high-performance student-athletes and the resources they have used to cope with these demands. Overall, this study will contribute to previous research by understanding the factors that positively and negatively affect the well-being of UK-based high-performance student-athletes during a COVID-19 affected academic year; and to understand the factors which affect the help-seeking behaviours of student-athletes. This will extend the current knowledge and provide recommendations that can be used to encourage help-seeking behaviours and support student-athlete well-being.

Thesis Structure

In Chapter One, the context of the study has been introduced and a conceptual gap within the literature has been identified. This chapter also presented the research aims and objectives and highlighted the contributions this study can make to the extant literature.

In Chapter Two, the extant literature will be reviewed to identify key areas of academic literature regarding the well-being and mental health of the student-athlete population. This includes a conceptualisation of well-being and its link to mental health and mental illness. Following this, the impact dual-career demands can have on well-being is reviewed, alongside the nature of help-seeking behaviours among student-athletes. Finally, the impact of COVID-19 on the well-being of student-athletes is highlighted.

In Chapter Three, the methodological approach and methods utilised for this qualitative study will be described. This chapter further includes a detailed outline of the participant selection criteria and recruitment procedure. The data collection and analysis processes, as well as the methodological rigour of the study are then discussed.

In Chapter Four, the findings obtained from the participants are presented, to illustrate: the factors that affected the well-being of the student-athletes within this study; the impact of

COVID-19 on their well-being; and the factors perceived to impact the help-seeking behaviours of these student-athletes.

In Chapter Five, the results of this study are further discussed and explained, through the synthesis of contemporary literature.

In Chapter Six, a summary of the study is presented, and the applied implications of the study are highlighted. This is followed by a discussion of the strengths, limitations, and future directions of the study.

Chapter Two

Literature Review

This chapter aims to critically review the research that has been conducted on well-being, and the factors known to affect the well-being of student-athletes. To do this, key areas of academic literature regarding well-being, mental health, and mental illness are discussed with a specific focus on the student, athlete, and student-athlete populations. The conceptualisation of well-being is examined with a focus on the hedonic and eudaimonic approaches. Furthermore, the link between well-being, mental health, and mental illness is presented. Through exploration of these concepts, the impact that the combined demands of being a student and a high-performance athlete can have on the well-being of student-athletes is emphasised. Following this, the help-seeking behaviours of student-athletes and well-being interventions used with the population are discussed. Finally, the potential impact the COVID-19 pandemic has had on student-athlete well-being is reviewed.

Conceptualisation of Well-Being

Well-being is a subjective, complex, and multi-dimensional experience (Lundqvist, 2011) defined as “the balance point between an individual’s resource pool and the challenges faced” (Dodge et al., 2012, p. 230). Previously, researchers explored well-being through two differing approaches, whereby well-being was either considered to be i) hedonic, concerned with happiness, or ii) eudaimonic, centred around human potential (Ruini & Ryff, 2016). Hedonic well-being, as described by Aristippus (4th Century BCE), represents happiness through the pursuit of pleasure and the avoidance of pain (Disabato et al., 2016), associating well-being with the experience of high positive affect and low negative affect (Bradburn, 1969). This was furthered to also include an assessment of life satisfaction in which an individual makes a subjective judgement on the satisfaction they have with their life as a whole or within particular life domains such as relationships and work (Henderson & Knight, 2012).

Through the pursuit of these three components (e.g., positive affect, negative affect, life satisfaction), happiness can relate to a range of experiences from bodily pleasures to self-interests (Ryan & Deci, 2001) including eating, sex, enjoyment of art, social interactions, or excitement for new experiences (Disabato et al., 2016; Huta & Ryan, 2010). Due to the assessment of hedonic well-being as an individual's perception of their own happiness through their affective state and satisfaction with life, hedonic well-being is referred to as emotional or subjective well-being (Diener, 1984). Several studies have examined subjective well-being within a sports setting. For instance, Morris and colleagues (2020) aimed to understand the subjective well-being of National Collegiate Athletic Association (NCAA) Division I university student-athletes through the utilisation of a subjective happiness scale. Furthermore, Testoni et al. (2018) advocate for the use of subjective well-being measures to understand the impact of sport on people in order to develop policy guidelines and successful interventions. However, it has been suggested that the hedonic approach provides an incomplete picture of well-being as it reduces the construct too narrowly to experiences that provide immediate happiness (Disabato et al., 2016). As a result, other researchers proposed that well-being should be examined through the eudaimonic tradition (Westerhof & Keyes, 2010).

Originating from Aristotle's (4th Century BCE) conceptualisation, eudaimonic well-being moves beyond the subjective assessment of happiness and instead highlights the good life (Disabato et al., 2016). The good life, in accordance with eudaimonic well-being, is concerned with human growth and development, which is embedded in the pursuit of goals that align to one's identity and values, leading to the realisation of one's potential and the achievement of excellence (Ryan & Deci, 2001; Waterman, 1993). Accordingly, Ryff (1995) articulated the core components of eudaimonic well-being (e.g., pursuit of goals, realisation of one's potential, achievement of excellence) into the concept of psychological well-being. Psychological well-being consists of six elements of positive functioning: purpose in life

(purposeful goals for living), environmental mastery (effective mastery of the environment), positive relationships (trusting, caring relationships with others), autonomy (self-determined and intrinsically motivated), personal growth (sense of development), and self-acceptance (positive view of the self). These six elements are suggested to be important when striving to become a better person and to realise one's potential (Ryff, 1995).

However, it was later suggested by Keyes (1998) that there was a missing element to this measurement of eudaimonic well-being in the form of a social component. Keyes argued that individuals are immersed within their social structures and encounter innumerable social tasks and challenges. This may result in an individual assessing their functioning and quality of life against social criteria, characterised by social acceptance (positive attitude towards others), social actualisation (positive attitude toward the world), social contribution (view that one's own societal contributions are valuable), social coherence (interest in the social world), and social integration (feelings of support and belonging). Together, these elements were proposed to determine an individual's level of functioning within their social lives and their overall social well-being (Keyes & Shapiro, 2004).

Researchers within a sports context have also utilised the eudaimonic approach to understand well-being in sport. For example, Kouali et al. (2020) aimed to create a sport-specific eudaimonic well-being scale, which included questions such as "I have a sense of direction in sport" and "my goals in sport have been a source of satisfaction." Kouali and colleagues argued this scale was needed due to the lack of available instruments to measure well-being in a sport-specific context and to better understand the influence of the competitive environment on student-athlete well-being. Ferguson et al. (2014) also explored eudaimonic well-being within their study, specifically through the relationship between self-compassion and eudaimonic well-being (i.e., the role of self-compassion in striving to reach sporting potential). Nevertheless, the eudaimonic approach to understanding well-being has been

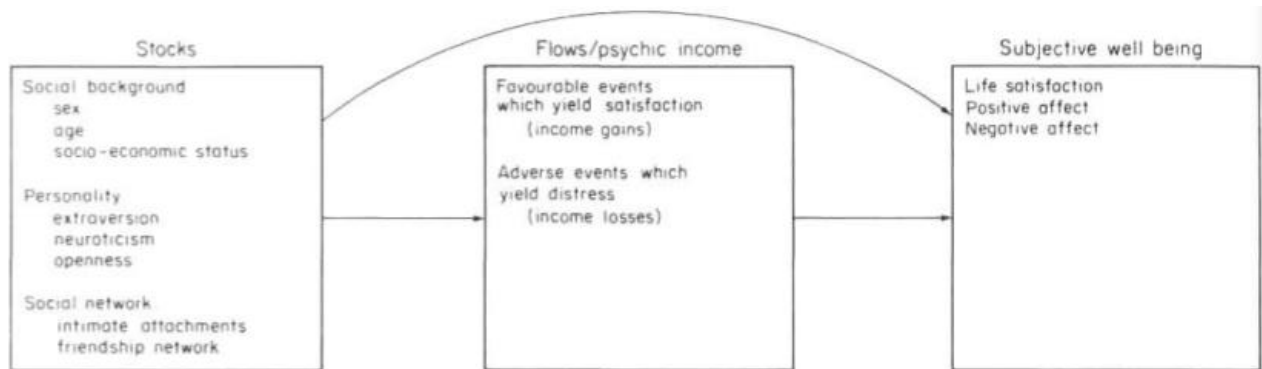
criticised for allowing researchers to determine what makes a good life as opposed to allowing participants to provide their subjective view of what makes their life good (Diener et al., 1998).

In more recent literature (e.g., Huta & Ryan, 2010; Lundqvist, 2011; Rahmani et al., 2018; van de Weijer et al., 2018) well-being is considered to be a multifaceted, complex construct (Lundqvist, 2011) and it is acknowledged that a holistic approach that combines the emotional, psychological, and social aspects of hedonic and eudaimonic well-being provides a deeper and more accurate understanding to the nature of well-being (Swami et al., 2018).

Despite the growing research interest in well-being, researchers (i.e., Awartani et al., 2008; Dodge et al., 2012) have noted that well-being is inadequately defined with a multitude of approaches utilised to measure the concept. As a result, there is considerable variation and understanding of well-being within research (Danna & Griffin, 1999). It is therefore important to develop a clear definition of well-being for consistent measurement, comparison, and interpretation (Dodge et al., 2012) in order to support policies and interventions (Dodd et al., 2021). Consequently, the lack of a clear well-being definition has resulted in research that cannot be compared across populations (La Placa et al., 2013). In response, Dodge and colleagues (2012) drew on the extensive well-being literature (e.g., Csikszentmihalyi, 2002; Cummins, 2010; Headey & Wearing, 1991; Hendry & Kleop, 2002), to create a definition of well-being. First, they drew on equilibrium research (e.g., Headey, 2006; Headey & Wearing, 1992), specifically the stocks and flows framework of subjective well-being (Figure 1).

Figure 1

A Stocks and Flows Framework for Analysing Subjective Well-Being.

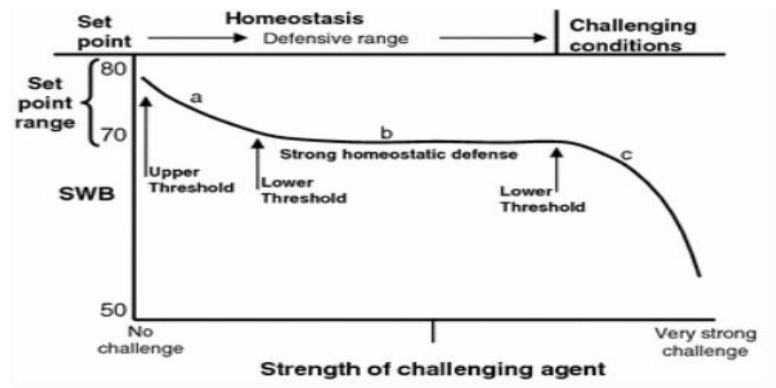


Note. From “Subjective Well-being: A Stocks and Flows Framework,” by B. Headey and A. Wearing, in F. Strack, M. Argyle and N. Schwartz (Eds.), *Subjective Well-Being: An Interdisciplinary Perspective* (p. 56), 1991, Oxford: Pergamon Press. Copyright 1991 by Pergamon Press plc.

Through this framework, it is suggested that individuals have a set-point level of well-being, determined by “stocks” (i.e., stable personal characteristics) such as social background, personality, and social network. These stocks are utilised to manage favourable and unfavourable life events known as “flows.” Well-being (i.e., life satisfaction, positive affect, negative affect) fluctuates as a result of the interaction between stocks and flows, with equilibrium and high levels of well-being, achieved when these are balanced (Headey & Wearing, 1991). Cummins (2010) extended the equilibrium theory to explore life events as challenges (Figure 2).

Figure 2

Changing Levels of SWB as Homeostasis is Challenged

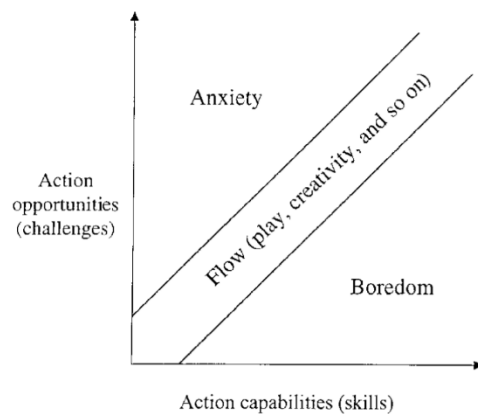


Note. From “Subjective Wellbeing, Homeostatically Protected Mood and Depression: A Synthesis,” by R. A. Cummins, 2010, *Journal of Happiness Studies*, 11, p. 5. (<https://doi.org/10.1007/s10902-009-9167-0>). Copyright 2009 by Springer Science+Business Media.

As suggested by Cummins (2010), optimal levels of well-being are represented by a set-point that remains at equilibrium within a genetically prescribed threshold (illustrated as 70 to 80 percent of maximum). As challenges are experienced, well-being will fluctuate within this threshold and will be defended by homeostatic processes in order to remain stable. However, if a very strong challenge is experienced and sustained, such as the time demands of a dual career or repeated performance losses, homeostatic defence will fail to restore equilibrium and well-being will decrease. Well-being can also increase beyond this threshold if strong positive experiences occur (Cummins, 2010). The final theory on which Dodge and colleagues (2012) developed their definition included the concept of flow (Figure 3; Nakamura & Csikszentmihalyi, 2002).

Figure 3

Flow State



Note. From “The Concept of Flow,” by J. Nakamura and M. Csikszentmihalyi, in C. R. Snyder and S. J. Lopez (Eds.), *Handbook of Positive Psychology* (p. 94), 2002, Oxford: Oxford University Press. Copyright 2002 by Oxford University Press.

It is understood that an individual will develop a range of skills and engage with resources to manage each challenge they face. In accordance with Csikszentmihalyi (2002), to achieve a flow state an individual must engage with challenges or opportunities that are appropriate for one’s capacity including neither exceeding nor underutilising one’s existing skills. Achieving this state of flow can foster happiness. Hence, through the concepts of equilibrium, challenges, and resources, Dodge et al. (2012) proposed that well-being is “the balance point between an individual’s resource pool and the challenges faced” (p.230). Accordingly, stable well-being is achieved when the psychological, social, and physical demands are balanced with the psychological, social, and physical resources. Therefore, an imbalance between these demands and resources has the potential to lower well-being. This includes the demands encountered exceeding the resources available as well as the resources accessible to an individual being greater than needed to manage the demands faced (Balk et al., 2018). The imbalance between challenge and resource can lead to negative feelings such as overload and exhaustion (Isoard-Gauthier et al., 2010). Although this definition can be utilised to understand how well-being is maintained or lowered through the balance or

imbalance of challenges and resources, there is no guidance regarding if or how well-being can be increased beyond this equilibrium (Cahill, 2015). As discussed by Dodge et al. (2012), this definition of well-being allows an individual to use their resource pool to assess a demand as a routine chore, a challenge, or a risk but does not define demands in the positive.

The Link Between Well-Being, Mental Health, and Mental Illness

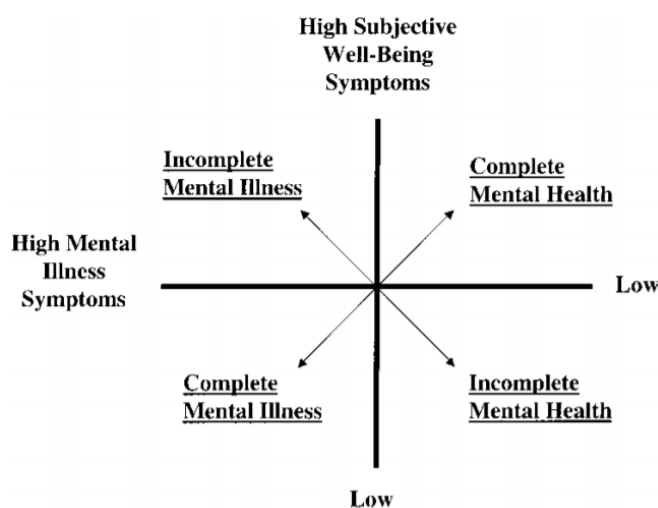
Mental health is “a state of well-being in which an individual realises his or her abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community” (World Health Organization, 2005, p.2). Within this definition, a state of well-being refers to the positive feelings relating to the emotional component of well-being, the realisation of one’s potential that is associated with the psychological component of well-being, and functioning within a community signifies the social component of well-being (Westerhof & Keyes, 2010). Opposingly, mental illness is “a syndrome characterised by clinically significant disturbance in an individual’s cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning” (American Psychiatric Association, 2013, p. 20).

Traditionally, mental health was synonymous with the absence of mental illness, and much of the mental health research focused largely on disorders such as depression, anxiety, and substance abuse, among many others (Payton, 2009). This view was based on the assumption that mental health and mental illness formed a single bipolar dimension, implying health and illness reflect opposite ends of the same continuum (Iasiello et al., 2020). Through this view, individuals are either mentally ill or presumed mentally healthy (Keyes, 2005). The single continuum has been widely criticised due to the reduction of mental health to merely the absence of disorder (Payton, 2009) and the arbitrary transition point between mental illness and mental health (Iasiello et al., 2020). It has also been noted that each culture and gender

may consider that mental health for one individual may not be mental health for another (Herron & Trent, 2000). Instead, it is suggested that the absence of illness is an inadequate measurement of mental health (Iasiello et al., 2020), and it is now acknowledged that mental health and mental illness are related, though distinct constructs (Westerhof & Keyes, 2010), as illustrated through the dual continuum (Figure 4).

Figure 4

Mental Health and Mental Illness: The Complete State Model



Note. From “Toward a Science of Mental Health: Positive Directions in Diagnosis and Interventions,” by C. L. M. Keyes and S. J. Lopez, in C. R. Snyder and S. J. Lopez (Eds.), *Handbook of Positive Psychology* (p. 50), 2002, Oxford: Oxford University Press. Copyright 2002 by Oxford University Press.

According to Keyes and Lopez (2002), mental health and mental illness each have two states, which inform the mental health continuum. The dual continuum indicates that complete mental health, which is referred to as “flourishing,” is when an individual is free of mental illness and has high levels of emotional, psychological, and social well-being. Keyes (2005) suggests in order to be flourishing, an individual must exhibit high levels on at least one of two hedonic well-being scales (positive affect and life satisfaction) and on six of eleven eudaimonic scales (six scales of psychological well-being and five scales of social well-being). This suggests an individual is experiencing positive affect, life satisfaction, and optimal functioning (Peter et al., 2011). Incomplete mental health, known as “languishing,” consists of an

individual free from mental illness, but who experiences low levels of well-being in which they have high negative affect and are not fulfilling their potential (Grant & Cavanagh, 2007). To this effect, individuals must exhibit low levels on one scale of hedonic well-being as well as on six of the eleven eudaimonic scales (Keyes, 2005). If an individual is “struggling,” or experiencing incomplete mental illness, they are exhibiting some symptoms of mental illness, however, they also have high levels of emotional, psychological, and social well-being. Finally, complete mental illness is experienced when an individual is “floundering” and therefore exhibiting high levels of mental illness symptoms, as well as low levels of emotional, psychological, and social well-being (Venning et al., 2013). Critically, within this model, it is noted that sustained periods of low hedonic and eudaimonic well-being increase the likelihood of experiencing mental ill-health (Keyes & Lopez, 2002). In having adequate resources to cope with the demands faced, the physiological and psychological costs of demands can be reduced and encouragement towards personal growth and development of goals can occur. In combination, these contribute to the maintenance or improvement of emotional, psychological, and social well-being (Xanthopoulou et al., 2007).

