

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**Deepening our understanding of Social Media use in High-Performance Athletes**

A thesis presented in partial fulfilment of the requirements for the degree of

Master of Science

In

Psychology

at Massey University, Albany, New Zealand.

Hamish David Cotty Gill

2023

## Abstract

Social media has had a significant impact upon high-performance athletes in New Zealand and around the world. This impact can be seen in the way that we interact with our favourite sports teams and athletes. Social media has developed into a cost-effective medium which embraces interactivity, diversity, and collaboration, which athletes can take advantage of to help push their personal “brand” and awareness. Such an awareness affords the general population unique insights into the lives of high-performance and professional athletes around the world. Social media has also changed the way the athletes themselves interact with the world around them and how these interactions shape their performance and their wellbeing. However, very little research in New Zealand has been undertaken to explore general social media usage in high-performance athletes, and how this usage impacts their performance and their daily lives.

This study investigated the various uses for and consequences of social media usage in high-performance athletes in New Zealand, and as result, deepens our understanding of how high-performance athletes make sense of, regulate, and engage with social media. This study had three aims: (i) to understand why New Zealand high-performance athletes use social media, (ii) to understand if social media effects their performance, and (iii) to examine social media’s impact on wellbeing. The study consisted of an initial screening survey, followed by a semi-structured interview and involved 11 athletes who had represented New Zealand. A thematic analysis established key themes and indicated that athletes used social media for connection, improvement, and motivation. Additionally, three overarching themes were established that represented the consequences associated with social media use; these were body image, pressures, and control.

The study draws from various theories in making sense of the findings and highlighting their relevance to high-performance athletes. The findings showed that social media engagement has a profound effect on high-performance athletes in New Zealand. The findings from this study suggest that social media engagement can both positively and negatively affect performance and wellbeing of high-performance athletes.

## Acknowledgements

First, I would like to express my deepest appreciation and gratitude to my supervisors Dr Warrick Wood and Dr Ian de Terte. Your continuous support, advice and encouragement whilst completing this study was invaluable, and I know without your patience and expertise this road would have been a lot bumpier! Thank you for only being a short distance away, either on email or in-person, and for your quick responses to problems or frustrations I was encountering. Thank you to Harvey Jones, without you the implementation of the screening survey on Qualtrics would have been extremely difficult. Thank you for your help in setting this up, and for my constant barrage of questions on email!

I would also like to thank Massey University for their support through my university experience, whether that be through scholarships in my undergrad, or through academic advice for when I was struggling to meet the requirements for this Master's degree. Although you have thousands of students, I always felt that I was supported and understood in my journey, and for that I am grateful. Thank you also to the Academy of Sport who helped share the study through their Academy email contacts and Facebook page.

To my family; Mum, Dad, Pops, and Greer. There are too many words that could describe your support and I don't think I would have enough time to write it all down. Thank you for everything and for sticking by me right to the end, I am very grateful.

Mum and Dad, your guidance and support has been unwavering. I know there have been times during these university years where I have been frustrating, and I have not always been the most grateful son, and for that I apologise. This thesis is not only mine, but also yours by extension, it is a culmination of years of support from the both of you and for that I am eternally grateful.

## Table of contents

Abstract.....	2
Acknowledgements.....	3
Table of contents.....	4
List of Figures and Tables.....	6
Chapter One .....	7
Introduction.....	7
1.1 Scope and justification for research.....	7
1.2 Research aims and objectives .....	9
1.3 Structure of thesis .....	9
Chapter Two.....	10
Literature Review.....	10
2.1 Defining Social Media .....	10
2.2 Social Media and Sport.....	12
2.3 High-performance Sport .....	17
2.3.1 Defining high-performance.....	18
2.3.2 High-performance Sport and Social Media in New Zealand.....	19
2.4 Uses and gratifications theory.....	21
2.5 Self-presentation theory .....	23
2.6 Self-determination theory .....	26
2.7 Distraction-conflict theory .....	29
Chapter Three.....	33
Methodology.....	33
3.1 Methodology .....	33
3.2 Study design.....	34
3.2.1 Development of the screening survey.....	34
3.2.2 Participants.....	34
3.2.3 Development of the semi-structured interview.....	35
3.3 Data collection .....	35
3.4 Data analysis .....	36
3.5 Research quality.....	38
3.5.1 Rigour .....	38
3.5.2 Trustworthiness.....	39
3.5.3 Member checking.....	41
3.5.4 Bias and reflexivity .....	42
Chapter Four .....	44

Results.....	44
4.1 Thematic findings .....	44
4.2 Social media use by high-performance athletes.....	44
4.2.1 Connection .....	45
4.2.2 Improvement .....	49
4.3.3 Motivation.....	50
4.4 Consequences of social media use .....	54
4.4.1 Body image .....	55
4.4.2 Pressures .....	59
4.4.3 Control .....	65
Chapter Five.....	68
Discussion and Conclusion .....	68
5.1 Research purpose .....	68
5.2 Research Question 1 .....	68
5.2.1 Connection .....	69
5.2.2 Improvement .....	72
5.2.3 Motivation.....	73
5.3 Research Question 2 .....	77
5.3.1 Body image .....	77
5.3.2 Pressures .....	81
5.3.3 Control .....	85
5.4 Limitations .....	87
5.5 Future directions .....	88
5.6 Conclusion .....	89
References.....	92
Appendices.....	116
Appendix A: Participant Information Sheet .....	116
Appendix B: Screening Survey.....	118
Appendix C: Initial Information Email.....	124
Appendix D: Facebook Poster .....	126
Appendix E: Semi-structured Interview Areas .....	127
Appendix F: Follow-up Member Checking Email .....	129

## List of Figures and Tables

<b>Figure 1.</b> Social Media use by High-Performance Athletes .....	45
<b>Figure 2.</b> Consequences of Social Media use .....	55

# Chapter One

## Introduction

The first chapter of this study begins by providing the overall scope and justification for the undertaking of the research. The research aims and objectives are then introduced, which speaks to the overall purpose of the study, and the resulting research questions are presented. Finally, a brief overview of the structure of the thesis is presented.

### 1.1 Scope and justification for research

Social media has changed the way that we think and interact with others. There is little doubt that social media has become one of the defining characteristics of this generation and has helped shape life for future generations. From the development of Web 1.0 and Web 2.0 we have seen these effects through social media platforms such as Facebook, Instagram, and Snapchat (Pegoraro, 2010). Although social media predates these technologies (Harrison & Barthel, 2009; Kaplan & Haenlein, 2010), the latest wave of innovation has placed social media at the forefront of computer-mediated communication and as the standard for user interactions (Harrison & Barthel, 2009).

By 2021, there were approximately 4.26 billion people using social media across the world, and it is projected that this number will increase to almost six billion in 2027 (Statista, 2022). This projected rate of increase is also predicted in New Zealand, with 90% of the New Zealand population already using social media (Statista, 2022a). As social media continues to grow so does the number of athletes who choose to embrace these platforms to grow their online presence, it has become a part of their life. This presence allows athletes to engage with fans on a completely different level than previously thought, with fans being able to have a unique look into the lives of their favourite athletes and teams (Clavio & Walsh, 2014; Pegoraro, 2010;). Due to this increase of interaction between fans, athletes, and stakeholders, social media has received attention from academics who are interested in the social, cultural, and sporting impacts resulting from social media usage (Filo et al., 2015). Research that has investigated social media to date has found that both athletes and sporting organisations have become increasingly active on social media for a few reasons; including, increasing interactions with fans and stakeholders (Hambrick et al., 2010), the exchange of information between peers to promote and grow their brand (Eagleman, 2013), and market themselves to



potential sponsors (Geurin-Eagleman & Burch, 2016; Karg & Lock, 2014; Lebel & Danylchuk, 2012). As many athletes do not have the opportunity of having mainstream media coverage daily, social media gives the opportunity for some to promote themselves and increase awareness (Eagleman, 2013). Social media is also a unique and distinct media that differs from the mainstream media outlets, it is a cost-effective medium which embraces interactivity, diversity, and collaboration (Filo et al., 2015). This interactivity has seen an explosion in the use of social media around the world and has shown us the importance of global collaboration, in not only its use in personal endeavours, but how it can be implemented to help cross borders and countries.

Despite these benefits, athletes still face challenges with their interactions on social media. The life of a high-performance athlete is not an easy one, the constant pressure to perform (Bauman, 2015; Mellalieu et al., 2009), look the best (Schaal et al., 2011), injury stressors (Putukian, 2016), and overtraining and burnout (Bauman, 2015; Gustafsson et al., 2008) are all aspects of sport that are sometimes exacerbated by social media. Social media is pervasive, and many athletes face the reality that during their time as a high-performance athlete they may never experience true privacy or escape from the public eye. Recent research with Australian elite athletes found that there were gendered differences resulting from social media, with around 16% of elite women and 10% of elite men subjected to social media abuse (Walton et al., 2021). Likewise, Farrington et al., (2017) found that athletes who had an online presence had an increased risk of cyber-bullying if their performance was found wanting. Social media has also had an impact on the mental health of high-performance athletes. Specifically, Beable et al. (2017) found that social media was a risk factor for depressive symptoms in high-performance athletes in New Zealand. In addition, Rice et al. (2016) recognised that the increased scrutiny on social media has led to an increase of mental illness in high-performance athletes. Social media has also become a contributing factor in the creation of barriers that prevent high-performance athletes from seeking help for mental illness (Anderson et al., 2004; Castaldelli-Maia, 2019; Gulliver et al., 2012).

There is a need to investigate high-performance athletes' social media usage in New Zealand. Filo et al. (2015) highlighted that most of the research into social media and sportspeople derived from North America. They suggested that greater diversity is required within this research area, and that social media has greater geographic backgrounds than what has been investigated to date. Whilst there is significant research that has investigated social

media use and its effects in general populations both in and outside New Zealand, there is limited research which explores this dynamic in high-performance sport. Furthermore, to the best of the researcher's knowledge, this would be the first study that would specifically investigate general use in high-performance athletes in New Zealand. Understanding the lived experiences and outcomes of social media use in high-performance athletes is not only beneficial for the longevity of our athletes (Hayes, 2019), but it also provides a foundation for comparisons with athletes around the world, to set baselines and standards that can be used to measure outcomes related to social media, and to improve our understanding of how high-performance athletes use social media. Therefore, this research aims to deepen our knowledge and understanding of social media use in high-performance athletes, and to understand how their experiences of social media impact not only their sporting performance but their wellbeing too.

## **1.2 Research aims and objectives**

The overall purpose and aim of this study was threefold: 1) to understand why New Zealand high-performance athletes use social media, 2) to understand if social media use impacts upon their sporting performance, and 3) to examine how social media use impacts on their wellbeing. The following research questions were developed to address the three main aims:

**Research Question 1:** Why do high-performance athletes use social media?

**Research Question 2:** What are the resulting effects of social media use in high-performance athletes?

## **1.3 Structure of thesis**

This thesis investigates the impact of social media on high-performance athletes in New Zealand. It is comprised of five chapters. This initial chapter outlines the scope, justification, and purpose of the study. The second chapter discusses findings from other research within the literature, examining the impact of social media in society and sport, the role of high-performance sport both in and outside of New Zealand, and key theories which are relevant to the research in this study. The third chapter presents the methodology of the study. The fourth chapter details the results and thematic findings. The final and fifth chapter contains the discussion, limitations, future directions, and conclusions of the study.

## Chapter Two

### Literature Review

Chapter two provides a review of literature on social media, the many aspects of research within this area, and how social media is recognised in sport and high-performance athletes. First, the chapter highlights the importance of defining social media in both general and sporting domains and the key elements that help conceptualise social media. Next, social media in sport is reviewed, exploring the many roles of social media in sport and how these affect athletes. A review of high-performance sport is then presented, including consideration of the important role that high-performance sport plays in New Zealand. Finally, this review is concluded by focussing on four key sport psychology theories that are relevant to the findings.

#### 2.1 Defining Social Media

In the last two decades social media has grown exponentially to become the new daily “norm” for billions around the world. Some scholars have labelled this phenomenal growth a “networking revolution”, whilst others have shunned how easily it has squeezed itself into the lives of the consumers (Duffett, 2017; Keles et al., 2020). Although there is no common definition for social media across scholars, the term social media has become engrained within modern society and is often referred to as internet networks which enable individuals to interact with each other, both visually and verbally (Carr & Hayes, 2015). Furthermore, Carr and Hayes (2015) presented their definition of social media which has not only become widely accepted within this research area but introduced a more applied definition:

Social media are Internet-based channels that allow users to opportunistically interact and selectively self-present, either in real-time or asynchronously, with both broad and narrow audiences who derive value from user-generated content and the perception of interaction with others (p. 50).

Although this definition is useful in its description of general-purpose use, within this study Filo et al.’s (2015) definition is chosen to underpin this research as it extends previous definitions and places it within a sporting context:

New media technologies facilitating interactivity and co-creation that allow for the development and sharing of user generated content among and between organisations (e.g., teams, governing bodies, agencies, media groups) and individuals (e.g., consumers, athletes, and journalists) (p. 4)

Due to the characteristics of this definition, being more verbose and less complex than most scientific definitions, key elements must be identified that are directly or indirectly influenced by this medium in general population use to help conceptualise social media. These key elements include *perceived interactivity*, and *value*, and they both will play an important part of defining and conceptualising social media use in this study.

*Perceived interactivity* highlights the need for an engagement with the user in order for it to be “social” (Carr & Hayes, 2015). Although arguments are made for the idea that a ‘social medium’ is inherently social (e.g., Kaplan & Haenlein, 2010), it does not necessarily mean that these interactions are interpersonal – a user must *perceive* that an interactive component is present. When using social media platforms, it may seem that there is an interaction with the platform itself, even when there is none, individuals place value in their interaction by the sheer launching of the application – this is not considered a social interaction in itself (Li & Li, 2014). This type of behaviour is often presented in research as a parasocial interaction, an interaction which is one-sided, and in terms of social media, where the user has perceived interactivity and social connectedness (Carr & Hayes, 2015). Previous research has explored these types of interactions with celebrities on social media and even in dating applications (Lindqvist et al., 2011). In addition, research has explored the nature of social media in the workplace, how it influences relationships and creates challenges for both employees and managers – linking closely with relationships seen within sport (i.e., athlete and coach, athlete and fans), where social media platforms become the collaborative medium (Pegoraro, 2010). Understanding these types of interactions is important as it demonstrates the unique and complex nature of social media and what demonstrates “social” in modern day society.

*Value* can be closely linked to perceived interactivity and is derived from the contributions or interactions that users have from social media platforms. Social media value is subjective, because it is generated and measured solely by the user it is often difficult to conceptualise. For example, an individual can place value in their interactions with other

users online through comments and exchanges (Li & Li, 2014; Mikal et al., 2014), whilst another will place value in using the platform to promote political activism or journalism (Pearce, 2014). Similarly, rather than individual value, research has found that organisations place value in social media through business promotion but warn of the speed and diverse nature of this medium (Nair, 2011; Schaupp & Bélanger, 2014). Much like businesses, athletes conduct themselves in similar ways, promoting their “brand”, or sporting success to the millions on social media – the value of social media is measured through the success of its ability to engage with consumers and market their image (Abeza & Reid, 2013; Arai et al., 2013; Pegoraro, 2010). The differences between user-generated value are immense, furthermore it highlights the unique characteristic of social media and its ease of accessibility for a myriad of people around the world, and the value they place on their interactions.

## **2.2 Social Media and Sport**

In the relatively short history of social media, the sporting world has not been immune to the explosion of social media applications, with numerous platforms becoming heavily involved in both communication and consumption (Clavio & Kian, 2010; Lebel & Danylchuk, 2012). Social media has become so engrained within society that it not only has become standard infrastructure for sporting reporting, but it has changed the way sports are reported and consumed around the world (Lebel & Danylchuk, 2012; Kassing & Sanderson, 2010). Alongside its prevalence in society, the many aspects of the sporting world have accepted its influence, including stakeholders, national sporting bodies, teams, events, fans, leagues, coaches, managers, and athletes (Abeza et al., 2015; Hutchins, 2014). There have been several recent studies that have focussed on the impact of social media on fans, and how athletes and sporting organisations can drive fan engagement and involvement (e.g., Annamalai et al., 2021; Fathy et al., 2021; Vale & Fernandes, 2018). For example, research has indicated that athletes have far better engagement, interactions, and loyalty with fans if their behaviours align with their own, and through the ever-increasing access to technology this has become easier than ever (Billings et al., 2017; Fathy et al., 2021). Acknowledging the role that social media plays within the sporting world is important particularly in today’s technologically driven world, where technology is a fast-paced, evolutionary phenomenon (Abeza et al., 2015; Rowe & Hutchins, 2014). Due to the speed and complexity of technology for social media, researchers are still trying to gain insights into trends and characteristics of usage in sporting settings (Abeza et al., 2015).

Social media has paved a new pathway for sport marketing and publicity (Pegoraro, 2010). Using social media to promote and grow their desired projects has allowed sporting organisations to become closer with their fans, both maintaining and enhancing their interactions and experiences (Abeza et al., 2013; Clavio & Walsh, 2014). Social media has also made communication much easier and more reliable than ever before which has fostered fan loyalty (Abeza, et al., 2013; Stavros et al., 2008). Fan loyalty is a concept that has been studied for decades, and studies (e.g., Pegoraro, 2010; Robison & Trail, 2005; Sloan, 1988; Wann & Branscombe, 1993) have shown that a key predictor of fan loyalty is individual attachment and identification, both to a team or a specific athlete. Social media has been employed by sporting organisations to enhance this fan interaction and athlete accessibility through transparency, which has allowed a unique way to look “inside-the-lives” of celebrity athletes (Pegoraro, 2010).

Initially, social media was used to help supplement traditional news outlet sources, but now many sporting organisations have moved solely to social media to promote and distribute their sporting success and information (Clavio & Walsh, 2014; Sherwood et al., 2017). Recent research has focussed on strategies that have been implemented to improve sporting social media relations and promotion across the world to varying degrees. For example, employing strategies through social media to win the bid for FIFA Women’s World Cup in 2023 become increasingly scrutinised (Beissel et al., 2021). Beissel et al. (2021) found that through the deliberate use of social media, narratives were formed to help sway votes on the FIFA Council to award the hosting rights to Australia and Aotearoa/New Zealand. Likewise, similar methods were employed through social media by Tennis New Zealand to help promote interest and involvement with tennis (Thompson et al., 2014). Researchers found that to spark this interest and involvement, strategies must be creative and must use modern technologies like social media to have a competitive edge over the competition (Brown, 2003; Thompson et al., 2014). There has also been extensive research on the importance of relationship marketing and sport (e.g., Abeza et al., 2013; Hambrick & Kang, 2014). Abeza et al. (2013) found that building long-term relationships with customers leads to customer retention and loyalty, which has only been made easier through social media avenues. Closely related, sporting public relations and communication has also been a major focus within the sporting area (e.g., Hopwood et al., 2010; Sherwood et al., 2017). With research investigating how athletes can manage negative publicity within the high-

performance world as athletes are scrutinised daily for seemingly mundane tasks, particularly as it is almost impossible to live a private life in a social media dominated world (Hopwood et al., 2010).

Twitter has become perhaps the most-adopted social media platform, bringing everyone closer to their sporting heroes as it allows for direct communication between fans and athletes without any third-party mediation (Pegoraro, 2010). Using social media platforms (e.g., Twitter) has led to “open communication”. Pegoraro (2010) found that it allowed athletes to become comfortable in showing never before seen personalities that they do not typically share at press conferences or interviews. This development of a personalised social media experience has led to the separation of social media in the sporting world, where it has evolved into two interdependent dimensions: “athlete-driven” and “fan-driven”. Athlete-driven refers to the athletes’ interaction with social media; this can range from advertising and product endorsement to pushing their own athlete brand (Arai et al., 2013). An athlete brand is a cultural phenomenon which has been widely studied, it places athletes at the forefront of their own promotion and as the marketed “product” or “brand” (Gilchrist, 2005). Just after the beginnings of ‘The Web 1.0’ (World Wide Web) Gledhill and Cloke (1991) suggested that athletes are:

a social sign, carrying cultural meanings and ideological values, which express the intimacies of individual personality, inviting desire and identification; an emblem of national celebrity, founded on the body, fashion and personal style (p. 11).

In modern media culture this refers to their on-field ability, attractiveness, and general marketability (Arai et al., 2014). Due to these three key dimensions, interactions with social media by athletes will derive from a combination of these aspects, creating their brand and platform that they will use to explore other endeavours as shown in the work by Rein et al. (2006). Due to the volatile and unpredictable nature of sport (e.g., injuries, pandemics) creating strong brand strategies are vital for establishing the longevity of an athlete’s career to help return from setbacks and to sustain loyalty even after retirement (Arai et al., 2014; Richelieu & Pons, 2006). Therefore, an athlete-driven dimension of social media relies on their marketability, and without fan loyalty their “brand longevity” becomes difficult to establish. Their ability to be marketable and attractive has also led to them becoming role models for thousands, sometimes millions of individuals around the world. Social media has

allowed for these role models to appear on various social media platforms with relative ease and coupled with implicit and explicit messaging has placed these athletes in these positions of power (Kovacs & Doczi, 2020). Furthermore, as these athletes are looked up to and followed on social media, they are also representing their norms and values on such platforms which often other audiences will align themselves to (Kovacs & Doczi, 2020). As a result, Kovacs and Doczi (2020), found that when an athlete actively participates in engaging with the media “one of the most important factors was to show example to the public” (p. 1143). Highlighting, the importance of maintaining a positive image in the media, and to ensure that they are fostering fan loyalty through behaviour which aligns with their norms and their audiences.

Fan-driven interactions can be seen through three different avenues. First, fan interactions are driven through non-transactional behaviours (Jowdy & McDonald, 2002). Such interactions include, word-of-mouth social behaviours, and emotional engagement (Huettermann & Kunkel, 2022). The second avenue relates to the transactional behaviours of fan interactions, which are based on cost and benefit exchanges (Trail et al., 2005). These exchanges include social media interactions, which are judged through both the quality and value placed upon the relationship (between fan and target athlete/s) (Fathy et al., 2021). The third avenue explores the rapport that is built between fans and their favourite team or athlete, it is suggested that this rapport is built through cognitive and affective functions (James et al., 2002). Within this study fan-driven interactions are established as non-transactional, where their support is not for the benefit of themselves, but for their favourite athlete or sports team. Although this study focusses upon the athlete interaction with social media, it is important to recognise the interactions that sit at the opposite end of the spectrum as it can help establish context and conceptualise the relationship between athletes and social media. Highlighting both aspects of social media interactions is also key as one cannot survive without the other.

As shown, it is evident that there is an extensive body of literature that exists around social media and sport. A significant portion of this has been dedicated to mechanisms that are acting upon social media (e.g., Abeza et al., 2013; Abeza et al., 2015; Fathy et al., 2021; Thompson et al., 2018), for example relationship marketing and how sporting organisations (or athletes) can take advantage of such marketing techniques for the benefit of their stakeholders – this is achieved through mutual exchange and fulfilment of promises (Abeza et al., 2013). These mechanisms also include examining athlete branding (Arai et al., 2013),



motivations of sport fans (Billings et al., 2017; Clavio & Walsh, 2014), and the implementation of social strategies (Beissel et al., 2021; Thompson et al., 2014) to help improve promotion, viewership, and ultimately profit. Within the body of literature there is also a portion which has examined the perceptions of athletes and their interactions with social media (e.g., Billings et al., 2017; Hambrick et al., 2010; Lebel & Danylchuk, 2012; Pegoraro, 2010). The findings from research have detailed several reasons why athletes use social media: to interact with fans and stakeholders (Hambrick et al., 2010), exchange of information between peers, to promote and grow their brand(s) (Eagleman, 2013), and market themselves to potential sponsors (Geurin-Eagleman & Burch, 2016; Karg & Lock, 2014; Lebel & Danylchuk, 2012). Research has also found that athletes use social media as a nutrition resource (e.g., Bourke et al., 2019; Solly, 2022). Although this research area has made significant progress in understanding social media in sport, it still struggles to fully capture the specifics around motivations and general uses of social media by high-performance athletes. Rather, most research on athletes has been solely reliant on conclusions resulting from Twitter and Facebook usage (e.g., Coche, 2017; Lebel & Danylchuk, 2012; Pegoraro, 2010), rather than personal accounts and experiences.

Some explanations have been proposed as to why there is a dearth of research in this area. First, the ease of gaining access to athletes has steadily declined over the years, whether this be at an individual level or team level. This is reflected within sports journalism where most now believe that even gaining a chance to interview an athlete is minimal at best (Sherwood et al., 2017), with research opportunities with athletes having the same result. The reason for this decline in access is due to the agenda of either the athlete or sporting organisation they belong to. For example, Sherwood et al. (2017) found that sporting organisations or athletes attempt to compete with traditional media organisations to release news direct to the public through social media. However, Sherwood et al. (2017) highlights that there is limited research around these agendas and how it impacts athlete access. As a result, many researchers help to ease the difficulties of access to high-performance athletes through the use of student-athletes (e.g., Brougham, 2021; David et al., 2018; Gomez et al., 2018). However, this creates limitations in itself which will be discussed in the next section of this review.

Secondly, due to the nature of high-performance sport, many athletes do not have the time to participate in research studies, particularly longitudinal projects or those that require

one-on-one access over a period. Busy yearly schedules make it extremely difficult for research involvement and is one of the contributing factors as to why research that specifically involves high-performance athletes is so limited. Even in research that has included high-performance athlete interviews, the sample group size is typically small and limited due to access limitations (e.g., Tamminen et al., 2012; Gomez et al., 2018). In fact, many athletes do not like talking about themselves, whether that be about their training or personal lives, with many athletes struggling to open up about problems that could arise from being a high-performance athlete (e.g., depression; anxiety) (Gorczyński et al., 2017; Gulliver et al., 2012). Therefore, it is not surprising that research within this area has previously been conducted through meta-analyses and content analyses (e.g., Gorczyński et al., 2017; Hausenblas & Downs, 2001; Lebel & Danylchuk, 2012). However, it is important to acknowledge the prevalence of Australian research within high-performance sport which is a result of the recognised and established Australian Institute of Sport (AIS). Through partnerships with the AIS there has been an increase of research in recent years (e.g., Hayes, 2019; Walton et al., 2021) which has involved high-performance athletes for the benefit of advancing knowledge in this area due to the ease of access to athletes through the AIS. These partnerships set an example for sporting organisations around the world, including New Zealand, which show an immense understanding of high-performance sport and ways through which it can lead to greater sporting success.

### **2.3 High-performance Sport**

The evolution of high-performance sport was spurred in the 1950s and is arguably a result of political tensions that existed between Western and Eastern powers for propaganda and to achieve political objectives through athletic success (Houlihan, 2013; Sotiriadou & De Bosscher, 2018). Since then, high-performance sport has evolved through many avenues such as, the one-on-one “athlete-coach-federation” framework (Houlihan & Zheng, 2013), through to what we see today in many countries, which is a complex, intricate network of operations, which comprises of the athlete, coach, and support staff (i.e., physiotherapists, psychologists, sports masseurs, strength and conditioning coaches) (Collins et al., 2013; Sotiriadou & De Bosscher, 2018). Becoming a top-level athlete is not by chance, it is through meticulous planning, commitment, and time management by both athletes and support staff (Gomez et al., 2018). This intricacy lays the foundation for the development of successful high-performing athletes, some of whom, are recognisable on the world stage.