Further work has been conducted on well-being and mental health through positive psychology, which aims to move beyond the focus on mental illness and instead promote the importance of positive subjective experience, positive individual traits, and positive institutions (Seligman & Csikszentmihalyi, 2000). Positive psychology operates on three levels, the subjective level, which includes positive experiences associated with well-being, satisfaction, optimism, flow, happiness, and contentment. The individual level focuses on the qualities required to be a good person including the capacity for love and vocation, perseverance, forgiveness, wisdom, and courage. Finally, the group level focuses on civic virtues such as work ethic, social responsibility, and altruism (Seligman, 2002). Specifically, Seligman’s (2011) positive psychology identifies five contributing elements to well-being: positive

emotions, engagement, positive relationships, meaning, and accomplishment. Positive emotions are considered to be important for a pleasant life and measure such factors as flourishing, happiness, and life satisfaction through emotions including hope, interest, love, gratitude, and amusement. Engagement is the subjective assessment of an individual's involvement in a task, with the ultimate aim to achieve a flow state. Positive relationships, in alignment with Keyes' (1998) social component, are a key aspect of well-being, with feelings of connection, support, value, belonging, and love, positively impacting well-being. Meaning is an intrinsic human quality in which individuals have a sense of worth and belonging beyond themselves. This is often found through pursuits such as a career, social cause, or religious belief. Finally, accomplishment is the mastering of a task or achievement of a goal which can be rewarding and result in feelings of joy, pride, and confidence and can have a positive effect on well-being (Seligman, 2011).

Prevalence of Low Well-Being and Mental Illness Among Adolescents in the UK

In the UK, mental illness disorders affect one in four people (British Medical Association 2020), with the most prevalent including depression, generalised anxiety disorder, panic disorder, and phobic disorder (Mental Health Foundation, 2016). Three-quarters of these disorders will develop in individuals by the age of 25 (National Assembly for Wales, 2018). Indeed, low well-being and mental illness disorders often develop during adolescence, as it is a time of biological, psychological, and social change (Venning et al., 2013). Moreover, during this time, adolescents begin to participate in risk-taking behaviours (e.g., binge drinking, reckless driving; Botdorf et al., 2016; smoking and drug use; Messer et al., 2020) that have the potential to cause negative long-term mental health effects (Venning et al., 2013). This leaves the university student population vulnerable to the development of low well-being and mental illness. In 2019, it was found that one in eight people aged 5 to 19 years experienced a mental illness (Longfield, 2020). This figure increased in 2020 to one in six (Vizard et al., 2020), with

12.8% of people aged 5 to 19 years considered to have a mental illness. Furthermore, mental illness is suggested to be most prevalent among adolescent females (Longfield, 2020). According to Vizard et al. (2020), this includes 27.2% of females and 13.3% of males aged 17 to 22 years identified as having a mental illness. More specifically, in 2018, 31% of females aged 16 to 24 years indicated experiencing anxiety or depression compared to 18% of age-matched males (Rees, 2020). It has been suggested that individuals under the age of 25 also struggle with substance abuse, which can negatively impact mental health or worsen mental illness disorders (Peter et al., 2011; Young Minds, 2021). It has been found that one in five people aged 16 to 24 years had experimented with drugs in 2020 (Stripe, 2020), with the prevalence higher in males than females (National Institute on Drug Abuse, 2020). Moreover, there is an increasing concern for the rising cases of self-harm and suicide among adolescents because of decreasing well-being and mental health (Bould et al., 2019). It has been indicated that 75% of suicides in the UK are committed by males. In 2018, the suicide rate among males aged 10 to 24 years was at the highest level since 2003, with rates of 7.8 per 100,000. For females aged 10 to 24 years, suicide rates had decreased by 0.3 between 2017 and 2018 for a total rate of 2.9 per 100,000 (Manders & Kaur, 2019). This indicates that there is serious concern for the well-being and mental health of adolescents and young adults of both genders.

Student Well-Being and Mental Health

University students are considered a very high-risk population for low well-being and mental illness disorders (Baik et al., 2019). The period spent at university is often during the peak time of mental illness development (Auerbach et al., 2018) and is associated with a period of enhanced distress (Bewick et al., 2010). This is due to the associated transition period for students resulting in a range of new challenges such as moving away from home, independence, a new social environment, heavy course load, academic deadlines, pressure to achieve good grades, and financial constraints (Ansari et al., 2011; Bitsika et al., 2010; Fernández-Rodríguez

et al., 2019). These extensive demands can become overwhelming and have the potential to reduce student well-being (Bore et al., 2016). This is of concern, as sustained low well-being and mental ill-health can affect students emotionally, psychologically, socially, and physically. Furthermore, a period of sustained low well-being and mental ill-health can have consequences on the academic performance of students due to reduced motivation, attention, processing, retention, as well as decision-making capacities (Baik et al., 2019), which can result in lower self-efficacy, dissatisfaction, and increased dropout rates (Lipson & Eisenberg, 2018). Therefore, it is important to address such well-being and mental ill-health trends, as high levels of well-being are critical for effective learning (Ansari & Stock, 2010), with those in better mental health achieving higher academic performance (Bonell et al., 2014).

Prevalence of Well-Being and Mental Illness Among Students

Recent studies (e.g., Brown, 2016; Howells & Smith, 2019; McManus & Gunnell, 2020) have shown that students' well-being is often lower than that of their age-matched population. In 2019, it was reported that 64% of students felt that their studies and university lifestyle negatively impacted their mental well-being, with academic stress, financial pressure, and balancing university with work, noted as the biggest contributors to their low well-being (Randstad, 2020). An annual student experience survey conducted across UK HEI by Unite Students (2016) identified that one in ten (13%) students were not satisfied with their lives. This figure was higher than that of the aged-matched general population in which 2.9% expressed low levels of life satisfaction (Manclossi, 2015). It was also determined that at the time, only 27% of students were experiencing high levels of emotional, psychological, and social well-being. Opposingly, the survey found that 16% of students experienced low levels of emotional, psychological, and social well-being and were more likely to experience poor sleeping patterns, unhealthy eating including problematic eating behaviours, low concentration

that affected their academic work, as well as being more likely to drop out of university than flourishing students (Unite Students, 2016).

Such levels of low well-being may contribute, in part, to the increased levels of mental illness observed among students. In 2007/08, it was reported that 9, 675 students had a mental illness, which steadily increased to 57, 305 in 2016/17 (Universities UK, 2018). The Higher Education Statistics Agency (2020) suggested this number was as high as 96,490 for the academic year 2019/20. A further study (i.e., Unite Students, 2019) conducted with 21,000 students from 140 universities across the UK, found that these figures did not present a complete picture, as it was reported that only 53% of students disclose their low well-being and mental illness symptoms. The students most commonly experience poor mental health through mood disorders, anxiety, substance abuse, depression, self-harm, and eating disorders (Auerbach et al., 2018; Barkham et al., 2019; Hagell & Shah, 2019). Reports suggest that HE students have particularly low emotional well-being, with approximately 12% experiencing anxiety (Blanco et al., 2008), 7% to 9% experiencing depression (Eisenberg et al., 2013), and 33% of students having suicidal thoughts - double that of the general population (All Party Parliamentary Group on Students, 2015). These concerns can have further significant detrimental effects on students including social isolation, reduced self-esteem, academic underachievement, a reduced ability to gain education, or employment after graduation (Storrie et al., 2010), poor interpersonal relationships, reduced self-perception, and insufficient social-emotional skills (Winzer et al., 2018).

Beyond the low well-being and mental illness statistics that have been highlighted for university students, it should be noted that certain groups within the student population are at further risk of mental illness disorders (Eisenberg et al., 2013). In recent years, female students have been found to be more vulnerable to low well-being and mental illness than their male counterparts, with one in five female students having a mental illness compared to one in eight

male students (McManus et al., 2016). Female students also experience lower emotional well-being and higher rates of depression and anxiety in comparison to male students (Seehuus et al., 2019). However, male students are at increased risk of experiencing substance abuse (Pedrelli et al., 2016).

Student Well-Being and Mental Health Interventions

Due to the magnitude of well-being and mental illness concerns among university students, support and interventions are often provided within HEIs. Across the UK, 94% of universities have reported an increase in the demand for well-being services, which are used by one in four students (Thorley, 2017). The most prevalent service offered by HEI's is individual and group counselling (Worsley et al., 2020), however, these professional services have a limited capacity and cannot support all students (Brown, 2018). Furthermore, many students do not seek help due to barriers such as concerns for privacy, time constraints, lack of perceived need for help, unawareness of the available services, scepticism in the effectiveness of services, stigma (Hunt & Eisenberg, 2010), and the preference to seek support from friends or family opposed to professional services (Gorczyński, Sims-Schouten, et al., 2017). As a result of these barriers, self-help programmes such as digital interventions may be more effective than traditional counselling (Garrido et al., 2019). Digital interventions often consist of cognitive behavioural therapy, support groups, personalised feedback, and psychological skills training (Harrer et al., 2019) and have been shown to increase well-being and reduce symptoms of depression, anxiety and stress in university students (Lattie et al., 2019). Such interventions have the added benefit of being accessible, convenient, personalised, and can reduce the stigma associated with counselling (Becker & Torous, 2019).

Within a university setting, it is also important to increase the mental health literacy of students (Miles et al., 2020) in order to improve their ability to recognise low well-being and mental illness symptoms, as well as enhance their help-seeking knowledge and behaviours

(Gorczyński, Sims-Schouten, et al., 2017), for this leads to improved well-being. It has been found that there is a significant difference in mental health literacy between genders, with female students regarded as having better mental health literacy than male students, especially relating to the recognition of symptoms of depression and anxiety disorders. Moreover, male students have shown considerably lower mental health literacy regarding depression and eating disorders (Miles et al., 2020). Higher mental health literacy has been associated with help-seeking behaviours due to the increased understanding of the helpfulness of interventions, the reduction of stigma, and knowledge of the confidentiality of seeking help (Gagnon et al., 2017). Therefore, mental health literacy interventions should aim to increase an individual's ability to recognise low well-being and mental illness symptoms, knowledge of preventative measures, knowledge of help-seeking options, and self-help strategies and skills to support others experiencing mental illness symptoms (Jorm, 2012). Despite the interventions that are in place to enhance the well-being and mental health of students, there is scope for more to be done within HE settings. For instance, it has been proposed that all universities should implement a well-being and mental health strategy, though only one-third of institutes currently have a strategy in place (Thorley, 2017).

Athlete Well-Being and Mental Health

Recently, the well-being and mental health of the athlete population has received increased research attention (Giles et al., 2020). This is due to the invalidated notion that athletes are devoid of low well-being and mental ill-health (Wolanin et al., 2015). Originally, it was assumed that athletes were unlikely to experience low well-being and mental ill-health because of the benefits of regular exercise and the extended social support they receive within their sport (Chiou et al., 2019; Morgan et al., 2013; Sarkar & Fletcher, 2014). Regular exercise has been associated with beneficial impacts on well-being (Zubala et al., 2017) including enhanced self-esteem, positive affect, optimism, happiness, life satisfaction (Rodríguez-Ayllon

et al., 2019), and reduced symptoms of mental illness (Bell et al., 2019). Additional benefits to participation in sport include perceived enjoyment, overall health (Mandolesi et al., 2018), motivation, confidence, development of life skills (Chen et al., 2010), positive sporting relationships and support, autonomy, career satisfaction, and increased mental health literacy (Egan, 2019; Küttel & Larsen, 2019), which further enhanced the view that athletes were less likely (in comparison to their non-sporting counterparts) to experience low well-being and mental ill-health. Along with the benefits of physical participation in sport, the social support athletes receive within the sporting environment is seen as an important resource to enhance athlete well-being and mental health (Fogaca, 2019). Through this social support, athletes can express their thoughts and feelings more freely with peers who have a mutual understanding of the sporting career (Crutcher et al., 2018). Having the support of teammates, coaches, sports staff, friends, and family can assist an athlete to cope with adversities such as low well-being, injuries, and burnout (Berg & Warner, 2019).

Despite the many benefits, it is now understood that athletes encounter low well-being and mental ill-health, which can be exacerbated by a range of demands including injuries, team conflict, increased public scrutiny, performance failure, overtraining, and fatigue (Purcell et al., 2019). In particular, elite athletes not only encounter these extensive demands but also make substantial mental and physical investments in their sport, deal with immense pressure to succeed (Schaal et al., 2011) and manage extensive training loads in comparison to their non-elite counterparts. This can lead to low well-being and mental ill-health if not properly controlled (Küttel & Larsen, 2020). Furthermore, elite and non-elite athletes ascribe differing meanings to sport such that non-elite athletes may be interested mainly in a social aspect, whereas elite athletes are focused on the competitive nature of sport. To this effect, elite and non-elite athletes will face different demands that have varying effect on their well-being (Piermattéo et al., 2018). Indeed, the time of peak competitive performance for elite athletes is

also often concurrent with the peak age for low well-being and mental illness disorders, which can increase an elite athlete's vulnerability to low well-being and mental ill-health (Gorczyński, Coyle, & Gibson, 2017; Rice et al., 2016).

Prevalence of Well-Being and Mental Illness Among Athletes

It has been recently established that the prevalence of low well-being and mental illness among athletes is similar, if not higher than the general population (Gorczyński, Sims-Schouten, et al., 2017; Rice et al., 2016). Athletes participating in competitive sport can experience unique demands such as overtraining, competitive pressures (Gustafsson et al., 2017), injury, failure (Putukian, 2016), weight management (Alwan et al., 2019), as well as future employment and financial concerns (Park et al., 2013). These demands can lead to low well-being, low motivation, anxiety, depression, mood disturbance (DeFreese & Smith, 2014), risk of substance and alcohol abuse (Breslin et al., 2017a), burnout, and disordered eating, among others (Hughes & Leavey, 2012). Indeed, Ranson et al. (2020) found that 19% of 394 UK Olympic athletes had low well-being, with 24% also reporting high or very high psychological distress. An additional study conducted with 612 Danish elite athletes found that 64% were categorised as flourishing with above-average well-being, low anxiety, and depression, 29% had moderate mental health including below-average well-being and mild or moderate anxiety and depression, and 6.5% were labelled as languishing in which athletes had low well-being and moderate to severe symptoms of anxiety and depression (Küttel et al., 2021). These results are similar to those found in the age-matched general population.

Furthermore, Gouttebauge et al. (2019) found that 19% of elite athletes had symptoms of alcohol misuse and 34% of athletes had anxiety or depression. Prevalence rates of eating disorders have also been found to be higher among athletes than non-athletes, with approximately 20% of female athletes reporting an eating disorder compared to 9% of female non-athletes (Sundgot-Borgen & Torstveit, 2004), with the figure particularly high in sports

that focus on weight class, aesthetics, or low body mass (e.g., rowing, gymnastics, swimming, figure skating, and cycling; Joy et al., 2016). Eating disorders can also contribute to a significant reduction in all aspects of well-being (de Vos et al., 2018) as well as increase the risk of developing mental illness disorders including depression, anxiety, substance abuse, and suicidal ideations (Wells et al., 2020).

Low well-being and mental illness are often stigmatised in the athletic culture as athletes are held in high regard as being mentally tough (Bauman, 2016). This expectation may put athletes at a perceived risk of suffering negative consequences if they disclose their low well-being or mental illness such as being seen as weak, reduced playing time, loss of their starting position, or even the end of their athletic contracts (Bauman, 2016). Gender stereotypes, particularly perceptions of masculinity, also increase the stigma surrounding low well-being and mental illness, which can influence athletes' willingness to seek help (Breslin, Shannon, et al., 2019). Stigma can be public or personal, with perceived public stigma instilling fear of judgement from peers, coaches, family, and the public, and personal stigma impacting an individual's self-esteem, both of which decrease help-seeking behaviour (Kaier et al., 2015). Athletes have been found to demonstrate a higher degree of negative attitudes towards help-seeking behaviour than non-athletes, especially among the male athlete population. Other barriers suggested to seeking help include the belief that the problem will go away or can be solved without help, lack of confidence in professionals, lack of transport, and lack of time (Gulliver, Griffiths, & Christensen, 2012). As with the student population, many athletes also have low levels of mental health literacy, which includes limited knowledge of low well-being, mental illness, and the available support, further hindering the help-seeking behaviour of athletes (Gorczyński et al., 2019). Collectively, such factors can decrease the likelihood of athletes seeking support for their well-being concerns, thereby exacerbating the situation, and

increasing the potential of developing low well-being and mental illness symptoms (Gulliver, Griffiths, Christensen, Mackinnon et al., 2012).

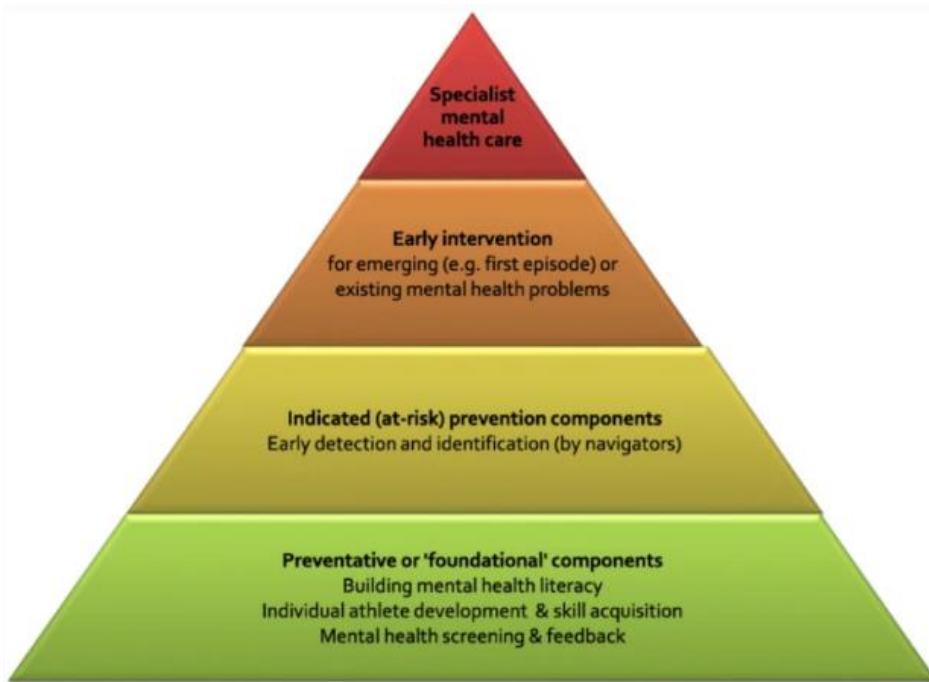
Athlete Specific Well-Being and Mental Health Interventions

To mitigate the impact of help-seeking barriers and improve the well-being and mental health of athletes, researchers have evaluated the impact of interventions within a sport setting (e.g., Breslin et al., 2017a; Gavrilova & Donohue, 2018). It has been suggested that many of the well-being interventions conducted within sport settings have not been adapted for the specific requirements of athletes, despite the need for context-specific programmes (Breslin et al., 2017a). As such, many of the interventions are similar to those applied within the student population including mental health literacy, professional psychological support (Breslin et al., 2017a), self-management (Breslin et al., 2021), and internet-based interventions (Gulliver, Griffiths, Christensen, Mackinnon et al., 2012). It is suggested that mental health literacy interventions may be the most beneficial within sport settings due to the negative attitudes towards help-seeking as well as lower mental health literacy levels among high-performance athletes. Mental health literacy training has been shown to improve athletes' well-being and mental health knowledge and short and long-term reductions in stigma, however, the methodological quality of many of these studies was low, with more evidence and theory-based research required (Breslin et al., 2017a; Bu et al., 2020).

Furthermore, Purcell et al. (2019) suggested that mental health literacy is insufficient to tackle the mental health needs of athletes in isolation. They, therefore, proposed an elite athlete well-being and mental health framework, which encompasses four distinct stages (Figure 5).

Figure 5

Elite Athlete Mental Health and Well-Being Framework



Note. From “Mental Health in Elite Athletes: Increased Awareness Requires an Early Intervention Framework to Respond to Athlete Needs,” by R. Purcell, K. Gwyther and S. M. Rice, 2019, *Sports Medicine – Open*, 5(46), p. 4. (<https://doi.org/10.1186/s40798-019-0220-1>). CC BY.

Stage one (i.e., preventive or ‘foundational components’) focuses on preventative components including improving mental health literacy, reducing stigma, promoting help-seeking behaviour, developing personal and career goals, and mental health screening. This preventative stage aims to educate athletes, coaching and support staff as well as family and friends on the importance of athlete well-being. Stage two (i.e., indicated [at-risk] preventive components) is aimed at athletes considered to be at-risk of low well-being. Through this, the prevention programme attempts to reduce the deterioration of well-being and mental health by detecting symptoms at the earliest stage. During this stage, it is often coaches and teammates that detect changes or symptoms in an athlete and who facilitate the referral to an appropriate well-being professional. Stage three (i.e., early intervention) is necessary when the athletic and life demands exceed the resource available to cope. This stage is often indicated by signs of low well-being and mild to moderate mental ill-health, with referral to professional well-being

services recommended. In the fourth and final stage (i.e., specialist mental health care), despite earlier interventions, some athletes will experience low well-being and symptoms of mental ill-health that require clinical intervention (Purcell et al., 2019). While comprehensive, and conceptually appealing, the above framework has yet to be examined within the sporting context.

Along with researchers, governments are also attempting to address the low well-being and mental ill-health of the athlete population (Breslin et al., 2017a). For instance, the UK government developed an action plan that aimed to establish a high standard of well-being support through the implementation of well-being and mental health promotion, reduction of stigma, learning opportunities (e.g., e-learning courses), dissemination of sport-specific resources, and the encouragement of good practice (Department of Digital, Culture, Media & Sport, 2018). Together, these strategies were intended to improve the well-being of athletes, though, it is acknowledged that addressing the perceived stigma and inherent mental toughness within this setting is a difficult task (Poucher et al., 2021). In summary, in date, there is limited evidence-based to indicate the success of well-being and mental health interventions among athletes (Breslin et al., 2017b), with much of the research conducted of poor quality in both design and reporting (Rice et al., 2016).

Student-Athlete Well-Being and Mental Health

Understanding and supporting the well-being of university student-athletes has become a priority within HEIs (Bird et al., 2021) as the simultaneous pursuit of sport and academia can provide a multitude of challenges (Harrison et al., 2020). University student-athletes not only experience the academic challenges encountered by their non-athlete counterparts including deadlines, newfound independence, new social environments, financial difficulties, adjustment to a new learning environment (Macaskill, 2012), and academic pressures (Ryan et al., 2018), but have the added demands of a sporting career such as coach conflicts (Ryan et al., 2018),

training demands, performance expectations, competition pressures (van Rens et al., 2016), and injuries (Wilson & Pritchard, 2005). The combination of these educational and sporting demands can result in fatigue, scheduling conflicts (Cosh & Tully, 2015), overload, increased risk of injury (Schinke et al., 2018), lowered academic engagement and performance, limited career progress, and critically low well-being (Creed et al., 2015) and mental illness (e.g., anxiety, depression, eating disorders and substance abuse; Egan, 2019). The unique combination of demands, which stem from being both a student and a high-performance athlete, can force student-athletes to balance or prioritise multiple and often conflicting roles (Whitehead & Senecal, 2019). This can cause low well-being, especially when student-athletes attach importance to, and have a desire to do well in both athletic and academic roles (Wendling et al., 2018). Although student-athletes have these increased demands that can negatively impact their well-being, concern has conventionally been constrained to their physical health (Van Slingerland et al., 2018), neglecting to account for emotional, psychological, and social well-being. However, physical, mental, and social well-being are interrelated and important aspects that contribute to the overall well-being and ultimate success of student-athletes (Kroshus, 2016).

Despite the negative impact that the unique combination of demands can have on well-being and mental health, being a student-athlete can also provide the opportunity to increase self-confidence, connectedness, self-esteem (Ryan et al., 2018), social support, and responsibilities. While also facilitating the development of a positive identity (Van Slingerland et al., 2018), provide meaning and value to life and the opportunity to pursue goals. All of which can positively impact well-being and mental health (Egan, 2019). As with the athlete population, it was historically assumed that the associated benefits of participating in sport (Snedden et al., 2018), alongside the increased social support from teammates, peers, coaches, and academic staff, had a protective effect on the well-being and mental health of student-

athletes (Hagiwara et al., 2017). With this assumption of the buffering factors reducing the likelihood of low well-being and mental ill-health, the student-athlete population has been overlooked and under-researched (Cutler & Dwyer, 2020). As a result, there is limited understanding of the factors that impact student-athlete well-being and mental health (positively and negatively), and the true prevalence of low well-being and mental ill-health. This has led to limited research-based evidence of effective interventions specifically targeted for student-athletes (Hong et al., 2018).

Prevalence of Well-Being and Mental Illness Among Student-Athletes

Although there is limited research to date, what exists has indicated that student-athletes have similar rates of low well-being in comparison to non-athletic students, though are at greater risk of developing specific mental illnesses such as eating disorders, substance abuse, mood disorders, and suicidal ideations (Chow et al., 2020; Moreland et al., 2017; Shannon, Breslin, et al., 2019). A Canadian study by Van Slingerland et al. (2018) reported that 45% of the 110 student-athletes within their sample were flourishing, 52% were moderately mentally healthy and 1.8% were languishing. In comparison, a large-scale study of 1,710 non-athletic university students found that 59% of students were flourishing, 40% were moderately mentally healthy and 1.3% were languishing (Fink, 2014). Hence a slightly poorer level of well-being and mental health among the student-athletes compared to non-athletic university students. It is also reported elsewhere that prevalence rates of depression among the student-athlete population are between 16.8% (Weigand et al., 2013) and 23.7% (Wolanin et al., 2016) compared to 8.7% (Rao & Hong, 2016) and 14.5% for the student population (Bird, Chow, Meir, & Freeman, 2018). The prevalence of anxiety among student-athletes was also reported to be high within a study by Davoren and Hwang (2014), where it was found that 31% of male student-athletes and 48% of female student-athletes reported symptoms of anxiety. Worryingly, suicide is the fourth leading cause of death among student-athletes and the second leading cause

of death among university students (Rao et al., 2015). This prevalence of mental illness disorders can be a result of sustained low well-being (Keyes & Lopez, 2002).

Student-Athlete Specific Well-Being and Mental Health Interventions and Help-Seeking Behaviours

Even with the understanding that well-being and mental illness are at a similar, or somewhat higher rates for university student-athletes, compared to their non-athlete counterparts, it is reported that professional services are underutilised by the student-athlete population (Bird, Chow, Meir, & Freeman, 2018), with around 10% of student-athletes seeking support in comparison to 30% of non-athletic students (Chow et al., 2020). As found with both students and athletes, student-athletes face significant barriers to seeking help including stigma, negative views of professional support, and the perceived weakness attached to seeking support (Armstrong et al., 2015). To further add to these barriers, the student-athlete culture is often associated with mental toughness, in which student-athletes are expected to persevere through pain or injuries, leading to poor decision-making and risk-taking behaviour (Crust et al., 2016). Mental toughness can also be viewed as a contradictory concept to low well-being and mental illness, reinforcing the view that low well-being is a weakness, which may prevent student-athletes from seeking the appropriate help for their well-being concerns (Bird et al., 2021). Moreover, a lack of mental health literacy such as the lack of knowledge of signs of mental illness, unknown expectations of seeking professional support, fear of coaches' negative reactions, and the attribution of low well-being to overtraining and heavy schedules have been reported to significantly reduce the help-seeking behaviours of student-athletes (Ryan et al., 2018). To address the stigma and increase student-athlete mental health literacy, several interventions have been implemented within this population (e.g., Chow et al., 2020; Fogaca, 2021; Laslett & Uphill, 2020). It has been suggested that interventions focused on the reduction of stigma are important due to the role perceptions of well-being and mental ill-health play in

student-athlete help-seeking behaviours. One form of intervention that addresses this issue was a mental health literacy intervention conducted by Breslin et al. (2018) which aimed to promote mental health through group learning and discussions, as well as an introduction to mindfulness practice. This intervention successfully increased the knowledge of mental health, types of mental illnesses, and increased the likelihood of student-athletes engaging with and offering support to someone with a mental illness. It has also been found that such mental health literacy interventions have had some success in improving well-being, mental health knowledge, confidence to help others, and reducing stigma among student-athletes (Breslin, Haughey, et al., 2019; Breslin et al., 2017b). However, despite the need to address help-seeking behaviours and the stigma surrounding well-being and mental health, these outcomes are difficult to change, and mental health literacy interventions in isolation may therefore be insufficient (Chow et al., 2020).

As student-athletes have expressed a lack of skills to manage their mental health (Shannon, Hanna, et al., 2019), interventions focused on increasing these skills may be beneficial in combination with mental health literacy. For example, Fogaca (2021) designed an intervention aimed at improving coping skills and social support by teaching student-athletes how to use their mental skills (i.e., mindfulness, breathing relaxation, self-talk, growth mindset) to manage stressors as well as teaching captains and coaches the importance of social support. This intervention was found to improve mental skills and reduce anxiety among student-athlete participants compared to the control group. As found within this study, a whole team approach to interventions may be more beneficial, especially for student-athletes wishing to seek support but being too afraid to do so (Fogaca, 2021).

An additional barrier to seeking help is student-athletes' beliefs that their issues are not significant enough to require professional support (Bird, Chow, & Cooper, 2018). This barrier has been addressed through self-management interventions, which provide an opportunity for

student-athletes to manage their well-being through skill development (Shannon, Breslin, et al., 2019). One way to do this is through the proposed Five Cardinal Mental Skills Model (Henschen, 2005), which teaches relaxation, imagery, routines, self-talk, and concentration through skill-building and performance enhancement. This model has been found to be beneficial for increasing student-athlete well-being, reducing perceived stigma, addressing barriers to help-seeking behaviours as well as creating a means of engaging student-athletes in discussion and equipping student-athletes with performance and well-being enhancement skills (Beauchemin, 2014). As with the athlete population, primary prevention and early identification of low well-being are seemingly more effective, with coaches suggested to be in the best position to provide early identification of low well-being, as they often have the most contact with student-athletes (Bissett & Tamminen, 2020). It is therefore recommended by Kroshus (2016) that coaches should receive training to increase their knowledge of well-being and the avenues of support for student-athletes. Despite these tentative findings and proposed interventions, there remains a lack of evidence-based understanding regarding how to effectively support the well-being of student-athletes, especially within the UK (Ryan et al., 2018).

The Impact of COVID-19 on Well-Being and Mental Health

The unprecedented circumstances of the COVID-19 pandemic have had a profound effect on the well-being and mental health of individuals across the globe, extending beyond those who have been directly affected (O'Connor et al., 2020). COVID-19 has been associated with psychological consequences such as low well-being, post-traumatic stress, depression, and anxiety (White & Van Der Boor, 2020) as well as changes in behaviour including sleep disturbances and binge eating (Zhai & Du, 2020). Furthermore, well-being and mental health are likely to be negatively affected by the impact COVID-19 has had on socioeconomic

inequalities, unemployment, social connections, isolation, social distancing, and physical inactivity (Campion et al., 2020).

Between April 2019 and March 2020 (pre-pandemic), well-being in the UK had begun to decrease. Happiness ratings fell by 1.1% to 7.48 out of 10 compared with the previous year. This decrease was also represented by life satisfaction, with figures falling by 0.6% to 7.66 (Coates, 2020). With the onset of the COVID-19 pandemic, well-being in the UK continued to decrease. Between March 2020 and June 2020 (during lockdown), happiness decreased by 1.9% to 7.27 out of 10 and life satisfaction fell by 1.7% to 7.5 (Hill, 2021). Specifically, in March 2020, overall levels of happiness decreased among 20-to-24-year-olds, with only 32.1% expressing high levels of happiness - a decrease of 0.2% compared to March 2019. A further 9% of individuals also reported low levels of happiness, which represents a figure 1.2% higher than in the previous year. Furthermore, in March 2019, 27.6% of individuals expressed very high levels of life satisfaction. This decreased to 25% in March 2020 (Rees, 2020).

Such low well-being concerns, which were the result of the pandemic, have been found across all population groups, including student-athletes. The COVID-19 pandemic has negatively impacted both aspects of student-athletes dual careers, with university learning transferring online, and athletic training and competitions cancelled (Bullard, 2020). Moreover, the social interactions that many student-athletes rely on to maintain their well-being have been reduced due to the self-isolation and social distancing measures implemented, leading to a detrimental impact on their well-being and mental health (Graupensperger et al., 2020). According to the National Collegiate Athletic Association (2020b), of the 37,658 student-athletes surveyed, 40% lacked motivation, 21% had feelings of stress or anxiety, and 13% reported feeling sad or depressed, with mental health concerns 1.5 to two times higher than reported prior to the pandemic (Johnson, 2021). Although many student-athletes are still training daily, either through virtual club events or individually, the time usually dedicated to

training has decreased, with limited equipment and lack of social interaction negatively influencing their physical and mental well-being (Liu, 2020). Student-athlete well-being has also been influenced detrimentally during the pandemic through disruptions to daily routines, removal of physical activity, social isolation, cancelled games, uncertain training plans, and the loss of access to coaches, sports staff and teammates (Abenza-Cano et al., 2020).

Furthermore, the transition period out of university, and subsequently into retirement for many student-athletes can be challenging, especially during the pandemic. Consequences of this early or unplanned retirement can include reduced social support as well as higher athletic identity, which can negatively impact well-being and mental health (Reardon et al., 2020). Hence, student-athlete well-being is not only impacted by the demands of being a student-athlete, but the COVID-19 pandemic has presented additional challenges as well as removed or reduced many of the resources student-athletes use to maintain or improve their well-being (Bullard, 2020). This emphasises the importance of understanding the factors which impact student-athlete well-being, particularly during the COVID-19 pandemic. By gaining this understanding, strategies can be implemented to support the well-being of student-athletes going forward.

Hence, the aim of this study is to address identified gaps in the literature by i) examining the factors perceived to positively and negatively impact the well-being of UK-based high-performance student-athletes; ii) exploring the impact of the COVID-19 pandemic on high-performance student-athletes' well-being; iii) understanding the factors that affect the help-seeking behaviours of these student-athletes and; iv) utilising the findings to develop recommendations that can be implemented to support the well-being of high-performance student-athletes within the UK HE systems.

Chapter Three

Methods

This chapter describes the methodological approach and methods used to explore the factors perceived to affect the well-being of high-performance student-athletes. First, the methodological approach is explained before describing the participant selection criteria and recruitment procedure. The data collection and analysis processes are subsequently discussed followed by the identification of steps taken to enhance the methodological rigour of the study.

Methodological Approach

An interpretive description (ID) methodology (Thorne et al., 1997) was used to understand the factors perceived to influence the well-being of high-performance student-athletes during a COVID-19 affected academic year. Developed for use in applied research settings, ID aims to generate new knowledge and understand complex disciplinary questions (Thorne, 2016a). This is achieved by exploring the understanding, knowledge, and experiences of multiple people while accounting for individual variations and commonalities between participants (Thorne et al., 2004). ID was deemed an appropriate methodology for this study as it enabled perceptions of the phenomena of interest to be obtained (i.e., factors perceived to affect student-athlete well-being) as well as provide insight into the varying experiences and opinions of the participants (Thorne et al., 2004). Although it was anticipated that student-athlete participants had similar experiences of a dual career pathway, it was expected that there would be variations due to the nature of their sports and academic courses. There, this approach could capture those differing contexts, perspectives and opinions. This was also expected to be the case for the coach participants who provided a differing perspective of student-athlete well-being.

Specifically, ID draws upon an inductive analytical approach to analyse themes and patterns within the subjective perceptions and experiences of participants. ID was therefore

utilised to understand a complex question from three differing perspectives (i.e., student-athletes, coaches, university sports officer). Additionally, and aligned with this methodology, this study aimed to generate relevant and practical information that can be utilised to improve the well-being of student-athletes. Furthermore, the inductive approach allowed themes to emerge from the data following analysis, which included repeated exposure to the data. This enabled the researcher to identify relevant data to the phenomena of interest (Thompson-Burdine et al., 2021). Within this study, themes and patterns relating to the factors perceived to affect the well-being of high-performance student-athletes were identified using this inductive approach. ID also acknowledges that the researcher may have prior experience or knowledge of the phenomena of interest, thus potentially influencing data collection and analysis (Thorne, 2016a). Within this study, this included the researcher having experience and knowledge of being a student-athlete and therefore the effects this dual career can have on well-being. Overall, as this study aimed to explore a complex subject through the perspective of three participant groups as well as produce practical information that could be used to improve the well-being of high-performance student-athletes, ID was deemed an appropriate methodology.

This thesis and its methodology were guided by constructivist epistemology, which acknowledges that human experience is socially constructed and subjective while recognising the possibility of shared realities across individuals (Thorne et al., 2004). ID holds naturalistic ontological orientations in which knowledge is developed through the interactions between the researcher and the object of study, resulting in multiple realities that reflect individual perspectives (Thorne et al., 2004). Aligned with this perspective, it is recognised that within the current study, the researcher and participants interacted to co-create and shape an understanding of the factors perceived to impact the well-being of high-performance student-athletes. Moreover, participants' accounts were further influenced by such factors as previous

experiences and socially constructed knowledge (Murphy et al., 2016). This allowed the researcher to clarify prior knowledge within this area, understand new perspectives, and challenge how prior knowledge of factors affecting the well-being of student-athletes has been interpreted. (Thompson Burdine et al., 2020).

Participants

The inclusion criteria for this study were: i) current university student-athletes within a high-performance sports club; ii) current university student-athletes who were captains of a high-performance sports club; and iii) sport science support staff who currently worked with student-athletes within/alongside a high-performance sports club. Through purposive sampling, this selection of participants was recruited in order to provide detailed information that could be used to address the research aims of this study (Campbell et al., 2020). Specifically, student-athletes were selected to provide insight into the factors perceived to affect student-athlete well-being. Captains were also recruited as they not only have similar experiences to student-athletes but have added demands and expectations that have the potential to impact their well-being further. They also held a leadership role which provided them with an insight into the factors perceived to affect the well-being of their teammates. Coaches were included within this study to provide an alternative perspective of the factors they considered had an impact on the student-athletes' well-being in their care. Finally, the university sports officer was included in this study to gain an understanding of the processes and systems in place to support the well-being of high-performance student-athletes. The recruitment of this range of participants provided differing and important views of the research aim (Campbell et al., 2020).

Participants of this study were recruited from a university in the UK and included 21 high-performance student-athletes, five coaches, and one university sports officer. Each of the student-athletes were members of one of the six sports that form the university's high-

performance sports programme: American football (male; $n = 3$), football (male; $n = 3$), hockey (male; $n = 2$; female; $n = 3$), netball (female, $n = 3$), rugby (male; $n = 3$; female; $n=3$), and swimming (female; $n = 1$). The student-athletes ranged in age from 19 to 24 ($M = 21.14$, $SD = 1.32$). Furthermore, each of these teams competed at inter-university British Universities and Colleges Sports (BUCS) competitions in the Premier South (female rugby, football, hockey, American football), Super rugby (male rugby), Western 1A (netball), and Championship (swimming) leagues.

The student-athletes reported they were engaged with their academic work between six and 40 hours per week ($M = 21.94$, $SD = 11.82$) that included lectures and independent study, and prior to COVID-19, they spent between 6 and 25 hours per week ($M = 10.21$, $SD = 5.02$) in training and competition. Due to the national COVID-19 restrictions implemented for university sport, the student-athletes had been unable to participate in formal training or competitions during the completion of this study, and instead, had been encouraged to continue fitness training at home.

The coaches who were recruited for this study, coached the high-performance sports teams at the university including American football (male), football (male), hockey (male), netball (female), and swimming (female). The coaches ranged in age from 29 to 61 years ($M = 45$, $SD = 11.56$). The university sports officer (female), aged 29 years, oversaw and aided the development of all sports teams at the university.

Procedure

Ethical approval (DH_LS_21-10-20) was granted by the university's ethics committee. Following this, initial contact was made with each of the coaches via email. An introduction to the study was provided and the coaches were asked to participate in an individual interview exploring the factors that they perceived affected the well-being of their high-performance student-athletes. In addition, the coaches were asked for permission to access the captains of

the high-performance sports. Once permission was given, an email (Appendix A) was sent to each of the captains explaining the study and requesting an interview. These interviews aimed to understand the risk and protective factors perceived to impact the well-being of high-performance student-athletes. Snowball sampling (Goodman, 1961) was then utilised to recruit other high-performance student-athletes for this study. Snowball sampling requires each individual within a random sample to name a specified number of other individuals in the population. For this study, the sample consisted of most captains from the high-performance sports, who were then asked to provide the contact details for high-performance student-athletes within their team who they considered may also be interested in participating in the study. Two of the nominated high-performance student-athletes were then randomly selected and contacted via email. Therefore, the following student-athletes were interviewed: American football (one captain, two student-athletes), football (one captain, two student-athletes), male hockey (two student-athletes), female hockey (one captain, two student-athletes), netball (one captain, two student-athletes), male rugby (one captain, two student-athletes), female rugby (one captain, two student-athletes), and swimming (one captain). Through this email, the student-athletes were provided with an introduction to the study and were asked to participate in an interview. The university sports officer was also asked to participate in this study via email and was provided with an introduction to the study.