As a result of this evolution, research within high-performance sport has become more widespread and standardised. It is hard to imagine the scope of impact that sport has had on society not only since the beginnings of professional forms of high-performance sport 60 years ago, but since the establishment of the ancient games in Greece in 776 BC (Nelson, 2007). Since the 1950s, researchers have investigated many concepts within high-performance sport, such as the socio-cultural and political factors that impact high-performance sport (e.g., Houlihan, 2013), high-performance sport coaching and management (e.g., Rynne et al., 2006; Sotiriadou & De Bosscher, 2018), sport psychology (e.g., Eubank et al., 2014; Schinke et al., 2020), and the impacts of banned substances within high-performance sport (Beamish & Ritchie, 2006; Hilderbrand, 2011). High-performance sport is an area which is constantly developing and evolving in order to achieve exceptional performance with athletes, coaches and organisations often working in unison to achieve such results.

### ***2.3.1 Defining high-performance***

Defining high-performance can be difficult, as the conditions and requirements can differ between countries, codes, and research. In most research the terms “elite” and “high-performance” are used interchangeably and will be treated as such within this study. In some cases, the definition of a high-performance athlete in research is through the existence of a mutual relationship with a governing sporting body or organisation, for example the AIS or New Zealand’s equivalent, High Performance Sport New Zealand (HPSNZ) (e.g., Bourke et al., 2018; Gulliver et al., 2012; Heather et al., 2021; Walton et al., 2021). This athlete is supported or “funded” by these organisations to pursue their high-performance objectives. In many areas of sport research, particularly in the United States, studies have used student-athletes as participants due to the ease of access and the prolific potential population to sample from (e.g., Brougham, 2021; Butt et al., 2010; David et al., 2018; Gomez et al., 2018). However, in many of these studies the athletes are described as “elite”, when often they are still development or progressing through NCAA (National Collegiate Athletic Association) pathways. There are nearly half a million NCAA student-athletes in 2021-22 academic year, with around 38% belonging to Division 1 (highest sporting level at American college level) (NCAA, 2022), to class them all as ‘high-performance’ is too generalised.

Although research often uses Division 1 athletes, many of them do not progress to professional levels or represent their country at international competitions, rather they stick within the NCAA pathway to focus on academic achievement (NCAA, 2022). Therefore, this can cause inaccuracies within high-performance sport research as the definitions and conditions to be considered high-performance become ambiguous and unclear, and due to the New Zealand context within this study, these definitions are not necessarily transferrable (Gomez et al., 2018). However, other researchers have defined athletes as high-performance through their achievement, with many studies defining high-performance as participating at an international or national level for their country (e.g., Castaldelli-Maia et al., 2019; Coyle et al., 2016; Rice et al., 2016; Solly, 2022; Sotiriadou & De Bosscher, 2018). Defining athletes through their achievement appears to be the most accurate indicator of high-performance and is chosen as the method for defining high-performance within this study. Although, one could argue that an athlete requires the support from a NSO (National Sporting Organisation) to become high-performance, within this study our focus and definition is based upon their achievement and sporting success, regardless of support from an organisation. As high-performance sport is recognised as the pinnacle of sport, then it must be reflected in research with chosen populations (Sotiriadou & De Bosscher, 2018).

### ***2.3.2 High-performance Sport and Social Media in New Zealand***

Although research within high-performance sport continues to grow, research that involves high-performance athletes within New Zealand is limited. The specific reason for the lack of research is unknown but is likely due to a combination of factors aforementioned within this literature review around gatekeeping the access to high-performance athletes, their busy schedules, funding, and possible stigmas that could arise from participation. Typically research within New Zealand focuses upon the usage of sport within the general population as it closely relates to main goals set by Sport New Zealand (NSO). Over its history, Sport NZ has focussed upon exploring ways to improve the health of New Zealanders, by engaging in sport or recreational activity (Sport New Zealand, 2022). As a result, sporting research within New Zealand has taken many avenues. Studies have explored the role of culture within sport and the occurrence of Māori stereotypes (e.g., Hokowhitu, 2003; Jackson & Hokowhitu, 2002; Thomas & Dyall, 1999; Watson, 2007), the integration of sport into the teaching curriculum (e.g., Burrows & McCormack, 2011; Grant, 1992), and even the role of alcohol in sport and sponsorship (Cody & Jackson, 2016; O'Brien et al., 2007).

In comparison, research that involves high-performance athletes in New Zealand is an area that has not seen as much attention but continues to grow and develop. Within this high-performance area we have seen research which has contributed towards recognising help-seeking behaviours and attitudes surrounding sport psychology consultation (e.g., Anderson et al., 2004), which has found that athletes within New Zealand typically hold positive attitudes towards sport psychology compared to other countries. The understanding of career transitions within high-performance sport in both retirement and transitions between amateur and high-performance levels has also been investigated (e.g., Hollings & Mallett, 2014; Ryan, 2019). Athletes who retired voluntarily and had strong athletic identities typically showed greater levels of flourishing in retirement than those who did not, resulting in greater long term positive outcomes (Ryan, 2019). Similarly, research has also found that high-performance athletes who are successful in their progression to senior ranks demonstrated effective goal setting, were successful early in their senior careers, and had a single dominant identity and strength (e.g., prioritising their sport) (Hollings & Mallett, 2014). Comparatively, athletes who did not flourish in the senior transition were unable to manage competing commitments (e.g., social lives), and exhibited a lack of progress (Hollings & Mallett, 2014).

Recently, we have seen research acknowledging the influence of social media on high-performance athletes and their nutritional choices. Both Bourke et al. (2018) and Solly (2022) found that social media played a role in high-performance athlete's choices around their nutrition, and that social media has a major influence on their day-to-day lives. In a study conducted in partnership with HPSNZ, Axis Sports Medicine Specialists, and University of Auckland, Beable et al. (2017) recognised that social media (described as a "daily hassle") has become a contributing risk factor for depressive symptoms in high-performance athletes in New Zealand, and that further exploration is required to help early screening of high-performance athletes to identify potential risk factors. It is evident that throughout this review that social media is acknowledged as playing a major role in high-performance athletes' lives, yet this is an area within New Zealand sporting research that requires our attention. Consequently, to the best of the author's knowledge this is the first study which has exclusively explored the relationship between social media use and high-performance athletes within New Zealand. Our aim is to contribute research within this space to improve knowledge surrounding social media use and its impact on high-performance athletes within New Zealand.

## 2.4 Uses and gratifications theory

Uses and gratifications theory is a key theory explored within this study and is utilised as a foundation for other theories chosen. Uses and gratifications theory helps to understand the typical uses and reasons why high-performance athletes within this study use social media. Uses and gratifications theory has long been used to help conceptualise mass communication and communication research in society, and at the core of the theory, aims to understand why and how individuals use media (Weiyan, 2015). Uses and gratifications theory studies how users, or in this case high-performance athletes use social media to meet and ultimately, satisfy their social and psychological needs (Hayes, 2019; Weiyan, 2015). Research has shown that gratifications received from using media are good predictors of this use and the recurrence of it (Kaye & Johnson, 2002). Although uses and gratifications theory has typically been used to describe traditional media outlets (i.e., television, newspaper), it is also a key theory that helps to explain social media use (Whiting & Williams, 2013). Gathering perspectives on media is important in understanding how and why individuals (e.g., athletes) use social media (Katz et al., 1974). These perspectives are also key in understanding what the user gains or does not gain from their chosen media sources (Ruggiero, 2000).

Uses and gratifications theory was initially used to explore media content; however, as the theory has developed it has now placed its focus upon the media audience and their use of media (Hayes, 2019; Whiting & Williams, 2013). As mass communication has shifted towards the internet, so has uses and gratifications theory, developing in various ways to help stay relevant in communication research. This development has seen the shift of focus towards understanding the motives behind media use, specifically social media use and participation (Ruggiero, 2000; Whiting & Williams, 2013). Rubin (2008) reviewed the original tenets of uses and gratifications theory by Katz and his colleagues (1974) to reflect the impact that modern media audiences has had on this research area. Rubin (2008) proposed that contemporary uses and gratifications research is comprised of five key assumptions. First, the users are considered active in their use of social media and their use is purposeful and motivated, the users make conscious decisions around their media and media content (Rubin, 2008). In the context of this study, users are classified as athletes as they are the specific users of the media (e.g., social media). Second, it is the athlete who chooses and initiates the media platform and the need to satisfy their gratification or use of social media (Rubin, 2008). For example, an athlete may choose to engage with specific media (e.g., social

media) to receive gratification around their performance or other competitors' performances, which can be achieved through images or short messages.

Third, there are various other factors which mediate the communication behaviour of the athlete (e.g., environment, interpersonal interactions, previous experiences) and how they then respond to social media. This response is seen through a filtered approach, where the resulting behaviour of the athlete is filtered by factors including personality, social categories, and relationships (Rubin, 2008). Fourth, social media competes with other sources which can satisfy the gratifications of the athlete (Rubin, 2008). The ability of the chosen social media platform to satisfy the athlete's needs and motives varies between individuals and is based on social and psychological factors (Rubin, 2008). In the context of the current research, athletes may prefer to use social media to update fans, friends, and family due to the text-based nature of the platforms compared to other social media platforms that primarily emphasise photo-sharing. The fifth assumption is that people are more influential than the media in some cases, where this assumption assumes that the athletes have the capacity for subjective choice and can influence the patterns and consequences of their media use (Rubin, 2008). Although assumptions of uses and gratifications theory has been reviewed on multiple occasions, and will continue to be reviewed in the future, it is clear that the approach to data collection remains the same. Open-ended questioning was prevalent within Katz et al. (1973) approach to uses and gratifications theory and is continued today with modern research. Therefore, in the context of the current research, this most effective method of data collection to gain understanding of athlete perceptions of social media is through open-ended questions. The current research also assumes that the athletes participating within this study are active and have purpose in their use of social media, their motivations for using social media are directly related to their needs and gratification. Gathering first-hand accounts of social media use in high-performance athletes is key to understanding the uses and gratifications they have for social media.

Although uses and gratifications theory has been widely used in its examination of media use, and more recently social media use, criticisms still remain that challenge its underlying assumptions (Rubin, 2008; Ruggiero, 2000). Uses and gratifications has been accused of being too individualistic – this means it is hard to generalise results towards larger populations or predict future trends for other populations other than the individual studied (Elliott, 1974; Ruggiero, 2000). Likewise, studies that have used uses and gratifications

theory have become compartmentalised which reduces the impact of research findings as they do not become synthesised with other research to the same degree (Ruggiero, 2000). Lack of clarity and synchronisation around central concepts (e.g., needs and motives) has also led to criticisms of the uses and gratifications theory (Ruggiero, 2000). Research has also identified problems with self-report mechanisms in uses and gratifications theory as researchers rely on the interpretation of participants to be introspective of the processes which mediate their behaviour, and often this report is based on whatever is available at the time (Rosenstein & Grant, 1997). However, as Rubin (2008) mentioned these criticisms have largely been addressed in recent research with adaptations made by researchers to account for such issues through the consistent use of media appropriate measures across different contexts. Regardless of such criticisms, uses and gratifications theory was relevant within the current study as it placed the athletes central to their uses and motivations on social media. Previous research has shown that like general populations, athletes could also seek gratification from using social media, both in consuming and producing content (e.g., Hayes, 2019).

## **2.5 Self-presentation theory**

Self-presentation theory is a theory which states that individuals develop their own personal identities to help gain social rewards or status through interactions with others (Vogel & Rose, 2016). The identities of individuals are often split into two images, private and public, contain the self-concept, and are multidimensional (Hollenbaugh, 2021). Sitting within these two images are characteristics that an individual possesses, and those they *wish* to possess – the “ideal self” (Higgins, 1987). Self-presentation theory involves one’s ability to control and manage their image or identity of their self to others (Mesagno et al., 2011). This controlling nature is used in an attempt to influence others and their perceptions of one’s identity, constantly trying to place themselves in balance between the actual self or ideal self, often showing a greater emphasis on their ideal self (Hollenbaugh, 2021). Individuals harness their ability of self-presentation to project positive impressions, often adopting different behaviours or appearances around others (Goffman, 1959; Schlenker, 2012). With the prevalence of social media, self-presentation has only become more prominent and dominating as individuals attempt to project their ideal selves into online social communities. In the context of Facebook and Instagram, for instance, users are able to carefully construct identities through profiles or images of themselves which are accessed by thousands, sometimes millions of people (Hogan, 2010). Although profiles do typically show the users’



true selves (Back et al., 2010), the positive aspects of their lives are often emphasised, with many presenting themselves as popular and well-rounded (Chou & Edge, 2012; Zhao et al., 2008). Many social media users are heavily influenced by the perceptions and opinions of their audiences when posting online (Lowe-Calverly & Grieve, 2018). Due to these perceptions, users tend to be selective when presenting themselves to audiences, for example they may show some aspects of themselves in a certain way to one audience but will not show it to another (Goffman, 1959) – a phenomenon which is not strictly exclusive to social media and has been studied for decades.

There are three key aspects within the relationship of self-presentation theory and social media and are portrayed as *affordances*: (i) anonymity, or the disconnect between an offline and online identity, (ii) persistence, or the durability of a message to remain available online, and (iii) visibility, or the appearance of messages which are easily accessible in search results or newsfeeds (Hollenbaugh, 2021). Social media has allowed individuals to manage their presentations on social media to the point of almost anonymity, subsequently, individuals now can present themselves in ways which best fit their ideal-self and “cut-ties” to offline identities (Hollenbaugh, 2021; Suler, 2004). Due to the persistent nature of social media (i.e., online footprint), individuals who use social media channels are more selective in their self-presentation – social media platforms that are considered higher persistence include Facebook, Twitter and Instagram (DeVito et al., 2017; Hollenbaugh, 2021). Compared to Snapchat, which is considered a less persistent social media platform, users are more likely to reveal their “true self”, which includes characteristics which they typically would not show offline (Choi & Sung, 2018). Due to the reach of social media, visibility of social content has become easily located (Evans et al., 2017). Therefore, with the increased visibility in posting online through photo-sharing platforms (e.g., Instagram) or mixed-use platforms (e.g., Facebook, Twitter), users would typically be more careful or selective in their self-presentation (Hollenbaugh, 2021).

Research has also highlighted the important effect that other users’ content has upon individual self-presentation, this means content that is generated by others which mediates the self-presentation of the user (Hollenbaugh, 2021). Due to the incredible ease and widespread access of social media, formations of opinions and impressions can begin even without actually meeting the person, rather these can be achieved through a simple scroll on Instagram or posting on another person’s social media profile (Hollenbaugh, 2021). Walther

et al. (2009) investigated this phenomenon and found that content that is not generated by the user has a stronger effect on self-presentation than content that is produced by the user themselves. Thus, being “prosocial” has meant that users must manage their self-presentation through ways that are not necessarily controllable by their own methods, particularly if they deem it to be undesirable or negatively affecting their identity (Hollenbaugh, 2021; Walther et al., 2008). As a result of the strict management of one’s self-presentation, social comparisons can occur, a key theme throughout this study and explored within later theories. Social comparison is typically associated with negative psychological outcomes, including lower self-esteem (Buunk et al., 1990; Vogel & Rose, 2016) and deteriorated self-evaluations (Cash et al., 1983). The most prominent comparison is when the target individual is similar to that of the perceiver, including traits such as gender and age (Gruder, 1971; Zell & Alicke, 2010), which is often the case within competitive sport.

Self-presentation theory has been utilised within many sport studies in recent years, including those which examine the relationship between high-performance athletes and social media (e.g., Geurin-Eagleman & Burch, 2016; Lebel & Danylchuk, 2012). Specifically, the theory has also been used in research which has investigated the relationship between pressure and choking in high-performance athletes and sport (e.g., Hill et al., 2017; Mesagno et al., 2011), and the effect that self-presentation has on stress and anxiety in sport (Williams et al., 1999; Wong et al., 1993). Dimmock et al. (2020), reviewed self-presentation in sport and exercise and found that someone who is categorised as an “athlete” reaps numerous interpersonal benefits. These interpersonal benefits range from being seen as fitter, stronger and ultimately healthier than others, as well as more sociable and friendlier – a “halo effect” is created (Martin et al., 2000). This “halo effect” may explain some of the reasons that individuals choose to participate in sport or exercise as having an athlete identity is somewhat beneficial (Dimmock et al., 2020). Conversely, those who avoid participation in sport due to the stigma around being uncoordinated or unfit has also become detrimental to self-presentation amongst individuals (Martin et al., 2001). Furthermore, research has found that goals which are driven by self-presentation are more likely to be less satisfying than those which are intrinsically driven (Sebire et al., 2009).

Self-presentation is constantly reinforced on social media as it allows athletes a platform to publicly present themselves (Marshall, 2010) and receive immediate feedback. This public platform creates opportunities for athletes to interact with fans and stakeholders,

and to help gain sponsorship, all previously discussed within this review. It also allows athletes to express themselves in ways never before seen, with most of them adopting practices and routines to ensure that they are presented in a positive light (Lebel & Danylchuk, 2012). Although athletes are constantly aware and continually manage their self-presentation on social media, there is evidence to suggest that this constant awareness of self-presentation has also led to negative experiences within sport. Williams et al. (1999) provided evidence to show that competitive self-presentation induced stress and anxiety within athletes, where their main concerns lay within their ability to cope with pressure, concerns, and fears of appearing incompetent and out of form, and their impression made on others. Similarly, in an earlier gendered study conducted by Wong et al. (1993), they found that women scored higher on competitive anxiety than men but lower in self-presented confidence, which suggested that there is empirical evidence that supports differences of self-presentation between genders and that there is a relationship between competitive anxiety and self-presentation. Both Mesagno et al. (2011) and Hill et al. (2017) acknowledged this within their studies, finding that competitive anxiety is closely related to self-presentation concerns within athletes. It is evident that self-presentation theory has become an important framework that has been implemented within sport research for decades, however this research space is continually evolving as social media grows. This theory was relevant to this current research as it allows the experiences of the participants to be recognised and contextualised. In addition, considering the role of self-presentation in social media use, this current study aimed to address the knowledge in this area and build upon the affordances of social media and the social comparison phenomena reviewed. It also places self-presentation within a sporting context and creates a foundation to investigate the resulting effects on high-performance athletes.

## **2.6 Self-determination theory**

Self-determination theory first evolved from research which examined the relationship between intrinsic motivation and extrinsic rewards (Deci & Ryan, 2017). It explains the basic psychological needs and tendencies that are associated with self-motivation, social integration and wellbeing, positive development and the conditions that help to facilitate these processes (Ryan & Deci, 2000). These basic psychological needs are; (i) competence, the need to feel effective in the way individuals relate to the environment around them, (ii) autonomy, an individual who can self-regulate one's experiences and actions, and (iii) relatedness, an

individual who has concerns about being socially connected and as a result, experiences a sense of belonging (Ryan & Deci, 2017). When these basic psychological needs are met individuals thrive and experience the development of these processes which help to improve physical and mental wellness (Deci & Ryan, 2012; Ryan & Deci, 2017). However, self-determination theory also states that when these psychological needs are not met, people often experience deterioration to their physical and mental wellbeing, including the facilitation of antisocial behaviours and unhappiness (Ryan & Deci, 2017). Extensive research into the three psychological needs has shown that they are key to optimal human functioning and growth, social integration and development, and physical and mental wellbeing (Ryan & Deci, 2017; Ryan & Deci, 2000). Although self-determination theory comprises of six sub-theories, this study will focus upon self-determination theory as a whole, rather than addressing all six, this research acknowledges the presence and contribution of the various sub-theories.

A key aspect of the self-determination theory is that it helps to describe motivational tendencies through the creation of intrinsic and extrinsic motivation (Ryan & Deci, 2000; Pelletier et al., 2013). Motivation is placed on a continuum which ranges from amotivation, to controlled motivation and through to autonomous motivation (Ferguson et al., 2015; Ryan & Deci, 2000). Amotivation is described as motivation where a person lacks knowledge as to why they are performing an activity, whilst autonomous motivation is governed by factors that are consistent with intrinsic goals or outcomes, hence the behaviour is self-determined (Ferguson et al., 2015; Ryan & Deci, 2017). A form of motivation which is often associated with social media use is introjected regulation, this is a process which is governed through lower self-esteem, and issues with ego and guilt (Ferguson et al., 2015), which is shown to arise from social media use. As introjected regulation is a form of less autonomous motivation, research has shown that individuals who are weaker at internalising motivation are associated with more negative health outcomes (Williams et al., 1998). Within self-determination theory research, autonomous motivation is most likely to result in positive outcomes for the individual through the promotion of wellbeing and the consistent engagement with goals and outcomes (Ryan & Deci, 2000). Autonomous motivation is more likely to be maintained over time as it can be self-regulated and can be fully internalised (Moller et al., 2006). Recent research has uncovered close links between self-determination theory and social media as it fosters autonomous content (Ferguson et al., 2015; Kaplan & Haenlein, 2010). Social media establishes this autonomy as it allows content which is

generated by users who choose to interact with others through processes such as collaboration and relationship building (Kaplan & Haenlein, 2010). Weinstein and Ryan (2010) found that when individuals are guided by autonomous motivation, social media gives them a greater sense of personal will and reasons to engage in prosocial behaviour. Similarly, research found that autonomous motivation is linked to greater awareness of others and their willingness to help others (Ferguson et al., 2015).

Self-determination theory has also shown close links to self-presentation theory (Dimmock et al., 2020), which is why these two theories have been chosen to help explain the findings from the thematic analysis in the current study. As individuals strive to be presentable or desirable, they become motivated to achieve these goals, and as Dimmock et al. (2000) highlighted, this motivation can be explained through the motivation continuum presented by Deci and Ryan. However, an important part of the relationship between self-determination theory and self-presentation theory sits within goal attainment, where research has indicated that when attainment is driven through self-presentation, suboptimal outcomes are achieved (Dimmock et al., 2020). Although research has highlighted the suboptimal outcomes due to self-presentation motivation, Eklund and Howle (2017) warn against underestimating the strength of self-presentation as a motivator for physical activity. They found that by using self-presentation to encourage motivation, it is possible to achieve positive interpersonal outcomes, such as appearing fit, healthy and competent in one's achievement. Leary et al. (2011), suggest that self-presentation is often essential in its motivation of goals and impressions. Furthermore, research has found that when self-presentation goals are considered alongside self-determination theory, they become an active participant in predicting overall health outcomes within intrinsic and extrinsic exercise goals (Gunnell et al., 2014; Sebire et al., 2011).

The relationship between self-determination theory and sport is an area which has also seen significant research in the past decades. Many researchers have used self-determination theory to underpin their research as it creates a foundation through its three basic psychological needs which can help to conceptualise the important motivational characteristics of high-performance athletes. Typically, self-determination theory is used to identify methods of motivation used by athletes within their sport, with many studies investigating the role of intrinsic motivation (autonomous motivation). It is not surprising that research has found that intrinsic motivation is positively associated with optimal and positive

health outcomes and prosocial behaviour within athletes, which does not differ from general population results (e.g., Cece et al., 2020; Readdy et al., 2014; Sheehy & Hodge, 2014; Vlachopoulos et al., 2000). Specific sport research within self-determination theory has also been achieved, with studies finding positive links between self-determined motivation and athlete burnout (e.g., Holmberg & Sheridan, 2013; Lemyre et al., 2007; Lonsdale et al., 2009), and self-determination theory and interpersonal control (e.g., Bartholomew et al., 2011; Bartholomew et al., 2011). Research has also been undertaken to explain doping in high-performance sport, which has shown that effective doping prevention methods are best used when the motivations of the athletes are understood and acknowledged (Corrion et al., 2017). Similarly, Shannon et al. (2019) found that applying aspects of the self-determination theory to athletes, helped to increase effects of mental health interventions. Returning to sport following an injury has also shown greater trends for self-determination (Podlog & Eklund, 2010), as well as positive associations with autonomous motivation and prosocial behaviour in masters athletes (Sheehy & Hodge, 2014). Although self-determination theory has been utilised in many studies within sport psychology, research which directly investigates the relationship between high-performance athletes and their uses of social media through a self-determination theory perspective is lacking. This study aims to fill this gap and build upon existing knowledge around self-determination theory and high-performance athletes. In the context of the current research, this places the high-performance athletes central to their own experience on social media, where they are guided by the identified aspects of the motivation continuum to engage with others on social media platforms and display resulting behaviours which reflect and impact their overall wellbeing.

## **2.7 Distraction-conflict theory**

Distraction-conflict theory is a theory which was developed within the social psychology field. It is based on the idea that when an individual is aware of another person it creates a conflict between attending to the person and the initial primary task (Baron, 1986). Further, Baron (1986) highlighted that often this presence of another person can energise performance – defined as social facilitation. However, this arousal of behaviour is not always a positive outcome, Blascovich (2002) found that sometimes an individual's performance can become negatively influenced and inhibited, referred to as social inhibition. Similarly, Brooks (2015) recognised the impact of distractions or attentional conflict on primary tasks and found that in the wake of the social media age research was needed to see if social media created the same

impact on individuals. There are three key phases within the distraction-conflict theory model: (i) others are distracting, (ii) distraction can lead to attentional conflict, and (iii) attentional conflict elevates drive (Baron, 1986). This elevated drive resulting from multiple distractions/conflict can increase the presence of stress and arousal, which can impair performance and motor behaviour (Baron, 1985; Brooks, 2015; Brooks et al., 2017). Stimuli that create attentional conflict between the primary task and the distractor can lead to cognitive overload which also elevates stress as mental activity is increased (Brooks et al., 2017; Sweller, 1994). This cognitive overload can negatively affect attention, precision and working memory, which can increase stress (Coursaris et al., 2012; Sanders & Baron, 1975). Previous research on stress has shown that the creation of stress from the use of technology can have negative impacts on psychological wellbeing (Ayyagari et al., 2011; Choi & Lim, 2016).

Baron (1986) found that whilst distraction-conflict theory can help explain the distractions of others, it also assumes that attentional conflict can arise from both internal and external distractions. He recognised that any mental activity that is not directly related to the primary task at hand for the individual is an internal distraction. Furthermore, attentional conflict will arise when the individual feels the need to allocate their attention to one or more stimulus (Baron, 1986; Baron et al., 1978; Leung, 2015). In the context of the current research, high-performance athletes are focussing on competing or training at the highest level (the primary task), whilst the distraction or attentional conflict could be needing to check their social media platforms for messages or other validation (Brooks, 2015). A common reason for distractions between individuals through the distraction conflict theory model is social comparison, acknowledged in both self-determination theory and self-presentation theory as well (Baron, 1986; Hayes, 2019). This aspect of the distraction conflict theory assumes that individuals require information regarding the effectiveness of their performance on the task, and whether there could be improvements (Baron, 1986). This is often achieved through comparisons between an individual's performance or evaluations from audiences to the performance (Baron, 1986), which could lead to attentional conflicts (Hayes, 2019). Hence, this type of social comparison could heighten the social facilitation phenomena and elevate drive, resulting in a greater chance of impairments to sporting performance (Baron, 1986; Hayes, 2019). In the context of the current research, this could be an athlete comparing their sporting performance to another's, or negative comparisons between body image on social media platforms. It is suggested that attentional conflicts

directly resulting from social media could lead to impacts on sporting performance (e.g., Hayes, 2019), but more research is required to investigate this impact through a distraction-conflict approach. This study aims to help fill this gap in the literature and investigate if social media does impact sporting performance in high-performance athletes by identifying the potential attentional conflicts that arise from social media use.