To note, each participant received an information sheet (Appendix B), which allowed them to make an informed decision as to whether they would like to take part in the study and complete an individual semi-structured interview. Within the information sheet, as well as prior to the commencement of the interview, participants were informed that their participation was voluntary, they could withdraw at any time and their data would be kept anonymous. All participant data were secured on a password-protected hard drive and all identifiable data was removed.

Data Collection

Semi-structured interviews were utilised to collect the data within this study. Interviews are the most common data collection process within ID (Thorne, 2016a). Semi-structured interviews are an important form of data collection in which rich and new knowledge can be generated. To this effect, interviews are a useful way to collect participants' opinions, ideas, feelings, attitudes, and experiences towards a phenomenon (Sparkes & Smith, 2014). Furthermore, semi-structured interviews are flexible and allow researchers to seek clarification or to generate additional insight and knowledge of interest by asking unanticipated questions as the conversation unfolds. This is particularly the case when the interview is led by the participant, and they discuss topics that they deem meaningful. This can also result in the generation of new avenues of knowledge not otherwise considered by the researcher (Smith & Sparkes, 2016). For example, within this study participants were asked to discuss any factors that they perceived to affect the well-being of student-athletes. As this was an open-ended question, participants were able to discuss the factors they deemed to be personally relevant to them and allowed for an exploratory discussion that enabled the generation of rich and new knowledge unconsidered by the researcher. Due to the depth of information achievable through interviews, all participants were invited to complete an individual semi-structured interview. Written consent (Appendix C) was gained from all participants prior to the interviews commencing. The interviews were conducted online via Zoom, to accommodate the COVID-19 regulations, and at a mutually convenient time. Each interview was recorded and took between 37 and 91 minutes ($M = 56$, $SD = 12.23$).

Through a theoretical scaffold and informed by the work of Dodge et al. (2012), the interview schedule (Appendix D) was organised to highlight the important elements of the research (Thorne, 2016b). Specifically, the interview schedule was separated into four broad sections including i) the demands perceived to affect the well-being of high-performance

student-athletes; ii) the resources used to protect or improve the high-performance student-athletes well-being; iii) factors affecting the help-seeking behaviours of the high-performance student-athletes, and iv) the perceived impact of COVID-19 on the well-being of high-performance student-athletes.

At the beginning of each interview, participants were reminded of the aim of the study, including its purpose, and the reason for their involvement. Following this, participants were provided an opportunity to ask questions or raise any concerns. Participants were ensured of their anonymity and reminded that their identity would not be revealed. Furthermore, participants were advised that they could stop the interview at any time without consequence. Participants then offered their verbal consent to start recording and begin the interview.

For the high-performance student-athletes, the interview opened with dialogue regarding the time spent engaging in both aspects of their dual career, whereas with the coaches and sports development officer, questions were asked regarding their role including their responsibilities. Discussions then transitioned into the four sections of interest with an emphasis on the factors that were considered to affect the well-being of high-performance student-athletes. Following each interview, key information such as factors perceived to affect well-being that had not previously been discussed was noted and used to guide the remaining interviews. Hence data collection was an iterative process to ensure concepts that arose during interviews were explored through the perspective of other participants, allowing for more contextualised details of the factors perceived to affect the well-being of high-performance student-athletes.

Prior to the commencement of data collection, one pilot interview was completed with a student-athlete. Pilot interviews are useful for testing research instruments, resources, and timings (Malmqvist et al., 2019) as well as feasibility, reliability, and validity of the proposed methodology. By pre-testing these factors, feedback can be given which will encourage

amendments and refinements to the research methodology (Ismail et al., 2018). For this study, a number of changes were made to the interview schedule as a result of the pilot interview. Firstly, additional demographic questions were added regarding the time student-athletes spent engaging in academia and sport. Secondly, probing questions were included. For example, following the question “which demands do you perceive to impact student-athlete well-being,” an additional probing question was asked such as “how does this demand affect the way that you feel or behave.” Thirdly, a question was included to ask specifically about any aspects that had a positive impact on the well-being of student-athletes. In making these adjustments prior to the commencement of the main study, it was ensured that interview schedules addressed the aims of the research and allowed for clarification or expansion of subjects if required.

Data Analysis

Interviews were transcribed, and all identifying information was removed. According to Thorne (2016b), any data analysis technique that aligns with the phenomenon being researched can be utilised within an ID study. In order to analyse the data and identify the themes and patterns within the subjective perceptions of participants’, reflexive thematic analysis was used. Thematic analysis can be utilised to provide analyses and identify patterns in people’s experiences, behaviours, and perspectives (Braun & Clarke, 2020). Thematic analysis follows six phases: i) familiarisation with the data; ii) generating initial codes; iii) generating themes; iv) reviewing themes; v) defining and naming themes, and; vi) writing the report. This is a recursive process in which there is movement between phases as required (Braun & Clarke, 2019).

First, immersion in the data occurred, with the researcher reading and re-reading transcripts in order to become deeply familiar with the content of each transcript. At this stage, notes were made regarding any ideas, concepts, or patterns that could provide an understanding of the factors which were perceived to impact the well-being of student-athletes. For example,

the notes made included initial ideas such as ‘dual career pathway had both positive and negative affect on student-athlete well-being’ as well as ‘support networks were mainly seen as a protective factor of student-athlete well-being.’ Consistent with ID, it was recognised that the researchers’ experience and knowledge would influence analysis. This experience included the researcher being a student-athlete and who had previously conducted research in the area of interest. Once there was intimate familiarity with the data, codes were generated through a systematic and thorough process in which meaningful labels were assigned to specific data relevant to the research question (Braun et al., 2019). Following the initial coding process, codes were organised into themes by identifying patterns between codes and collating these relevant codes into overarching themes. For instance, the two codes of ‘no purpose’ and ‘removal of structure’ were combined to make the sub-theme ‘lack of direction’ which was incorporated into the descriptive theme of ‘COVID-19: No home advantage.’ These themes were treated as candidature themes so that they could be altered or discarded to better represent the data (Terry et al., 2017). For example, *Pressure* was an initial candidature theme, however, after review, this theme did not accurately represent the data and was discarded.

The candidate themes were then reviewed to check whether the themes represented the data and formed coherent patterns. The collected data were again reviewed including the initial notes to ensure any data from previous stages that had been missed but were relevant to the established themes, were coded. The researcher presented and discussed the developed candidate themes with two supervisors who acted as ‘critical friends’ and provided a sounding board in which to explore various explanations of the data, enhancing data analysis (McGannon et al., 2021). Through these discussions, the researcher acknowledged that multiple realities exist and therefore are potentially alternative ways to interpret the data (Smith & McGannon, 2018). Each theme and sub-theme were then given a descriptive name that captured the content

of the theme (Braun et al., 2019). Once the themes had been finalised, the write-up of the report began.

Methodological Rigour

Methodological rigour was maintained in a number of ways throughout this study. Firstly, a pilot interview with a student-athlete was conducted prior to the commencement of data collection. This interview provided an opportunity to ensure the questions were clear, relevant to the sample, and provided in-depth responses. Following this pilot interview, several questions were altered or removed in order to make the interview schedule coherent and relevant. The pilot interview also provided an opportunity to practice undertaking the interviews to prepare for data collection (Malmqvist et al., 2019). The pilot interview, therefore, increased the likelihood of accessing detailed and accurate participant accounts.

Furthermore, ID evaluation guidelines were followed to ensure methodological rigour. These guidelines focused on epistemological integrity, representative credibility, analytic logic, interpretive authority, and moral defensibility (Thorne, 2016b). This study maintained epistemological integrity by emphasising epistemological consistency throughout the study. In order to do this, each semi-structured interview and the data analysis process was based on an ID methodology, which was used to gain an understanding of the factors that impact student-athlete well-being through the perspectives and experiences of the participants. In line with a constructivist approach, ideas and patterns including similarities and differences between participant's experiences were discussed. This conformed to epistemological integrity by displaying a clear interpretation of data that aligned with the research question (Thorne, 2016b).

Representative credibility was attained through a heterogenous sample of participants who were each able to provide different experiences and perspectives of factors perceived to affect high-performance student-athlete well-being (Thorne, 2016b). Data triangulation was utilised to gain rich and full data (Wilson, 2014). To ensure representative credibility,

triangulation occurred through the recruitment of participants in differing roles within the university sporting community. Data triangulation can provide confirmation of findings, increase confirmability, and give differing perspectives, which can provide a deeper understanding of the well-being of high-performance student-athletes (Bekhet & Zauszniewski, 2012).

Within this study, analytic logic was demonstrated through the completion of an extensive literature review, in which the findings of previous research within the area of interest (i.e., high-performance student-athlete well-being) were used to guide the researcher (Thorne, 2016b). For example, the research conducted by Dodge et al. (2012) and their subsequent definition of well-being was used as a theoretical scaffold on which to base the appropriateness and quality of the research questions and discussion.

To ensure interpretive authority, two supervisors acted as critical friends with whom emergent patterns and themes were discussed and interpretations of the data were challenged in order to make certain the findings aligned to the participant's data (Smith et al., 2014). In doing this, it was acknowledged that there are multiple realities and therefore a variety of possible interpretations of the data (Smith & McGannon, 2018). Reflective notes were also made following each interview that shaped data collection and analysis. The notes consisted specifically of emerging themes, potential patterns with other interview data as well as the researchers' subjective feelings. These notes also enabled the researcher to refine the interview guide to ensure the research question was answered (Smith, 2006).

Finally, this study aimed to address the gap in literature regarding the factors perceived to affect the well-being of student-athletes. As demonstrated, limited research attention has been given to this specific population, especially within the UK. Due to the established knowledge that the well-being of student-athletes is negatively impacted, it is important to understand the factors perceived to impact their well-being in order to provide the appropriate

support. Therefore, moral defensibility was demonstrated as the knowledge obtained within this study can be utilised to provide practical recommendations to improve the well-being of student-athletes (Thorne, 2016b).

Chapter Four

Results

This chapter presents the factors perceived by the participants to affect the well-being of high-performance student-athletes during a COVID-19 affected academic year. Several factors were regarded by the participants to enhance and/or hinder student-athlete well-being. These factors included: *dual career, injuries, relationships, leadership, finances, nutrition, and COVID-19*. Furthermore, this section outlines the factors perceived to impact the help-seeking behaviours of the student-athletes including *previous experience, social support, perceived resources, available support systems, and stigma*.

Factors Perceived to Impact the Well-Being of High-Performance Student-Athletes

The Jekyll and Hyde of a Dual Career

Overall, it was believed by many of the participants that although at certain times it could be negative, being a student-athlete had a positive effect on their well-being, as explained by a rugby player (male), "...it can affect your well-being negatively at times, but it can also be really positive...there are a lot of positives about it otherwise I wouldn't have kept doing it."

The Jekyll (Good). The pursuit of a dual career was deemed to have a positive effect on the well-being of all the student-athlete participants most of the time. For example, a netball player expressed, "...it [dual career] does do so much good for my well-being." A rugby player (male) stated, "it's [dual career] good for your well-being because of all these positive effects."

Positive Affect. For many of the participants, their well-being was perceived to be enhanced by their enjoyment of training, competitions, and academia. This enjoyment was described by an American football player, "...being a high-performance athlete...it is a good feeling to be doing high-performance sports and to be competing. I enjoy it." Furthermore, many of the student-athletes discussed the positive effect experienced through training, with

one netball player saying, "...we train for our well-being...we're doing something that will improve our well-being...you do feel amazing after [training], and you're ready for the day." Some of the coaches also acknowledged the positive effects of training, "they [student-athletes] are positively impacted when they do attend [training], and they're negatively impacted when they don't." For a few student-athletes within this study, being selected to play for the team had a further positive effect on their well-being, with one hockey player (male) stating, "...the delight you get when you get picked, it's a pretty good feeling." In discussing academia, some of the student-athletes expressed enjoyment of their course. An American football athlete said, "I enjoy my course" and a netball player stated, "I love what I do." Furthermore, and as detailed in my reflective notes:

throughout each of the interviews, the student-athletes were clear in the importance they ascribed to their sport and the perceived improvement sport had on their well-being. Academia was also perceived to be important to the well-being of the student-athletes within this study and they often found it enjoyable.

The enjoyment many of the participants derived from their participation in a dual career positively impacted their well-being as discussed by a netball player, "...it [dual career] makes me happy."

Success. Moreover, when the participants experienced success within both career domains, their well-being was perceived to improve. One football player explained:

I think I get quite a positive...effect on my well-being. When you've got an assignment and a big game, if you manage to get that assignment done and you think you've done quite well and then you've got the big game that you go and win later that week...you just feel really good. You've accomplished quite a lot and got a bit of a buzz.

This was reiterated by a rugby player (male), "when you're playing great and you're doing great in uni, there's no better feeling. So that's...what you do it for...I'm very happy...I feel

great.” A netball player discussed the positive impact of achieving good grades, “...I always feel really good when I do well in uni and I don’t think anything motivates me more than when I get good grades...it just makes me happy...that you’ve accomplished something.” The positive impact of success was also noted by some of the coaches with one explaining, “it [success] can develop so much self-worth.”

Structure / Routine. Having a dual career provided structure and routine for the participants which they found to be beneficial for managing their stressors / demands and maintaining their well-being. As discussed by a rugby player (female), “being a student-athlete...makes me feel good...it’s given me structure.” A football player explained this point further, “I like to have something to structure my day around...I feel more productive.”

The Hyde (Bad). At certain times of the year, it was perceived that being a high-performance student-athlete negatively affected the well-being of some of the participants within this study. The impact of this negative effect was explained by a coach, “...it can put them under serious pressure. It can make it slightly unenjoyable at times, they forget that it’s around what was originally their passion.”

Too Many Demands Leading to Overload. For many of the student-athletes within this study, a dual career negatively impacted their well-being when they had too many demands. This left some of the student-athletes feeling overwhelmed with their dual-career becoming unenjoyable. Furthermore, for some of the student-athletes within this study, too many demands led to experiences of overload. A rugby player (male) summarised this overload:

There is never enough time in the day...some days I’m up at 5:45 getting ready for training...finish training at ten, I’m in uni from ten until four, go home and eat then I’m back in training at six... I’m not finished until ten. So, some days I won’t be at home, I’ll just be living out the back of my car.

It was suggested that the overload experienced by some of the student-athletes occurred during critical events. Concerning the student-athletes within this study, the pertinent events to their well-being were exam periods and deadlines. A hockey player (female) discussed the effect of these critical events further, "...playing around exams and deadline seasons has always been hard...you're expected to be able to manage both [sport and academia]." This was deemed to affect the well-being of some of the student-athletes, as described by an American football player, "when assignments are due...they're definitely the most stressful...definitely doesn't improve my well-being." To illustrate the negative impact of this critical event, a rugby player (male) compared the impact of exam periods to non-exam periods, "at the start of each term it's easy because nothing is affecting us...and then it's the week of the deadline which is the worst and most stressful thing." In addition, exam periods often coincided with the main competitive sporting period which further added to the overload of demands experienced by some of the student-athlete participants within this study. A football player explained:

...the end of football season...which is right when you've got build-up to exams...that's got to be the toughest because it's...the business end of the season where you've got the biggest games and the most pressure to perform but you've also got your biggest exams and most pressure to be revising...so you're...really low...and just feeling really crap.

Such critical events were also noted by the coaches, "I think whenever there's a deadline for a piece of work, that's when I notice my athletes just need permission to just not be there." This was due to the belief that, "...it's impossible for them to do both [sport and academia] 100 percent." Another coach stated, "... you're getting half an athlete or half a uni student, you're not getting a...full measure of what they can do." As a result of too many demands during this critical period, some of the student-athletes experienced negative consequences. This included such effects as sleep disturbances, with a netball player describing, "...when I'm really

stressed, I don't sleep very well...my mind is racing...I find it hard to switch off... I'll get really disengaged and...less motivated." Along with disruptions to sleep, some participants experienced negative impacts on their nutrition, as explained by an American football player, "quite often...I'll have dinner at midnight...if it does happen times get really stressful...there's a loss of appetite with that sort of...stress." Beyond this, the overload experienced had further negative consequences for some of the student-athletes within this study. For one American football player this included:

There was a week I just didn't move out of bed. I had no motivation to play sport, I had no motivation to go on a night out. I had no motivation to do anything at all... It has put me down to a point where I just can't be arsed.

Furthermore, the overload of demands experienced by a rugby player (male) resulted in emotional distress: "its almost like everything is caving in...the walls are closing in and everything's just getting a little bit more sensitive." In response to a similar emotional state, a hockey player (female) said that because of overload, "I get grumpy, or I just cry." Finally, the overload experienced by the swimming student-athlete resulted in her quitting high-performance sport as she explained, "balancing the workload is really difficult...I actually stopped high-performance training...I struggled mentally trying to balance it [dual career] and I actually ended up quitting the sport because of it."

The coaches within this study noted the negative effect of demand overload:

...it can be quite intense so it [demands] can affect their performance in both...They're tired from training and...they've been in lectures all day and then they're tired when they get to training. They don't perform well and so it's just a cycle...it's stress and leads to that burnout.

Moreover, each of the coaches noted that some of the student-athletes could be emotionally reactive during these times:

... when you're under pressure and stress, your irrationalities become quite high...their thought and coping process becomes different...If you're constantly stressed and panicking...you're going to lash out at the people that are around you. So, then you alienate yourself from them and then you're in...a downward spiral where you...withdraw, and then you've got somebody that's isolated and struggling mentally because they're not able to know how to communicate effectively.

This was thought to affect a significant number of the student-athletes:

...we've had, I would say, at least 20 to maybe even 30% of the high-performance swimmers who have some form of what you can categorise as a meltdown, so where they're panicking, they can't manage, they're struggling, and they've had some ill health because...they've got to do it all themselves. They tend to feel very overwhelmed.

Time Management. Some of the participants believed they had the appropriate resources to manage the demands of a dual career and maintain their well-being. One hockey player expressed, "...it's [dual career] not really stressful...but it's a demand because it's quite hard to keep managing it sometimes, but other than the management of time it's not really...putting me under pressure." In reference to this impact, an American football player felt, "...I get to the point of actually getting really stressed out and quite bad down...but I find it easy to overcome it." It was found that effective time management was crucial for the participants to maintain their well-being and manage or reduce the overload of demands. As a hockey player (female) stated, "...time management is key." When the participants used effective time management strategies, it allowed them to become more "clear-minded," and "in control of that [dual career]" as stated by netball and hockey (female) players respectively. A netball player further explained the importance of effective time management:

Being an athlete...you do have a big ask to be organised and to plan ahead a little bit more than say someone who doesn't do sport for the uni...if you don't, then that's when you're going to really get stressed and that's when it will affect your mental health.

A rugby player (male) also advocated for effective management, "...all that stuff [demands] is pretty manageable if you're prepared and disciplined about it." Effective time management was highlighted to reduce anxiety for one rugby player (male), "...the organisation aspect...would make my anxiety a lot easier." Alternatively, one netball player discussed the negative impact of ineffective time management, "...it [dual career] didn't necessarily affect my well-being, but...I had to be organised...if I wasn't organised...everything would just...go to pot." Some of the student-athletes discussed their time management strategies or lack thereof. One netball player described her effective time management strategy for managing demands and maintaining her well-being during exam and deadline periods:

...because time management is quite a big thing...it's all about making sure my week is planned out...I know when deadlines are, and I can...see it in advance and I know what my weeks are going to look like...I'm not as stressed...later on when everything starts building up.

The effect of a poor time management strategy was expressed by a rugby player (male), "...the poor management [of time] and poor balance is ruining my well-being." Inadequate time management strategies led to fatigue for some student-athletes within the study, as experienced by a rugby player:

...if you try and do too much, you run yourself into the ground...and then you realise that you can't keep doing this...the main thing is how tired it makes you physically and mentally...it's hard...it's exhausting...it makes you want to...just lie in bed and...rest your brain.

Insufficient time management also led to some participants feeling overwhelmed or low mood. An American football player said, "...there are times it can be overwhelming...I can't balance everything. I feel like I'm trying to balance way too much." Along with a rugby player (female), "...I get quite moody...I keep everything to myself and then when everything gets too much...I'm panicking trying to get too much stuff done in one...it's too much for me to handle." Ineffective time management also resulted in negative emotions for an American football player, "...I get angry quickly and build up frustration quite quickly...it just builds up into something which ultimately ends up in me...losing my temper...it really does put me down...a lot." A loss of motivation and anger towards significant others was also experienced by a rugby player (female), "...I tend to become quite lazy...I definitely am more snappy towards family...I'm probably less tolerable."

Prioritisation. Ineffective time management led to some of the student-athletes within this study prioritising one aspect of their dual-career to lessen the overload of demands. For many, sport was prioritised over academia due to the enjoyment and perceived positive effect on well-being. A rugby player (male) noted, "...I just prioritise the rugby aspect because that's a lot more enjoyable." A hockey player (female) perceived sport to be her priority, "...sport is an obligation...I put that first always...I can cram in uni work." It was suggested by some of the coaches that this was due to the development of an athletic identity:

If they've been elite athletes most of their lives, quite a lot of their identity is tied up in that...I think it's quite a negative thing...lots of people come through academy systems or county level...so when that disappears and that's all they've ever known...people aren't as prepared for that change...and then they come away to university and they struggle with that and it's not suddenly all that they are.

However, a smaller number of the participants prioritised academia over sport due to the importance of academia to their future. A hockey player (male) said, "...I'll probably shift

towards doing the more academic side...we're here to get a degree, we're not here to play sport, we all just really enjoy it [sport]." This was reiterated by a netball player, "...you have to remember, even though we love training...actually, uni work does come first...because that's the whole point of uni...it's quite easy to get carried away thinking that they're equally weighted importance wise." As written in my reflective notes:

more female student-athletes, particularly the netball players, prioritised academia over sport as they believed academia to be of more importance. This was likely due to the nature of the sport including limited progress opportunities or financial gain. Alternatively, more male participants including rugby players placed their passion and enjoyment of sport over the importance of academia. Again, sports such as rugby have increased developmental opportunities and higher financial incentives.

Lack of Skills and Autonomy. It was noted by some of the coaches that a few of their student-athletes were not equipped with the appropriate skills to be autonomous and manage their time effectively at university. One coach explained:

...decision making is hard for people who have always been directed...If they've not been independent before, because most high-performance athletes will have been very guided...what time they go to bed, what time they eat...and all of a sudden...they've got these hundreds of hours that...they've got to put...towards serious training or studying and I really think just the management of that is a huge pressure.

This point was also summarised by another coach, "...at home with your parents, there's more prescription...someone is making your food for you, someone's telling you where to go, someone's driving you...first year can be a real struggle which is reflected in...performance...and student-athlete well-being massively." One rugby player (male) also agreed with the view that some high-performance student-athletes lacked the skills to be autonomous:

...they [student-athletes] need a little guidance...you've got to do this by then, you've got training, but you've got to do this at the same time...It's not something that you have to do for yourself growing up. There are so many things that you have to manage.

Feeling the Strain

For the few student-athletes within this study that sustained an injury, there were several factors that impacted their well-being. This included the injury itself, isolation, missing out, lack of support, fear of losing their position within the team, athletic identity, and coping strategies.

Impact of Injuries. Some of the student-athletes within this study had sustained an injury during their time at university and for each of these student-athletes, this had a negative effect on their well-being. A football player said, "it [injury] definitely affects me a lot psychologically as well. I was pretty down." These negative emotions were also experienced by an American football player, "...it's...more of a...doom and gloom feeling where...I wish I wasn't injured and I'm...feeling sorry for myself." The impact of injuries was explained to impact an American football player's well-being, "...I just felt...horrible through that time, like mentally." A rugby player (male) also discussed the impact of an injury on his well-being:

...that's probably the worst thing that's happened to me...it was almost like being in limbo. I didn't know what to do with myself because even though I had uni work, I wanted to prioritise the sport and it certainly had an effect on my mental health.

Isolation. Each of the participants who had experienced an injury felt isolated from their sport and social support network. This subsequently had a negative effect on the participant's well-being as discussed by a rugby player (male), "I felt very isolated...I wasn't in the environment with the boys anymore. So, going from an environment where you had thirty boys, five times a week...to just being on your own is quite tough to deal with." Another rugby player disclosed:

...can you imagine going from a team environment where you spend 16 hours a week training with your mates and then you go to hobbling around on crutches for six months...you're suddenly outside of this circle that you love being in...that was tough...that has a detrimental effect on your well-being."

Of note, a small number of the participants identified that feelings of isolation were exacerbated if they received no communication from their coaches. A rugby player (male) said, "...I felt like I wasn't kept in the loop at all...I felt just like a used toy." A coach agreed with this, "...we don't look after you [student-athletes] as well as I would like."

Missing Out. Similar to isolation, the student-athletes that had sustained an injury felt they were missing out on not only participating in their sport but also the team environment, which negatively affected their well-being. This was explained by a coach:

...any athlete who is not doing what they want to be doing, their well-being is affected...I want to be out there playing...I want to be out there with my friends, and it just takes you out of that group...I've seen...how it affects...your well-being.

An American football player also felt this negative effect:

It had a huge effect on me in terms of my well-being just because I always feel gutted that when it comes to playing, I can't contribute, I can't train...I can't do anything...so injuries are definitely something big because you just kind of feel useless...I'd just be overwhelmed.

Lack of Support. Along with the associated isolation and sense of missing out, the period of injury meant the student-athletes were removed from their social support. This was noticed by a coach:

...their support group normally, that will become the team when they're at university, and if they have to be separated from that for a period of time, you can see that...they

just don't really have anyone else to talk to...it can be quite a...difficult thing psychologically for them...it can lead to them being...quite isolated.

Along with the social support of their teammates, a few of the student-athletes within this study perceived that the support of the coaches was also removed. A rugby player (male) spoke more broadly about this lack of support for injured players:

...if you get injured, there is zero support, you are...left hung out to dry...one of my good mates...he hasn't heard anything...he's not had...conversations with coaches...because they knew he was going to be out for a long period of time so he's no use to them...he really struggled with that.

Fear of Losing Position in the Team. For a few of the participating student-athletes, the period of injury was spent worrying about the security of their position within the team, which affected their well-being - as discussed by a hockey player (female): "...that [injury] got me really down...I was scared...and it was really annoying...It just makes you stress that someone will play better than you and then you might be dropped, and that's...nothing you can control...which is the hardest part."

Athletic Identity. As some of the participants within this study identified themselves first and foremost as an athlete, the removal of their sport through injury was also perceived to remove their identity. This affected one football student-athlete in particular, "...that was very difficult to deal with. You sort of feel like a piece of your identity...is taken away."

Coping Strategies. The participants who had been injured did try to maintain their well-being and prevent isolation by attending training and competitions. As a coach discussed:

...the main thing that they try to do...is be a part of everything...they'll still make an effort to come to every training session, to come to all the games, and still be as involved as they can so they still get the team aspect of it, and they're still around everyone."

However, another coach proposed that this approach may not always help to maintain well-being, "...we [coaching staff] try to keep you [student-athlete] involved...we try and keep you coming to training...but you always know that you're not part of the team."

Finally, a coach summarised the overall effect of injuries on the student-athletes well-being:

...the loneliness and they miss out on...that interaction they normally have with their teammates...They'll spend way too much time...feeling down about themselves and...when they're not turning up to things, they'll...not get that interaction and they'll just not feel part of it [the team] which is always negative for them.

I Get By With A Little Help From My Friends

All the student-athletes within this study felt that the relationships they formed with teammates, university friends, family, and coaches had an extremely positive impact on their well-being.

Shared Understanding. Most of the student-athletes within this study deemed teammates to be particularly important due to the support and understanding they provided, especially as they were also experiencing similar demands. This was explained by a coach, "...that sharing and understanding that other people are going through similar things to what they're [student-athletes] going through...just sharing of resources, experience...talking to each other about what they do, how they manage these things, how they feel about it." This was also discussed at length by many student-athlete participants, with one rugby player (female) saying, "talking to other people that are in...a similar boat really helps me."

Social Support of Teammates. Each of the student-athletes noted the importance and positive effect the support of teammates had on their well-being. An American football athlete illustrated, "...I really enjoy going out on socials, and socialising with the team in general...it helps a lot...they [teammates] have a huge positive effect." Critically, many of the participants explained that they used this source of social support to manage their well-being during

challenging times. In particular, being able to discuss their problems with peers who are experiencing similar demands was important. An American football athlete explained the effect this had, “being able to talk to teammates...it’s the one [resource] I use the most because...it’s the most relieving.” Another American football described the impact this form of social support had on his well-being:

It [teammate support] definitely has a positive effect on my well-being...it’s a morale booster...we [teammates] chat a lot...If I have a problem...I turn to them and talk it out...Means less burden on me to have to carry around...certain thoughts or...problems I’m going through.”

A football player summarised the positive effect communication with teammates had on his well-being:

...we’ll have a discussion about it [a problem] and we can have a laugh and it...helps me...I can normally come away from a conversation with them and...I’ll feel better about whatever it was. I feel like I’ve taken something from it, whether it’s...uni work or stresses at football.

Non-Sporting Friendships. The importance of having friendship groups outside of sport was also perceived to be important for the well-being of some of the participants as it offered an additional avenue of support as well as opportunities to participate in social situations away from the demands of sport. Hence, they were perceived as an important resource to maintain or improve well-being due to both the support and distraction from sport that they often provided. One coach stated, “...having maybe some diverse friendships...is quite important [for well-being].” This was discussed further by a netball player, “...it is really nice to have a big circle of friends that are different...you can then sort of have a break from netball girls.” A hockey player (female) also enjoyed the diversity of friends outside of sport,

“...I like having a whole other social element [friends outside of sport]...where I can go and socialise, that’s really nice.”

Conflicting Social Relationships. However, at certain times, non-sporting friendship groups were seen as an additional demand which encouraged the overload they experienced. The perceived requirement of socialising with different friendship groups negatively impacted the well-being of some of the participants. As described by one of the coaches:

...they [student-athletes] might have...their friends on the team, they’ll have their friends on their course, they’ll have their friends they live with and they’re all...trying to go out on different nights...and trying to do different things, and they...get stretched too thin sometimes...it leads to that tiredness, that burnout and...they end up missing a training session or...they’re late with their coursework...because they’re just trying to fit in too many things.

Distraction. In addition, a small number of the student-athlete participants believed non-sporting friends could be a distraction to their athletic career, as stated by an American football player, “...I could see them being, and they have been...a distraction as well.”

Disregard for Dual Career. It was perceived that on occasion, non-athlete friends could negatively affect the well-being of the student-athletes through their lack of understanding regarding the participant’s commitment to their dual careers. An American football player explained this, “I don’t think any of them [non-athlete friends]...understood...the commitment you have...They assume that you almost don’t care about them at times and...you do but sometimes you have to prioritise different things.” A hockey player (male) discussed the lack of empathy his non-athlete friends had for his dual career and the subsequent effect this had on their friendship:

...they were saying he’s doing this and doing that [hockey related] and he doesn’t want to be our friend...I don’t think any of them played a sport and understood the

commitment you have...They assume that you almost don't care about them...and you do [care about them], but sometimes you have to prioritise different things...I've had relationships that have broken down because I prioritise something [dual career].

Familial Support. Some of the participants also found family to be important to their well-being, although to a lesser extent than their friends. Family provided some participants with support and guidance, particularly when they experienced overload and became overwhelmed. For the participants that relied on parental support, calling them to discuss their issues was seen as beneficial. A football player also recalled the effect of parental support, "...they're [parents] always there...They're always willing to...help and lend a hand...They're super helpful in making me feel better and getting me through it [overload]."

Beyond the support that family was perceived to provide during times of overload, a small number of student-athletes found that regular conversations with parents were beneficial for their well-being, regardless of whether they felt overload or stress. A hockey player (male) said, "I Facetime my mum every day...so that's always nice...I look forward to it." A football player explained further that, "...it's nice to talk about...something to someone who is not...in the environment...that can help sometimes."

Alternative Perspective. It was perceived by a few of the student-athletes within this study that support from their family helped their well-being due to the differing perspectives they were able to provide. A hockey player (female) discussed this benefit, "...I use my parents a lot as a resource...it helps me to calm down...I feel so much better...I think as well, it helps me to talk...about it [demands] to other people...they'll have different opinions on it." Further to this, a rugby player (female) explained the positive effect of this on her well-being:

It's just good to speak to someone...I do bottle everything up...and then it just all comes out and it's...a massive stress...It's good to get different opinions on how to approach things...It makes me feel good, I know that I've got somebody there to support me.

Feeling Understood. Parental support was perceived by some of the student-athletes to be beneficial to their well-being as they felt their issues have been acknowledged. As a football player expressed, “I just find that when I have a chat with them [parents]...that...really helped...my well-being because I feel like it’s [issue] been heard and understood.”

Supportive and Non-judgemental Environment. A small number of student-athletes within this study believed their parents created a supportive environment in which they did not judge their decisions. A hockey player (female) perceived this to be particularly beneficial for her well-being:

...I do like to talk through my problems...it boosts me up so much...my well-being just improves when I can talk out my problems and have no judgement...they’re [parents] just so supportive...they’re there for me...they’re a huge part of my life and they make my life run so much smoother.

Risk Factors of Family Relationships. While for the most part, the family of the student-athletes was a source of social support that contributed to the maintenance of well-being, this was not always the case. For a small number of participants, they chose not to disclose their concerns with their family, as stated by an American football player, “I don’t really speak to my mum or my family...as much as they would want to know everything...I just don’t really feel comfortable.” Along with this, a coach explained, an over-reliance on family may prevent self-development and resilience, “...I think it can be both positive and negative. I think families are very important to ground you...but if you become too reliant on them then you can’t stand up on your own two feet.” It is highlighted within my reflective notes:

for some of the student-athletes, their over-reliance on parental support suggested they were unable to cope with making decisions or the multiple demands of being a student-

athlete. This is likely due to the lack of autonomy they experienced prior to university, with parents controlling much of their lives.

Coach-Athlete Relationship. There was a mixture of responses regarding the coach-athlete relationship. For some of the student-athletes within this study, coaches provided support and understanding regarding their well-being. However, for other student-athletes, their coaches did not take this aspect into account and were thought to be unapproachable.

Perceived Support. Some of the student-athletes within this study perceived coaches to be a helpful source of support. This view was mainly shared by female participants about their female coaches. The swimming athlete said, “coach was good...she helped me...quite a lot...She was very very good. She understood.” Furthermore, the netball team believed their coach was supportive and approachable which helped their well-being, “she [coach] always had a lot of time for us one on one...I felt so comfortable...she was so approachable. I could go to her straight away and I think that helped my well-being.” Another netball player said, “...she [coach] did focus so much on my well-being, and I think that made such an impact on us as players.”

Unapproachable. In contrast, some of the participants within this study believed they could not seek support from their coaches as they controlled their athletic career. This led to a reluctance to disclose any well-being concerns for fear of negative consequences.

A netball player said, “...you did feel a sense of...I can’t show weakness, or I don’t want to show that...I’m finding the training really difficult...because subconsciously you would think...she’s [coach] going to hold that against me.” It was stated by a hockey player (female) that, “...coaches are going to go off commitment. So, they do not factor in mental health in the slightest.”

Lack of Understanding. It was expressed by a few of the participants that coaches did not fully understand the demands of a dual career, as one hockey player (male) noted:

...you're a coach, you're employed to make us play well, to make us train as much as possible...they don't really understand that you're also here to get a degree first and foremost, and as a student, you're going to go out...you're going to do all of these things that every student does and sometimes coaches just aren't the best people to talk to about that.

This lack of understanding was discussed by a football player, "...they [coaches] don't understand the demands on you...sometimes they're just completely focused on football. I don't blame them...that's obviously what they care about." Further to this, and as written within my reflective notes:

there is disconnect between the perceptions of the coach-athlete relationship from the perspectives of the student-athletes and the coaches. To this effect, many of the coaches believe they are approachable, and their student-athletes will seek support for any issues they encounter. However, from the perspective of some of the student-athletes, the coaches are in control of their career, and they were not comfortable approaching them with any issues that could be perceived as a weakness or put their position within the team in jeopardy. It was also found that there is discrepancy between the way in which the same coach is perceived by different players within the team.

Overall, social support from teammates, non-athlete friends, family, and coaches was perceived to have a positive effect on the well-being of the student-athletes within this study, and it was suggested that they could not maintain their dual-career without it. However, at certain times, these social groups became an additional demand due to the pull of multiple friendship groups, lack of understanding and empathy from non-athlete friends, unwillingness to disclose issues to family members, as well as the perception that some coaches were unapproachable.

With Great Power Comes Great Responsibility

It was perceived that being a captain was both positive and negative for the well-being of those who participated in this study.

Love of being a Leader. For many of the captains, being in a position of responsibility had a positive effect on their well-being due to the added enjoyment and motivation it brought. One captain described this positive effect as:

...the reward you get for leading a team and them actually listening to you...Being that leader, being that person that people can...come to guidance wise and having respect from the team...has definitely...put that positive...side of things in perspective and I've loved it. I've loved every single second of it.

Additionally, a captain summarised the impact of leadership on their well-being:

...there are times where...it's been a bit stressful, but for the most part, I'd say it's probably had a positive effect on my well-being. Despite all the work, I do really enjoy it...I feel proud to have the position...whenever something good happens to the club or whenever we get praise...you do feel pride...There are times I can feel the workload, but I know that it's never negatively affected me too much...It gives me an extra motivation. It gives me something to work towards.

Sporting Success. The positive effect on well-being was particularly experienced when the team was successful during competitions:

...we [team] are incredibly proud...the reward for that [win] has really really helped...It made me feel so much better and my worth increased...having a moment of success...that brings it all back to centre and makes you feel a lot better.

Chosen To Lead. Moreover, being chosen as the leader of their team was deemed to improve the self-worth of some of the captains which positively impacted their well-being. As one captain described the position as, "...an achievement...Its quite nice to see that they

[teammates] wanted me.” Furthermore, a captain said, “...it’s nice to be captain. I was grateful to...be chosen and it’s a position of responsibility that I like...I think that’s definitely been a positive.”

However, for some of the captains, the role was found to be difficult. One captain said, “...it is that extra element of leadership...my first couple of months as being captain, I found that really difficult.” Another captain described the negative effect of being a leader, “...it’s a lot of pressure...It is probably negative overall...so that’s been really tricky.”

Sporting Failure. The negative effect of being a captain was especially felt by some of the captains when the team lost:

...when it was a bad performance...or we lost the game...it would play on my mind because...that’s partly on me. I should have figured out ways to deal with situations better or train them [teammates] on certain things...and I’ve got to be the one to figure that out.

Conflicting Roles. For some of the captains, being an authoritative figure to their friends was particularly difficult:

...we’re [teammates] such good friends...and then to turn to them and say...we need to step it up. That mental shift of, you need to be that leader rather than just their friend, that was a demand that I felt being a student-athlete...I felt it was unique to student-athletes because you are essentially with your peers, you have to lead them, you have to tell them to step up their game but then you also have to...go out with them...and enjoy their company.

This conflict in roles was often felt when some of the captains had to ensure the players were training to the best of their ability:

...it’s definitely a responsibility...you’ve got to make sure they [teammates] are sticking to what they’re supposed to be doing and...sometimes I feel like...they’re

going to think I'm too over the top...and probably feel like they can't come to me or...talk to me about certain things.