With most distractions, the original information associated with the primary task is most affected, this can lead to information being lost as it may have never entered the working memory (Brooks, 2015; Speier et al., 1999). Once the distraction task has been completed a recovery period is required to be completed before attention can be returned to the primary task, this recovery period is required as information that was lost on the primary task is required to be obtained again before continuing (Brooks, 2015). Trafton et al. (2003) highlighted that the recovery period is often associated with difficulties in regaining the mental state before distraction, as a consequence, the productive mental state lost to a distraction could be greater than what is originally thought. Because of the ease of access to technology, social media has become a powerful distraction mechanism that creates these recovery periods (Brooks, 2015). The impact of recovery periods can be detrimental to high-performance athletes as consequences of attentional conflicts can cause effort difficulties (Baeker et al., 1995). This study aims to apply the dimensions of the distraction-conflict theory model to help understand the effects of social media on high-performance athletes, and how their use of social media can lead to attentional conflicts which can impact their performance and wellbeing.

This chapter has defined social media and highlighted the impact that social media platforms have on the sporting industry. This chapter also investigated high-performance sport and its background and discussed the various methods of defining of high-performance around the world and within this study. High-performance sport and social media in New Zealand has also been highlighted. Highlighting the key theories used within this study was also discussed as the context of social media use is helped to be understood by such theories. This review has revealed a number of key gaps that remain prevalent within established literature. As a result, the three research questions were developed to help address these gaps and contribute to this research area by establishing a novel study which investigates social media use in high-performance athletes in New Zealand.



The following chapter explains the research methodology utilised within this study. The paradigmatic framework is discussed first, followed by a description of the study design, and the development of the screening survey and semi-structured interview questions. Next, the study's data collection and analysis are discussed in-depth, followed by academic rigour matters.

## Chapter Three

### Methodology

This chapter introduces the methodology of the study. First, the paradigmatic framework is discussed, followed by the study design and the development of the screening survey, recruitment of participants and semi-structured interviews are then discussed. Data collection and data analysis processes are then highlighted and described. Finally, matters regarding academic rigour are considered, including trustworthiness, member checking, and bias and reflexivity.

#### 3.1 Methodology

To gain an understanding of how social media has affected the lives of high-performance athletes within New Zealand, this study was underpinned by interpretivist philosophical assumptions. Therefore, within this approach we hold the belief that reality is dependent on the meaning that is given to events, objects, and practices (i.e., ontological relativism), and that the knowledge gained is subject to differing interpretations, as well as mediated by values (i.e., epistemological constructionism). Accordingly, this study sought to elicit the subjective experiences of high-performance athletes and their social media use, and how these experiences are shaped by social and personal constructs. These constructs are explained through the participants conceptualisations which can be attributed to their lived experiences, including their awareness of mental health and impact upon performance. Therefore, as a piece of interpretivist research we seek to explore how social media is experienced and valued within codes of high-performance sport.

Using interpretivist philosophical assumptions allowed rapport to be built with participants and gave them ownership on how their perceptions have shaped their experiences, rather than describing phenomena through a predetermined categorical system or criteria (Pietkiewicz & Smith, 2014). This approach is synonymous with qualitative research as knowledge gained within this study cannot be reduced or quantified by numbers – knowledge is gained from people’s experiences and understandings with social media use (Walters, 1995; Bryne, 2001). Furthermore, this approach allowed us to explore the fundamental reasoning and structure of social media and how individuals construct new

understandings or knowledge through interactions with it (Ültanir, 2012; O'Grady, 2002). To this end, without an interpretivist approach it is evident that this study would have struggled to produce meaningful and credible conclusions that are of benefit for advancing sport and exercise psychology knowledge.

### **3.2 Study design**

A cross-sectional study design was chosen for this research as it captured the observation of a defined population at fixed time interval. A screening survey was completed by potential participants to determine eligibility. Participants were recruited through convenience sampling methods which included existing industry and Massey University sporting contacts via email and Facebook. Participants were required to complete a screening survey which included an online consent form prior to participation. Eligible participants were then contacted by the head researcher to schedule an interview. The participant information sheet (see Appendix A) and screening survey (see Appendix B) was shared through these existing industry and Massey University sporting contacts via email (see Appendix C) and Facebook (see Appendix D), who were then able to forward the survey to athletes within their own network and support structure. This email contained an information sheet which detailed the aim and purpose of the study, what their participation contributed to the field, and their rights as participants – including their ability to voice concerns, or withdraw from the study at any point, as well as the mechanisms that are employed to protect the confidentiality of their responses. This information sheet also provided information on available support mechanisms should they be required. This information was also provided online before participants could begin the screening survey.

#### ***3.2.1 Development of the screening survey***

The screening survey was developed from typical screening questionnaires and included questions on gender and age and included specific questions regarding their sporting involvement and achievements. The screening survey included study consent questioning and participants were unable to continue until the consent form had been completed.

#### ***3.2.2 Participants***

There was a total of 12 eligible completed responses to the screening questionnaire. Of the 12 responses, 11 continued to take part in the semi-structured interviews. The inclusion criteria

were: (i) being over 18 years old, and (ii) represented New Zealand. The sample was made up of female (n=8) and male (n=3) high-performance athletes described as those who were actively representing New Zealand at an international level. Participants ranged from 18 to 26 years old, however only five of the participants chose to disclose their ages. Sport information was also collected, with participants competing in basketball (n=4), football/soccer (n=1), canoe polo (n=1) waterpolo (n=1), hockey (n=1), swimming (n=1), beach sprinting (n=1) and snowboarding (freeride; n=1). Years at high-performance level ranged from less than six months to eight years, with a mean length of four years. Instagram was the most popular social media platform with all participants (n=11), followed by Snapchat (n=8), Facebook (n=7), TikTok (n=4), and Twitter (n=1). Daily social media usage ranged from 1 hour to 6 hours, with a mean of 3 hours. All participants (n=11) chose to complete their semi-structured interviews on Zoom. Ethics approval for this study was granted through Massey University (Approval number 4000025740), it was evaluated by peer review and judged to be low risk.

### ***3.2.3 Development of the semi-structured interview***

The semi-structured interview guide was developed and based on previous interview guidelines (e.g., Hayes, 2019; Bourke et al., 2019). The guide consisted of four areas; experiences and motivations, and general aspects of social media usage; mental health and wellbeing; social media as a positive and negative distraction; and competition environment (see Appendix E). These areas covered topics that were important to the study and provided an important guide for the researcher; however, the semi-structured nature allowed sufficient flexibility to probe and follow each participant's lead. Participants were encouraged to speak about any topics associated with social media. Once these four areas were covered, participants were asked if they had anything else they would like to share and if they had any questions. Participants also had the opportunity to request a copy of the study once it had been completed and published. Participants had the opportunity to choose whether the interview was conducted either in person or on Zoom.

### **3.3 Data collection**

Initial data was collected via the online screening survey software Qualtrics (Qualtrics, 2022, version July 2022). The purpose of the screening questionnaire was to ascertain eligibility. Those who were not over 18 or had not represented New Zealand were deemed ineligible.

The survey was open from late July to late October and took approximately 5–10 minutes to complete. Once eligible participants had completed the screening questionnaire, they were then contacted by the lead researcher to schedule an interview. All participants (n=11) chose to complete their interview on Zoom. Within this communication, participants were assigned a pseudonym that was confirmed when both parties met for the interview – this was to establish anonymity and confidentiality of data, the only identifying piece of information that was known by the researcher was their email address. The audio from all interviews was recorded for the purpose of data analysis, and this was communicated to all participants – interviews conducted on Zoom were recorded through the software. The interviews ranged from 24–54 minutes in length.

### **3.4 Data analysis**

The data analysis was guided by Braun and Clarke's (2006) guidelines for inductive thematic analysis in psychology. These guidelines align with the interpretivist philosophical assumptions highlighted within this study. Inductive thematic analysis was chosen as it is one of the core and trusted methods of data analysis within qualitative research (Holloway & Todres, 2003). It offers flexibility through its theoretical freedom and compatibility with most paradigms within psychology and produces rich and descriptive data sets (Boyatzis, 1998; Braun & Clarke, 2006). Braun and Clarke (2006) provided an outline guide that highlights six phases of analysis that were followed within this study. The first phase is immersing and familiarising oneself with the data, a technique which is prevalent in many inductive analysis practices (Braun et al., 2016). Recorded data was transcribed using Otter.ai (transcription software) (Otter.ai, 2022), checked manually, and then analysed for themes using inductive thematic analysis through NVivo (analysis software). The transcriptions of the data sets were solely completed by the primary researcher, with each completed transcript being read multiple times to familiarise oneself with the data. Riessman (1993) confirmed that an effective method of familiarisation is through the process of transcribing. Previous researchers have highlighted the interpretive nature of this concept within qualitative research, placing importance in the creation of the first stages of understanding and meaning resulting from the data set (Lapadat & Lindsay, 1999). Once the transcriptions had all been completed, member checking (discussed further below) was then implemented to help with enhancing the data of the study, with the option of interviewing them again if needed (see

Appendix F for email sent to participants). This provided the opportunity for the participants to confirm the accuracy of their responses and to add or redact information – all participants had three weeks to return their transcripts, they were considered to be accurate representations if the participants were not heard from.

With help from the research team, potential codes were discussed and developed, with a final formal coding set developed across all transcripts. The coding was completed using computer software “NVivo”. This is computer software which enables qualitative researchers to establish themes and tendencies across data sets rigorously (Hilal & Alabri, 2013). With the help of this software, we were able to upload transcripts and create codes, whilst being able to read through the transcripts simultaneously. Much like transcribing, the coding process is part of the analysis, however these codes will differ from the eventual themes that are highlighted as they tend to be broader (Tuckett, 2005). The research team tried to code for as many themes as possible, as well as ensuring that the data coded was done inclusively (i.e., keeping surrounding data) – this was to ensure that the *context* of the data was not lost, a common criticism of coding (Bryman, 2016). As a result, the next stage included the revision of emergent codes and themes, then the defining and naming of themes from the combined coded data extracts (Braun & Clarke, 2006).

Defining and naming the recognised themes was discussed within the research team and included understanding the essence of each theme and how this relates to the overall goal of the research. Braun and Clarke (2006) enforced that it is vital not to place too much weight on each theme, meaning that the theme “says” what it does and nothing more – it is not too convoluted or diversified. This was achieved by creating a detailed analysis for each theme, which details exactly what it provides and how it fits into the overall aim of our research, we wanted to limit as much overlap as possible. This ensures that each theme is considered and can convey meaning in relation to other themes that were identified. As a result, this allowed us to have finality in our theme development, begin applying these themes analytically, and to provide a compelling argument that illustrates our understanding of the research question and aim.

### 3.5 Research quality

#### 3.5.1 Rigour

Regarding the qualitative research field there seems to be the perception that “anything goes”, that qualitative research is an area which seems to be unclear to most researchers (Labuschagne, 2003). Although qualitative research does not have the same strict guidelines as “quantitative” approaches, it can provide strict methods of data analysis that can be used effectively and stringently across data sets (Braun & Clarke, 2006). It can be difficult to demonstrate effective rigour as there is no accepted, common agreement where rigour can be judged against (Noble & Smith, 2015). However, as many researchers have demonstrated, standards for *good* qualitative research does exist (i.e., Braun & Clarke, 2006; Parker, 2004; Silverman, 2013). Nonetheless, as with all research methods there are pitfalls that researchers must avoid to produce good, rigorous, and trustworthy research.

Within the broadest qualitative contexts, the concept such as reliability is important, even if there are questions raised about the effectiveness to evaluate qualitative research (Long & Johnson, 2000; Rolfe, 2006). However, it is important to mention the role they play within this research and how they were transformed to be meaningful within a qualitative approach. Within this research, alternative terminology has been used, reliability is understood as *trustworthiness*, which highlights the importance of having transparency and clarity within the researcher’s methodology and approach. This helps with the replication of the study, as well as ensuring that chosen methods are intrinsically associated with the researcher’s analytical position and perspectives, which are differentiated from the participants’ perspectives (Noble & Smith, 2015). This term was emphasised throughout the study and played a key part in the formation of our pursuit of rigorous and credible research.

In contrast to quantitative research, which is sometimes more recognised for its *precision* of concepts in research, qualitative research is recognised for its *profusion* (Winter, 2000). Concepts within qualitative research are often large in number and associated descriptions are *rich* in nature (Weick, 2007). However, the mark of a rigorous and rich qualitative standard within research is the ability to sort through the abundance of data and produce study specific outcomes (Tracy, 2010) accurately and effectively. Applying this concept to this study was seen within the data analysis phase and showed that a researcher

who is familiar and immersed with their data set is best prepared to recognise nuance and intricacy (Tracy, 2010). Indeed, it was within this scope that rigorous data collection, and analysis was conducted due to the ability of the researchers to recognise the importance of complexity in inductive thematic analysis.

A recognised weakness of inductive thematic analysis is its ability to produce unfounded analyses, something that could be detrimental to our research and undermine research rigour. Due to the flexible nature of inductive thematic analysis, the potential range of analytic options are sometimes too great for what the researcher, or the research is capable of (Braun & Clarke, 2006). Hence, it can become detrimental to the analytic process as individual themes can become subsumed due to the pursuit of a comprehensible data set (Braun et al., 2016; Coyle, et al., 2017). To help prevent against unfounded analysis and excessive data sets, the research team acted as “critical friends” (Smith & McGannon, 2018), where we were held accountable by each other, challenging assumptions and analysis conducted. This type of critical accountability between the research group was invaluable as each member came from different areas of discipline and experience. As aforementioned, it was important to find balance in our analysis – identifying important themes in a considered and manageable approach allowed us to recognise the flexibility that thematic analysis provides, an advantage utilised within this study.

Inductive thematic analysis was chosen by the researchers as it was a flexible analysis method which allowed for both social and psychological interpretations of data, and effective descriptions of data sets (Braun & Clarke, 2006). Furthermore, it was the most appropriate and effective technique to best address the goal of the research. Most of the pitfalls identified by previous researchers associated with this type of methodology are “researcher-error”, where they can be attributed to ineffective data analyses, or unsuitable research questions, rather than the method itself (Braun & Clarke, 2006; Braun et al., 2016, Coyle, et al., 2017). Avoiding these pitfalls and errors was key when conducting this research as it was evident that these mistakes are easily made.

### **3.5.2 Trustworthiness**

Due to the epistemological position of the researchers, it was crucial that their relation to trustworthiness and bias were discussed. In particular, how it influenced data analysis and the resulting research quality. *Fairness* within research demands that each differing paradigm or



construction are recognised and implemented – there is no exclusion when these concepts relate to participant involvement and the creation of dialogue amongst various perspectives.

Within an ontological approach, Morrow (2005), introduces *ontological authenticity* where “participants’ individual constructions are improved, matured, expanded, and elaborated,” (p. 252). Acknowledging and understanding participants’ responses and lived experiences formed the foundation of this research and ensuring that there was appreciation for their contribution created trustworthiness and rapport. Quality criteria within constructivism is sought after, and Morrow acknowledged that “there must be mutual construction of meaning between, and among researchers and participants” (p. 253), and that “participant meanings are understood deeply” (p. 253). Understanding these constructions meant that researcher reflexivity could occur, where dialogue between perspectives is upheld and understood – as constructivist/interpretivist paradigms will share similar worldviews in critical, postmodern, and ideological theories (Morrow, 2005). Furthermore, reflexive acknowledgement of multiple truths, perspectives and results in the research process is a characterising trait for research quality and rigour (Smith & McGannon, 2018).

Understanding participant constructions was vital within the research approach as qualitative research depends upon these constructions– the participants lived experience. This dependable nature is influenced by various factors featured within Morrow’s (2005) research and helped to provide a guide for trustworthiness within our research – these include research *context* and *cultural frameworks*. Contextual grounding within this research meant that we were able to understand the meanings that the participants placed on their experiences with social media and how their perspectives had evolved over time. This contextualisation was important for the researchers as it meant that although high-performance athletes may have a similar overall experience with social media, there are many differing contextual factors that influence and place meaning on the importance of their experience. Contextualising our interviews and the interview-based data helped to enforce this view. Although examining cultural frameworks was not at the fore within this research, it is important to acknowledge the role it plays in qualitative research as it can be particularly suited to understanding cultural phenomena (Morrow et al., 2001). Recognising and understanding cultural phenomena allowed the researcher to show respect and built rapport with the participants.

### 3.5.3 Member checking

Member checking, or sometimes termed “participant validation”, involves the participants assessing the “trustworthiness” of the qualitative data as a way to improve rigour (Birt et al., 2016; Candela, 2019; Smith & McGannon, 2018). Member checking is associated with both rigour and trustworthiness within research. First popularised by Lincoln and Guba (1985), member checking is completed by returning the data (i.e., interview transcripts) to the participants and asking them to check whether the data is accurate and/or accurately reflects their experiences. Once the participant has returned the data and has confirmed the accuracy, then the data is deemed credible and consistent (Smith & McGannon, 2018; Curtin & Fossey, 2007).

Within this study, member checking involved the returning of the whole interview transcript to the participant. Returning the whole transcript was the most appropriate method to ensure that the participant was able to check for accuracy of their response, and evidence, and to make certain that nothing of importance was missed (Tilley & Powick, 2002; Yin, 2014). This study also offered the opportunity for the participants to have a secondary interview if they felt they had not been accurately represented or wanted to offer new information. This method fit within the interpretivist nature of our research, which focused on the co-constructing of new meaning, and the validation of previously known meanings between the participant and the researchers (Birt et al., 2016; Doyle, 2007). Member checking was only completed once throughout the study, even with previous research suggesting that the research can be enhanced if it is completed at key points throughout the research (Doyle, 2007). However, following consulting with the literature (e.g., Birt et al., 2016; Smith & McGannon, 2018; Stake, 1995; Yin, 2014) it was decided that once was sufficient due to time constraints and the possible effect it can have on the participants.

Member checking can be an ethical concern within qualitative research, particularly with regard to the protection of the participants, and whose voice is at the fore of the findings: the participant, or the researcher (Birt et al., 2016; Fossey et al., 2002). Hence, addressing potential bias within qualitative research is vital to ensure that *representation* of the participants’ experiences are not only prioritised, but analysed in a way where their experiences are not reduced or affected by subjective bias. Although distressing or uncomfortable information was not anticipated to be brought to the fore within this research, it was important that participants had the opportunity to express themselves without feeling

isolated or voiceless (Birt et al., 2016). Therefore, opportunities were provided to the participants to voice their concerns and liaise with the primary researcher to ensure that their interactions were valued and understood. A potential risk was that returning the transcribed data to the participants could alter their view of how they described their experience with social media (Carlson, 2010). However, research has suggested that participants who see that their views are validated and reflected within research can be of benefit to their overall wellbeing, with similar results to group therapy (Harper & Cole, 2012).

### ***3.5.4 Bias and reflexivity***

In some ways, qualitative research sits at a direct contrast to quantitative research; whilst quantitative research pursues objectivity, qualitative research acknowledges and is grounded in subjectivity (Morrow, 2005). Rennie (2004) defined reflexivity as “self-awareness and agency within that self-awareness” (p. 183). Depending on the research characteristics or the underlying research paradigm, researchers may choose to either limit, control, or manage this subjectivity – or within some research, it can be embraced, with the researcher becoming a “research instrument” (Chenail, 2011; Morrow, 2005). All research is subject to bias, including researcher bias – a type of bias where the researcher(s) have personal biases or assumptions that they are unable to manage effectively (Onwueguzie & Leech, 2007). Recognising the importance of researcher bias was vital within this study due to the position of the primary researcher who himself is an active athlete who has previously been within the high-performance pathway within New Zealand. Hence, within this research reflexivity was undertaken by the researchers within each aspect of the study to ensure that possible biases or assumptions were recognised and understood. One of the ways that reflexivity was implemented was through the consultation within the research team (Morrow, 2005). The research team within this study were invaluable, both offering advice and acting as a mirror, reflecting and assessing the primary researcher’s research process, alternative thought processes were promoted within such discussions, particularly around the experiences of the primary researcher. Rossman and Rallis (2003) encouraged these reflexive conversations and recommend that one surrounds themselves with knowledgeable and experienced colleagues with whom they can engage in analytical discussion.

From the influence of the interpretivist paradigm that underlies this research, we chose to embrace the position of the primary researcher, placing him as a co-creator of meaning within the study, and fundamental to the interpretations of the findings. Hence,

because of the position of the primary researcher and presuppositions that were formed through reading of literature it would have been almost impossible to avoid any researcher bias within this study, therefore controlling for it by embracing its presence was key. We believe that due to the prior knowledge and experience of the primary researcher, it helped to provide context and meanings to the discourses of the participants, without them having to justify their experiences with social media and high-performance sport. Embedded within subjectivity, particularly within this research due to this position was *representation*. This relates to the “crisis of representation”, which questions whose reality is actually being represented within the research – the researcher or the participants’ (Denzin & Lincoln, 2011). Acknowledging this concept was particularly important as the primary researcher had his own experiences with the phenomenon being studied. Controlling for the accuracy of representations of the participants’ realities was vital and during the data collection process the primary researcher took the stance of the “*naïve inquirer*” (Morrow, 2005, p. 254). This meant that the primary researcher was always asking for clarification and delving deeper into participant answers. This helped to accurately represent the participants’ viewpoints, as well as recognising and presenting their lived experiences equitably.

An overview of the methodology used within this research has been discussed. Specifically, the research paradigm of interpretivist philosophical assumptions has been established, including the justification for a qualitative research approach. The study design, development of the screening survey, participants, and development of the semi-structured interviews has also been discussed. An overview of data collection and data analysis has also been highlighted, including aspects of academic rigour (i.e., trustworthiness, member checking, and bias reflexivity). The next chapter presents the results and thematic findings of the current study. The findings from the inductive thematic analysis have identified key themes that are associated with social media use in high-performance athletes and will be supported by direct quotes from the participants. The participants have been assigned pseudonyms to ensure anonymity.

## Chapter Four

### Results

This chapter presents the results of the study and begins with an overview of the thematic findings from the inductive thematic analysis. Firstly, themes associated with uses of social media are considered. Secondly, themes associated with the consequences of engaging with social media are outlined. Each theme is discussed alongside illustrative participant quotes.

#### 4.1 Thematic findings

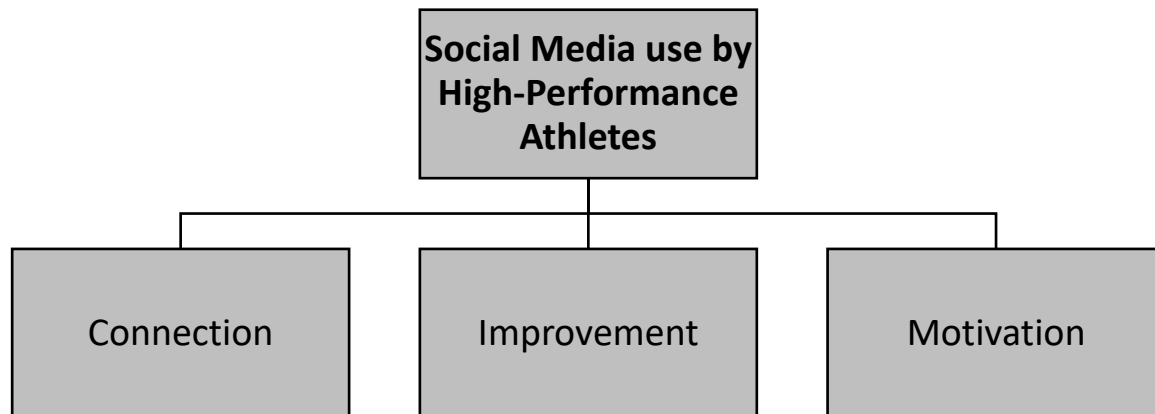
Thematic analysis resulted in the identification of six themes from the data set. These six were represented through two overarching dimensions: *social media use by athletes* and *consequences of social media use*. *Social media use by athletes* included: *connection*, *improvement*, and *motivation*. *Consequences of social media use* included: *Body image*, *pressures*, and *control*. Each dimension and theme is discussed herein and accompanied by illustrative participant quotes.

#### 4.2 Social media use by high-performance athletes

Three distinct themes emerged during analysis that captured the various ways that the participants ascribed their social media usage.; specifically, these were *connection*, *improvement*, and *motivation*. The three secondary themes are summarised in Figure 1 before being presented in depth.

**Figure 1.**

*Social Media use by High-Performance Athletes*



#### ***4.2.1 Connection***

Many of the participants described their use of social media for the development and maintenance of connections. In the broader sense, this meant the patterns of familial and friend relationships that were maintained through social media, or the development of relationships with people that they “followed” or connected with on social media platforms. As a result, this theme is split into two subthemes: *maintaining connections* and *vicarious experiences*.

##### ***Maintaining connections***

Participants recognised that one of their main uses of social media was the development and maintenance of connections. These connections mainly consisted of family and friends, but also with potential sponsors and brands. For many, their main source of communication with others was through social media, which can be difficult due to the busy lives that these high-performance athletes live. Josh found that his main form of usage for social media was connecting with others:

Checking up with mates, posting, interacting with canoe polo social media posts, looking at their posts, sharing their posts, I'd say it has helped me grow connections and stay in touch with people that if I had fallen out of love with canoe polo, I maybe would never talk to them again. But now that I'm kind of seeing their posts, that keeps me in the loop of their realm and what they're doing.

Many of the participants used various social media platforms within their day-to-day usage, which fell in accordance with the perceived hierarchy of their connections. Stacey was an example of this of social media, demonstrating that various platforms had different uses to help maintain and grow connections:

I use Facebook mainly for events, if it's one I've created or connected with other ones. [Facebook] messenger for messages, Snapchat, just like talking to some close friends in a different way. And then Instagram, where I have two accounts, I have a personal account and swimming account ... my private account is mainly like friends from university, high school, or swimming, or wherever I've met them ... it's a way for me to connect with my friends without having to go 'hey, how's your day?'

Keeping other people informed of their sporting journey was also an important part of the athletes connection on social media. Whilst portraying this journey, being authentic and "true" on social media was important for these athletes as it allowed them to be autonomous in their usage. Some athletes recognised this need for a genuine connection with their followers on social media which was not impacted by the perception of an "ideal" high-performance experience, rather being honest in their experience was highlighted. Josh is one athlete who highlighted that it was important for him to be authentic with his followers and friends through his usage with social media:

When I did sit out of games because of an injury, I put it on my posts to keep people informed. I feel like I am an advocate for canoe polo, so normalising injuries and normalising that it does happen ... you have to if you're going to post the positives, you want to post the negatives as well, just so people can see a contrast of, it's not just

the good stuff. And when you do get the good stuff, it shows that you've had the bad stuff, which makes that success feel more [satisfying].

Many participants reported that when traveling for sport their use of social media would increase, with many of them acknowledging that this was something their followers would be interested in as it differed to their normal posting habits. Tracy mentioned that when she travels overseas her engagement with social media increases:

One-hundred percent increases. I think people will get really interested in the different lifestyle that you portray from your normal lifestyle that you might have at home ...If you are travelling overseas, posting about the competitions you are partaking in, its more interesting for my followers as they get to see something outside my normal routine.