Costume Drama

Some of the participants discussed the financial hardship associated with a dual career, which was perceived to consistently impact their well-being negatively. This was the result of the cost of being a student (e.g., technology, maintenance, socialising) alongside the cost of their sport (e.g., training, competing, club membership, kit, nutrition). As a coach expressed, "...coming to university isn't cheap and the...team, fees are high." This was particularly the case with swimming where the participants were burdened with costs including "...£65 a month to come to training...swimsuits cost £300 to £400" as well as the costs associated with competitions. As the coach explained:

...you've got to get to a meet [travel]...you've got to stay over [accommodation]...you've got to enter the meet [competition entry fees]...It's normally about £15 now to enter one event...by the time you've added all of those little bits up...it's roughly between £300 or £400.

It was said that the swimming student-athletes would enter "a minimum of three" meets per year which would cost more than £1000, on top of the monthly fee they had to pay to train. A coach also explained that many of the swimming student-athletes attended training camps that cost "£600, £700 for a week". However, if the swimmers chose not to attend these camps, they feared negative consequences and isolation from their teammates. The swimming coach noted:

...if you don't go to the camp, are you being excluded then, or are you alienating yourself? What repercussions will there be? What will you lose by not going on that camp? They're the thoughts they [student-athletes] have...It can be quite damaging to [well-being].

A hockey player (female) also described the high cost associated with her sport as well as her frustration at having to pay the high fees:

...the club has expected us to pay for so much...that the financial burdens become greater and greater. It's a privilege to play... As a student, the daunting task of having to pay for kit and a membership and everything in the first semester of uni is ridiculous... In my first year, I was like, if I don't pay now they're going to drop me from the team...it was always feeling so much more stress...It's the equipment as well...I'm paying in excess of £150 for a pair of Astros (trainers)...My well-being dropped massively.

Furthermore, an American football player discussed the impact of limited finances due to the cost of a dual career and living expenses, "it can get stressful when I'm running low on money."

A football player further mentioned the need to monitor his finances to ensure they did not negatively impact him, "...It [finances] definitely affects me [well-being]...I do have to work on a budget each month just to make sure I'm not spending too much money, otherwise, I'm in trouble."

Financial Support/Income. For a small number of the student-athletes within this study, they were able to supplement their income with part-time work, this included an American football player:

...I work part-time...there's times where...I wish I didn't have to spend every single Saturday going there because I've got other stuff on my plate and I wish I could just have the time to focus on my university work or something with American football...It can get a bit frustrating...but at the same time, I do know it's needed so I don't go broke and miss out on everything [dual career and social life].

Some of the student-athletes undertook seasonal part-time work such as during the summer months when they did not have the demands of a dual career. This was beneficial for a netball

player, "I've worked...summer jobs...to make sure I have enough money when I go to uni." A football student-athlete also supplemented his income in this way as well as received a student loan and had the financial backing of family, "...I work when I come back [parents' home] in the holidays...and then when I go back to uni, I don't work so I just...rely on my student loan and then my mum will...send me a bit of money." The financial support provided by parents was also important for some student-athletes, as one American footballer stated, "...I know my parents...whenever I need anything, I'm very fortunate where they'll always send some extra cash to me whenever I ask." The positive influence and safety provided by the financial support of parents were described by a coach:

...it didn't matter how hard done by they [student-athletes] felt, if they were ever in danger, mum and dad could pick up the pieces...[student-athletes] had that confidence...for those who don't have that confidence and they're constantly worrying...about not having the backup at home, that's when people make mistakes.

This constant worry can negatively impact the well-being of student-athletes.

Sacrifices Made to Save Money. In order to maintain financial stability, some student-athletes sought gainful employment, however, this led to deprivations in other areas including their social life. As a football player stated,

...it [finances] was a bit of a strain...I was sort of dipping into the overdraft and thinking...if this carries on, I'm going to be in a bit of trouble and...it almost puts more of a demand on you...because when the year is done, you can't necessarily just go and enjoy yourself because you've got to go and work to make the money back. It's a bit of a tough one and sort of links in with the whole social side because you think, I'm going to be missing out again because I've got to work rather than see my mates over the summer.

Bushtucker Trials and Tribulations of Nutrition

“Nutrition...is quite big for student-athletes” as expressed by a football player. This is due to its impact on the overall performance and subsequent well-being of the participants. Having the appropriate nutrition to fuel the dual career of the participants was seen as vital to some of the student-athletes. A football player described the importance of good nutrition:

...If I’m eating better then I will feel better in myself...If I can eat well it’ll help me train more and to a better level, and I’ll feel happier and more confident in myself...It just makes me feel on the whole a lot better.

It was perceived that a number of demands related to nutrition affected some of the student-athletes within this study, as a netball player explained:

...I think it’s a mix of all of it...the time to prepare...decent meals, sometimes...you get back and it’s...half nine, ten-ish in the evening...I wouldn’t have time to eat before that...and then also like moneywise, obviously, fruit and stuff can be a lot more expensive.

Poor Nutrition. Some of the student-athletes within this study found that following an unhealthy diet had negative impacts on their well-being as well as sporting performance. As a result of poor nutrition, an American football player felt, “...I get frustrated when I’ve eaten poorly...I think, why have I done that...I feel sluggish.” A football player further explained the effect of poor nutrition on his well-being:

...I can tell when I’ve not eaten well because I feel so run down and tired but also, mentally, just feel really just sort of a bit crappy...no motivation and just a bit grumpy as well. Obviously, that has an effect on your work and football because you’ve got no motivation to do it. If you’re feeling a bit grumpy, you’re not going to apply yourself best.

Moreover, the lifestyles of being a student and an athlete were perceived by a few of the participants to conflict, as a football player illustrated:

...you can go out, you can enjoy yourself, and that's when obviously you end up eating McDonald's or a kebab and you end up drinking...seven or eight pints and it's just...not the nutrition you need for being an athlete at all.

In turn, this had a negative effect on the player's well-being, "...If you've got a few days where you're not doing too great [nutritionally] you do sort of feel it quite a bit...I'll just feel rubbish."

Financial Demands of Good Nutrition. Following a nutritious diet was perceived to be financially unviable for many of the participants due to the higher cost associated with fresh food. Of concern for certain student-athletes, particularly some of the male athletes, the quantity of food they required further impacted the financial burden. One coach said:

What are you going to do to feed your brain and your body so that you are capable of surviving...The amount of food that athletes need...can make it very expensive for them, so there's financial implication from the amount of food that they need to have, and the quality of food as well...it's difficult for them.

Another coach explained the effect that lack of financial knowledge can have on nutrition:

...we have folk caught in traps of not being financially aware and ending up not eating well, and that for me is a big worry. I watch it...with women and training and eating disorder type issues...It's this concept...that they're doing something wrong...it's something else that niggles away at them.

Nutritional Support. Although it was understood that nutrition had a negative impact on the well-being and performance of the participants, a netball player explained they received minimal nutritional support or advice:

...they [coaches] mention it, but you don't get given...a plan or sort of a list of what they think you should sort of be aiming towards... it would be quite helpful...I think

especially for...freshers who have just come up and gone straight into...the high-performance teams, and they might not have cooked much for themselves.

A coach also agreed that more nutritional support should be provided to the student-athletes. "...I think maybe some kind of meal or food support set up could be considered, especially for high-performance athletes." Again, this also indicated the lack of skills and autonomy the participants had prior to becoming a student-athlete. As detailed within my reflective notes:

some of the student-athletes have not been taught how to shop or prepare nutritious meals for themselves. This has meant that the student-athletes often indulge in fast food or ready meals. Furthermore, financial instability or lack of financial awareness can result in student-athletes being unable to afford high-quality, fresh produce, leading to the purchase of cheaper, low-quality foods. This combination can impact the well-being of the student-athletes, with them feeling lethargic and grumpy as well as resulting in underperformance in their dual career.

Girl Power

Each of the female rugby players were concerned about their physical appearance, specifically their weight and femininity, which led to negative effects on their well-being. Within this study, no male student-athletes raised this factor/theme.

Femininity in a Masculine Sport. When one of the female rugby players was asked if perceived body image had an impact on her well-being she replied:

Yeah, it does, because rugby always seems like a masculine sport... I try to make myself look more feminine because I'm playing a masculine sport... You try a bit harder to look a bit nicer...I think subconsciously I try a bit harder than I think I normally would if I was playing netball or something feminine.

An Athletic Appearance. It was felt by a female rugby player that there is an expectation to maintain a certain appearance to be an athlete, "...I have to look a certain way

to play sports.” This led to the student-athlete feeling required to monitor her weight, which was perceived to negatively impact her well-being, “...I have to watch my weight, watch what I’m eating and it’s just...quite overwhelming sometimes...I’ll feel bad about myself.”

Body Image. Beyond a sporting context, some of the female athletes, and likely many of their non-sporting counterparts reported poor body image which negatively impacted their well-being at times. As stated by a rugby player (female):

I don’t really like what I look like...I put more and more weight on...I do put myself down a lot when it comes to my body...I look at myself in the mirror and just be like, you’re a fat thing. You’re disgusting.

In contrast, this rugby player referred to the positive effect a previous experience of losing weight had on her, “...I lost quite a lot of weight...when I first joined rugby and my confidence was just skyrocketed. I just loved it.”

Some of the coaches within this study also recognised the impact that body image concerns had on the well-being of a small number of female student-athlete participants, “it [body image] does add extra anxiety, potentially for many athletes, in how they look.”

COVID-19: No Home Advantage

Positive Impact. Some of the participants noted that the unexpected break from their sport, caused by the pandemic, allowed them to appreciate their academic and sporting achievements as well as take time for themselves. This initially, had a positive impact on their well-being.

Reduced Demands. As many of the student-athletes within this study normally had to manage multiple demands, the COVID-19 pandemic initially offered a reprieve. This was particularly the case for a netball player:

I did myself over...by making my workload massive...and I think if it hadn’t been a thing and I would have had to be doing training and going out and doing all the other

stuff, I wouldn't have been able to keep up with everything...otherwise, I would have...absolutely crashed and burned.

The start of the pandemic gave some of the student-athletes a reprieve from the dual demands they were experiencing, which was beneficial for the well-being of a rugby player (male), "...it's been nice to have that break, slow down and...take things into perspective."

Gratitude. The COVID-19 pandemic also gave some student-athletes an opportunity to appreciate their academic and sporting achievements, as well as their supporting relationships, as a hockey player (male) explained, "...it [COVID-19] probably increased it [well-being], especially when it first started...Stepping back away and realising what you've got...definitely improved my well-being."

Self-Care. Further benefits of the pandemic were found in a few of the student-athletes being able to step away from the multiple demands they usually face, and take time for themselves and:

...I've never really taken time to myself...to sit down and think about things...it's been interesting...I quite like to hide away from my problems through being busy...taking the time off now has been a godsend...I feel a lot more productive, but to begin with, it was really hard.

Recognition of Skills. The pandemic was also indicated to have brought out a number of psychological skills possessed by the student-athletes. As explained by one of the coaches:

...what I think has been the positive is that they've actually seen that they cope really well... and that resilience is a lot...higher than perhaps they previously perceived it to be...It's given the opportunity for them to show a set of skills that perhaps they haven't previously...they've become more independent...they have learned to communicate better.

Negative Impacts. However, for all of the participants, over time, the pandemic was perceived to have lowered their well-being for a variety of reasons. This lowered well-being was described by a netball player, "...it hit me out of nowhere and it probably affected me...dramatically in a negative way, and it surfaced quite a lot of...mental health problems." Another netball player stated, "...the first lockdown had a very negative impact on my well-being and mental health." This negative impact was also noted by some of the coaches as one expressed, "...I know...players in high performance who have had to use medical help."

Lack of Control / Uncertainty. Many of the participants were particularly impacted by the uncertainty associated with the pandemic which made them feel they had no control over their lives. For instance, a coach said, "...there have been negatives [with the pandemic]. I think the biggest thing is the unpredictability...that's just a killer." This was further explained by an American football athlete regarding his sport, "...it's been a struggle because we never know what we're allowed to do...we have to work around the guidelines." As a result of this uncertainty and control, the well-being of many of the participants was negatively affected. A hockey player (female) explained, "...COVID did a massive number on my mental health...my mental health and well-being nosedived, especially with...the first lockdown...because no one knew what was going on." Further to this, a rugby player (female) discussed the effect this uncertainty had, "...it really disheartened me...I cried a lot in the first lockdown...I was sad and quite frustrated...not knowing what was going to happen really affected me quite a lot...I'm just angry."

Lack of Direction. For many of the student-athletes within this study, the COVID-19 pandemic removed the purpose and structure they gained from being a performance student-athlete. A hockey player (female) described the effect that the removal of her sporting structure had on her well-being:

...you just have those odd days...of a sense of purpose was lost. A lot of the time I train, I play, I've got direction, I've got goals and that was all...stripped from me quite quickly. That was really tough to accept.

This lack of structure and purpose significantly affected the well-being of a football player, "it's really, really negative [impact on well-being]...especially the first lockdown. There was nothing going on...I might have actually been depressed...I'm really down every day, no motivation, no appetite." The coaches also perceived a lack of purpose or structure to negatively impact the well-being of the student-athletes:

...if it's [sport] being taken away from them, then there's a void. Lockdown has given everyone isolation...When you don't have targets or your set schedule and you're in isolation, then you're getting closer to major trouble...it's been a huge impact to so many.

Removal of Sport. As the student-athletes within this study regularly participate in training and competitions, the sudden removal of their sport negatively impacted their well-being. This impact was explained by a hockey player (female):

...I've had days when I've not been outside...so I'll get into...a slump and then I'll get moody...I'll be in a really bad mood because I haven't done any exercise or haven't been outside...and it does...drag you down a bit because you do feel...trapped.

Along with the lack of exercise, some of the participants perceived that the removal of their sporting competitions was detrimental to their well-being, as a coach explained, "...not having...the satisfaction and gratification from competition...is quite significant because that's why athletes do it. It's why they train...the withdrawal of any kind of competition...for players who train hard...that must have an impact."

Lack of Social Support. The removal of access to social support during the pandemic was also perceived to negatively impact the well-being of the majority of the student-athletes

within this study. This was due to the level of importance the student-athletes placed on social support as a resource to mitigate the impact of demands. A rugby player (male) explained the impact of this removal:

the idea of me not playing rugby or not being involved in the...group is terrifying and....that's been a rough thing...because you don't have that support...the brotherhood has gone...that's hard, not being able to see your mates that you see every day.

Moreover, the unknown timeframe of the pandemic and therefore the indefinite removal of their social support resource was difficult for an American football player:

...the lockdowns have been really tough...it has been really difficult, especially...the long lockdown. It was really tough not seeing people...the lockdowns have been quite stressful...a lot of the thing with COVID is the stress kind of comes from...the unknown of how long the whole thing is going to be.

Lack of Motivation Towards Academia. For some, the lowered well-being also had a negative effect on their academic performance, as the swimming student-athlete summarised:

there's definitely been an effect...it's just lack of motivation from mental health...I've almost given up twice [the degree] in the last month and a half...It's been tough and it has actually ruined me...quite badly...uni went horribly wrong this year...I'm just scraping by...I can't control if we're in another lockdown, what my grades are.

Help-Seeking Behaviours of Student-Athletes

Mind Matters

An additional aim of this study was to understand the factors perceived to impact the help-seeking behaviours of the student-athlete participants. For many of the participants, they would consider seeking support. When asked if he would be willing to use well-being services, an American football player replied, “yeah for sure. I mean it's an extra pressure...to be a higher performer.”

Previous Experience. For some of the student-athletes within this study, their willingness to seek support for their well-being concerns was dependent upon their prior experiences. For some, their previous experiences had been positive, and they would therefore be willing to seek support again, as a hockey player (female) explained, “I have done in the past [use professional well-being services] to help with...talking things through...It just helps to have someone else’s...neutral opinion...I think that helps massively.” Oppositely, for the student-athletes that did not have a positive previous experience when seeking professional support for their well-being concerns, they were now unwilling to seek support. This was the case for a rugby player (male), “...I just felt like they [well-being professionals]...didn’t understand me...and I felt like I can deal with stuff myself...I’ve never been afraid to ask for help.” A netball player also felt that the support she received was “impersonal.”

Established Support Networks. Another main factor perceived to influence the help-seeking behaviours of some of the participants within this study was the support network they perceived to have in place. If their support network was deemed sufficient to aid them with any well-being concerns, they would be less willing to seek professional support. This was explained by a netball player:

...I’ve got such a good family and friends support system that I will talk to them...it suited me more because obviously, they knew my history...they’ve known me all my life...if I had a problem...I probably wouldn’t seek professional help.

Perceived Personal Resources and Unworthiness. Some of the student-athletes within this study were also reluctant to seek support due to their belief that they could deal with any well-being concerns themselves, with one football player stating, “...it [seeking support] would be almost like a last resort. I would want to be able to fix it [well-being concerns] myself...for a sense of...I can overcome it...I’m in control of how I’m feeling.” It was believed

by a few of the participants that they had the appropriate personal resources to remove the demand impacting their well-being, as one rugby player suggested:

...I haven't ever actually struggled with my mental health or...when the pressure was on and you're starting to feel bad, I've always generally just battled it out...and you...get whatever it is that stresses you out away and then you're done.

Further to this, some of the participants felt that their well-being concerns were not of sufficient issue to seek support. As one hockey player (female) indicated, "...I don't think I would feel comfortable enough [to seek support]...I feel like I'm using up resources that should be there for people who really do...have those problems."

Limited Structured Support. The support systems available within the university also hindered the opportunities for the student-athletes within this study to seek support for their well-being concerns. It was found that there was no specific well-being support structure in place beyond the university-wide initiatives for all students. It was suggested that each sports club within the university should have student volunteers to adopt the role of a well-being officer, however, this was seen to, "potentially be quite a burden on that person...in terms of their own well-being and mental health." The support of student-athlete well-being was also suggested to fall to the coaches, as indicated by a sports officer, "...with the high-performance sports, obviously the head coaches...know their athletes really well. They're aware of when something isn't, well, you'd hope that they're aware when something isn't quite right." However, this view was not shared by some of the coaches, as one explained:

...I think that (available support) possibly could be better advertised. That us as coaches, would maybe have better access to a range of different support avenues...so that if we have people with food disorders or if we have people with...body dysmorphia...there'll be somebody we could go to...there probably is, but I wouldn't

know them...I think it would be wise to have environments that are very immediate, that I could pick up the phone and say...where do I go next?

Stigma. Finally, each of the participants identified that stigma is still in place regarding well-being, and for some, this reduced their willingness to seek support for their well-being concerns. It was viewed by some of the student-athletes within this study that seeking support for well-being concerns was seen as a weakness, and as high-performance student-athletes, they should not show weakness. A rugby player (male) explained, "...mental health is an injury in itself...and we're pretending not to be hurt."

Athletes Should be Happy. It was suggested by a few of the participants that there is a perception that athletes should not have any well-being concerns due to the enjoyment that is usually derived from sport. A hockey player (female) discussed this perception:

We're expected to be...happy and fun all day long, every day ...I think people don't expect athletes to have problems...that's what a lot of people think and I think a lot of people in sports as well share the same attitude...I would say there is a bit of a stigma...I think it's from...people not wanting to admit that they might need the help.

Mental Toughness. Some of the student-athletes felt that by showing what was deemed to be a weakness when seeking professional support, they were viewed as not strong, this was an issue for one hockey player (male), "...it seems if you're...seen as weak or vulnerable then you're not...strong and that's a problem." A swimming student-athlete also perceived that she could not voice concerns for her well-being whilst she was competing due to the fear of being seen as "weak", "...there is definitely a stigma around it [mental health]...You have to put a brave face on because if you're a competitor you can't look like you've got a weakness." It was also expressed that the sports environment had taught athletes to be mentally tough, further highlighting their perceived ability to manage their own well-being. This was particularly

discussed by a hockey player (female), "...sport has always taught me to be mentally tough so it looks weak to go to someone else...I feel like I can get myself out of anything."

Gendered Stigma. It was perceived by some of the participants that the stigma associated with well-being is particularly prevalent within male sports. This was suggested to be a result of the masculinity society expects of males. A rugby player (male) mentioned, "...It's a society thing. You're meant to be big and strong, and you're meant to be the protector, and everything is meant to be okay with you". A coach also shared this view, highlighting the stigma that has been in place throughout history:

...men have suffered with it probably more because of that old-fashioned stigma of men are supposed to be tough...it's farcical... I think it's an old...stigma and I think it's evolving and changing. I think men are getting the message that it's a strength to share...and it's a strength to say I'm struggling at the moment.