Social media was also a source of income for many athletes who saw that leveraging social media to grow their "brand" meant that opportunities through sponsorship could arise more frequently. As mentioned in chapter two, many athletes use social media in this way with it being one of the main advantages of their social media use. Tracy uses social media in this way also, commenting:

I get money off it [social media]. I also want to keep expanding my brand to gain more followers ... so I know that I can benefit more out of it by keeping my social platforms up... I receive brand deals, and those brand deals help me pay for certain bills and everyday life things.

### *Vicarious experiences*

This theme captures how some athletes use social media to connect with people they may not have a personal relationship with but follow through social media. This is a form of connection where the athlete may not personally foster or engage in, rather this type of connection allows them to connect and relate with other athletes' experiences around the world and live vicariously through them. Many of the participants followed other athletes' social media accounts to seek comfort in their own sporting journey as they saw others experiencing their own similar struggles and successes. Sarah was one of these athletes who commented on the benefit of connections through her social media use:



[she follows] athletes that talk about mental health, so it's kind of their experience with their own mental health, and how they're dealing with it ... I think it's just like their story or what they've gone through... I think it's interesting to see what other athletes are doing, what other people I know are doing.

Jenny mentioned that it is important being able to see other athletes struggles and that it is important that social media shows both the good and bad parts of an athletes' career:

With the WNBA (Women's National Basketball Association), they're actually posting a bit more vulnerably, like about their injuries, and I've seen lots of things about eating disorders with athletes, and they're actually talking about it. They're not just ignoring it and showing the best parts of the sport, they're actually showing the hard parts too.

Similarly, some athletes felt that it was good to follow other athletes that were ahead of them in their careers so they could measure progress. Brenda found that her experience was not just exclusive to just sporting ability, she said:

I like to follow a few people that I've met that are a few steps ahead of me in their career, just to sort of see what they're sort of doing and check myself against it ... you could learn something there, someone who's built like me and sort of seems to be around the same personality sort of thing. So I'd like to know what they're doing.

Jessica recognised that reinforcing what other athletes had been through was an important part of her routine when dealing with pressure, "with other athletes and things, that have posted reminders, with pressure and all of that stuff ... just trying to remember those things that people have spoken about from experiences".

Tracy mentioned that she likes to follow people who are on the same mental health journey as her, and with her role on social media it was important to continue the sharing of positivity and awareness on her own platforms:

One positive thing I get from social media is the ability to type in, or like, follow people who do similar things that I do in regards to mental health ... I'm a huge mental health advocate. So, whenever those times around mental health awareness week or world mental health post something up, just to like normalise those conversations, and I think having the platform that I have, it's really important for me to do that

#### **4.2.2 Improvement**

This theme represents the participants uses of social media for improving their knowledge around their sport. This knowledge includes various aspects; firstly, for some it involved learning new exercises or activities and integrating these into their own training regime for physical improvements. For others, social media provided useful resources (e.g., mindfulness exercises) to improve psychological skills and performance.

Jenny commented that social media was a good place to help gain ideas for her training sessions as she recognised weaknesses that had arisen in her athletic ability. She also found that using social media helped her to gain confidence in these areas. Her comments demonstrated her use of social media to help address these issues:

I do often copy some stuff that I see online. Just because I know I'm not very good at figuring what I want to do, like I'm not a very good gym goer. So, if I see something that looks like it'd be good or entertaining in the gym, I'll take that for my own training.

Similarly, Olivia said, "I actually use a lot of the training videos on Instagram, basketball workouts and that ... I've saved workouts in the gym and saved skill workouts too". Josh acknowledged that social media was useful during lockdowns where playing sport was unavailable. Hence, social media provided a platform where he found exercises that were not part of his usual routine, he commented, "doing stuff that you'd never think was worth it, but you doing it keeps you in the realm of being in your sport". Sarah found other ways for her social media use, but still remains sceptical on the overall benefit of it, she commented:

I think I do, like nutrition and stuff like that. Whether it's true or beneficial or detrimental, whatever it is, I think I still look at stuff like that ... I think it's cool to try

new things, and that's what social media brings as well, whether it works or it doesn't work.

Participants also spoke about using social media to help find resources that would be of benefit to their mental health, particularly around mindfulness. With many utilising social media to help manage their wellbeing and to ensure that they were in the right headspace before a major competition, event, or even training session. Managing their mental health was important for these athletes and they recognised that social media could be utilised in such a way, through the presence of positive posts on their platforms many of the athletes saw that social media had a resulting positive impact on their lives. Olivia commented that using social media before a basketball training was important:

I follow a few quote pages, there's a few of those that have been helpful. I'm definitely a quote person, so I have a few quotes saved that I use myself ... I've read a few quotes before training.

Josh felt that seeing mental health awareness posts was a positive aspect of his social media use which helped to manage issues that could arise from playing sport or from day-to-day life:

If I am on my phone, it's nice to have those refreshing posts every now and again, that you can look at and not fall so deep into social media ... [posts] that show you ways to manage your anxiety, or just little things that you can take note of.

### **4.3.3 Motivation**

Many of the participants recognised that their social media use (intentionally or unintentionally) elicited a change to motivation regarding social media and lead to the establishment of the theme referred to as *competitive driver*. This broader motivational theme also acknowledges how individual motivations for using social media evolved over time due to their lived experiences. Some participants explained this change was due to ageing and maturing alongside social media and being able to see the negative impacts it had on their lives. Whilst others it was a change in routine, which included having children or reducing excessive daily time spent on social media. Some changing perspectives are represented below.

Josh felt that the pressure of posting on social media platforms created a barrier to portray his truer self to his followers, and decided to change that once he realised the problem it had caused, and he viewed the COVID-19<sup>1</sup> lockdowns as a chance to reflect on his social media usage and perspectives:

Although it was very confronting at the start, it showed a lot of things that you can change about yourself, and it doesn't actually matter what anyone thinks [on social media]. I feel like I was caught up in that a lot, especially being that guy that everyone thought was popular because he was an athlete, but that's not me. That [sport] doesn't define who I am. But now I can just be me.

Josh felt that this change was beneficial, "I just felt more natural, I felt like I actually wanted to post and then I posted when I wanted to, not like as frequently but when I wanted to. I felt like I didn't post because I had to, but because I was doing it on my terms now". His opinions about posting on his social media platforms evolved into a more grounded and authentic view of his life:

You do know that people are going to see it [social media post], and now I'm at the point where I just don't really care. I care that people support me, but I post what I want to post because I want to post it, and if people don't like it, I don't really care, maybe a few years ago I would have been like, 'I shouldn't post that, or I shouldn't say it in that way' because of this person, that person, I might offend my mate, but now I'm like 'you have to put it in the way you want to, because it's your post'.

Having a more grounded and authentic social media platform meant that his experience with social was more natural – it was an accurate extension of his "offline" identity. Josh wanted to recognise that his self-presentation on social media was not upheld to societal standards, rather his experience was based upon his own values and norms. Social media was a new experience for Tracy when she was younger, and she has seen the development of social media first-hand which has also influenced the way she has viewed and used social media as she has aged:

---

<sup>1</sup> COVID-19 is an infectious disease which caused several lockdowns in New Zealand in 2020 and 2021

It's changed with the way social media has grown, it has become monetised, I know that social media is supposed to showcase your everyday lifestyle in the most authentic way possible, that's how it first started for me. But during the years it has definitely changed, you're putting on this façade. I didn't really show my own lifestyle anymore.

Initially, Tracy found it difficult to see other competitors on social media, often impacting upon her sporting performance and wellbeing. However, she described how her perspective evolved as she found that social media was inhibiting her growth as an individual:

...it used to affect my performance a lot because I think for me, [initially] I saw it as a jealousy thing... I wasn't growing up, understanding that everyone has different journeys in their lives, and maybe the reason why I'm not competing well is because of my injury, or all that stuff, but now when I see my competitors do well, it's definitely inspiring, I enjoy seeing my competitors doing well.

The main theme established within motivation is competitive driver which is addressed here.

### ***Competitive Driver***

Some participants recognised that seeing other people (direct competitors or not) often increased motivation to improve and to compete at higher levels; these individuals could be teammates, opposition, or not directly know to them (e.g., famous athletes). Jenny felt seeing her competition on social media helped to steady her focus back onto her goals and to ensure that she was setting herself up for success:

It puts a fire under me like, 'oh maybe I should go out and do something like that and find something else to do that around me if I'm not there, even in off-season, where other people are still doing their stuff, it makes me brainstorm what I can do.

John recognised that the mental battle is the biggest challenge for his sporting success, and "seeing what my peers are doing can be a particularly good push to sort of get me over the edge to actually start doing things". During COVID-19 lockdowns using social media was a great tool to help athletes keep focus and keep motivation high, with many unable to

compete or even train. Josh commented, “lots of the European guys during lockdown, even our guys were posting workout videos, trying to motivate each other”. Not being able to attend training camps, seeing other competitors training and playing sparked motivation within Olivia, even if they were her own teammates:

It definitely makes me feel like I’m not doing enough, just because there’s not a lot of competition here. And then I see overseas people posting like their stats for a game, really good stats and stuff, and I’m like I need to be better sometimes ... I feel like there’s a lot of videos I see of athletes online that motivate me to do better and want to do better ... I see my teammates and stuff, and like I’m obviously happy for them, but also, I’m like, I want to be better ... I always watch basketball, three on three comps, and I just want to be so good, better than these people.

Samantha also shared this view with Olivia showing that she loves having the attention on social media and that it helps fuel her performance and motivates her to be a better athlete:

I like [it] when I get a lot of attention and stuff, I want that recognition, I want that spotlight ... it gets the competitiveness flowing and I’m like I need to go shoot now, or I need to go do an extra workout ... it motivates me to be better.

Although Samantha considers this a positive aspect of her social media use, she is also aware that it can become a problem, “It could turn toxic and negative” if it becomes obsessive. Due to an over-reliance on social media as a motivator and the possible seeking of validation, social media could lead to negative patterns of behaviour, and as a result, impacts upon wellbeing. Sarah recognises this type of motivation within her own experiences and spoke about the importance of being intrinsically motivated:

Generally, it’s better to be motivated not by other people’s outcomes, you should be motivated by your own outcomes, motivated by your values, or your goals ... They’re [intrinsic motivators] more long term, it’s easier to stay motivated by the intrinsic because they’re not like, ‘either you’ve made the team, or you haven’t’ ... I’m not going to say I’m not motivated by something external, which is false because I’m

a competitive person, but I think being grounded by the internal is a lot more sustainable.

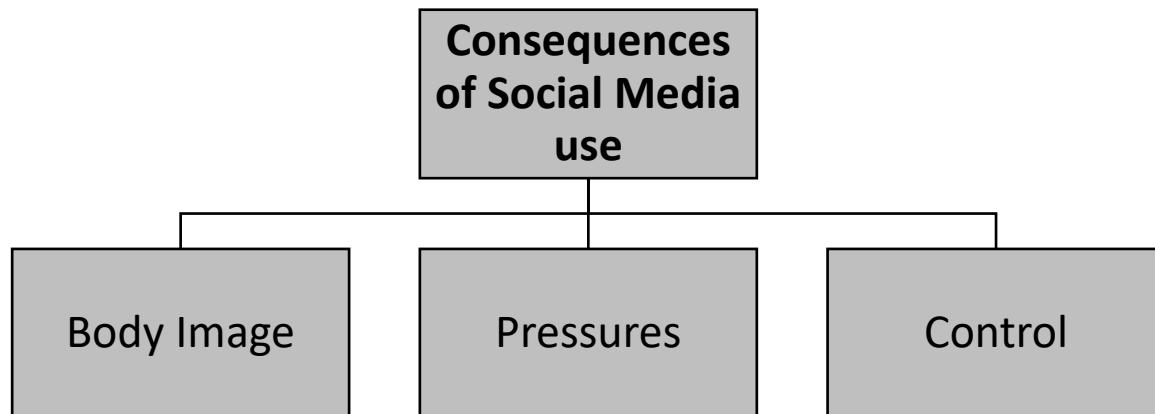
This increased motivation due to social media was particularly relevant to older athletes in this study, as motivations to compete were influenced by how they wanted to portray themselves on social media in addition to what they see other athletes doing. Nearing the end of his career Chris highlighted that this drive to compete is influenced by such factors:

It's a good motivation for me to keep going and keep playing and all the rest of it, people are still watching what I'm up to ... seeing [people] playing in Japan, I'm like, I want to get over there and play again ... If there is a talk posted by FIBA (International Basketball Federation), or something of me doing some sort of shot or some sort of lay-up, then that's more a motivation for me.

Inductive thematic analysis revealed three key uses of social media for these high-performance athletes: connection, improvement, and motivation. From their use of social media, three consequences are identified which are revealed in the next section of the results.

#### **4.4 Consequences of social media use**

This overarching dimension was used to consider broadly the consequences of social media use by the participants within this study. Whilst the previous dimension spoke to their general use, this dimension presents the findings related to the consequences of social media engagement. Three main themes were established; namely, *body image*, *pressures*, and *control* (see Figure 2). Similarly, to the previous section, these themes are presented and considered herein alongside illustrative quotes.

**Figure 2.***Consequences of Social Media use*

#### ***4.4.1 Body image***

One theme that emerged regarding the consequences of social media use was related to body image. Many of the participants reported that social media use had a significant impact on encouraging comparison to others, particularly related to their body image. This theme was discussed in all but two of the participants responses.

Some athletes felt that that their body image dissatisfaction was related to their time spent on social media, with longer periods on social media increasing the chance of negative thought patterns related to body image. Brenda found that sometimes she thought about her body image in relation to her own sport:

I find if I spend too much time on Instagram particularly, I can compare myself to people way too much and beyond sort of what I would feel is healthy for me ...which is why I started cutting down on my usage ... But it is still just with all the filtered, fake hair, fake this, fake that but it still has an impact, 'oh I could never look like that,



I don't look like that when I hit a ball or when I run ... it doesn't make me feel good about myself.

Brenda correlated her body image issues with her sporting performance and the creation of anxiety:

If they look good and ready to go and they have a good performance then it produces anxiety, but if they don't, the anxiety goes away ... if they've done well, and I haven't, then it's probably still there.

Through her experience as a female basketball player, Jenny has had many issues with body image and social media as she grappled with what she felt society expected versus the reality of sport:

It can be hard especially as a female athlete, because especially with Instagram, with how society wants us to look ... being [tall] and someone who's not generally the normal size for a female, I'm used to seeing all the little, girls on there [Instagram]... it's always skinny, slim girls, whereas with athletes there a lots of different body shapes.

Some athletes found that dissatisfaction with their body image resulting from social media had actually become a barrier for posting on social media because of the perceived "ideal" social media body. Olivia highlighted that she had struggled with her body image and that not posting on social media was related to such issues:

Body image is very hard as a female athlete ... you see women on social media, and they have a certain type of body which is hyped up, but it's hard because you want your body to be the best physically for your sport, and that does not look like social media bodies ... it definitely put me off [posting] now and again.

Samantha had similar experiences to many of the participants but offered a unique insight into body image struggles on social media post-pregnancy as a high-performance athlete. She told us:

There was the whole [body] image issue because lots of mums on Instagram were posting their post-baby body and they looked like they had never had a baby, or they were out after two weeks of having a baby and I had a tough labour. I couldn't work out for three months after that ... it put all these unreal expectations of what being a mother was like on Instagram.

Some of the athletes within the study were not only talented in one sport, but multiple. Body image therefore become a complex issue across the athlete's sports in different ways. Samantha found it difficult to contend with body image when playing three different sports throughout her career:

When I'm playing a specific sport, my body image, the way I see my body on social media changes. So, when I played netball, I feel incredibly overweight, I feel like massive, and I get insecure in a netball dress. But then I go to volleyball, and I feel confident and great. And then I get to basketball. And I feel like fine, like I'm okay.

Samantha found that her body image issues began when she was much younger due to social media, and is one of the reasons why it has become an issue which has been prevalent throughout her life:

Throughout high school, I was the tallest and I had a butt, but back then in high school, it was like the 'Tumblr era' and everyone wanted to be so skinny, like almost anorexic which was the cool thing. So, I was so insecure and had so many body image issues growing up and it didn't help that social media was just starting to become popular and everyone was posting themselves in their netball dresses looking super skinny.

Interestingly, it was not until she went and played collegiate-level basketball in America she felt her mindset shift and saw the differences in her social media behaviour due to the cultural shift. Samantha speaks on this cultural comparison and how her experiences in New Zealand and America are so different:

In America, people like me are celebrated, big butts and not being super skinny, more of the Kardashian and Beyonce figures. So, when I went over there my figure, and my

body was celebrated. And they were like, 'oh, you're a big strong woman, and you're tall that's amazing'. But, in New Zealand, I feel like I don't want to stand out. And I've had so many body image issues as result, but then in America, I was so celebrated. So, I posted my body so much more on social media [in America], I was much more confident posting pictures and bikini pictures, which I would never have posted in New Zealand.

For some athletes, issues with body image has impacted their sporting performances. Samantha found that in each of her sports that she was competitive in, body image affected her in different ways:

The motto was look good, feel good, play good. So, like, when you feel good about yourself, you're always going to play better, it has a big impact. If I'm feeling like I'm looking fit and I'm looking good, then I'm more confident, I just play basketball, I'm not thinking about anything else. But yeah, like when I'm when I'm playing netball, and I'm thinking about my skirt going all the way up and, I'm definitely not as free in my movement and ability.

Tracy is another athlete who continues to struggle with body image issues resulting from social media, recognising that there are sometimes multiple reasons as to why body image issues can arise:

I think it doesn't help that a lot of girls they really only display what they think is a healthy body, some of them are actually not qualified nutritionists. So, on social media, they only show the good bits ... No one takes in consideration different ethnicities and obviously, different body types. Some people have, or might have gone through an eating disorder, or some people might be on certain pills, it makes them bloated, but we wouldn't know. I know that I personally still compare my body to certain people even when I know that those people are naturally built that way or don't do the sport, I do that's why they look like that.

Social media has always been platform where authenticity is not always at the fore, as a result it has meant that issues regarding body image have been allowed to flourish, particularly for female athletes. The participants within this study have shown that body

image issues are a major concern within high-performance athletes in New Zealand, impacting not only their wellbeing but sporting performance too.

#### **4.4.2 Pressures**

Being high-performance athletes, many of the participants recognised the influence social media has on creating both performance and social media pressure. Two forms of pressure are discussed within this theme: *internal* and *external*. Internal pressure stemmed from the participant's own insecurities or expectations; however, it appeared that such internal pressure has often first manifested as a result of using social media. Whilst external pressure is created when the participant views social media as a source of or eliciting competition, encouraging comparisons, and an external expectation to be actively posting.

##### ***Internal pressures***

Internal pressure was described as being created and influenced by social media. This pressure was often formed by the athletes' own insecurities or perceived societal expectations on social media, these expectations are closely linked to routines around posting on social media. Brenda felt that when she began posting on social media it was difficult to stop, a routine had formed which she was not particularly proud of:

With Instagram, I found last season, once I started posting the little updates, I felt like I couldn't stop, probably more of a routine than I'd want to admit ... I found myself, especially near the end [of the season] trying to think of taking a specific photo because I thought it would fit well into the update. When I started [doing social media updates] it was supposed to be more organic.

With expectations high for high-performance athletes on social media, some athletes found it necessary to ensure that their "posts" were up to a consistent and high standard. John felt similar pressure and explained that the pressure of posting on social media can come down to finding the perfect shot:

I definitely have struggled in sort of not posting because I can't find things that I think are good enough to post, but then I am definitely kind of trying to go out of my way to give myself opportunities to actually capture stuff ... So, it's definitely a concerted

effort, you know, sort of spend an hour trying to get something and hope that I get something.

Within high-performance sport, some athletes take on an advocate role, actively trying to promote and further the growth of their sport. Consequently, due to ease of social media this has placed additional pressure on those who see themselves in such a role. Josh acknowledged this experience and described it as a “self-pressure” and commented that this pressure has stemmed from trying to promote his sport:

I feel like sharing your experience people make it to be like validation of what you've done kind of thing. Especially with canoe polo being a smaller sport, you want to push every positive thing that happens within your experience of canoe polo out to the rest of the world so that they can see it as well. There definitely is pressure, I wouldn't say it's negative pressure. But I would say there probably is pressure to keep the spark alive because it's not always there. You have to kind of keep pushing it for it to be in the spotlight.

Samantha found that when she played collegiate level basketball in America, she felt that she was obligated to show that she was having a great time on social media, even if it wasn't a true representation:

Because I was living in LA and I was posting stories in Malibu, and Hollywood and all this kind of stuff and I probably looked like I had the best life ever, but I also was struggling with basketball and being away from friends and family and all that kind of stuff ... that was when I realised how, like deceptive it [social media] is and how I personally was posting all these stories, and it probably looked absolutely amazing from the outside, but I was like, quite sad and not okay. And so, when I realized that, like that was what I was doing. I was like, ‘is this what everyone else was doing?’.

Similarly, Olivia also felt this pressure to portray herself a certain way on social media when she was playing basketball in America:

It can come off that you're enjoying it way more than you actually are, I feel like it's just to show off when you're in college.

Olivia felt that when she was in America, showing her personal struggle was not an option compared to her outlook now, “definitely then [in America], but now I’d post and write something if I was [struggling] you know”. She places this change down to her growth as an athlete and a person and realising that “everyone struggles” and that perceived expectations of portraying herself on social media had inadvertently inhibited her help-seeking behaviour as she was conscious of a negative reaction from reaching out to friends and family to show that she was “struggling” away from home.

### *External pressures*

Many of the participants felt that the external pressures of social media elicited the greatest negative effect on performance and their wellbeing. The participants felt that social media was a medium which increased the likelihood of comparisons, and fuelled expectations to be active on these platforms. Brenda felt that competitors posting on social media had an impact on her as competitors can pick-and-choose what they show on their social media profiles, “which is a positive for me, but I can find it to be negative when I’m consuming too much of it”. When John was not able to compete (due to the seasonal nature of his sport) it impacted him, “seeing all my friends riding it wasn’t too good for me in terms of a pressure perspective”. He had a mixed opinion on the pressure resulting from social media:

It’s a good and bad sort of thing. Because in one way it sort of shows me what I should be doing and it helps me stay focused and lets you know what my competitors were doing. But, in other ways it can make me feel quite down, particularly because [my sport is] seasonal. When I haven't been able to get to Europe for the New Zealand summer, then it can make me feel kind of depressive throughout this sort of summer while I just see all my friends training and getting better and better.

He says this pressure has led to him second guessing his social media posting and impacted his self-esteem if his social media “post” is not getting as many “likes” as he had hoped:

I definitely in general have always really struggled to post because I'm always very worried about what other people are going to think about it and that's obviously

resulted in me not posting, and when people don't actively like it, that also is just extra discouraging.

Tracy has had a similar experience on social media, when seeing her competitors do well also affects her sporting performance and mental wellbeing:

When I see my competitors do really, really well, I do have a really bad headspace. And then, then it's like, kind of like a trickle effect, like, it affects my training, and it affects my mental health and I just keep spiralling.

Similarly, Jenny had the same experience with social media due to presence of social comparisons and issues with self-esteem:

If someone has done a really cool post about them winning, it will start with a bit of jealousy because they've done well, and maybe I haven't at that time ... I personally do struggle with anxiety, and when it comes to the national team stuff and I see the girls who are living in Australia doing all the extra stuff before camp, whereas I've been at home, it does make me worried that I'm not up to par.

High-performance athletes tend to be well respected within their communities and as a result, are role model figures to younger audiences. This pressure to align social profiles with appropriate core values and positivity was acknowledged by the participants. Jessica has felt this pressure due to her younger following:

I want to make sure that what I'm posting is aligned with what they can see, especially if it's younger followers ... I definitely try to post positive aspects about the team and hyping that up.

Similarly, John has tried "to keep all my stuff clean. And that's not just for younger audiences, but also just to be more professional". Olivia felt that through her experience as a high-performance athlete, sharing her endeavours with her audience was important, but initially felt it difficult to express due to stigma around high-performance sport and help-seeking behaviours, "I've felt it myself, everyone's watching, so yes, you have to be like 'yeah, I'm fine, it's good'". She found that it had begun impacting her mental health:

Recently this year, I really looked into my mental wellbeing. Because it was getting too much for me so that I didn't enjoy playing. Because in my head I was like, 'oh, people expect this from me so I should be like this way kind of thing ... my family is known in the basketball community so there is that pressure too, and in my head the basketball community has expectations of me too.

She also realised that it had begun impacting upon her sporting performance, "Because I feel like sometimes for me in my head, it's definitely now and again, it's not all the time but I've thought about if this will look good on social media, like if this performance or taking photos or if someone is videoing". Statistics posted on social media have also produced this external pressure to perform for Olivia, and have had her questioning her own performances:

Seeing my teammates put up 25 points a game it has definitely influenced me, negatively putting pressure on myself, 'these people are doing all this and I'm not' ... seeing how well they're doing can sometime mess with my head and have me thinking 'I'm not good enough' because I'm not getting these types of stats which are posted on social media.

As a new mum, Samantha felt the pressure of returning to sport due to the persistence of social media and who she "followed". It was difficult to manage her wellbeing due to the constant exposure to other athletes' social media accounts:

I follow all my teammates, my competition, I follow everyone, you see them all the time, and just seeing their pictures, and them in their [Instagram] stories training or playing ... 'they're getting better'. And I'm sat here with a baby in my stomach and or, breastfeeding, not being able to do that. So that definitely was like, quite stressful and put a lot of pressure on me.

Tracy also recognised the challenges of returning to sport after a hiatus, but this time with injury. One of her biggest causes of external pressure after an injury is due to social media:



If I'm injured and then I see certain competitions that my friends are participating in, and I knew I was capable of being in those. Sometimes I would mute my friend's stories, just to protect my own mental wellbeing.

Tracy found that she became more aware of the external pressure social media caused when she became obsessive over 'views' and 'likes', which unfortunately began to produce anxiety and stress due to comparisons:

Social media has definitely become more serious in the content we are creating. This is heightened by the amount of views and likes you get for your post. The sad thing is that the more followers, likes you have etc., the more likely people are going to engage in your post. This personally has sometimes stressed me out because I compare myself to others and their content which is not healthy at all.

Tracy understands the resulting stress and anxiety that can stem from the pressures of posting on social media compared to typical media outlets due to the lack of policing around comment sections:

With social media, the comment section is for everyone, like everyone, and anyone can comment, whatever they like, and there's no boundaries for it. So that definitely causes a lot of anxiety and stress for people who maybe might not be performing well in sports, getting the brunt of it is pretty shit.

Although most of the athletes associated pressure with negative outcomes, comparatively some athletes recognised that in certain situations pressure from social media can be a positive for their sporting performance, often fuelling them to perform at a higher level. Josh acknowledges this and that being a high-performance athlete you must be able to manage both:

Not all of it [pressure] is bad. Knowing that everyone's watching, I'm like, this is my chance to show everyone back home that the training I did was worth it, and I have earned the spot, and that we are one of the best teams in the world. So, as I say, there's positives and negatives to both.

#### **4.4.3 Control**

This theme represents the participants' experiences of feeling both in and out of control when using social media. Participants reported that they felt most comfortable when they were in control of their social media use and the resulting outcomes. However, a recognised consequence of using social media is that it can be unpredictable and uncontrollable, which has led to participants' wellbeing and performances being affected.

Brenda recognised control as being one of the biggest factors of her social media use, from the initial thought process, right through to the actual posting of the media. She comments:

I like being in control, being the person who's typing it. So, from the moment it's thought of, or edited or put in, it's what I've intended to go out, and definitely with photos and videos and stuff. It's sort of I know what's happening before it happens as well.

She began to have more of a focus on social media control due to the fact that previously her interviews and stories had been misinterpreted or taken out of context when someone else was responsible – a common problem within traditional media outlet reporting:

At least if I put something out, and it's interpreted wrong, it's because of what I said, it's not what someone else has said, it's more controllable and it's your fault if it goes wrong.

Josh has felt that his experience with social media control has been both positive and negative and are typically associated with his interpretation of being in control, he places importance on his awareness and attention when using social media:

I've been that guy who has let it affect me in a bad way and I've let it affect me in a good way. When I was doing it the good way, I was in control, I was in control of what I was consuming. There are still times where I end up watching some Chinese guy building a swimming pool at three o'clock in the morning or something like that. But then, most of the time I was you know, conscious and aware and in control of the media that I was consuming.

However, he found that being totally in control of your own social media is not always a foundation for success:

I think 80% yes [in control], and 20% [not in control]. Because that 20% can still be its own thing and actually be positive, like, if you let it do its own thing it can blow up, and it can just do something that you never expected it to. But I do like to be in the majority of kind of, like, keeping it safe, but also taking the risks necessary to, because you have to take risks to be successful. I feel like you have to find the right balance.

Josh found that with his experience with social media being in control meant that opportunities (e.g., sponsorship) were sometimes lost, and that it is important to take risks on social media to help grow your profile and reach. The unpredictable nature of social media was highlighted by the participants and is one the reasons why many high-performance athletes tend to stay away from their phones on key competition or event days. Stacey said not being on her phone helps her manage distractions and stay in control, particularly before a big race or competition:

I can't control what is going to pop up, I could suddenly see a party that I'm not at, and I probably would feel a little bit left out even though I know that in that moment, it would just distract me. Or someone might be messaging me about something that might make me feel some sort of emotion that isn't happy, for whatever reason, it could be. I'd rather stay like a bit more in control of my feelings and emotions right before the race. Like I would only reply to friends that are like super close. Or I like kind of know where the conversation's going.

Tracy found that controlling her usage on social media helped manage the consequences (e.g., anxiety, stress, negative wellbeing) that had arisen from her platforms:

It used to be really, really bad. I used to be on my phone like 12 hours plus, now it is just like six to seven. I just wasn't sleeping properly, and it obviously wasn't helping that I was on social media and that's just wasted time ... I'm being more structured with how I use my social media now. I only go on social media now to interact with

my real close mates. Otherwise, I don't really care about scrolling on social media for other benefits, besides what benefits me.

Having this control leads to more positive outcomes for her mental health and wellbeing, helping to make her social media experience much more positive:

Being able to control how I view my own social media platforms gives me a sense of security. It also lessens the amount of anxiety I have knowing that that I have hidden/muted or unfollowed certain accounts that may trigger my mental health. At the end of the day, I am the one who has control on how I receive and participate with social media. So, it's my responsibility on how to handle these platforms to ensure my mental health isn't affected.

Overall, the results from the thematic analysis have identified two key overarching dimensions: *social media use by athletes* and *consequences of social media use*. The analysis found that athletes use social media for: *connection, improvement, and motivation*. Additionally, there were three identified broad consequences of such use, which included: *body image, pressures, and control*. The next chapter will discuss these themes in the context of the three aims of the study and highlighting their contribution to the literature.

## Chapter Five

### Discussion and Conclusion

This chapter discusses the study's findings. It begins with a brief overview of the research aims and objectives. Next, findings are considered in relation to the extant literature that was outlined in Chapter Two. Finally, limitations of the study are outlined, and some final recommendations are offered.

#### **5.1 Research purpose**

The aims of this study were threefold; (i) to understand why New Zealand high-performance athletes use social media, (ii) to understand how their use does or does not impact upon their sporting performance, and (iii) to examine how their use of social media impacts their wellbeing. In New Zealand, health is recognised as a factor of optimal performance; however, the variables which govern health and performance are not fully understood (Heather et al., 2021). This, coupled with increasing concerns around the relationship between athletes and social media, has led to more research attention exploring the potential negative impacts of social media (David et al., 2018; Encel et al., 2017). However, as social media continues to evolve, research exploring this area within New Zealand is at risk of falling behind. As a result, this study was carried out to help fill this gap in the literature and to provide a foundation for future research and developments. Furthermore, the findings are discussed with links to the current literature to highlight their significance as well as implications for theory and practice.

#### **5.2 Research Question 1**

The first aim was to greater understand how high-performance athletes use social media. The results from the analysis of the participant responses uncovered three themes related to social media use; these were connection, improvement, and motivation. Uses and gratifications theory and self-determination theory were used to help understand and contextualise athletes' uses of social media. These themes provide new insights into athlete social media use, whilst also corroborating with previous research within this area (e.g., Billings et al., 2017; Hambrick et al., 2010; Pegoraro, 2010). Essentially, these themes captured reasons why athletes within this study chose to use social media.

### **5.2.1 Connection**

The theme of connection in this study reflected the participants' uses for social media with regard to the development and maintenance of relationships. This included the patterns of familial and friend relationships that were maintained through social media, and relationships with people that they "followed" on social media platforms. Hambrick et al. (2010) found that the sharing of stories and other non-sporting related information with friends and family was a main theme of social media use with their sample. In the current study, a few athletes chose to share these stories publicly through athlete pages (e.g., Instagram), preferring to use athlete pages due to convenience as all the information can be accessed and responded to on one platform, rather than having to update everyone individually. Reinforcing the findings of Hambrick et al. (2010), research where most athletes prefer to have direct and timely communication with their fans and family. It also reinforced the ability for athletes to have unfiltered communication and personal or at least direct communication with their fans, which is not found via typical media outlets (Hambrick et al., 2010; Pegoraro, 2010).

Such direct and unfiltered communication was particularly relevant when traveling as many of the athletes recognised that it was important for them to keep updating their followers on their progress and achievements whilst away from home. This type of interactivity is unique to social media as it provides a platform for followers to engage in personal exchanges regardless of the proximity to the athlete (Browning & Sanderson, 2012; Hambrick et al., 2010). Furthermore, when contextualised for travelling, Browning and Sanderson's (2012) research is supported, as they found that connection is one of the major reasons why athletes use social media. Social media also allowed them to keep in touch with current events back home which kept them grounded and gave them a sense of connection. Both Hambrick et al. (2010) and Ruggiero (2000) also found that it was important for athletes to use social media to keep this connection with others. Although the positive aspects of connections are widespread and understood, a significant finding in this study was that athletes did find it difficult to maintain these connections overseas as the constant managing of their social media became tiresome and difficult. Negative associations with connections on social media is an area which requires more attention, however in a recent study conducted by Guerin (2017), connections can sometimes pose challenges for high-performance athletes on social media. These challenges can include unwanted messages and abuse, with some struggling to escape from it due to the prominence of social media in current society (Guerin,

2017). Findings in this study do support the presence of negative associations with connection on social media, however the athletes did not mention that they were subjected to the severity of such examples in Guerin's (2017) research. Regardless, in a general population study that investigated the impact of constant social media engagement in study-abroad students, common themes were found that suggested that overuse can deprive individuals of experiencing the environment and culture around them, reducing engagement and appreciation of the experience (Wooley, 2013). Although, the experiences of athletes may differ, it is suggested that the same themes could be translated across samples due to the pervasiveness of social media and technology and the value placed on its existence in our lives (Wooley, 2013).

Some athletes preferred to share their experiences and updates with others on their own private pages or platforms. The private sharing of experiences was mainly through closed messenger applications (e.g., Facebook messenger), as it provided a platform for quick and easy access. Being a high-performance athlete, these individuals often do not have the affordance of time to provide lengthy updates to fans and family. As a result, the findings from one study would be difficult to translate into a content analysis as it would not capture the full sample (e.g., Hambrick et al., 2010). This connection also extends to finding sponsorship, and places athletes central to the development of economic benefit through social media. The findings in this study further highlight previous research in this area that has investigated the role that social media plays connecting athletes with potential sponsors (e.g., Guerin-Eagleman & Burch, 2016; Karg & Lock, 2014; Lebel & Danylchuk, 2012). Many of the athletes acknowledged that being classed as high-performance in New Zealand does not necessarily translate into receiving meaningful economic help, therefore there is often a reliance on sponsorship. The impact of sponsorship is highlighted in previous research (e.g., Guerin-Eagleman & Burch, 2016; Lebel & Danylchuk, 2012), and with the relevance of its presence in many social media research studies, it is evident that it is a crucial factor in reaching and sustaining a high-performance career. Taking advantage of social media to promote and generate publicity is key for the athletes as online creation tools helps to grow their awareness and personal brand to attract sponsors who can help support their sporting goals (Eagleman, 2013). For many, without sponsorship, the economic support that high-performance athletes receive, particularly within New Zealand, is relatively low and the connection that social media provides to potential sponsorship is a vital part of athletes reaching their sporting goals.

Social media also facilitated the athlete-athlete connection, with many of the athletes using social media to follow other athletes' journeys and have a vicarious experience through them. They sought out this connection through social media to find comfort in sharing the experiences with others, and for confirmation that they are not alone in their struggles. This extends the findings of David et al. (2018) on athlete use on Twitter, with her research providing evidence that social media use facilitates shared experiences and the acknowledgement of effort between teammates. Similarly, this shared experience extends to other athletes not necessarily in their immediate circle or team, referencing their opponents' progress as one of the main reasons why social media is useful for athletes (David et al., 2018). This understanding of other athletes' experiences also relates to relatedness, one of the basic psychological needs highlighted within self-determination theory.

Due to the nature of high-performance sport and the commitment which arises from it, athletes tend to be perceived as separated from general society due to aspects such as the role model status and exemplarism (Feezell, 2012). As a result, general understandings of their lives and experiences can become misunderstood or misrepresented in daily life and speaking about such experiences to those who are not within high-performance settings can increase the risk of alienation and threaten self-expression – as does speaking out against issues such as mental illness and discrimination (Rice et al., 2016; Sanderson, 2018). Hence, when athletes are able to see other athletes experiencing similar challenges, they may feel a greater sense of relatedness, feelings of belonging are heightened, and a sense of community is created (Deci & Ryan, 2011; Eagleman, 2013). These feelings are also shared with close friends and family, where the need to be cared for and trusted help facilitate relatedness, which ultimately nurtures motivation (Deci & Ryan, 2011). Seeing the journeys of others in similar positions helped the athletes within this study to contextualise their own experiences, with some athletes speaking to injuries, eating disorders and mental health struggles. Many of the athletes commented on their own role in helping to normalise such issues and believed that their platforms could be used to help incite change within sport and begin conversations around such important issues. David et al. (2018) suggested that Twitter is a useful platform through which athletes can spread positive messages, with some athletes in this study suggesting that they use social media to help promote positive attitudes around mental health.



### **5.2.2 Improvement**

Another identified use of social media by high-performance athletes in this study was improvement. Using social media to facilitate improvement contained two important aspects highlighted by the participants, the first was to help improve their mental health, with many highlighting the role of mindfulness, and second, to help improve skill acquisition. Many of the participants acknowledged that social media is a useful tool which helps with the sharing of mental health information. This sharing of information through social media is one of the recognised benefits of its use in both general and athlete populations, and the current study's findings contribute to already established research (e.g., Eagleman, 2013) in this area. Some athletes in this study found that referring back to mindfulness information gathered from social media has helped manage their mental health struggles and will sometimes improve motivation to train. As a result, this acquisition of knowledge helps to reinforce the dimensions of self-determination theory (Deci & Ryan, 2017). The findings suggest that it is plausible that mindfulness resources from social media could help nurture feelings of autonomy, competence, and relatedness. Autonomy could be achieved through the ability of the athlete to regulate their own experiences and actions, where their mental health and wellbeing can be managed through mindfulness resources gathered from social media. Competency allows the athletes to be responsive to their environment, where they are able to recognise potential risks which could influence their mental health, and therefore act. Relatedness can be felt through a sense of belonging when using resources gathered from social media via others, which helps to reinforce the feelings of being cared for and understood by those in similar positions.

An advantage of social media recognised by some participants in this study is the ease of access to mindfulness resources that social media provides. They acknowledge that they leverage social media to help improve and manage their mental health. This reinforces findings from Naslund et al. (2017) which acknowledged the potential of social media to share important information with individuals who may be experiencing mental health challenges. Mindfulness-based interventions have also been shown to be an effective method of reducing stress and improving wellbeing in athletes (Shannon et al., 2019). The results from this study suggest that social media was a useful tool for some of the participants in the management of their wellbeing through mindfulness resources. This study also found that athletes use social media as a resource for improving knowledge and self-efficacy around their sport, which is consistent with earlier research (e.g., David et al., 2018). Many of the

athletes in the current study mentioned that they use social media to help supplement or even create workouts for their sport, often these workouts will be representative of areas that the athlete deems to be lacking. This directly relates to the psychological need of competence highlighted within self-determination theory.

It is important to note that not all knowledge improvement was around their sport, rather social media was useful for other general life aspects which they have recognised as having low self-efficacy in (e.g., makeup and hair). Improving nutritional knowledge was also recognised by some and helps to support the previously established links between social media and nutrition in high-performance athletes (e.g., Bourke et al., 2019; Solly, 2022). These findings contribute towards the need for management and improvement of self-efficacy within high-performance athletes and how social media can be a platform for growth. However, David et al. (2018) and Gorrell (2018) found that interactions with social media can have both positive and negative impacts upon self-efficacy and improvement within athletes. Gorrell (2018) in particular found evidence that social media usage has the greatest impact upon athletes' self-efficacy, and that although usage is not necessarily unhealthy it is how the athlete interpret this information and use it which has the most impact. This suggests that athletes need to be aware of such risks, which could include training in social media use, so that it does not reach a dysfunctional level, or, ideally, it contributes positively to performance (Gorrell, 2018).

### ***5.2.3 Motivation***

Participants recognised that using social media could nurture motivation. Comments suggested that seeing teammates or competitors on social media often elicited motivation to improve and compete at higher levels. This reinforced current self-determination theory research (Ryan & Deci, 2000) within this area as it relates to the motivation continuum discussed in Chapter Two. Within this particular study, social media is an external influence that, for some, increased extrinsic motivation. Some participants recognised that social media, although being an external influence, nurtured self-determined forms of extrinsic motivation; for instance, the desire to improve in their sport – recognised as integrated regulation. However, the findings in this study showed that the participants found that their motivations to compete and improve was initially governed by ego-involvement (the desire to be better than other athletes) – introjected regulation. Therefore, in this case it is suggested that the motivations that guide these athletes on social media are formed through multiple dimensions

of the motivation continuum, from the ego-involvement (introjected regulation) through to integrated regulation (congruence), and that the aspects which govern each form of motivation are shared.

Changing of motivations were also seen throughout this study as the athletes recognised that being motivated by social media had negatively impacted their wellbeing, initiating this shift to a more congruence form of motivation. As previously mentioned, this changing of perspective was due to ageing and maturing alongside social media and being able to see the negative impacts it had on their lives. Whilst others it was a change in routine, which included having children or reducing excessive daily time spent on social media. Integrated regulation is recognised in previous research as being the most autonomous or self-determined form of extrinsic motivation as the integrations (i.e., values and needs) have become assimilated to the self (Ryan & Deci, 2000). This means that when the regulator (e.g., seeing a relevant sports post on social media) aligns with their values and needs, it breeds motivation, in this case regarding improvement and competition. Although integrated regulation shares some characteristics with intrinsic motivation, it is still considered extrinsic due to outcomes being separate from the activity itself (i.e., inherent enjoyment of participation) (Ryan & Deci, 2000).

Further findings in this study support this type of motivation, with some participants highlighting that when motivation for sport was low, seeing others competing helped them to stay committed. Athletes also acknowledged that a key determinant of their motivation was feelings of low self-efficacy, which was fuelled by constant comparisons being made on social media, a common theme which was present across previous studies on self-efficacy and competency in self-determination theory (e.g., David et al., 2018; Deci & Ryan, 2017). This low self-efficacy provided reasons for the athletes to train and improve and is consistent with findings within Mallett and Hanrahan's (2004) study, where although motivation was not driven by the inherent enjoyment for the sport, it was mediated by recognising that hard work and commitment are common building blocks for achieving success – identified as integrated motivation.

This inherent need to be better than others can be a strong driving force for high-performance athletes; for many, it is in their nature to be competitive. For some, the threatening of their self-efficacy directly relates to self-determination theory and the basic

need to feel competent. The need for competency motivates individuals for achievement and to face appropriate challenges that satisfy this (Mallet & Hanrahan, 2004). In the context of this study, it places the athletes central to their own growth and development which results in the facilitation of integrated regulation. Through the experiences described by the athletes in their undertaking of challenges to improve because of their social media use, the athletes within this study demonstrated integrated regulation and as a result satisfied their need to be competent in their ability to perform at a high-performance level. Similarly, some athletes in this study exhibited characteristics of introjected motivation – motivation which is regulated by ones' need to demonstrate ability for ego-based reasons (Ryan & Deci, 2000). Athletes exhibited such behaviours when exposed to other athletes on social media, where they felt threatened by their performance or results and needed to be better. Once again, demonstrating the inherent need for high-performance athletes to be competent in their sporting ability, but grounded in a different type of motivation.

Athletes can be classed as 'ego-orientated' or 'task-orientated' performers. Ego-orientated performers link outperforming others to their self-worth and perceived ability (Dweck & Leggett, 1988), whilst task-orientated performers are driven by the learning and mastery of new skills or improvement of current skills (Mallet & Hanrahan, 2004). Both of these orientations were present within this study and were consistent with tenets of self-determination theory. Findings in this study supported ego-orientated focuses where the perception of ability or success is based on their comparison to others (Mallet & Hanrahan, 2004). Whilst task-orientated athletes focussed on improving one's skills through learning and development (Mallet & Hanrahan, 2004). Research supports ego-oriented performers as having decreased intrinsic motivation, and increased extrinsic motives in sport, whilst task performers demonstrate the opposite (Whitehead & Duda, 1998). However, it is plausible that the findings of this study could suggest that both are required to help form the foundations of a high-performance athlete and being driven by intrinsic motivation, although preferable for overall wellbeing, is simply not enough to be self-determined. For example, athletes within this study were highly driven by goals of achievement, they were focused on performing to the best of their ability (i.e., task goal), and also defeating their opponents (i.e., ego goal). Furthermore, the work of Roberts (2001) summarised that both ego- and task-involvement might be necessary for success in high-performance sport.

Athletes within this study also recognised the harmful impact that social media can have on their drive for success in their sport. The risk of becoming obsessive with other competitors was labelled by one participant as being “toxic” and that relying on social media to be a motivator is not the most appropriate or healthy pathway for a high-performance athlete. These findings relate to self-determination theory and the promotion or undermining of intrinsic motivation. How the athlete perceives the source will influence its effect on intrinsic motivation, with controlling sources (i.e., external causality) decreasing self-determination experienced and undermining intrinsic motivation (Mallet & Hanrahan, 2004; Ryan & Deci, 2000). Some participants in this study recognised such undermining of intrinsic motivation and the findings highlighted that although their use of social media was an external influence on their motivation, it is inherently better to be self-determined; mediated by values and goals of the athlete (i.e., integrated regulation).

Competitive and high-performance sporting environments are typically characterised as being hyper-focused on winning and ego-promotion which is associated with a decrease in intrinsic motivation (Mallet & Hanrahan, 2004; Vallerand et al., 1987). The results in this study seemingly support these findings; however, the main form of motivation demonstrated by the use of social media presented in the results is integrated regulation, which shares similar qualities to intrinsic motivation, therefore it is difficult to completely support the connection. Furthermore, Ryan and Deci (2000) stated that as an individual begins to internalise these regulations, greater autonomy and awareness is established, which would assume that as the athlete continues to align their values and needs, the internalisation of motivation is also established and developed. Hence, due to these findings, it is suggested that as the athlete becomes more aware of the impact of social media on their motivation, internalisation of motivation begins to be established. Such examples were seen within the changing motivations section, where athletes began to be more aware of the impact that social media had on their posting habits, expectations and ultimately, their motivations for their sporting performances. Subsequently, this creation of awareness shifted the motivations of use to a more grounded and authentic viewpoint, which was then reflected in their social media platform activity and opinions on motivation.

This shift in motivation is reflective of the athletes’ experiences of social media as they progressed through their careers and is a novel finding. Research within this space is limited, with no other known studies having explored the dynamic nature of motivation for

using social media as a high-performance athlete. Athletes found that their sporting experiences were impacted by their changing values and perspectives of social media. Many felt that a self-assessed overreliance on technology and resulting social media was the biggest factor in their changing attitudes and motivations towards their social media use. This study argues that the cause of these attitudes towards social media was due to a shift their motivation, and overall orientation of the athletes. Many of the athletes found that their experience with social media changed as they realised that social media was not as authentic as they initially thought. Future research should examine if athletes perceive any changes to their motivations for using social media over time, rather than just their general social media use.

### **5.3 Research Question 2**

The second aim of this study was to identify the resulting effects of social media use in high-performance athletes. Self-presentation theory, self-determination theory, and distraction-conflict theory were used to contextualise the findings and, as such, greater understand the consequences of social media use in high-performance athletes in this study. The results from the thematic analysis uncovered three themes related to the consequences of social media use, including body image, pressures, and control. These themes provide new insights into athlete social media use, whilst also corroborating with previous research within this area (e.g., Bartholomew et al., 2011; Tamminen et al., 2012; Torstveit et al., 2008).

#### **5.3.1 *Body image***

Many of the athletes highlighted the impact that social media use had on influencing trends of comparison, and, for many, this involved an emphasis on body image. Negative perceptions regarding body image were described by all female participants in this study. Research which has investigated the differences in perceptions of body image in females between athletes and non-athletes has found that non-athletes tend to have greater body dissatisfaction (e.g., DiBartolo & Shaffer, 2002; Robinson & Ferraro, 2004). None of the male participants in the study identified body dissatisfaction as a consequence of their social media engagement. Interestingly, previous research (Galli & Reel, 2009; Krane et al., 2005) that investigated male athlete perceptions on body image found that they are relatively happy with their bodies, and that they have confidence in their bodies for athletic performance. However, studies have also suggested that the greatest differences in body image dissatisfaction in athletes are

directly related to the particular sport engaged in, and athletes that participate in sports that emphasise the “lean” or “thin” look are particularly vulnerable (e.g., distance runners, gymnasts, ballet dancers) (Byrne & McLean, 2002; Hulley & Hill, 2001). It is important to recognise these findings in the context of this study as they help to contextualise and understand the lived experiences of the athletes.

High-performance athletes often have to contend with a range of different adversities. However, findings in the current study highlight issues that are not directly a result of sporting achievement or goals, rather issues that impact body image act upon those athletes due to the influence of social media. The influence of social media on body image, particularly within high-performance athletes, is substantial (e.g., Fardouly & Vartanian, 2015; Galli & Reel, 2009; Hausenblaus & Symons Downs, 2001; Rice et al., 2016); however, previous research within this area has found it difficult to produce a generalised outcome which shows that social media has a negative impact on body image for athletes. Some research (e.g., Fardouly & Vartanian, 2015) has shown that social media does have an impact on body image between athletes and non-athletes, whilst others (e.g., Rice et al., 2016) produced inconsistent findings. Furthermore, Hausenblaus and Symons Downs (2001) showed that athletes tended to have better body positivity than non-athletes. Regardless of current research, the findings in the current study support the presence of a significant link between body dissatisfaction and social media, specifically in females. Participants also reported greater body dissatisfaction when they spent more time on social media, commenting that the more time that they spent on social media, the more the comparisons would occur, and the resulting negative thoughts of body image. Fardouly and Vartanian’s (2015) found that correlation studies did show this relationship; however, experimental studies did not show any correlation between brief exposure of social media and negative body concerns in young women, rather it was suggested that this relationship does strengthen over time and longitudinal studies are required to accurately determine the nature of this relationship.

The presence of body dissatisfaction was a big indicator of anxiety within this study and was consistent with other research patterns in both athlete and non-athlete samples (e.g., Rice et al., 2016; Wilson et al., 2013). Rice et al. (2016) found that athletes who participated in typically “lean” body type sports (e.g., swimming, distance running) were more vulnerable to anxiety and mental illness. In comparison, the findings from this study supported the

prevalence of body image issues within sports that were typically less “lean” dominant (e.g., basketball), and athletes saw themselves as not fitting the “norm” for typical female athletes presented on social media. As a result, the athletes in the current study associated the “lean” or “slim” women as the typical “athlete-body” due to their presence within sports that do not perpetuate societal expectations of this ideal “athlete-body”. Interestingly, athletes also found that they felt confident and comfortable in some settings, but not in others, based on what they felt was encouraged within each particular environment. These findings suggest that perceptions of body image could be sport-specific and influenced by societal and sporting norms associated with each sport. Furthermore, female athletes in particular are more at-risk of experiencing anxiety, mental illness, including eating disorders, which was consistent with non-athlete population findings (Hudson et al., 2007; Terry et al., 1999).

The association of body image with the “lean” and “slim” women in high-performance sport has also impacted upon the way the athlete’s posted on their social media, with some refusing to post at all unless they felt they were “in-shape” or feeling and looking good. These findings extend knowledge within self-presentation theory and provide evidence for its relevance towards high-performance sport. The motto “look good, feel good, play good” (used by one the participants) places self-presentation theory centre in the lives of these high-performance athletes, both in real-time and on social media. Due to the constant need to self-present appropriately to audiences the findings show that athletes will reduce their posting patterns on social media if they do not “look good” or “feel good”, as it could endanger their typical athlete categorisation (Dimmock et al., 2020). The halo effect provides reasoning for avoiding participation on social media platforms when their identity feels threatened. Due to this strict management of their social media posting patterns, social comparisons tended to occur, and in the context of these findings, body image dissatisfaction. Resulting from this form of social comparison, negative psychological outcomes can occur, including lower self-esteem (Buunk et al., 1990; Vogel & Rose, 2016) and negative self-evaluations (Cash et al., 1983). Consistent with previous research, the female participants in this study appeared to be more negatively affected by pictures posted by others, more at-risk of comparing their bodies, and this in turn predicts negative effects from such comparisons (Fox et al., 2016). These effects include experiencing stress and anxiety related to self-presentation, with previous research indicating that focussing upon self-presentation can be associated with such outcomes in sport (Williams et al., 1999; Wong et al., 1993).



Body image dissatisfaction was also present in the postpartum period for one of the athletes. This offered a unique insight into the role that social media plays in postpartum time periods in high-performance athletes. As there is no study to date that explores this relationship in high-performance athlete, the findings are compared to non-athlete populations, where the findings from this study support negative associations with postpartum and body image and are consistent with previous research in this area in non-athletic populations (e.g., Hartley et al., 2018; Roomruangwong et al., 2017). Although this research did not explicitly explore the effects of social media on body image during postpartum, this research hopes to illuminate the opportunities for research in this space, particularly with the increasing prevalence of female athletes returning to sport post-pregnancy. Similarly, body image dissatisfaction was also associated with injuries and returning to sport post-injury. Typically, these acute transitions can be attributed to issues with eating disorders as athletes try to adapt to a new regime when managing an injury (Buckley et al., 2021). Eating disorders, whilst an important contributing aspect to body image dissatisfaction, was not exclusively investigated within this study, but is an important avenue for future research opportunities in New Zealand high-performance athletes.