The toxic masculinity that is embedded throughout society also made it hard for some of the male participants to discuss any issues relating to their well-being. This was particularly an issue when males discussed their well-being with other males. As a rugby player (male) described:

I think there has been a movement in the right direction...I think talking is a big thing, obviously, we're big advocates for it, but it is more difficult than you think, especially...men compared to girls...trying to speak about feelings is tough...especially speaking to other boys...I think it's easier for men to open up to girls...just because they felt a bit more comfortable and safe.

Perceived Public Stigma. For many of the student-athletes, their unwillingness to disclose any well-being concerns was a result of perceived public stigma, with one hockey player (male) believing, "...people don't accept that it's okay to talk about things like that [mental health]." The perceived public stigma also meant that some of the participants did not

feel comfortable disclosing any well-being issues with their teammates, as discussed by a hockey player (male), "...I certainly wouldn't share with the rest of the team...because I think they would tell everyone...that fear would always be there."

Although, some of the participants within this study believed that there is a movement in the right direction towards reducing the stigma associated with well-being, the stigma, as well as previous experience, and available support, often prevented the student-athlete participants from seeking help for their well-being concerns.

Chapter Five

Discussion

The following chapter provides a discussion of the findings from this study, in order to address the proposed research aims.

Research Aims and Objectives

This study endeavoured to address the following four aims: i) examine the factors perceived to positively and negatively impact the well-being of UK-based high-performance student-athletes; ii) explore the impact of the COVID-19 pandemic on high-performance student-athletes' well-being; iii) understand the factors that affect the help-seeking behaviours of these student-athletes and; iv) utilise the findings to develop recommendations that can be implemented to support the well-being of high-performance student-athletes within the UK HE system.

Research Contributions

It has been identified that more research is needed that focuses specifically on the factors that impact the well-being of student-athletes in the UK (Shannon et al., 2019). This qualitative study contributes to the extant literature through an in-depth exploration of the factors that affect student-athlete well-being, addressing this gap. Furthermore, this study extends the current literature by providing an informative and detailed understanding of the impact the COVID-19 pandemic, and subsequent removal of important resources, has had on the well-being of UK student-athletes. This is important due to the unprecedented impact and limited understanding of the COVID-19 pandemic on the well-being of student-athletes. The qualitative focus of this study provides a depth of understanding to the research topic (Lester et al., 2020). This has offered an opportunity to generate detailed findings that can inform practical implications for maintaining student-athlete well-being. Finally, this study utilised triangulation of data through the views of student-athletes, coaches, and practitioners to collect

unique perspectives and a deeper understanding of the factors impacting student-athlete well-being during COVID-19. As a result, triangulation can enhance the quality and credibility of this research by providing a range of perspectives for mutual confirmation of the phenomenon (Krefting, 1991).

Factors Affecting High-Performance Student-Athlete Well-Being

It was found that the participants within this study perceived that a number of factors positively and negatively impacted the well-being of high-performance student-athletes. These factors included *dual career, injuries, relationships, leadership, finances, and nutrition*. This study also found that overall, the COVID-19 pandemic had a negative impact on the well-being of student-athletes due to the perceived lack of *control, direction, sport, and support*. However, some of the participants within this study felt that initially, the pandemic had some positive effects on their well-being from the *reduction in demands, recognition of skills, increased gratitude, and improved self-care*. This study also identified a number of factors perceived to affect the help-seeking behaviours of the student-athletes including *previous experiences with professional support, established support networks, perceived resources, and stigma*.

Overall, it is acknowledged that the pursuit of a dual career had a positive effect on the well-being of student-athletes. Through the focus of positive psychology, being a student-athlete provided an opportunity for positive experiences leading to increases in subjective well-being, satisfaction, and happiness. It was also evident that, despite the challenges initiated by the COVID-19 pandemic, many of the student-athletes showed perseverance, high work ethic, social responsibility, and love for their dual career and their support networks. Furthermore, many of the student-athletes showed positivity toward their dual career in a number of domains. Specifically, many of the student-athletes expressed positive emotions such as joy and pride as well as continued engagement in their dual career despite the impact of COVID-19. Positive relationships with teammates, support staff, friends, and family were also seen to be important

for the maintenance of student-athlete well-being. Finally, pursuing a dual career brought meaning and accomplishment to the student-athletes through the achievement of sports and academic goals as well as a sense of belonging and worth. Each of these areas aligns with the elements of positive psychology and well-being suggested by Seligman (2011).

Within this study, the pursuit of a dual career was perceived to have both positive and negative effects on the well-being of student-athletes and therefore, adds to the limited research to date regarding the protective factors of well-being (Pankow et al., 2021). It was found that the pursuit of a dual career had such benefits as improved well-being, enjoyment, motivation, and wider support networks. Additionally, it was noted that the student-athletes within this study were positively impacted when they experienced success in their dual career as well as by the structure a dual career provided. This was found to be congruent with previous literature (e.g., Kamusoko & Pemberton, 2013; Woodford & Roberts, 2021), whereby it has been found that a dual career can provide many benefits such as increased well-being, social support systems, career prospects, improved academic performance (van Rens et al., 2019), increased life satisfaction as well as an easier transition period following athletic retirement (Cartigny et al., 2021).

Despite the positive effects of a dual career discussed by the participants within this study, it was suggested that being a student-athlete could negatively impact well-being, particularly when demands increased during exam and deadline periods. If these demands became overwhelming and the student-athlete was unable to cope, they experienced a range of negative impacts such as low well-being, sleep disturbances, reduced motivation, disengagement, and loss of appetite. The resultant overload of too many demands also led one student-athlete to withdraw from their sport. This was also found to be consistent with research literature (e.g., Lopes Dos Santos et al., 2020; Stambulova & Ryba, 2013), as the extensive time demands associated with a dual career can be perceived as a stressor and often require

student-athletes to find a balance between their two career pathways (Hatteberg, 2020). It was suggested by some of the participants within this study that in order to successfully maintain a dual career, student-athletes needed to possess a number of skills such as time management, autonomy, and decision making. In alignment with this view, the literature suggests that student-athletes need a range of skills and competencies including motivation, commitment, resilience (Vickers, 2018), time management, organisation, self-discipline, autonomy, adaptability, patience, and interpersonal skills (De Brandt et al., 2018). Therefore, it is recommended that student-athletes should be taught these necessary skills to successfully manage the demands of a dual career. This could occur through workshops within a university setting.

Self-determination theory (SDT; Deci & Ryan, 1980; Ryan & Deci, 2000) can be utilised to explain such negative and positive impacts of maintaining a dual career pathway. SDT identifies there are three needs including competence, relatedness, and autonomy which facilitate optimal functioning, social development, and well-being (Deci & Ryan, 2008). For many of the student-athletes within this study, these three needs were met, leading to an increased motivation to participate in a dual career, and subsequently, increased well-being. Specifically, student-athletes within this study perceived the need for competence was met when they experienced success within their dual career. Furthermore, when student-athletes perceived that they were in control and able to make their own decisions such as participating in a dual career, the need for autonomy was met. Finally, the social support, particularly of teammates, was deemed to be important. As suggested by some of the participants within this study, a shared understanding of the demands faced by student-athletes helped some of the participants to manage a dual career and ultimately satisfying the need for relatedness. For the student-athletes within this study who felt competent in their abilities in sport and academia, in control of their decisions as well as connected to their social environment, motivation to

continue the pursuit of a dual career was present. As suggested within the literature, if these three needs (competence, autonomy, relatedness) are met, it is likely that a student-athlete will willingly and indefinitely re-engage with an activity and will maintain high levels of well being (Sarrazin et al., 2001).

However, it appeared for the student-athletes that did not experience the satisfaction of these needs, well-being was perceived to be low. For instance, when a student-athlete did not perceive themselves to be competent in managing the demands of a dual career, when they experienced isolation from teammates, and when they did not feel in control of their decisions (such as when they were injured), they reported lowered well-being.

Moreover, student-athletes within this study perceived that their well-being was lowered when they experienced too many demands. In accordance with the transactional model of stress and coping (Lazarus & Folkman, 1987), some of the student-athletes within this study appraised the demands of being a student-athlete, such as the balance between sport and academia as well as exam periods and deadlines, as stressors. For student-athletes with the appropriate skills and strategies including time management, organisation, autonomy, and decision making, this demand was appraised as manageable. For the student-athletes that did not possess these skills or effective strategies, the stressor was likely to be appraised as unfavourable or threatening, and for some of the student-athletes within this study, this led to perceptions of decreased well-being, feelings of overload and subsequently the discontinuation of a dual career.

Sustaining an injury had a particularly negative effect on the well-being of student-athletes within this study. For some of the student-athletes that identify strongly as an athlete, they felt as though their identity had been removed. Moreover, social support was deemed to be an extremely important protective factor of well-being for the student-athletes within this study, and this was removed during times of injury. Hence, the removal of social support during

periods of injury appeared to reduce well-being through feeling isolated, lonely, overwhelmed, scared, and annoyed. Such negative experiences have also been found in previous studies (e.g., Martin et al., 2021, Mitchell et al., 2014; Yang et al., 2010). According to the Integrated Model of Response to Sport Injury (Weise-Bjornstal et al., 1998) the response an individual has to injury is influenced by factors such as athletic identity and perceptions of social support (Madrigal & Gill, 2014). The importance individual's place on their athletic identity can have negative consequences following an injury due to the removal of what they deem most important. In addition, social support has been identified as an integral resource to facilitate injury recovery, enhance well-being, reduce negative stress responses, improve motivation, and can help individuals cope with the injury (Clement & Shannon, 2011; Rehmer, 2021; Yang et al., 2010). The removal of this identity and support for the student-athletes therefore not only hindered the positive effect social support can have on injury recovery but also resulted in perceived low well-being. A finding widely reported elsewhere within other studies (e.g., Podlog et al., 2013; Renton et al., 2021; Vekooijen et al., 2011).

As indicated, social support was found to be an important protective factor of student-athlete well-being. Within this study, social support from teammates, non-athlete friends, coaches, and family was perceived to increase well-being, improve mood, as well as provide a source of relief, understanding, distraction, and guidance. Furthermore, the student-athletes' social networks provided additional support such as financial aid from parents and physical and nutritional support from coaches. This reinforces the extensive research available (e.g., Berg & Warner, 2019; Hatteberg, 2015; Sullivan et al., 2020; Thoits, 2011) which posits that social support is associated with improvements in well-being, performance, flow states, challenge appraisals, self-confidence, and lowers the risk of injury and burnout (Gabana et al., 2017; Hartley & Coffee, 2019). This is due to social support being an effective tool in reducing the perceived stress associated with the demands of a dual career, subsequently reducing the

potential for demand overload and burnout. In accordance with the main effect theory (Cohen & Wills, 1985) social support buffers the negative effects associated with a dual career and provides benefits such as regular positive experiences, improved well-being, socially rewarding community roles, sense of purpose, stability, security, and recognition of self-worth (Cohen & Wills, 1985; Kawachi & Berkman, 2001). To do this, it has been indicated that social support provides a variety of psychological and physical resources that can be utilised when faced with challenges, and ultimately improves the ability to cope (Hill et al., 2021). These resources help to maintain the balance between demands and resources and therefore maintain well-being.

To note, it was identified within this study that coaches were important to the well-being of the student-athletes due to the support and understanding they provided. As identified by Jowett (2007), a high-quality coach-athlete relationship that is supportive, respectful, trusting, and encourages communication can protect student-athlete well-being. These protective relationships are often characterised by closeness, commitment, and complementarity in which the student-athletes and coaches have developed mutual trust and respect, have high intentions to commit to the maintenance of the relationship, and demonstrate harmonious behaviours. The coach-athlete relationship within this study was described by some of the participants as displaying these factors and therefore contributing to the maintenance of their well-being. Moreover, the quality of a coach-athlete relationship serves as an important factor for well-being, self-determined motivation, and basic needs satisfaction (e.g., competence, autonomy, relatedness; Jowett et al., 2017) which was also identified within this study. As a result of the many benefits provided by a high-quality coach-athlete relationship, it is unsurprising that student-athletes who noted a poor relationship with their coaches perceived lower well-being. Perceptions of the coach-athlete relationship were also found to be different for student-athletes within the same team. For instance, one netball player

believed her coach was supportive and would often seek her guidance. Oppositely, another netball player would not seek support from the same coach due to the fear of potential negative consequences such as being perceived as weak or incapable. This disparity shows there is some disconnect between the closeness, commitment, and complementarity of the coach-athlete relationship for some of the student-athletes but not for others. These ineffective relationships can also be characterised by a lack of interest, emotion, and remoteness (Jowett, 2005).

Considering this coach-athlete relationship, it should be noted that despite only being in contact with student-athletes for a limited number of hours each week, there is a high expectation for the coaches to be responsible for the well-being of student-athletes (Bissett et al., 2020). This immense pressure can have adverse effects on the coaches, leading to well-being and mental health concerns (Kenttä et al., 2020). Furthermore, coaches are often unqualified or unsuitable to manage the well-being and mental health of student-athletes and lack the specific knowledge of well-being risks in high-performance environments. Therefore, it is also important for coaches to understand the boundaries within which they can provide support (Lebrun et al., 2020).

Positions of leadership were found to have a positive effect on well-being, which has also been identified within previous literature (e.g., Brgoch et al., 2020; Todd & Kent, 2004). The captains within this study experienced increased self-worth when they were selected by their peers to take on the role of captain and strengthened their sense of belonging and value. Stets and Burke (2014) argued that an individual's self-worth is increased when their identity within a social group is verified, which appears to be the case within this study. This includes receiving recognition, approval, a sense of value, and acceptance from their teammates. However, some of the captains within this study also demonstrated that at times, the demands associated with leadership could lower well-being. This was said to be due to the workload associated with the position, along with the many responsibilities assumed, including

structuring training sessions, acting as a mediator between student-athletes and coaches, and ensuring the team are fulfilling their responsibilities (Weaver & Simet, 2015).

It has already been established that the financial burden associated with the high costs of being a student (i.e., tuition fees and living costs; Benson-Eggleton, 2019), paired with the costs of being an athlete (i.e., training, competition, travel, and kit costs; Cosh & Tully, 2015; Edmunds, 2014) can have a negative impact on the well-being of student-athletes as well as their productivity, satisfaction, and retention (Cude & Kabaci, 2012). This is no exception for the student-athletes within this study. It was highlighted by participants that the costs associated with a dual career including training, kit, competitions, travel, and nutrition could become a burden. Along with the high costs of being a student-athlete, it is indicated within the literature that there are a number of factors that impact financial wellness, such as limited knowledge and resources to maintain financial stability, limited understanding of their current financial situation, and an inability to implement financial goals. Therefore, it is important for student-athletes to be educated on the responsible behaviours necessary to manage their finances (Montalto et al., 2019), especially as they will have limited available time to undertake paid employment. This can often result in student-athletes obtaining additional financial support through student loans or parental backing (Drew, 2019; Vickers & Morris, 2021), as seen within this study. Despite this knowledge, there is limited research exploring the impact of financial instability on the well-being of student-athletes (McCoy et al., 2019), particularly in the UK. Much of the literature has focused on American collegiate athletes, who are often provided with scholarships and financial assistance (Stocz et al., 2019). It is therefore vital that additional research is undertaken to understand the impact that financial circumstances had on student-athlete well-being and to consider how to promote financial wellness.

It was highlighted that good nutrition is important for the mental and physical health of the participants, which has been supported in previous literature (Sceery, 2017). Adding to this,

participants within this study associated poor nutrition with low well-being, frustration, and lack of motivation. It was also found that the conflicting roles of being a student and an athlete could result in poor nutritional choices, further impacting student-athlete well-being. Previous research, and as found within this study, noted that the well-being of university student-athletes is vulnerable due to their extensive demands, university student lifestyle, financial resources, lack of life skills, and limited nutritional literacy (Cha et al., 2014; Heaney et al., 2008; Quatromoni, 2008). As a result, student-athletes often adopt poor dietary habits such as a high intake of processed food and insufficient nutrient intake (Lawson et al., 2020), which can lead to low well-being, reduced performance, fatigue, increased risk of injury, and unfavourable body composition (Ali et al., 2015; Riviere et al., Sarkisian, 2016; 2021; Werner, 2021). Nutritional literacy is a key factor for poor nutrition. As a result, student-athletes should be given the appropriate resources, such as nutritional knowledge which can be taught through workshops, to make informed decisions and maintain their well-being.

Body image and general appearance can be of great concern for many. This was found to be the case for some of the female student-athletes within this study who perceived lack of femininity and athletic appearance to have a negative impact on their well-being. This led to feelings of being overwhelmed, anxiety, and being conscious of weight management. It has previously been discussed within the literature that student-athletes are a population at higher risk of developing body image concerns and disordered eating (Kong & Harris, 2014; Reel et al., 2010) particularly within sports where low body weight or leanness are desired such as athletics, gymnastics, figure skating, and rowing (Heaney et al., 2008). Hence a focus on body image can lead to negative consequences such as low well-being (Maffei, 2019), low self-esteem, anxiety, depression (Perelman et al., 2018), self-doubt and obsession over physical appearance (LaFontaine, 2009). Furthermore, for some of the student-athletes within this study, well-being was affected by participation in what is considered a masculine sport. This

can be explained using objectification theory (Fredrickson & Roberts, 1997) through which it is suggested that female athletes internalise the societal ideals of beauty which often involve having a slim and lean physique (Perelman et al., 2018). Moreover, female student-athletes are also pressured to conform to societal standards of femininity, which do not involve the muscularity involved with certain sports. This is likely due to the association between muscularity and masculinity (Steinfeldt, Carter, et al., 2011). Relevantly, the rugby female student-athletes within this study were conscious of the societal pressure to appear feminine despite participating in a “masculine” sport. Hence, according to the theory, the effects of societally imposed gender roles can have detrimental impacts on the well-being and mental health of student-athletes, resulting in a higher frequency of negative emotions and mental health risks including depression, disordered eating, and body shame (Harrison & Fredrickson, 2003).

The COVID-19 pandemic has had a multitude of positive and negative impacts, as described by the student-athletes within this study as well as in recent research (e.g., Abenza-Cano et al., 2020; Hamza et al., 2021; Schary & Lundqvist, 2021; Scott et al., 2021). The restrictions implemented because of the COVID-19 pandemic had a short-term positive effect on several of the student-athletes within this study due to the reduction in demands and subsequent external pressures including sport commitments and social obligations. As found in other studies (e.g., Abenza-Cano et al., 2020; Sanborn et al., 2021), this reduction in demands also gave the student-athletes the opportunity to focus on other aspects of their life such as academia. Throughout the pandemic it was suggested by some of the participants that they were encouraged to reflect on their lives, resulting in feelings of gratitude for being given the opportunity to step back from their busy schedules, to appreciate life, as well as being able to take time for themselves. Literature suggests that this experience of gratitude on taking time for oneself can be important for the enhancement of subjective well-being and life satisfaction

(Kong et al., 2015). Furthermore, it was recognised by some of the participants within this study that student-athletes have demonstrated resilience during the COVID-19 pandemic in which they have adapted to adverse conditions, thus protecting themselves from stressors. Gupta and McCarthy (2021) also found similar results within their study of elite athletes. This adversity related growth can lead to increased well-being and mental health in comparison to those who have not experienced adversity (Sarkar et al., 2015). Specifically, Seery (2011) suggested that experiencing adversity can contribute to an individual's ability to positively adapt through mechanisms such as mastery over previous adversities, increased perceptions of control, the establishment of social support networks, as well as the belief that one can manage successfully. To this effect, the experience of challenges can foster higher levels of performance (Sarkar et al., 2015).