Although all female athletes within this study recognised the impact of social media on their body image, they also highlighted the importance of changing trends on social media. For example, there was evidence to suggest that returning to sport after an injury showed dimensions of increased self-determination through relatedness, as the athlete saw in others that change to their bodies was a normal part of being an athlete. Seeing the experiences of other athletes in similar positions to themselves created feelings of connectedness and produced a sense of belonging. Supporting evidence from Podlog and Ekund's (2019) study found that returning to injury supports stronger feelings of self-determination. Regulating and experiencing self-determination is associated with greater psychological outcome and wellbeing (i.e., self-esteem and positive affect) and was seen within gymnasts (Gagne et al., 2003). However, the sample size for recognising this effect in the current study was small, therefore the generalisability of the results to other athletes may be limited. Many of the participants recognised that narratives around body image have started to shift to more accepting and healthier outcomes; however, some still recognised the presence and promotion of unhealthy eating habits on social media, which is-line with recent research (Culbert et al., 2015). Athletes also recognised that their own personal perceptions had also changed due to their age and changing motivations regulating their social media use. Within the high-

performance space there is no past evidence that suggests that body image perception changes over time for athletes whilst in their careers. However, in a recent study which focused on body image in recently retired athletes Hardie et al. (2022), found that former athletes need to reevaluate what a “normal” body is for them, including their “healthy” and “unhealthy” perspectives. Furthermore, issues of body image do begin to occur in areas outside of sports for these women through upwards comparisons, which if they view themselves as once having the “ideal” body, creates feelings of guilt and negative emotions due to the perceived “failure” of not maintaining this body (Galli et al., 2022; Hardie et al., 2022; Stirling et al., 2012). In comparisons to athlete populations, there is evidence that supports the stability of body image over time in women. Tiggemann (2003) found that across the adult women’s life span their perception on body image tends to stay relatively stable. Evidence from the current study does begin to support such claims, however this is an area which requires further research in both athlete and non-athlete populations.

### ***5.3.2 Pressures***

Another consequence of social media use identified by the athletes was the presence of pressure. Two forms of pressure were discovered to be acting upon the athletes due to their experience with social media, these were classified as external and internal pressures. External pressure was the most common and was created when participants viewed social media as a platform that encouraged competition, comparisons, and posting. Internal pressure manifested through the participants’ own insecurities or expectations, often triggered or exacerbated as a result of social media use.

Social media has been identified in this study as an external pressure which can influence body image and self-presentation. This pressure has also been described by athletes in this study as a comparison tool, whether this be viewing competitors’ results or comparing athletic ability. Findings from previous studies suggest (Gruder, 1971; Zell & Alicke, 2010) that the most significant comparisons occur when the target individual is similar to that of the perceiver, including traits such as gender and age. It has already been established that viewing other people on social media often produced motivation to improve and compete at higher levels. This supports current self-determination theory research (e.g., Ryan & Deci, 2000), where the influence of others on social media creates introjected regulation. In this instance, social media is considered an extrinsic motivator as a result of the findings in this study. The comments from participants in this study suggest that comparative tools are useful in

facilitating motivation, however, it can create underlying pressure to perform and to conform to social pressures.

The relationship between social media use and comparisons was once again seen within this aspect of social media use, with athletes commenting that the more time that they spent on social media resulted in more opportunities for comparisons to occur. Athletes mentioned that the pressures presented by social media offered both positive and negative aspects, where it helps to keep them focussed on their goals but could also produce fear of missing out (FOMO) – social media is posed as a distraction within this space. This FOMO was present in this study and relates to research which is aligned with distraction-conflict studies (e.g., Baron, 1986; Blascovich, 2002). The distraction of social media has led to multiple attentional conflicts within these athletes and has created pressure to not only perform but to ensure that they are active in the social media endeavours. There was no evidence to suggest that when social media was identified as a distraction for these athletes it caused any cognitive overload, which is one of the main concerns with attentional conflicts suggested in previous research (e.g., Brooks et al., 2017). Regardless, the findings from this study do suggest that anxiety and stress are present when they are subjected to sustained social media use, due to other factors such as social comparisons.

The pressure of not only having to post on social media but to ensure that what they were posting aligned with social norms, not only highlights aspects acknowledged within self-presentation theory, but also shows signs of decreases in autonomy. This decrease in autonomy is linked to concerns and expectations around the evaluations and judgements of others on social media, which pressures the athletes to act in a certain way (Ryff & Keyes, 1995) and therefore reduce overall self-determination. This pressure may have been a result of conforming to certain social norms, as research (e.g., Billings et al., 2017; Fathy et al., 2021) has found that athletes have far better engagement and interactions with fans if their behaviours align. Oppositely, someone who is not concerned by the judgement of others and is able to resist social pressures is considered as having higher autonomy and greater self-determination (Ryff & Keyes, 1995). These findings also highlight the importance that athletes place on their self-presentation when using social media. The pressure to present oneself appropriately to audiences on social media reduces feelings of autonomy for these athletes and may explain why some of these athletes avoid posting on social media or take a hiatus from social media altogether.

When the psychological needs outlined in self-determination theory are not met, deterioration to one's wellbeing occurs, which can include antisocial behaviours and feelings of unhappiness (Ryan & Deci, 2017). The desire for higher autonomy in their social media use was expressed by athletes in this study, with some stating that they had already or were beginning to implement more ownership in their social media use patterns to help with the management of the mentioned risks in this study. Although athletes did not openly discuss relationships with High Performance Sport New Zealand or National Sporting Organisation's, it was implied that they were conscious of the guidelines related to social media that were associated with being a high-performance athlete under these organisations. This could have increased pressures around posting on social media due to these concerns which was recognised by Hughes and Coakley (1991) as being typical of high-performance sporting culture norms and values. Ryan (2018) found that within New Zealand's high-performance athlete population, excessive conforming to these norms and values can lead to imbalances in power relations and places them as a compliant participant, negatively impacting their identity. Consequently, the athletes' levels of autonomy diminish as the social and cultural practice of conforming fosters inequitable power imbalances and dissociates the athlete from being able to manage their own social media experiences. Furthermore, Maguire (2004) suggested that these power imbalances enforce the athletes lack of control over their own sporting experience. Findings from this study provide further evidence for the efficacy of utilising self-determination theory and self-presentation theory as frameworks for conducting research exploring high-performance athletes and their social media use.

Athletes felt pressure when posting on social media due to their perceived role model status in their sporting communities. Although the athletes did not state that the pressure negatively impacted them, they still felt external pressure to ensure that what they posted on social media was appropriate for their following and wider community. This follows trends in research which show that athletes strive to portray themselves in a positive light when on social media (e.g., Dimmock et al., 2020; Guerin, 2017; Kovacs & Doczi, 2020; Lebel & Danylchuk, 2012), and in research which has found that athletes are some of the most prevalent role models in our society (e.g., Edgar, 2021; Reid, 2017). Athletes also saw that their profiles needed to be moderated due to their younger and more impressionable audiences. This supports the research by Ronkainen et al. (2019) which identified that athlete role models play a major part in the development of adolescent identities and future careers.

This type of moderation potentially related to all aspects of self-determination theory; for example, autonomy was upheld through the evaluation of the self by their personal standards of presentation on social media, feelings of competency were recognised through their ability to relate to the environment around them and feeling socially connected created a sense of relatedness, and therefore, a sense of belonging within the sporting community. It is important to recognise that although the three dimensions of self-determination theory appear to be satisfied, there is still a risk to autonomy present. As the athlete is upheld to the evaluation of the self by their perceived role model status, it is possible that they begin to change and filter their “true” self in accordance. This is in line with previous research conducted by Guerin (2017), which found that when athletes interact with certain audiences on social media, they are held back from presenting their “true” self as they are aware of the importance of self-portrayal. Additionally, Guerin (2017) also found that audiences will contribute to the pressures felt by female athletes to post certain things on social media, for example, sexualised images. Although there was no indication that this type of pressure was present within the current study, these types of pressures felt by athletes because of social media indicates the immense power that audiences have on these platforms, and the influence they have on their self-presentation and self-determination. The findings from this study also suggest that the athletes strive for a balance between their role model perception and their “true” self, whilst also demonstrating that social media has the potential to support and neglect the basic psychological needs described within self-determination and self-presentation theory.

A surprising relationship was found between internal pressure regarding social media and help-seeking behaviour. As a population, high-performance athletes are more at-risk of developing mental health symptoms due to aspects such as overtraining and injury (Reardon et al., 2021; Schinke et al., 2017). This study found that social media produced feelings of anxiety and negative influences on wellbeing for the athletes due to the pressure of posting, the reception to these posts, and the pressure to conform to the perceived norms (e.g., role model status) associated with social media platforms. Furthermore, the findings also support that many of the athletes found it difficult to express these feelings to friends and family due to the way they were portrayed on social media, particularly when they were away from home traveling or competing. Which could potentially diminish the relatedness aspect of self-determination theory. This supports Gardner’s (2001) and Beauchemin’s (2014) research where they found that, at the time, athletes were still afraid to use support networks

(including trained mental health practitioners) due to stigma and misunderstandings. This stigma is perpetuated due to feelings of weakness and failure around recognising potential issues with mental health in high-performance athletes (Bär & Markser, 2013; Gavrilova & Donohue, 2018). Findings within this study support this stance as the athletes were inadvertently enforcing this stigma due to their reluctance to use support networks as a result of their portrayals on social media. Both Gulliver et al. (2012) and Rice et al. (2016) recognised that understandings of mental health and its impact upon performance within athletes is an area of deficit within research, therefore it is difficult to provide definitive conclusions and generalised assumptions for mental health across high-performance athletes.

When compared to the rest of the world New Zealand athletes seem to be more open to visiting a sport psychologist and did not recognise any perceived stigma that is generally associated with mental health support (Anderson et al., 2004). Furthermore, Anderson et al (2004) research also supports previous research (e.g., Sullivan & Hodge, 1991) conducted with New Zealand athletes which supported positive attitudes towards receiving support from a sport psychologist. However, low response rates within these studies show that it is difficult to generalise these results to larger athlete populations within New Zealand. Furthermore, these studies, largely due to their age, did not acknowledge the power of social media on influencing such attitudes, rather it supports the need to update such research in New Zealand athlete populations. Therefore, it is evident that this is an important area which requires attention, with a particular focus on improving our understanding of how social media impacts wellbeing and also attitudes regarding help-seeking.

### ***5.3.3 Control***

An additional theme regarding the impact of social media was control. This feeling of control, or lack thereof, was a significant outcome resulting from social media use. High-performance athletes tend to follow strict routines and training regimes which is part of what makes them so successful. For many, using social media is also a regular activity; unfortunately, due to the unpredictable nature of social media this use can lead to various unintended consequences. Athletes in this study sometimes felt a loss of control when using social media, conversely, they reported that they felt most comfortable on social media when they felt that they were in control of their social media use and were able to facilitate positive outcomes.

Athletes felt that being in control of their own social media experience meant that they were able to ensure that what was shared publicly was truthful and representative of their views and values. Many felt this way due to previous negative experiences with untrustworthy sources or misinterpretation. This extends Guerin's (2017) findings which saw athletes reconsidering their social media posts due to previous experiences of being misinterpreted by their audiences. Findings from this study supported previous research conducted with self-determination theory and self-presentation theory in social media (e.g., Hollenbaugh, 2021; Ryan & Deci, 2000). In the context of these findings the need for control satisfied dimensions of self-determination in these athletes, which bred motivation for social media use. For example, it appeared that autonomy was promoted through feelings of control as it allowed athletes to regulate their own experience with social media, competency was satisfied through their ability to control their actions and regulate the environment (i.e., social media), and relatedness was experienced as the athletes were able to relate to others on social media in ways that were actually representative of their views. Taking ownership of their own social media was a key aspect of many of the participants' responses and supports self-presentation theory, which is in line with research which highlights the need for individuals to attempt to influence others and their perceptions of their identity (Hollenbaugh, 2021). Some athletes did mention this control was not always a foundation for success, sometimes it was best to "take risks" on social media and finding balance was important. For them, this meant recognising that absolute control was not always the right way to manage their social media usage, however from their experience being flexible with their consumption meant more opportunities could be presented (i.e., sponsorship, connections). Furthermore, in the context of self-determination theory, this indicates that autonomy was not lessened, in some cases it was enhanced as the participant felt that they were in control in their social media usage. Having control also meant that distractions from social media could be limited. As an individual cannot necessarily control what is going to show on their social media platform – unless specific pages or accounts are blocked – some athletes described a preference to not use their phones or devices to access social media at all.

Due to the erratic nature of using social media before competitions, some athletes found that their psychological state would be compromised, which would impact upon their performance at the competition. Therefore, some athletes chose to not use their phones at all and completely disconnect from social media when they felt that their mental health was deteriorating, or in preparation for a competition or event. This was found to be particularly

effective at competition, as they felt that they were able to manage the distraction and shift their focus towards their competition. This extends current distraction conflict theory research (e.g., Brooks, 2015) where attentional conflicts can negatively impact upon attention and precision, which are vital aspects of physiological and psychological performance. This creation of stress and negative psychological wellbeing is a common result from the use of technology, and the findings of this study support such evidence from previous research (e.g., Ayyagari et al., 2011; Choi & Lim, 2016) highlighting that technology use is a dominant predictor of stress. Furthermore, this controlling of distractions was also present outside of competitions with some athletes reporting that they blocked or muted certain pages due to their unpredictable nature and the resulting effects on their mental health. Subsequently, it appears that autonomy was enhanced as they better regulated their own emotions and behaviours regarding social media, seemingly having a positive impact on wellbeing.

#### **5.4 Limitations**

Although this study provided important information regarding social media use in high-performance athletes and the resulting impact on wellbeing, there are limitations to acknowledge, and these are important to consider as we look to make sense of the study's findings. Due to several reasons, establishing a large sample size was a challenge of this study. Firstly, the timing was unfortunate as it coincided with the 2022 Commonwealth Games, and, as such, many potential participants were not available. Secondly, athletes as a population are typically not overly enthusiastic about research and hesitant to participate due to their busy schedules. Thirdly, this study was not championed by High Performance Sport New Zealand and made finding eligible participants difficult. Due to these reasons, the recruitment period was extended.

Within the sample of eleven, eight were women. In some ways, this could be perceived as a limitation as it produced an overrepresentation of women in this study; however, with that said, the sample provided a strong female voice, and increases the transferability to other female populations. Hence, with only three male participants, findings should be interpreted and applied to male groups cautiously. Due to the convenience sampling procedure this would also affect sample size and generalisability as participants were recruited from industry contacts and through Massey University's Academy of Sport.



Another recognised limitation of the study was that all participants chose to be interviewed via Zoom. Whilst the utilisation of Zoom allowed for participants who lived in other cities, it potentially impacted upon the overall experience of the semi-structured interviews for both researcher and participant. Small nuances of communication, for instance, body language, are not as easily identified via an online video call. Body language is recognised as an important non-verbal component of interviews as often participant responses can communicate emotional states through body language which can be missed unless the participant and interviewer are face-to-face (Forbes & Jackson, 1980; Legard et al., 2003). Body language can also help contextualise and provide clues to the interviewer that responses may need further clarification or review (Legard et al., 2003). Finally, as a Master's student, this was the first experience with conducting semi-structured interviews and, therefore, recognised as a limitation which could have influenced the responses of the participants.

As a cross-sectional study, athletes were asked to recall and describe their experiences; due to this, the accuracy of information provided by the athletes may have been affected. This issue of recall could have been influenced by issues of time or through compartmentalisation by the athletes with trauma related to social media use. Furthermore, during the member checking process no athlete indicated that they would attend a follow-up interview which would have been used to fully clarify responses and gain more information regarding certain aspects. Rather, only one athlete chose to return their transcript with changes made, with only three responding to say that they were happy with their responses and no changes were needed, however this might be due to the fact that the other participants were happy with both the interview itself as well as their responses.

## **5.5 Future directions**

As a result of the study's findings and limitations, some recommendations are made for future research. Due to the novel nature of this study within New Zealand, this study offers a foundation for investigating future social media use. These investigations could focus on both non-athlete and athlete populations as previous research in other areas have found similarities and differences between these populations. Future research could provide a more in-depth investigation into gendered differences for social media usage in high-performance athletes, as well as the differences between team and individual sport athletes. More research is required to investigate the way the four theories examined within this study (uses and gratifications theory, self-presentation theory, self-determination theory, and distraction-

conflict theory), are used to analyse and interpret the relationships between high-performance athletes and social media, and the resulting impact on wellbeing. Likewise, investigations into the impact on sporting performance would also be helpful. Help-seeking behaviours in athletes was also highlighted as an area within New Zealand literature which requires attention, particularly those which focus upon social media and the barriers and stigma which arise from the presentation of mental health on such platforms. Longitudinal studies would also be of benefit. Longitudinal approaches would allow for the capturing of data in real time, as well as evolving perceptions throughout a period, and, therefore, provide a truer representation of how things play out over time.

## 5.6 Conclusion

The purpose and aim of this study was threefold: (i) to understand how New Zealand high-performance athletes use social media, (ii) to understand how their use does or does not impact upon their sporting performance, and (iii) to examine how their use of social media impacts their wellbeing. This study employed qualitative research methods and inductive thematic analysis to investigate these aims. This study was conducted in the context of New Zealand high-performance athletes, and the design was informed by four psychological theories; specifically, uses and gratifications theory (Weiyan, 2015), self-presentation theory (Vogel & Rose, 2016), self-determination theory (Deci & Ryan, 2017), and distraction-conflict theory (Baron, 1986). The findings suggest that New Zealand high-performance athletes use social media for various reasons that are represented by three themes: *connection*, *improvement*, and *motivation*.

Within *connection*, athletes used social media for the development and maintenance of connections with others, whether this be familial or friend, and to follow other athletes who were on similar sporting journeys. Satisfying relatedness (an important psychological need highlighted within the self-determination theory) was a significant finding within social media use in these athletes as it reinforced their motivations for using social media.

*Improvement* saw the athletes using social media to help improve their knowledge around their sport and how new exercises or skills learnt from social could be implemented into their own training regime. Improvement also saw athletes using social media as a source for mindfulness resources, which they acknowledged as helping to improve psychological skills and performance. For some, *improvement* saw the satisfying of all dimensions of self-

determination through the use of such mindfulness resources which the athletes used to help improve and manage their mental health. The final theme found within social media use was *motivation*. Social media was recognised as eliciting a change to motivation within the athletes, often through seeing their competition on social media. The creation of motivation due to social media was mediated by self-determination theory which highlighted the role of both introjected and integrated regulation in the use of social media by these athletes. Athletes found that this was due to social comparisons, and comparisons between precepted skill levels. Athletes also recognised that their motivations for using social media evolved over time due to the perceptions of authenticity displayed on the platforms.

From the data set three broad areas of consequences associated with social media were also found: *body image*, *pressures*, and *control*. The most frequently cited consequence of social media use within this study was *body image*. Dissatisfaction with body image was a major concern and was exacerbated due to social media use, with many athletes reporting that issues with body image were compounded when their time spent on social media increased. Issues with body image diminished aspects of self-determination and self-presentation. These concerns also led athletes to fear posting on social media and increased their risk of developing anxiety, stress, and negative wellbeing due to body image perceptions created by social media. Athletes also felt *pressure* associated with social media, which were categorised as being either internal or external pressure. Internal pressure often manifested from the athletes' own expectations of social media, whether this be creating obsessive routines around social media or seeking validation for posting on social media. For some athletes, this internal pressure compiled with expectations caused by social media created barriers for help-seeking behaviour. External pressure was created when the athlete felt that social media was a platform that encouraged comparisons, both in a social and sporting setting. Athletes also felt that there were external pressures which were expected of the individual to be active on social media and present themselves in ways commensurate with society expectations. External pressures were also found to produce motivation within the athletes due to comparisons, which was identified as introjected regulation.

*Control* was the final theme identified as a consequence of social media use within these athletes. Control was identified as feelings of being both in and out of control whilst using social media. In particular, athletes reported that their wellbeing was improved when they felt they were in control of their social media usage and habits, which satisfied all

aspects of self-determination and self-presentation on social media. In contrast, due to the unpredictable nature of social media, some athletes found that their experiences threatened their autonomy. Threats to their autonomy were related to attentional conflicts as they were unable to control for outcomes related to social media which has negative impacts upon physiological and psychological wellbeing. Consequently, feelings of self-determination and self-presentation were diminished due to the unpredictable nature of social media.

The findings from this study suggest that social media use can be both beneficial and challenging for high-performance athletes in New Zealand. For some social media can become a significant focus and as a result, affect both performance and wellbeing. Moving forward, both athletes and organisations should recognise these potential impacts and ensure that athletes are being supported. Furthermore, these findings highlight the opportunity for education in this area which can be supported by High Performance Sport New Zealand and respective National Sport Organisations, focussing upon educating current and future high-performance athletes in New Zealand on the potential risks and benefits of using social media. The opportunity for education is widespread, and as social media continues to grow, so does the need for effective use. Organisational support should not look to “police” such use, rather it should look towards providing athletes with the mechanisms to take ownership of their platforms and to help mitigate the potential consequences outlined in this study. Overall, the findings support previous research and also provide some new insights regarding social media use by high-performance athletes. This study offers a foundation from which further research can be conducted within New Zealand.

## References

- Abeza, G., O'Reilly, N., & Reid, I. (2013). Relationship marketing and social media in sport. *International Journal of Sport Communication*, 6(2), 120-142. <https://doi.org/10.1123/ijsc.6.2.120>
- Abeza, G., O'Reilly, N., Séguin, B., & Nzindukiyimana, O. (2015). Social media scholarship in sport management research: A critical review. *Journal of Sport Management*, 29(6), 601-618. <https://doi.org/10.1123/JSM.2014-0296>
- Anderson, A. G., Hodge, K. P., Lavalley, D., & Martin, S. B. (2004). New Zealand athletes' attitudes towards seeking sport psychology consultation. *The New Zealand Journal of Psychology*, 33(3), 129-136. <https://dspace.stir.ac.uk/handle/1893/7669>
- Annamalai, B., Yoshida, M., Varshney, S., Pathak, A. A., & Venugopal, P. (2021). Social media content strategy for sport clubs to drive fan engagement. *Journal of retailing and consumer services*, 62. <https://doi.org/10.1016/j.jretconser.2021.102648>
- Arai, A., Ko, Y. J., & Ross, S. (2014). Branding athletes: Exploration and conceptualization of athlete brand image. *Sport Management Review*, 17(2), 97-106. <https://doi.org/10.1016/j.smr.2013.04.003>
- Ayyagari, R., Grover, V., & Purvis, R. (2011). Technostress: Technological antecedents and implications. 35(4), 831-858. <https://doi.org/10.2307/41409963>
- Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., & Gosling, S. D. (2010). Facebook profiles reflect actual personality, not self-idealization. *Psychological science*, 21(3), 372-374. <https://doi.org/10.1177/0956797609360756>
- Baecker, R. M., Grudin, J., Buxton, W., & Greenberg, S. (1995). *Readings in Human-Computer Interaction: toward the year 2000*. Morgan Kaufmann Publishers.
- Bär, K. J., & Markser, V. Z. (2013). Sport specificity of mental disorders: the issue of sport psychiatry. *European archives of psychiatry and clinical neuroscience*, 263(2), 205-210. <https://doi.org/10.1007/s00406-013-0458-4>
- Baron, R. S. (1986). Distraction-conflict theory: Progress and problems. *Advances in experimental social psychology*, 19, 1-40. [https://doi.org/10.1016/S0065-2601\(08\)60211-7](https://doi.org/10.1016/S0065-2601(08)60211-7)
- Baron, R. S., Moore, D., & Sanders, G. S. (1978). Distraction as a source of drive in social facilitation research. *Journal of personality and social psychology*, 36(8), 816-824. <https://psycnet.apa.org/doi/10.1037/0022-3514.36.8.816>
- Bartholomew, K. J., Ntoumanis, N., Ryan, R. M., Bosch, J. A., & Thøgersen-Ntoumani, C. (2011). Self-determination theory and diminished functioning: The role of interpersonal control and psychological need thwarting. *Personality and Social Psychology Bulletin*, 37(11), 1459-1473. <https://doi.org/10.1177/0146167211413125>

- Bartholomew, K., Ntoumanis, N., & Thøgersen-Ntoumani, C. (2011). Self-determination theory and the darker side of athletic experience: The role of interpersonal control and need thwarting. *Sport and Exercise Psychology Review*, 7(2), 23-27. [http://pure-oai.bham.ac.uk/ws/files/2920828/Bartholomew\\_Ntoumanis\\_Thogersen-Ntoumani\\_2011.pdf](http://pure-oai.bham.ac.uk/ws/files/2920828/Bartholomew_Ntoumanis_Thogersen-Ntoumani_2011.pdf)
- Bauman, N. J. (2016). The stigma of mental health in athletes: are mental toughness and mental health seen as contradictory in elite sport?. *British Journal of Sports Medicine*, 50(3), 135-136. <http://dx.doi.org/10.1136/bjsports-2015-095570>
- Beable, S., Fulcher, M., Lee, A. C., & Hamilton, B. (2017). SHARPSports mental Health Awareness Research Project: Prevalence and risk factors of depressive symptoms and life stress in elite athletes. *Journal of science and medicine in sport*, 20(12), 1047-1052. <https://doi.org/10.1016/j.jsams.2017.04.018>
- Beamish, R., & Ritchie, I. (2006). *Fastest, highest, strongest: A critique of high-performance sport*. Routledge. <https://rugbystrengthcoach.com/wp-content/uploads/2018/05/Beamish-Ritchie-Fastest-Highest-Strongest-A-Critique-of-High-Performance-Sport.pdf>
- Beauchemin, J. (2014). College student-athlete wellness: An integrative outreach model. *College Student Journal*, 48(2), 268-280. <https://www.ingentaconnect.com/content/prin/csj/2014/00000048/00000002/art00012>
- Beissel, A., Postlethwaite, V., & Grainger, A. (2022). “Winning the women’s world cup”: gender, branding, and the Australia/New Zealand As One 2023 social media strategy for the FIFA Women’s World Cup 2023™. *Sport in Society*, 25(4), 768-798. <https://doi.org/10.1080/17430437.2021.1980780>
- Billings, A. C., Qiao, F., Conlin, L., & Nie, T. (2017). Permanently desiring the temporary? Snapchat, social media, and the shifting motivations of sports fans. *Communication & Sport*, 5(1), 10-26. <https://doi.org/10.1177/2167479515588760>
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: a tool to enhance trustworthiness or merely a nod to validation?. *Qualitative health research*, 26(13), 1802-1811. <https://doi.org/10.1177/1049732316654870>
- Blascovich, J. (2002). Social influence within immersive virtual environments. In R. Schroeder (Ed.), *The social life of avatars* (pp. 127-145). Springer.
- Bourke, B. E. P., Baker, D. F., & Braakhuis, A. J. (2019). Social media as a nutrition resource for athletes: a cross-sectional survey. *International journal of sport nutrition and exercise metabolism*, 29(4), 364-370. <https://doi.org/10.1123/ijsnem.2018-0135>
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Sage Publications.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://doi.org/10.3402/qhw.v9.26152>

- Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith & A. C. Sparks (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 213-227). Routledge.  
<https://doi.org/10.4324/9781315762012>
- Brooks, S. (2015). Does personal social media usage affect efficiency and wellbeing?. *Computers in Human Behavior*, 46, 26-37.  
<https://doi.org/10.1016/j.chb.2014.12.053>
- Brooks, S., Longstreet, P., & Califf, C. (2017). Social media induced technostress and its impact on Internet addiction: A distraction-conflict theory perspective. *AIS Transactions on Human-Computer Interaction*, 9(2), 99-122.  
<https://aisel.aisnet.org/thci/vol9/iss2/2/>
- Brougham, J. K. (2021). The Impact of Social Media on the Mental Health of Student-Athletes across NCAA Divisions. *Journal of Issues in Intercollegiate Athletics*. 14, 717-739. [http://csri-jiia.org/wp-content/uploads/2021/12/RA\\_2021\\_34.pdf](http://csri-jiia.org/wp-content/uploads/2021/12/RA_2021_34.pdf)
- Brown, M. T. (2003). An Analysis of Online Marketing in the Sport Industry: User Activity, Communication Objectives, and Perceived Benefits. *Sport Marketing Quarterly*, 12(1), 48-55. <https://www.cabdirect.org/cabdirect/abstract/20033037540>
- Browning, B., & Sanderson, J. (2012). The positives and negatives of Twitter: Exploring how student-athletes use Twitter and respond to critical tweets. *International Journal of Sport Communication*, 5(4), 503-521. <https://doi.org/10.1123/ijsc.5.4.503>
- Bryman, A. (2016). *Social research methods*. Oxford university press.  
<https://ktpu.kpi.ua/wp-content/uploads/2014/02/social-research-methods-alan-bryman.pdf>
- Buckley, G. L., Hall, L. E., Lassemillante, A. C. M., & Belski, R. (2021). Disordered eating & body image of current and former athletes in a pandemic; a convergent mixed methods study-What can we learn from COVID-19 to support athletes through transitions?. *Journal of eating disorders*, 9(1), 1-16. <https://doi.org/10.1186/s40337-021-00427-3>
- Burrows, L., & McCormack, J. (2011). School culture meets sport: A case study in New Zealand. *European Physical Education Review*, 17(3), 301-312.  
<https://doi.org/10.1177/1356336X11416732>
- Butt, J., Weinberg, R., & Culp, B. (2010). Exploring mental toughness in NCAA athletes. *Journal of intercollegiate sport*, 3(2), 316-332.  
<https://doi.org/10.1123/jis.3.2.316>
- Buunk, B. P., Collins, R. L., Taylor, S. E., VanYperen, N. W., & Dakof, G. A. (1990). The affective consequences of social comparison: either direction has its ups and downs. *Journal of personality and social psychology*, 59(6), 1238.  
<https://psycnet.apa.org/doi/10.1037/0022-3514.59.6.1238>

- Byrne, M. M. (2001). Understanding life experiences through a phenomenological approach to research. *AORN journal*, 73(4), 830-830. [https://doi.org/10.1016/s0001-2092\(06\)61812-7](https://doi.org/10.1016/s0001-2092(06)61812-7)
- Byrne, S., & McLean, N. (2002). Elite athletes: effects of the pressure to be thin. *Journal of science and medicine in sport*, 5(2), 80-94. [https://doi.org/10.1016/S1440-2440\(02\)80029-9](https://doi.org/10.1016/S1440-2440(02)80029-9)
- Candela, A. G. (2019). Exploring the function of member checking. *The qualitative report*, 24(3), 619-628. <https://doi.org/10.46743/2160-3715/2019.3726>
- Carlson, J. A. (2010). Avoiding traps in member checking. *Qualitative Report*, 15(5), 1102-1113. <https://doi.org/10.46743/2160-3715/2010.1332>
- Carr, C. T., & Hayes, R. A. (2015). Social media: Defining, developing, and divining. *Atlantic journal of communication*, 23(1), 46-65. <https://doi.org/10.1080/15456870.2015.972282>
- Cash, T. F., Cash, D. W., & Butters, J. W. (1983). "Mirror, Mirror, on the Wall...?" Contrast Effects and Self-Evaluations of Physical Attractiveness. *Personality and Social Psychology Bulletin*, 9(3), 351-358. <https://doi.org/10.1177/0146167283093004>
- Castaldelli-Maia, J. M., e Gallinaro, J. G. D. M., Falcão, R. S., Goutteborge, V., Hitchcock, M. E., Hainline, B., Reardon L. C., & Stull, T. (2019). Mental health symptoms and disorders in elite athletes: a systematic review on cultural influencers and barriers to athletes seeking treatment. *British Journal of Sports Medicine*, 53(11), 707-721. <http://doi.org/10.1136/bjsports-2019-100710>
- Cece, V., Duchesne, M., Guillet-Descas, E., & Martinet, G. (2020). Self-determined motivation, emotional process and subjective performance among young elite athletes: A longitudinal hierarchical linear modelling approach. *European Journal of Sport Science*, 20(9), 1255-1267. <https://doi.org/10.1080/17461391.2019.1709562>
- Chenail, R. J. (2011). Interviewing the investigator: Strategies for addressing instrumentation and researcher bias concerns in qualitative research. *Qualitative Report*, 16(1), 255-262.
- Choi, S. B., & Lim, M. S. (2016). Effects of social and technology overload on psychological wellbeing in young South Korean adults: The mediatory role of social network service addiction. *Computers in Human Behavior*, 61, 245-254. <https://doi.org/10.1016/j.chb.2016.03.032>
- Choi, T. R., & Sung, Y. (2018). Instagram versus Snapchat: Self-expression and privacy concern on social media. *Telematics and informatics*, 35(8), 2289-2298. <https://doi.org/10.1016/j.tele.2018.09.009>
- Chou, H. T. G., & Edge, N. (2012). "They are happier and having better lives than I am": The impact of using Facebook on perceptions of others' lives. *Cyberpsychology, behavior, and social networking*, 15(2), 117-121. <https://doi.org/10.1089/cyber.2011.0324>



- Clavio, G., & Kian, T. M. (2010). Uses and gratifications of a retired female athlete's Twitter followers. *International journal of sport communication*, 3(4), 485-500.  
<https://doi.org/10.1123/ijsc.3.4.485>
- Clavio, G., & Walsh, P. (2014). Dimensions of social media utilization among college sport fans. *Communication & Sport*, 2(3), 261-281.  
<https://doi.org/10.1177/2167479513480355>
- Coche, R. (2017). How athletes frame themselves on social media: An analysis of Twitter profiles. *Journal of sports media*, 12(1), 89-112.  
<https://doi.org/10.1353/jsm.2017.0004>
- Cody, K., & Jackson, S. (2016). The contested terrain of alcohol sponsorship of sport in New Zealand. *International Review for the Sociology of Sport*, 51(4), 375-393.  
<https://doi.org/10.1177/1012690214526399>
- Collins, D., Trower, J., & Cruickshank, A. (2013). Coaching high performance athletes and the high performance team. In P. Sotiriadou & V. De Bosscher (Eds.), *Managing high performance sport* (pp. 237-252). Routledge.
- Corrion, K., Scoffier-Mériaux, S., & Longueville, F. (2017). Self-regulatory mechanisms of doping intentions in elite athletes: The role of self-determined motivation in sport. *Journal of Sports Medicine & Doping Studies*, 7(4), 1-9.  
<https://doi.org/10.4172/2161-0673.1000197>
- Coursaris, C. K., Hassanein, K., Head, M. M., & Bontis, N. (2012). The impact of distractions on the usability and intention to use mobile devices for wireless data services. *Computers in Human Behavior*, 28(4), 1439-1449.  
<https://doi.org/10.1016/j.chb.2012.03.006>
- Coyle, M., Gorczynski, P., & Gibson, K. (2017). "You have to be mental to jump off a board any way": Elite divers' conceptualizations and perceptions of mental health. *Psychology of Sport and Exercise*, 29, 10-18.  
<https://doi.org/10.1016/j.psychsport.2016.11.005>
- Culbert, M. K., Racine, E. S., & Klump, L. K. (2015). Research review: What we have learned about the causes of eating disorders – a synthesis of sociocultural, psychological, and biological research. *The Journal of Child Psychology and Psychiatry*, 56(11), 1141-1164. <https://doi.org/10.1111/jcpp.12441>
- Curtin, M., & Fossey, E. (2007). Appraising the trustworthiness of qualitative studies: Guidelines for occupational therapists. *Australian occupational therapy journal*, 54(2), 88-94. <https://doi.org/10.1111/j.1440-1630.2007.00661.x>
- David, J. L., Powless, M. D., Hyman, J. E., Purnell, D. M., Steinfeldt, J. A., & Fisher, S. (2018). College student athletes and social media: The psychological impacts of Twitter use. *International Journal of Sport Communication*, 11(2), 163-186.  
<https://doi.org/10.1123/ijsc.2018-0044>

- Deci, E. L., & Ryan, R. M. (2012). Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In R. M. Ryan (Ed.), *The Oxford handbook of human motivation* (pp. 85-107). Oxford University Press. <https://psycnet.apa.org/record/2012-03687-006>
- Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research*. Sage.
- DeVito, M. A., Birnholtz, J., & Hancock, J. T. (2017). Platforms, people, and perception: Using affordances to understand self-presentation on social media. In *Proceedings of the 2017 ACM conference on computer supported cooperative work and social computing* (pp. 740-754). <https://doi.org/10.1145/2998181.2998192>
- DiBartolo, P. M., & Shaffer, C. (2002). A comparison of female college athletes and nonathletes: Eating disorder symptomatology and psychological wellbeing. *Journal of Sport and Exercise Psychology*, 24(1), 33-41. <https://doi.org/10.1123/jsep.24.1.33>
- Dimmock, J. A., Howle, T. C., & Jackson, B. (2020). Self-Presentation in Sport and Exercise. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (pp.190-205). John Wiley & Sons. <https://doi.org/10.1002/9781119568124.ch10>
- Donalek, J. G. (2004). Choosing among qualitative traditions. *Urologic Nursing*, 24(5), 409-410.
- Doyle, S. (2007). Member checking with older women: A framework for negotiating meaning. *Health care for women international*, 28(10), 888-908. <https://doi.org/10.1080/07399330701615325>
- Duffett, R. G. (2017). Influence of social media marketing communications on young consumers' attitudes. *Young Consumers*, 18(1), 19-39. <https://doi.org/10.1108/YC-07-2016-00622>
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological review*, 95(2), 256-273. <https://psycnet.apa.org/doi/10.1037/0033-295X.95.2.256>
- Eagleman, A. N. (2013). Acceptance, motivations, and usage of social media as a marketing communications tool amongst employees of sport national governing bodies. *Sport management review*, 16(4), 488-497. <https://doi.org/10.1016/j.smr.2013.03.004>
- Edgar, A. (2021). Athletes as role models (and the ecological crisis). *Sport, Ethics and Philosophy*, 15(2), 157-159. <https://doi.org/10.1080/17511321.2021.1908662>
- Eklund, R. C., & Howle, T. C. (2017). Self-presentation and communication in physical activity settings. In *Persuasion and communication in sport, exercise, and physical activity* (pp. 250-265). Routledge. <https://doi.org/10.4324/9781315624365>
- Elliot, P. (1974). Uses and gratifications research: A critique and a sociological alternative. In J. G. Blumler & E. Katz (Eds.), *The uses of mass communications: Current perspectives on gratifications research* (pp. 249-268). Sage Publications.

- Encel, K., Mesagno, C., & Brown, H. (2017). Facebook use and its relationship with sport anxiety. *Journal of sports sciences*, 35(8), 756-761. <https://doi.org/10.1080/02640414.2016.1186817>
- Eubank, M., Nesti, M., & Cruickshank, A. (2014). Understanding high performance sport environments: Impact for the professional training and supervision of sport psychologists. *Sport and Exercise Psychology Review*, 10(2), 30-37. [https://www.researchgate.net/profile/Andrew-Cruickshank-4/publication/264706257\\_Understanding\\_high\\_performance\\_sport\\_environments\\_Impact\\_for\\_the\\_professional\\_training\\_and\\_supervision\\_of\\_sport\\_psychologists/links/577a47d408aec3b7433562ca/Understanding-high-performance-sport-environments-Impact-for-the-professional-training-and-supervision-of-sport-psychologists.pdf](https://www.researchgate.net/profile/Andrew-Cruickshank-4/publication/264706257_Understanding_high_performance_sport_environments_Impact_for_the_professional_training_and_supervision_of_sport_psychologists/links/577a47d408aec3b7433562ca/Understanding-high-performance-sport-environments-Impact-for-the-professional-training-and-supervision-of-sport-psychologists.pdf)
- Evans, S. K., Pearce, K. E., Vitak, J., & Treem, J. W. (2017). Explicating affordances: A conceptual framework for understanding affordances in communication research. *Journal of Computer-Mediated Communication*, 22(1), 35-52. <https://doi.org/10.1111/jcc4.12180>
- Fardouly, J., & Vartanian, L. R. (2016). Social media and body image concerns: Current research and future directions. *Current opinion in psychology*, 9, 1-5. <https://doi.org/10.1016/j.copsy.2015.09.005>
- Farrington, N., Hall, L., Kilvington, D., Price, J., & Saeed, A. (2017). *Sport, racism and social media*. Routledge. <https://doi.org/10.4324/9780203794807>
- Fathy, D., Elsharnouby, M. H., & AbouAish, E. (2021). Fans behave as buyers? Assimilate fan-based and team-based drivers of fan engagement. *Journal of Research in Interactive Marketing*, 16(3), 329-345. <https://doi.org/10.1108/JRIM-04-2021-0107>
- Feezell, R. (2005). Celebrated athletes, moral exemplars, and lusory objects. *Journal of the Philosophy of Sport*, 32(1), 20-35. <https://doi.org/10.1080/00948705.2005.9714668>
- Ferguson, R., Gutberg, J., Schattke, K., Paulin, M., & Jost, N. (2015). Self-determination theory, social media and charitable causes: An in-depth analysis of autonomous motivation. *European journal of social psychology*, 45(3), 298-307. <https://doi.org/10.1002/ejsp.2038>
- Filo, K., Lock, D., & Karg, A. (2015). Sport and social media research: A review. *Sport management review*, 18(2), 166-181. <https://doi.org/10.1016/j.smr.2014.11.001>
- Forbes, R. J., & Jackson, P. R. (1980). Non-verbal behaviour and the outcome of selection interviews. *Journal of Occupational Psychology*, 53(1), 65-72. <https://doi.org/10.1111/j.2044-8325.1980.tb00007.x>
- Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian & New Zealand journal of psychiatry*, 36(6), 717-732. <https://doi.org/10.1046/j.1440-1614.2002.01100.x>

- Fox, J., & Vendemia, M. A. (2016). Selective self-presentation and social comparison through photographs on social networking sites. *Cyberpsychology, behavior, and social networking*, 19(10), 593-600. <https://doi.org/10.1089/cyber.2016.0248>
- Gagne, M. (2003). Autonomy support and need satisfaction in the motivation and wellbeing of gymnasts. *Journal of applied sport psychology*, 15(4), 372-390. <https://doi.org/10.1080/714044203>
- Galli, N., & Reel, J. J. (2009). Adonis or Hephaestus? Exploring body image in male athletes. *Psychology of men & masculinity*, 10(2), 95-108. <https://psycnet.apa.org/doi/10.1037/a0014005>
- Galli, N., Shodahl, S., & Otten, M. P. (2022). An Exploratory Investigation of the Body Image and Health Behavior Transition in Retiring Intercollegiate Athletes. *Journal of Clinical Sport Psychology*, 1, 1-13. <https://doi.org/10.1123/jcsp.2021-0086>
- Gardner, F. L. (2001). Applied sport psychology in professional sports: The team psychologist. *Professional Psychology: Research and Practice*, 32(1), 34-39. <https://psycnet.apa.org/doi/10.1037/0735-7028.32.1.34>
- Gavrilova, Y., & Donohue, B. (2018). Sport-specific mental health interventions in athletes: A call for optimization models sensitive to sport culture. *Journal of Sport Behavior*, 41(3), 283-304. [https://www.researchgate.net/publication/320567736\\_Sport-Specific\\_Mental\\_Health\\_Interventions\\_in\\_Athletes\\_A\\_Call\\_for\\_Optimization\\_Models\\_Sensitive\\_to\\_Sport\\_Culture](https://www.researchgate.net/publication/320567736_Sport-Specific_Mental_Health_Interventions_in_Athletes_A_Call_for_Optimization_Models_Sensitive_to_Sport_Culture)
- Geurin, A. N. (2017). Elite female athletes' perceptions of new media use relating to their careers: A qualitative analysis. *Journal of Sport Management*, 31(4), 345-359. <https://doi.org/10.1123/jsm.2016-0157>
- Geurin-Eagleman, A. N., & Burch, L. M. (2016). Communicating via photographs: A gendered analysis of Olympic athletes' visual self-presentation on Instagram. *Sport management review*, 19(2), 133-145. <https://doi.org/10.1016/j.smr.2015.03.002>
- Geurin, A. N. (2016). Developing a social media strategy guide for elite athletes. *Sport & Entertainment Review*, 2(3), 70-76. [https://www.researchgate.net/profile/Andrea-Geurin/publication/309203726\\_Developing\\_a\\_Social\\_Media\\_Strategy\\_Guide\\_for\\_Elite\\_Athletes/links/58050de508aef179365e6b89/Developing-a-Social-Media-Strategy-Guide-for-Elite-Athletes.pdf](https://www.researchgate.net/profile/Andrea-Geurin/publication/309203726_Developing_a_Social_Media_Strategy_Guide_for_Elite_Athletes/links/58050de508aef179365e6b89/Developing-a-Social-Media-Strategy-Guide-for-Elite-Athletes.pdf)
- Gilchrist, P. (2004). Local heroes and global stars. In L. Allison, J. A. Mangan, & B. Majumdar (Eds.), *The global politics of sport* (pp. 107-126). Routledge. <https://doi.org/10.4324/9780203005460>
- Gledhill, C., & Cloke, P. J. (1991). *Stardom: Industry of desire*. Psychology Press. <https://books.google.co.nz/books?hl=en&lr=&id=SpezEJPnOoMC&oi=fnd&pg=PP2&dq=Stardom:+Industry+of+desire&ots=Sptmpm2E07&sig=x4bJp-GJfdV->

[lh45PXxVj8Y0r\\_k&redir\\_esc=y#v=onepage&q=Stardom%3A%20Industry%20of%20desire&f=false](https://books.google.co.nz/books?hl=en&lr=&id=TSk_EAAAQBAJ&oi=fnd&pg=PT8&dq=presentation+of+self+in+everyday+life&ots=Am6lLuNwBI&sig=5yyJOw20fMPXACbdQyW8qmWEMzE&redir_esc=y#v=onepage&q=presentation%20of%20self%20in%20everyday%20life&f=false)

- Goffman, E. (1959). *The presentation of self in everyday life*. Anchor.  
[https://books.google.co.nz/books?hl=en&lr=&id=TSk\\_EAAAQBAJ&oi=fnd&pg=PT8&dq=presentation+of+self+in+everyday+life&ots=Am6lLuNwBI&sig=5yyJOw20fMPXACbdQyW8qmWEMzE&redir\\_esc=y#v=onepage&q=presentation%20of%20self%20in%20everyday%20life&f=false](https://books.google.co.nz/books?hl=en&lr=&id=TSk_EAAAQBAJ&oi=fnd&pg=PT8&dq=presentation+of+self+in+everyday+life&ots=Am6lLuNwBI&sig=5yyJOw20fMPXACbdQyW8qmWEMzE&redir_esc=y#v=onepage&q=presentation%20of%20self%20in%20everyday%20life&f=false)
- Gomez, J., Bradley, J., & Conway, P. (2018). The challenges of a high-performance student athlete. *Irish Educational Studies*, 37(3), 329-349.  
<https://doi.org/10.1080/03323315.2018.1484299>
- Gorczyński, P. F., Coyle, M., & Gibson, K. (2017). Depressive symptoms in high-performance athletes and non-athletes: a comparative meta-analysis. *British Journal of Sports Medicine*, 51(18), 1348-1354. <http://doi.org/10.1136/bjsports-2016-096455>
- Gorrell, E. (2018). *The Impact of Social Media on Athletes' Self-Efficacy* [Master's Thesis, Brock University]. Brock University Online. <http://hdl.handle.net/10464/13673>
- Grant, B. C. (1992). Integrating sport into the physical education curriculum in New Zealand secondary schools. *Quest*, 44(3), 304-316.  
<https://doi.org/10.1080/00336297.1992.10484057>
- Gruder, C. L. (1971). Determinants of social comparison choices. *Journal of Experimental Social Psychology*, 7(5), 473-489. [https://doi.org/10.1016/0022-1031\(71\)90010-2](https://doi.org/10.1016/0022-1031(71)90010-2)
- Gruettner, A., Vitisvorakarn, M., Wambsganss, T., Rietsche, R., & Back, A. (2020). The New Window to Athletes' Soul—What Social Media Tells Us About Athletes' Performances. In *Proceedings of the 53rd Hawaii International Conference on System Sciences* (pp. 2479-2488). <http://hdl.handle.net/10125/64045>
- Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC psychiatry*, 10(1), 1-9. <https://doi.org/10.1186/1471-244x-12-157>
- Gulliver, A., Griffiths, K. M., & Christensen, H. (2012). Barriers and facilitators to mental health help-seeking for young elite athletes: a qualitative study. *BMC psychiatry*, 12(1), 1-14. <https://doi.org/10.1186/1471-244X-12-157>
- Gunnell, K. E., Crocker, P. R., Mack, D. E., Wilson, P. M., & Zumbo, B. D. (2014). Goal contents, motivation, psychological need satisfaction, wellbeing and physical activity: A test of self-determination theory over 6 months. *Psychology of Sport and Exercise*, 15(1), 19-29. <https://doi.org/10.1016/j.psychsport.2013.08.005>
- Gustafsson, H., Hassmén, P., Kenttä, G., & Johansson, M. (2008). A qualitative analysis of burnout in elite Swedish athletes. *Psychology of sport and exercise*, 9(6), 800-816.  
<https://doi.org/10.1016/j.psychsport.2007.11.004>
- Hambrick, M. E., & Kang, S. J. (2015). Pin it: Exploring how professional sports organizations use Pinterest as a communications and relationship-marketing

- tool. *Communication & Sport*, 3(4), 434-457.  
<https://doi.org/10.1177/2167479513518044>
- Hambrick, M. E., Simmons, J. M., Greenhalgh, G. P., & Greenwell, T. C. (2010). Understanding professional athletes' use of Twitter: A content analysis of athlete tweets. *International Journal of Sport Communication*, 3(4), 454-471.  
<https://doi.org/10.1123/ijsc.3.4.454>
- Hardie, A., Oshiro, K. F., & Dixon, M. A. (2022). Understanding body image perceptions of former female athletes: A qualitative analysis. *Body Image*, 43, 393-407.  
<https://doi.org/10.1016/j.bodyim.2022.10.001>
- Harper, M., & Cole, P. (2012). Member checking: Can benefits be gained similar to group therapy. *The qualitative report*, 17(2), 510-517. <https://doi.org/10.46743/2160-3715/2012.2139>
- Harrison, T. M., & Barthel, B. (2009). Wielding new media in Web 2.0: Exploring the history of engagement with the collaborative construction of media products. *New media & society*, 11(1-2), 155-178. <https://doi.org/10.1177/1461444808099580>
- Hartley, E., Hill, B., McPhie, S., & Skouteris, H. (2018). The associations between depressive and anxiety symptoms, body image, and weight in the first year postpartum: A rapid systematic review. *Journal of reproductive and infant psychology*, 36(1), 81-101. <https://doi.org/10.1080/02646838.2017.1396301>
- Hausenblas, H. A., & Downs, D. S. (2001). Comparison of body image between athletes and nonathletes: A meta-analytic review. *Journal of applied sport psychology*, 13(3), 323-339. <https://doi.org/10.1080/104132001753144437>
- Hayes, M. (2019). *Social Media Usage Among Elite Athletes: An Exploration of Athlete Usage During Major Events* [Doctoral dissertation, Griffith University]. Griffith University Online. <http://hdl.handle.net/10072/389666>
- Heather, A. K., Thorpe, H., Ogilvie, M., Sims, S. T., Beable, S., Milsom, S., Schofield, L. K., Coleman, L., & Hamilton, B. (2021). Biological and socio-cultural factors have the potential to influence the health and performance of elite female athletes: a cross sectional survey of 219 elite female athletes in Aotearoa New Zealand. *Frontiers in sports and active living*. <https://doi.org/10.3389/fspor.2021.601420>
- Higgins, E. T. (1987). Self-discrepancy: a theory relating self and affect. *Psychological review*, 94(3), 319-340. <https://psycnet.apa.org/buy/1987-34444-001>
- Hilal, A. H., & Alabri, S. S. (2013). Using NVivo for data analysis in qualitative research. *International interdisciplinary journal of education*, 2(2), 181-186.  
<https://platform.almanhal.com/Files/2/42766>
- Hilderbrand, R. L. (2011). High-performance sport, marijuana, and cannabimimetics. *Journal of analytical toxicology*, 35(9), 624-637.  
<https://doi.org/10.1093/anatox/35.9.624>

- Hill, D. M., Carvell, S., Matthews, N., Weston, N. J., & Thelwell, R. R. (2017). Exploring choking experiences in elite sport: The role of self-presentation. *Psychology of Sport and Exercise*, 33, 141-149. <https://doi.org/10.1016/j.psychsport.2017.09.001>
- Hogan, B. (2010). The presentation of self in the age of social media: Distinguishing performances and exhibitions online. *Bulletin of Science, Technology & Society*, 30(6), 377-386. <https://doi.org/10.1177/0270467610385893>
- Hokowhitu, B. (2003). 'Physical beings': Stereotypes, sport and the 'physical education' of New Zealand Māori. *Culture, Sport, Society*, 6(2-3), 192-218. <https://doi.org/10.1080/14610980312331271599>
- Hollenbaugh, E. E. (2021). Self-presentation in social media: Review and research opportunities. *Review of Communication Research*, 9, 80-98. <https://www.rcommunicationr.org/index.php/rcr/article/view/71>
- Hollings, S. C., Mallett, C. J., & Hume, P. A. (2014). The transition from elite junior track-and-field athlete to successful senior athlete: Why some do, why others don't. *International Journal of Sports Science & Coaching*, 9(3), 457-471. <https://doi.org/10.1260/1747-9541.9.3.457>
- Holloway, I., & Todres, L. (2003). The status of method: flexibility, consistency and coherence. *Qualitative research*, 3(3), 345-357. <https://doi.org/10.1177%2F1468794103033004>
- Holmberg, P. M., & Sheridan, D. A. (2013). Self-determined motivation as a predictor of burnout among college athletes. *The Sport Psychologist*, 27(2), 177-187. <https://doi.org/10.1123/tsp.27.2.177>
- Houlihan, B. (2013). Commercial, political, social and cultural factors impacting on the management of high performance sport. In P. Sotiriadou & V. De Bosscher (Eds.), *Managing high performance sport* (pp. 49-61). Routledge.
- Houlihan, B., & Zheng, J. (2013). The Olympics and elite sport policy: Where will it all end?. *The international journal of the history of sport*, 30(4), 338-355. <https://doi.org/10.1080/09523367.2013.765726>
- Hudson, J. I., Hiripi, E., Pope Jr, H. G., & Kessler, R. C. (2007). The prevalence and correlates of eating disorders in the National Comorbidity Survey Replication. *Biological psychiatry*, 61(3), 348-358. <https://doi.org/10.1016/j.biopsych.2006.03.040>
- Huettermann, M., & Kunkel, T. (2022). The Influence of Non-Transactional Fan Engagement on Merchandise Consumption. *Sport Marketing Quarterly*, 31(1), 48-61. <https://doi.org/10.32731/SMQ.311.0322.04>
- Hughes, R., & Coakley, J. (1991). Positive deviance among athletes: The implications of overconformity to the sport ethic. *Sociology of sport journal*, 8(4), 307-325. <https://doi.org/10.1123/ssj.8.4.307>