However, in the longer term, the restrictions implemented due to COVID-19 had a negative impact on the student-athletes well-being, which manifested itself as frustration, sadness, lack of purpose, no motivation, loss of appetite, depressive symptoms, and isolation. The participants within this study as well as recent research (e.g., Bullard, 2020; Grubic et al., 2021; Scott et al., 2021) suggested this was a result of the uncertainty surrounding the pandemic, removal of social support systems crucial for well-being, lack of direction, and lack of control. In particular, the removal of important resources for the student-athletes within this study (i.e., sport, social support) that are used to buffer the impact of demands, had a negative impact on their well-being, which is congruent with other research (e.g., Grubic et al., 2021). Research suggests that the removal of these important resources have left student-athletes feeling disconnected and disengaged (Bunce, 2013; Espina, 2021).

Help-Seeking Behaviours of Student-Athletes

For some of the student-athletes within this study, their help seeking-behaviours were influenced by a number of factors including previous experiences, established support

networks, and stigma, which have also been acknowledged within the literature (Gulliver, Griffiths, & Christensen, 2012). In particular, the student-athletes within this study suggested that they were more likely to accept further help if they had positive previous experiences. It was found by Gilliver et al. (2010) that positive past experiences with professional services encouraged help-seeking behaviours due to the knowledge gained of what to expect and how utilising professional services can help the student-athletes. Moreover, some of the participants within this study suggested that having a strong support network in place reduced the likelihood of the student-athlete displaying help-seeking behaviours. This was suggested by some of the participants within this study as well as in previous research (Norseth, 2017; Sander, 2019) to be the result of the perception that their support network can provide adequate support. Further to this, some of the student-athletes perceived there to be insufficient support available. Although general university student support was available to the student-athletes, the differing demands and needs make them a unique population. Therefore, the support available was deemed to be irrelevant or not effective for helping the student-athletes with demands specifically related to their dual career. This further increased the student-athletes reluctance to seek support (Renn, 2020).

Despite the prevalence of low well-being, mental illness, and the public promotion of help-seeking behaviours, there is still a stigma regarding this topic. This is indicated within the literature (e.g., López & Levy, 2013; Wahto et al., 2016) as well as by the student-athletes within this study. Within the athletic community, the perceived public stigma surrounding mental health is based on the perception that coaches or teammates will view the student-athlete as weak or incompetent (DeLenardo & Terrion, 2014). Some of the student-athletes within this study have internalised this public stigma and expressed similar perceptions of help-seeking behaviours as a sign of weakness. Furthermore, some of the participants within this study mentioned that they were taught to be mentally tough which hindered their willingness to seek

support. Extensive literature has also found that mental toughness can result in diminished help-seeking behaviours regardless of the stressors they encounter (Gucciardi et al., 2015; Kola-Palmer et al., 2020). Moreover, it was found that some of the male student-athletes within this study were reluctant to seek help due to the masculine values, norms, and expectations of society (Steinfeldt & Steinfeldt, 2012) in which men are supposed to be strong and tough (DeLenardo & Terrion, 2014). To this effect, seeking support for well-being concerns conflicts with the idea of masculinity and may present the image of being powerless, and lacking control. This added to the reluctance of some male student-athletes seeking help (Staiger et al., 2020).

Chapter Six

Conclusion

Summary and Applied Implications

Well-being and mental health have become a topic of increased importance in recent years, particularly within the student-athlete population. This study, therefore, provided an in-depth view of the factors that were perceived to positively and negatively impact the well-being of high-performance student-athletes during a COVID-19 affected year. It also identified the perceived determinants of help-seeking behaviours among the sample. It was identified that there were many factors that impact the well-being of student-athletes both positively and negatively. These included a dual career, injuries, relationships, leadership, finances, and nutrition. Furthermore, although there were some positives identified as a result of COVID-19 restrictions, many student-athletes found the pandemic to negatively impact their well-being mainly due to the perceived lack of control, motivation, and structure, along with the removal of key resources such as sport and social support. Finally, this study identified that previous experience with health care professionals, established support networks, and the stigma associated with well-being and mental health impacted the help-seeking behaviours of student-athletes.

This study has brought forth a range of applied implications that could be utilised to maintain or improve well-being, buffer the effects of a dual-career on well-being, and improve the help-seeking behaviours of high-performance student-athletes within a university setting.

As the management of tasks and the subsequent time commitments were demands highlighted by all participants, it is clear that many student-athletes within this study lacked the appropriate life skills to be an autonomous student-athlete living independently. Due to this, there is an opportunity to teach student-athletes a range of competencies and skills to adapt to this new independent lifestyle. Such skills should include time management,

communication, resilience, and critical thinking (Haslerig, 2018). Further workshops for student-athletes that could be beneficial include nutrition and financial management (Johnson, 2020). This will help student-athletes to live autonomously, manage the multitude of demands associated with a dual career, as well as be better prepared for time pressures or critical events.

Moreover, universities should provide mental health workshops aimed at improving the mental health literacy of student-athletes. Mental health literacy is defined as “understanding how to obtain and maintain positive mental health; understanding mental disorders and their treatments; decreasing stigma related to mental disorders; and, enhancing help-seeking efficacy” (Kutcher et al., 2016, p. 155). It is important for student-athletes to recognise when they are experiencing symptoms of low well-being or mental ill-health and subsequently when to seek support. For many student-athletes unwilling to seek support, they believed they were capable of handling these concerns by themselves. It is therefore important for student-athletes to understand that it is acceptable for them to seek support without it impacting their dual-career or perceptions of their capabilities. To this effect, the stigma surrounding mental health should also be addressed by educating student-athletes about well-being and mental health. This can be done through mental health literacy interventions aimed at reducing stigma. For example, in a study conducted by Chow et al. (2020), group interventions focused on education and awareness improved student-athlete mental health literacy, self-stigma, attitudes towards help-seeking behaviours, and intentions to seek help post-intervention. Additionally, Kern et al. (2017) aimed to reduce mental health stigma among student-athletes through a contact and education-based intervention. This included presentations consisting of four primary sections: i) educational overview of mental health relating to student-athletes; ii) videos of former student-athletes discussing their own mental ill-health; iii) first-person disclosure from the same former student-athletes and; iv) open discussion with the former student-athletes. This was found to increase student-athletes comfort in discussing mental health with teammates,

confidence to assist teammates seeking support, ability to identify mental health concerns in teammates, and willingness to seek support.

Furthermore, it was identified that there is a need to provide additional well-being support specifically for student-athletes. The accessible support for all students was described by the student-athletes as impersonal, generic, or did not meet the needs of the student-athletes. In countries such as America, there is extensive support and attention given to the well-being and mental health of student-athletes. For instance, the NCAA convened a task force to address student-athlete mental health concerns, developed a book focused on understanding and supporting student-athlete well-being and mental health (Hainline, 2014), as well as developed a consensus document to support student-athlete well-being (Sport Science Institute., 2017). Further to this, American student-athletes also have regular access to sources of support such as sports psychologists, sports medicine professionals, and academic support staff that can support them throughout their dual career (Hatteberg, 2020).

Additionally, there appeared to be an over-reliance on coaches and volunteer student-athletes to undertake the role of well-being support officer, leaving the individuals within these roles at risk of being overwhelmed and having to deal with issues beyond their capabilities. Moreover, as they were not trained to provide mental health support, those student-athletes in need, may not receive the best care. The university, therefore, has an opportunity to implement structured support systems that should include the provision of access to professional help for dual career-specific demands.

Strengths and Limitations

A number of strengths and limitations of this study should be mentioned. This study provided an in-depth view of both the positive and negative factors that impact the well-being of student-athletes. This allowed for a better understanding of the factors that need to be addressed to prevent the detrimental impact of low well-being but also highlights the factors

that can be elicited to protect or even enhance the well-being of student-athletes. Furthermore, the use of iterative semi-structured interviews allowed for in-depth discussions of participants experiences, perceptions, beliefs, and attitudes relating to well-being and help-seeking behaviours. This form of data collection also allowed the researcher to probe into the areas of interest to fully understand the impact each factor had (Kallio et al., 2016) on the well-being of student-athletes. As this study was conducted online, each of the participants was able to complete the interview in a location of their choosing, offering them comfort and safety, which may have allowed them to be more open and honest in their responses (Salmons, 2014). Along with this, the researcher was of a similar age and lifestyle to the student-athlete participants which could make them feel more at ease. This study utilised triangulation in the recruitment of participants leading to rich information regarding the experiences, perspectives, and opinions of student-athlete well-being from varying perspectives (Carter et al., 2014). This study can also contribute to the current gap in well-being literature, particularly due to its focus on high-performance student-athlete well-being within a UK setting, as much of the extant literature is American-based (Shannon, Breslin, et al., 2019; Stambulova & Ryba, 2014). Finally, the use of ID and strategies for trustworthiness provided a highly rigorous participant account of high-performance student-athlete well-being (Hunt, 2009).

In regard to limitations, participant recruitment was difficult due to their busy schedules as well as lack of response from some of the potential participants. This led to participant dropout and full coverage across all coaches and student-athletes was not achieved. This limits the full understanding of the factors that are perceived to impact the well-being of the student-athletes across all performance sports within the University in question. Moreover, all participants within this study were recruited from one university within the UK, limiting the ability to generalise these findings. Another limitation of this study was the selection process of student-athletes, as the details for the participants were provided by the captains of each

sport. This enabled them to select certain team members who would be willing to participate, potentially limiting the participation of those experiencing low well-being or mental ill-health. Furthermore, the participant recruitment process is often challenging, however, this was made more so by the COVID-19 pandemic. The restrictions implemented by the pandemic meant that the researcher could not have any face-to-face contact with participants and could therefore not establish a rapport during the recruitment process.

Future Directions

Although this study highlights some of the factors perceived to impact the well-being and help-seeking behaviours of student-athletes during a COVID-19 affected academic year, due to the small sample size, and limited coverage across all sports, further research should be undertaken with additional participants. Moreover, as this study was only conducted within one university, the incorporation of additional university student-athletes may indicate a number of similar or alternative factors perceived to impact the well-being of student-athletes. Future research should consider a longitudinal approach to gain a deeper understanding of the factors that affect student-athlete well-being at different time points across the year. There is also an opportunity to undertake research comparing samples. For example, research can be conducted comparing team sports to individual sports, as well as student-athletes and non-athlete students. This will provide a deeper understanding of the factors that specifically affect student-athletes as well as student-athletes within different teams. Further exploration should also be given to the student-athletes that would not seek help due to their lack of identification of someone that needs help. This could be a large barrier as to the reason many student-athletes do not seek help. Finally, undertaking a mixed-method approach has the potential to increase the likelihood of student-athletes experiencing low well-being to participate in the study but can also be utilised to understand the levels of well-being among student-athletes.

Overall, this study aimed to examine the factors that affect the well-being and help-seeking behaviours of high-performance student-athletes, as well as the impact of the COVID-19 pandemic. It was found that the well-being of high-performance student-athletes within this study was affected by the pursuit of a dual career, injuries, relationships, leadership, finances, nutrition, and COVID-19. Along with the factors perceived to impact the help-seeking behaviours of the student-athletes including previous experience, social support, perceived resources, available support systems, and stigma.

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Appendices

Appendix A. Example Introductory Email

Dear [Name],

I hope you are well.

I am contacting you regarding the postgraduate research that I am conducting regarding the well-being of high-performance student-athletes under the supervision of [Name].

Within this study, I am looking to hold online individual semi-structured interviews at a mutually convenient time. The interview will seek to explore the factors perceived to impact the well-being of high-performance student-athletes at Swansea University during a COVID-19 affected academic year. The study aims to utilise the findings of the research to provide recommendations that can be taken forward to improve the well-being of high-performance student-athletes.

I have attached an information sheet regarding the study to this email to give you a deeper understanding of the study. The information sheet also outlines the reasons you are being contacted and the benefit that your participation will have.

If you are interested in participating in this research, could you please contact me at your earliest convenience.

In the meantime, should you have any questions, please do not hesitate to contact me.

Kind Regards,

[Name]

Appendix B. Participant Information Sheet



PARTICIPANT INFORMATION SHEET

Project Title: An examination of the factors influencing well-being and mental health among student-athletes during a COVID-19 affected academic year.

Project Contacts:

Project Lead: Miss Laura Smith

Postgraduate Research Student, School of Sport and Exercise Science, Swansea University (Email: [REDACTED])

Project Co-Lead: Dr Denise Hill

Senior Lecturer of Sport and Exercise Psychology, School of Sport and Exercise Science, Swansea University (Email: [REDACTED])

Introduction to the project:

You have been invited to take part in this project that will examine the factors impacting the well-being and mental health of high-performance student-athletes at Swansea University - during a COVID-19 affected academic year.

What is the purpose of the project?

- i) To examine the factors impacting (both positively and negatively) the well-being and mental health of Swansea University high-performance student-athletes;
- ii) To consider the specific impact of the COVID-19 restrictions on the well-being and mental health of Swansea University high-performance student-athletes.

The overall intention is to use these findings (alongside those gained from a parallel project) to devise recommendations that can be adopted to maintain / enhance the well-being and mental health of student-athletes at the University.

Why have I been asked to take part in the project?

Because you are a high-performance student-athlete at Swansea University; or a member of their support team (e.g., coach, sport science practitioner, welfare officer etc.,).

What will happen to me if I take part?

You will be asked to attend an individual interview where you will discuss factors that you consider may be affecting (both positively and negatively) the well-being and

mental health of high-performance student-athletes at Swansea University. You will also be asked to consider, in particular, the impact of the COVID-19 restrictions.

Please note, that you will NOT be expected to discuss your own well-being and mental health. The interview will take place online at a mutually convenient time (during the next 5 months) and will last approximately 45 minutes.

Will my taking part in the project be kept confidential?

Yes. The recruitment process and the interviews will take place online. Therefore, it will not be known to anyone outside of the research team, that you have taken part in the project. Your data will be anonymised and stored on a password protected computer, and any data that may reveal your identity will not be used in the writing up of the project. All data will be destroyed once the project is completed.

What are the possible benefits of taking part?

From participating in this project, we will be able to recommend an evidence-based intervention which can enhance the well-being and mental health of student-athletes at Swansea University.

What are the possible disadvantages of taking part?

There are no anticipated disadvantages or risks from taking part in this study. However, there is a small possibility of psychological distress when reflecting on your well-being and mental health. If this occurs, you may wish to speak to someone in confidence (please see below for contact details):

- The Samaritans - 08457 90 90 90 www.samaritans.org
- Mind - 0300 123 3393 www.mind.org.uk/help/advice_lines
- The research lead (see details above)

Please also note that taking part in this study is entirely voluntary, so you do not have to complete the interview if you choose not to.

What if I have any questions?

If there are any questions, please contact the research leads (details provided above).

This project has been approved by the College of Engineering Research Ethics Committee at Swansea University (Reference Number: Denise_Hill_LS_21-10-20). If you have any questions regarding this, any complaint, or concerns about the ethics of this research please contact Dr Shane Heffernan, Chair of the College of Engineering Research Ethics Committee, Swansea University (coe-researchethics@swansea.ac.uk)

Appendix C. Consent Form

PARTICIPANT CONSENT FORM (Version 1.1, Date: 05/10/2020)

Project Title:

A qualitative examination of the factors influencing well-being among student-athletes during a COVID-19 affected academic year.

Contact Details:

Project Lead Contact: Laura Smith: [REDACTED]

Project Supervisor: Dr Denise M Hill: [REDACTED]

Student Union Contact: Georgia Smith (Sports Officer): [REDACTED]
[REDACTED]

Please initial box

1. I confirm that I have read and understood the information sheet (05/10/2020, version number 1.1) for the above study and have had the opportunity to ask questions.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.
3. I understand that sections of any data obtained may be looked at by responsible individuals from Swansea University or from regulatory authorities, where it is relevant to my taking part in research. I give permission for these individuals to have access to these records.
4. I understand that data I provide may be used in reports and academic publications in an anonymous fashion
5. I agree to take part in the above study.

Name of Participant

Date

Signature

Appendix D. Interview Schedule

Interview Schedule

Student-athletes

Introduction:

Aim of the project:

- To understand the factors that affect student-athlete well-being both positively and negatively.
- To understand the impact that COVID-19 has had on student-athletes and their well-being.
- The information collected from all the interviews conducted will be collated and used to make recommendations to help the University improve their support of student-athlete well-being.

Aim of the interview:

- As well-being is affected by the demands an athlete faces and the resources they have available, the aim of this interview is to:
 - Understand the types of demands a student-athlete faces, and whether certain demands affect you more than others.
 - understand the resources you, as a student-athlete, have available or rely on to cope with the demands you face.

Consent: Verbally check student-athlete is OK to carry on with the interview. Reiterate that they do not have to disclose anything they do not wish to- they can talk about student-athlete well-being in general.

Demographic questions:

- What sport do you play?
- What course do you study?
- What is your year of study?
- How many hours a week do you spend doing university related work? (i.e. lectures, assignments, studying)
- How many hours a week do you spend doing sport related activities (i.e. training, meetings)

Well-being:

So first, if we talk about the demands you face as a student-athlete. By demands I mean:

- any challenges that you face as a student-athlete that make you feel under pressure and affect your well-being. These can be positive or negative.

- What are the main demands you face as a student-athlete?
 - Why is this a demand for you?
 - How does this demand affect your well-being?
 - How does this demand make you feel?
 - How does this demand make you think? – Does it change the way you think?
 - How does this demand affect your behaviour?
 - Are you always affected the same way by this demand?

- Are these demands constant throughout the year or do they change?
- Which demands affect you most negatively?
 - Why/how?
- Are there any demands that have a positive affect on your well-being?
- Do you think gender has an impact on well-being and mental health in sport?
 - Why do you/don't you think gender influences mental health and well-being?
 - How can gender influence mental health and well-being?
- Literature suggests that those in the LGBT community may have lower well-being and mental health than heterosexual student-athletes
 - Is this something that surprises you, or you have seen within your sport?
 - Why do you think this may be the case?
 - Do you have any suggestions on a way to address this issue?
- The same has been said for BAME student-athletes
 - Is this something that surprises you, or you have seen within your sport?
 - Why do you think this may be the case?
 - Do you have any suggestions on a way to address this issue?

Resources:

So now we'll talk a little bit about the resources you use as a student-athlete:

(i.e. social support / coach / lecturer / planning / goal setting / enough sleep / good nutrition)

- What resources do you use to deal with the demands of being a student-athlete and help to maintain your well-being?
 - Which demands do you manage with this resource?
 - How does this resource help you maintain your well-being?
 - Why does this resource help to maintain your well-being?
- Do the resources you use differ for the academic demands that affect your well-being and the athletic demands that affect your well-being?
 - How do they differ?
- Do the resources you use differ across the year or do you use the same resources all year?
 - If different, explore each resource and when they are most used (i.e. what time of year – exam periods, competitions etc).

- Which of these resources is most beneficial to helping you manage your demands and well-being?
 - Why does this resource help you and your well-being the most?
 - How often do you use this resource?

Help seeking behaviour:

- Would you be willing to seek professional help if you were struggling with your mental health and well-being?
 - Why wouldn't you seek help?
 - OR
 - Who would you seek help from?
- Do you feel there is a stigma surrounding mental health in sport? – By stigma I mean discrimination towards people struggling with their mental health
 - Why do you think there is/isn't a stigma?
 - Do you think this stigma is present within your sport or team?

COVID-19:

- How has COVID impacted your university work?
- How has COVID impacted your sport?
- What impact do you think COVID has had on your mental health and well-being?
 - Have there been any positive impacts on your well-being?
- What resources are you using to manage the impact of COVID on your mental health and well-being?

Mental health training:

- Have you or anyone you know received mental health training? (i.e. are you aware of whether your coach has received mental health training?)

If so

- What did you learn as part of the training?
- What overall impact has the training had?
- Has the training had any impact on your well-being?
- Have you implemented anything you have learned during the training that could protect your well-being?
- Has your behaviour changed due to the training?
- What benefits have you received from the training?
 - Has the training benefited your well-being?
- How could the training be improved?

If they know someone who has had mental health training (i.e. coach):

- Have there been any changes to your coaches behaviour because of the training?
- Has the training had an impact on your well-being?
- Does your coach generally help your well-being?
 - If yes, how do they help?
 - If no, why do they not help your well-being?
- Is your coach more aware of your general needs and well-being after the training?
 - If yes, how are they more aware?
 - What do they do now to help your well-being that they didn't do before?
 - If no, why do you think they're not more aware?
- What do you think could be done to make your coach more aware of your needs and well-being?