- Hulley, A. J., & Hill, A. J. (2001). Eating disorders and health in elite women distance runners. *International Journal of Eating Disorders*, 30(3), 312-317. <https://doi.org/10.1002/eat.1090>
- Hutchins, B. (2014). Twitter: Follow the money and look beyond sports. *Communication & Sport*, 2(2), 122-126. <https://doi.org/10.1177/2167479514527430>
- Jackson, S. J., & Hokowhitu, B. (2002). Sport, tribes, and technology: The New Zealand All Blacks haka and the politics of identity. *Journal of Sport and Social Issues*, 26(2), 125-139. <https://doi.org/10.1177/0193723502262002>
- James, J. D., Kolbe, R. H., & Trail, G. T. (2002). Psychological connection to a new sport team: Building or maintaining the consumer base?. *Sport Marketing Quarterly*, 11(4), 215-226. <https://www.cabdirect.org/cabdirect/abstract/20033025814>
- Jowdy, E., & McDonald, M. (2003). Relationship marketing and interactive fan festivals: the women's United Soccer Association's 'Soccer Sensation'. *International Journal of Sports Marketing and Sponsorship*, 4(4), 10-26. <https://doi.org/10.1108/IJSMS-04-04-2003-B003>
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business horizons*, 53(1), 59-68. <https://doi.org/10.1016/j.bushor.2009.09.003>
- Karg, A., & Lock, D. (2014). Using new media to engage consumers at the Football World Cup. In S. Frawley & D. Adair (Eds.), *Managing the football world cup* (pp. 25-46). Palgrave Macmillan. [https://doi.org/10.1057/9781137373687\\_3](https://doi.org/10.1057/9781137373687_3)
- Kassing, J. W., & Sanderson, J. (2010). Fan-athlete interaction and Twitter tweeting through the Giro: A case study. *International journal of sport communication*, 3(1), 113-128. <https://doi.org/10.1123/ijsc.3.1.113>
- Katz, E., Blumler, J., & Gurevitch, M. (1974). Utilization of mass communication by the individual. In J. Blumler & E. Katz (Eds.), *The uses of mass communication: Current perspectives on gratifications research* (pp. 19-34). Sage Publications.
- Katz, E., Haas, H., & Gurevitch, M. (1973). On the use of the mass media for important things. *American sociological review*, 38(2), 164-181. <https://doi.org/10.2307/2094393>
- Kaye, B. K., & Johnson, T. J. (2002). Online and in the know: Uses and gratifications of the web for political information. *Journal of broadcasting & electronic media*, 46(1), 54-71. [https://doi.org/10.1207/s15506878jobem4601\\_4](https://doi.org/10.1207/s15506878jobem4601_4)
- Keles, B., McCrae, N., & Grealish, A. (2020). A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents. *International Journal of Adolescence and Youth*, 25(1), 79-93. <https://doi.org/10.1080/02673843.2019.1590851>



- Kovacs, A., & Doczi, T. (2020). Elite athletes and media appearances: opportunity or obligation?. *Sport in Society*, 23(7), 1136-1145. [https://doi-org.ezproxy.massey.ac.nz/10.1080/17430437.2019.1599861](https://doi.org/ezproxy.massey.ac.nz/10.1080/17430437.2019.1599861)
- Labuschagne, A. (2003). Qualitative research: Airy fairy or fundamental. *The qualitative report*, 8(1), 100-103. <https://doi.org/10.46743/2160-3715/2003.1901>
- Lapadat, J. C., & Lindsay, A. C. (1999). Transcription in research and practice: From standardization of technique to interpretive positionings. *Qualitative inquiry*, 5(1), 64-86. <https://doi.org/10.1177/107780049900500104>
- Leary, M. R., Allen, A. B., & Terry, M. L. (2011). Managing social images in naturalistic versus laboratory settings: Implications for understanding and studying self-presentation. *European Journal of Social Psychology*, 41(4), 411-421. <https://doi.org/10.1002/ejsp.813>
- Lebel, K., & Danylchuk, K. (2012). How tweet it is: A gendered analysis of professional tennis players' self-presentation on Twitter. *International Journal of Sport Communication*, 5(4), 461-480. <https://doi.org/10.1123/ijsc.5.4.461>
- Legard, R., Keegan, J., & Ward, K. (2003). In-depth interviews. In J. Ritchie & J. Lewis (Eds.), *Qualitative research practice: A guide for social science students and researchers* (pp. 138-169). Sage Publications.
- Lemyre, P. N., Roberts, G. C., & Stray-Gundersen, J. (2007). Motivation, overtraining, and burnout: Can self-determined motivation predict overtraining and burnout in elite athletes?. *European Journal of Sport Science*, 7(2), 115-126. <https://doi.org/10.1080/17461390701302607>
- Leung, K. (2015). *The Effect of Distractions on Task Performance and Enjoyment as Moderated by Regulatory Fit* [Master's thesis, San Jose State University]. SJSU ScholarWorks. [https://scholarworks.sjsu.edu/cgi/viewcontent.cgi?article=8142&context=etd\\_theses](https://scholarworks.sjsu.edu/cgi/viewcontent.cgi?article=8142&context=etd_theses)
- Li, Z., & Li, C. (2014). Twitter as a social actor: How consumers evaluate brands differently on Twitter based on relationship norms. *Computers in Human Behavior*, 39, 187-196. <https://doi.org/10.1016/j.chb.2014.07.016>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Lindqvist, J., Cranshaw, J., Wiese, J., Hong, J., & Zimmerman, J. (2011). I'm the mayor of my house: examining why people use foursquare-a social-driven location sharing application. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 2409-2418).
- Long, T., & Johnson, M. (2000). Rigour, reliability and validity in qualitative research. *Clinical effectiveness in nursing*, 4(1), 30-37. <https://doi.org/10.1054/cein.2000.0106>

- Lonsdale, C., Hodge, K., & Rose, E. (2009). Athlete burnout in elite sport: A self-determination perspective. *Journal of sports sciences*, 27(8), 785-795. <https://doi.org/10.1080/02640410902929366>
- Lowe-Calverley, E., & Grieve, R. (2018). Thumbs up: A thematic analysis of image-based posting and liking behaviour on social media. *Telematics and Informatics*, 35(7), 1900-1913. <https://doi.org/10.1016/j.tele.2018.06.003>
- Maguire, J. (2004). Challenging the sports-industrial complex: Human sciences, advocacy and service. *European physical education review*, 10(3), 299-322. <https://doi.org/10.1177/1356336X04044072>
- Mallett, C. J., & Hanrahan, S. J. (2004). Elite athletes: why does the 'fire' burn so brightly?. *Psychology of sport and exercise*, 5(2), 183-200. [https://doi.org/10.1016/S1469-0292\(02\)00043-2](https://doi.org/10.1016/S1469-0292(02)00043-2)
- Marshall, P. D. (2010). The promotion and presentation of the self: celebrity as marker of presentational media. *Celebrity studies*, 1(1), 35-48. <https://doi.org/10.1080/19392390903519057>
- Martin, K. A., Leary, M. R., & O'Brien, J. (2001). Role of self-presentation in the health practices of a sample of Irish adolescents. *Journal of Adolescent Health*, 28(4), 259-262. [https://doi.org/10.1016/S1054-139X\(00\)00209-3](https://doi.org/10.1016/S1054-139X(00)00209-3)
- Martin, K. A., Sinden, A. R., & Fleming, J. C. (2000). Inactivity may be hazardous to your image: The effects of exercise participation on impression formation. *Journal of Sport and Exercise Psychology*, 22(4), 283-291. <https://doi.org/10.1123/jsep.22.4.283>
- Meraz, S. (2009). Is there an elite hold? Traditional media to social media agenda setting influence in blog networks. *Journal of computer-mediated communication*, 14(3), 682-707. <https://doi.org/10.1111/j.1083-6101.2009.01458.x>
- Mesagno, C., Harvey, J. T., & Janelle, C. M. (2011). Self-presentation origins of choking: Evidence from separate pressure manipulations. *Journal of sport and exercise psychology*, 33(3), 441-459. <https://doi.org/10.1123/jsep.33.3.441>
- Mikal, J. P., Rice, R. E., Kent, R. G., & Uchino, B. N. (2014). Common voice: Analysis of behavior modification and content convergence in a popular online community. *Computers in Human Behavior*, 35, 506-515. <https://doi.org/10.1016/j.chb.2014.02.036>
- Moller, A. C., Ryan, R. M., & Deci, E. L. (2006). Self-determination theory and public policy: Improving the quality of consumer decisions without using coercion. *Journal of Public Policy & Marketing*, 25(1), 104-116. <https://doi.org/10.1509/jppm.25.1.104>
- Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of counseling psychology*, 52(2), 250. <https://psycnet.apa.org/buy/2005-03263-015>

- Morrow, S. L., Rakhsha, G., & Castañeda, C. L. (2001). Qualitative research methods for multicultural counseling. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counselling* (pp. 576-603). Sage Publications.
- Nair, M. (2011). Understanding and measuring the value of social media. *Journal of Corporate Accounting & Finance*, 22(3), 45-51. <https://doi.org/10.1002/jcaf.20674>
- Naslund, J. A., Aschbrenner, K. A., McHugo, G. J., Unützer, J., Marsch, L. A., & Bartels, S. J. (2019). Exploring opportunities to support mental health care using social media: A survey of social media users with mental illness. *Early intervention in psychiatry*, 13(3), 405-413. <https://doi.org/10.1111/eip.12496>
- National Collegiate Athletic Association (NCAA). (2022). *NCAA Recruiting Facts* [Fact sheet]. [https://ncaaorg.s3.amazonaws.com/compliance/recruiting/NCAA\\_RecruitingFactSheet.pdf](https://ncaaorg.s3.amazonaws.com/compliance/recruiting/NCAA_RecruitingFactSheet.pdf)
- Nelson, M. (2007). The First Olympic Games. In G. P. Schaus & S. R. Wenn (Eds.), *Onward to the Olympics* (pp. 47-68). Wilfrid Laurier University Press. <https://scholar.uwindsor.ca//llcpub/20>
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-based nursing*, 18(2), 34-35. <http://doi.org/10.1136/eb-2015-102054>
- O'Brien, K. S., Blackie, J. M., & Hunter, J. A. (2005). Hazardous drinking in elite New Zealand sportspeople. *Alcohol and Alcoholism*, 40(3), 239-241. <https://doi.org/10.1093/alcalc/agh145>
- O'Grady, P. (2014). *Relativism*. Routledge. <https://doi.org/10.1017/UPO9781844653294>
- Onwuegbuzie, A. J., & Leech, N. L. (2007). Validity and qualitative research: An oxymoron?. *Quality & quantity*, 41(2), 233-249. <https://doi.org/10.1007/s11135-006-9000-3>
- Otter.ai. (2022). *For education*. <https://otter.ai/education>
- Parker, I. (2004). Criteria for qualitative research in psychology. *Qualitative research in psychology*, 1(2), 95-106. <https://doi.org/10.1191/1478088704qp010oa>
- Pearce, K. (2014). Two can play at that game: social media opportunities in Azerbaijan for government and opposition. *Demokratizatsiya*, 22(1), 39-66. <https://www.proquest.com/openview/9e92f83da17674528f0dbf2e8cf63f21/1?pq-origsite=scholar&cbl=31203>
- Pegoraro, A. (2010). Look who's talking—Athletes on Twitter: A case study. *International journal of sport communication*, 3(4), 501-514. <https://doi.org/10.1123/ijsc.3.4.501>

- Pelletier, L. G., Rocchi, M. A., Vallerand, R. J., Deci, E. L., & Ryan, R. M. (2013). Validation of the revised sport motivation scale (SMS-II). *Psychology of sport and exercise*, 14(3), 329-341. <https://doi.org/10.1016/j.psychsport.2012.12.002>
- Pietkiewicz, I., & Smith, J. A. (2014). A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Psychological journal*, 20(1), 7-14. <https://doi.org/10.14691/CPJ.20.1.7>
- Podlog, L., & Eklund, R. C. (2010). Returning to competition after a serious injury: the role of self-determination. *Journal of sports sciences*, 28(8), 819-831. <https://doi.org/10.1080/02640411003792729>
- Putukian, M. (2016). The psychological response to injury in student athletes: a narrative review with a focus on mental health. *British Journal of Sports Medicine*, 50(3), 145-148. <http://dx.doi.org/10.1136/bjsports-2015-095586>
- Readdy, T., Raabe, J., & Harding, J. S. (2014). Student-athletes' perceptions of an extrinsic reward program: A mixed-methods exploration of self-determination theory in the context of college football. *Journal of Applied Sport Psychology*, 26(2), 157-171. <https://doi.org/10.1080/10413200.2013.816801>
- Reardon, C. L., Bindra, A., Blauwet, C., Budgett, R., Campriani, N., Currie, A., Gouttebauge, V., McDuff, D., Mountjoy, M., Purcell, R., Putukian, M., Rice, M., & Hainline, B. (2021). Mental health management of elite athletes during COVID-19: a narrative review and recommendations. *British journal of sports medicine*, 55(11), 608-615. <http://doi.org/10.1136/bjsports-2020-102884>
- Reid, H. (2017). Athletes as heroes and role models: An ancient model. *Sport, ethics and philosophy*, 11(1), 40-51. <https://doi.org/10.1080/17511321.2016.1261931>
- Rein, I., Kotler, P., & Shields, B. (2006). A sporting chance at branding. *Brand Strategy*. 30-31. [http://www.theelusivefan.com/sports\\_branding.pdf](http://www.theelusivefan.com/sports_branding.pdf)
- Rennie, D. L. (2004). Reflexivity and personcentered counseling. *Journal of Humanistic Psychology*, 44(2), 182-203. <https://doi.org/10.1177/0022167804263066>
- Rice, S. M., Purcell, R., De Silva, S., Mawren, D., McGorry, P. D., & Parker, A. G. (2016). The mental health of elite athletes: A narrative systematic review. *Sports medicine*, 46(9), 1333-1353. <https://doi.org/10.1007/s40279-016-0492-2>
- Riessman, C. K. (1993). *Narrative analysis*. Sage Publications. [https://books.google.co.nz/books?hl=en&lr=&id=9ffAwoYi7E0C&oi=fnd&pg=PP6&dq=Narrative+analysis&ots=UssvYKn4eT&sig=v6\\_Wij9kbJTC-SxsDJGvMdKxtz0&redir\\_esc=y#v=onepage&q=Narrative%20analysis&f=false](https://books.google.co.nz/books?hl=en&lr=&id=9ffAwoYi7E0C&oi=fnd&pg=PP6&dq=Narrative+analysis&ots=UssvYKn4eT&sig=v6_Wij9kbJTC-SxsDJGvMdKxtz0&redir_esc=y#v=onepage&q=Narrative%20analysis&f=false)
- Roberts, G. C. (2001). Understanding the dynamics of motivation in physical activity: The influence of achievement goals on motivational processes. *Advances in motivation in sport and exercise*, 3, 1-50. [https://media.wiley.com/product\\_data/excerpt/15/04717381/0471738115.pdf](https://media.wiley.com/product_data/excerpt/15/04717381/0471738115.pdf)

- Robinson, K., & Ferraro, F. R. (2004). The relationship between types of female athletic participation and female body type. *The Journal of psychology, 138*(2), 115-128. <https://doi.org/10.3200/JRLP.138.2.115-128>
- Robinson, M. J., & Trail, G. T. (2005). Relationships among spectator gender, motives, points of attachment, and sport preference. *Journal of Sport management, 19*(1), 58-80. <https://doi.org/10.1123/jsm.19.1.58>
- Rolfe, G. (2006). Validity, trustworthiness and rigour: quality and the idea of qualitative research. *Journal of advanced nursing, 53*(3), 304-310. <https://doi.org/10.1111/j.1365-2648.2006.03727.x>
- Ronkainen, N. J., Ryba, T. V., & Selänne, H. (2019). “She is where I’d want to be in my career”: Youth athletes’ role models and their implications for career and identity construction. *Psychology of Sport and Exercise, 45*. <https://doi.org/10.1016/j.psychsport.2019.101562>
- Roomruangwong, C., Kanchanatawan, B., Sirivichayakul, S., & Maes, M. (2017). High incidence of body image dissatisfaction in pregnancy and the postnatal period: Associations with depression, anxiety, body mass index and weight gain during pregnancy. *Sexual & Reproductive Healthcare, 13*, 103-109. <https://doi.org/10.1016/j.srhc.2017.08.002>
- Rosenstein, A. W., & Grant, A. E. (1997). Reconceptualizing the role of habit: A new model of television audience activity. *Journal of Broadcasting & electronic media, 41*(3), 324-344. <https://doi.org/10.1080/08838159709364411>
- Rossmann, G. B., & Rallis, S. F. (2011). *Learning in the field: An introduction to qualitative research*. Sage. [https://books.google.co.nz/books/about/Learning\\_in\\_the\\_Field.html?id=luFJQwpCoBgC&redir\\_esc=y](https://books.google.co.nz/books/about/Learning_in_the_Field.html?id=luFJQwpCoBgC&redir_esc=y)
- Rowe, D., & Hutchins, B. (2014). Globalization and online audiences. In A. Billings & M. Hardin (Eds.), *Routledge handbook of sport and new media* (pp. 25-36). Routledge. <https://doi.org/10.4324/9780203114711>
- Rubin, A. M. (2008). Uses-and-gratifications perspective on media effects. In J. Bryant & D. Zillmann (Eds.), *Media effects, Advances in Theory and Research* (pp. 181-200). Routledge.
- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass communication & society, 3*(1), 3-37. [https://doi.org/10.1207/S15327825MCS0301\\_02](https://doi.org/10.1207/S15327825MCS0301_02)
- Ryan, C. (2018). Navigating the athlete role: identity construction within New Zealand’s elite sport environment. *Qualitative Research in Sport, Exercise and Health, 10*(3), 306-317. <https://doi.org/10.1080/2159676X.2017.1399923>

- Ryan, L. (2019). *Flourishing after retirement: understanding the sport career transition of New Zealand's elite athletes* [Unpublished doctoral dissertation]. The University of Waikato. <https://hdl.handle.net/10289/12958>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and wellbeing. *American psychologist*, 55(1), 68. <https://psycnet.apa.org/doi/10.1037/0003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Publications. [https://books.google.co.nz/books?hl=en&lr=&id=Bc\\_DDAAAQBAJ&oi=fnd&pg=PP1&dq=self+determination+theory:+basic&ots=QImdhdfU5m&sig=nAltXNry4yUP-otly4Hs8XILzUI&redir\\_esc=y#v=onepage&q=self%20determination%20theory%3A%20basic&f=false](https://books.google.co.nz/books?hl=en&lr=&id=Bc_DDAAAQBAJ&oi=fnd&pg=PP1&dq=self+determination+theory:+basic&ots=QImdhdfU5m&sig=nAltXNry4yUP-otly4Hs8XILzUI&redir_esc=y#v=onepage&q=self%20determination%20theory%3A%20basic&f=false)
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological wellbeing revisited. *Journal of personality and social psychology*, 69(4), 719-727. <https://psycnet.apa.org/doi/10.1037/0022-3514.69.4.719>
- Rynne, S. B., Mallett, C., & Tinning, R. (2006). High performance sport coaching: Institutes of sport as sites for learning. *International Journal of Sports Science & Coaching*, 1(3), 223-234. <https://doi.org/10.1260/174795406778604582>
- Sanders, G. S., & Baron, R. S. (1975). The motivating effects of distraction on task performance. *Journal of Personality and Social Psychology*, 32(6), 956-963. <https://psycnet.apa.org/doi/10.1037/0022-3514.32.6.956>
- Sanderson, J. (2018). Thinking twice before you post: Issues student-athletes face on social media. *New Directions for Student Services*, 2018(163), 81-92. <https://doi.org/10.1002/ss.20272>
- Sanderson, J., & Truax, C. (2014). I hate you man!": Exploring maladaptive parasocial interaction expressions to college athletes via Twitter. *Journal of Issues in Intercollegiate Athletics*, 7(1), 333-351. [https://www.researchgate.net/profile/Jimmy-Sanderson/publication/289419443\\_I\\_hate\\_you\\_Man'\\_Exploring\\_maladaptive\\_parasocial\\_interaction\\_expressions\\_to\\_college\\_athletes\\_via\\_Twitter/links/5c2d3f2e92851c22a356314d/I-hate-you-Man-Exploring-maladaptive-parasocial-interaction-expressions-to-college-athletes-via-Twitter.pdf](https://www.researchgate.net/profile/Jimmy-Sanderson/publication/289419443_I_hate_you_Man'_Exploring_maladaptive_parasocial_interaction_expressions_to_college_athletes_via_Twitter/links/5c2d3f2e92851c22a356314d/I-hate-you-Man-Exploring-maladaptive-parasocial-interaction-expressions-to-college-athletes-via-Twitter.pdf)
- Sanderson, J., Browning, B., & Schmittl, A. (2015). Education on the digital terrain: A case study exploring college athletes' perceptions of social-media training. *International Journal of Sport Communication*, 8(1), 103-124. <https://doi.org/10.1123/IJSC.2014-0063>
- Schaal, K., Tafflet, M., Nassif, H., Thibault, V., Pichard, C., Alcotte, M., Guillet, T., El Helou, N., Berthelot, G., Simon, S., & Toussaint, J. F. (2011). Psychological balance in high level athletes: gender-based differences and sport-specific patterns. *PloS one*, 6(5). <https://doi.org/10.1371/journal.pone.0019007>

- Schaupp, L. C., & Bélanger, F. (2014). The value of social media for small businesses. *Journal of information systems*, 28(1), 187-207. <https://doi.org/10.2308/isys-50674>
- Schinke, R. J., Stambulova, N. B., Si, G., & Moore, Z. (2018). International society of sport psychology position stand: Athletes' mental health, performance, and development. *International journal of sport and exercise psychology*, 16(6), 622-639. <https://doi.org/10.1080/1612197X.2017.1295557>
- Schinke, R., Papaioannou, A., Henriksen, K., Si, G., Zhang, L., & Haberl, P. (2020). Sport psychology services to high performance athletes during COVID-19. *International journal of sport and exercise psychology*, 18(3), 269-272. <https://doi.org/10.1080/1612197X.2020.1754616>
- Schlenker, B. R. (2012). Self-presentation. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 542-570). The Guilford Press. [https://books.google.co.nz/books?hl=en&lr=&id=VukSQuVMQy0C&oi=fnd&pg=PP1&dq=.\)+Handbook+of+self+and+identity&ots=L1QVjIfrby&sig=Ifmidmk--YxRG290f0NLI TU5lsY&redir\\_esc=y#v=onepage&q&f=false](https://books.google.co.nz/books?hl=en&lr=&id=VukSQuVMQy0C&oi=fnd&pg=PP1&dq=.)+Handbook+of+self+and+identity&ots=L1QVjIfrby&sig=Ifmidmk--YxRG290f0NLI TU5lsY&redir_esc=y#v=onepage&q&f=false)
- Sebire, S. J., Standage, M., & Vansteenkiste, M. (2009). Examining intrinsic versus extrinsic exercise goals: Cognitive, affective, and behavioral outcomes. *Journal of Sport and Exercise Psychology*, 31(2), 189-210. <https://doi.org/10.1123/jsep.31.2.189>
- Sebire, S. J., Standage, M., & Vansteenkiste, M. (2011). Predicting objectively assessed physical activity from the content and regulation of exercise goals: evidence for a mediational model. *Journal of Sport and Exercise Psychology*, 33(2), 175-197. <https://doi.org/10.1123/jsep.33.2.175>
- Shannon, S., Hanna, D., Haughey, T., Leavey, G., McGeown, C., & Breslin, G. (2019). Effects of a mental health intervention in athletes: Applying self-determination theory. *Frontiers in psychology*, 10, 1-11. <https://doi.org/10.3389/fpsyg.2019.01875>
- Sharpe, S., Mountifield, C., & Filo, K. (2020). The social media response from athletes and sport organizations to COVID-19: An altruistic tone. *International Journal of Sport Communication*, 13(3), 474-483. <https://doi.org/10.1123/ijsc.2020-0220>
- Sheehy, T., & Hodge, K. (2015). Motivation and morality in Masters athletes: A self-determination theory perspective. *International Journal of Sport and Exercise Psychology*, 13(3), 273-285. <https://doi.org/10.1080/1612197X.2014.956326>
- Sherwood, M., Nicholson, M., & Marjoribanks, T. (2017). Controlling the Message and the Medium? The impact of sports organisations' digital and social channels on media access. *Digital Journalism*, 5(5), 513-531. <https://doi.org/10.1080/21670811.2016.1239546>
- Silverman, D. (2013). *Doing qualitative research: A practical handbook*. Sage Publications.
- Sloan, L. R. (1988). The motives of sports fans. In L. R. Sloan (Ed.), *Sports, games, and play* (pp. 182-247). Psychology Press. <https://doi.org/10.4324/9780203728376>

- Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International review of sport and exercise psychology*, 11(1), 101-121.  
<https://doi.org/10.1080/1750984X.2017.1317357>
- Smith, L. R., & Sanderson, J. (2015). I'm going to Instagram it! An analysis of athlete self-presentation on Instagram. *Journal of Broadcasting & Electronic Media*, 59(2), 342-358. <https://doi.org/10.1080/08838151.2015.1029125>
- Solly, H. (2022). *Elite Athletes Preferences for Nutrition Education* [Unpublished master's thesis]. Massey University.  
<https://mro.massey.ac.nz/bitstream/handle/10179/17328/SollyMScThesis.pdf?sequence=1&isAllowed=y>
- Sotiriadou, P., & De Bosscher, V. (2018). Managing high-performance sport: introduction to past, present and future considerations. *European Sport Management Quarterly*, 18(1), 1-7. <https://doi.org/10.1080/16184742.2017.1400225>
- Speier, C., Valacich, J. S., & Vessey, I. (1999). The influence of task interruption on individual decision making: An information overload perspective. *Decision sciences*, 30(2), 337-360. <https://doi.org/10.1111/j.1540-5915.1999.tb01613.x>
- Sport New Zealand. (2022). *Who we are and what we do*. <https://sportnz.org.nz/about/who-we-are/>
- Stake, R. E. (1995). *The art of case study research*. Sage.
- Statista. (2022). *Number of social media users worldwide from 2017 to 2027*.  
<https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>
- Statista. (2022a). *Active social media users as percentage of the total population in New Zealand from 2015 to 2022*. <https://www.statista.com/statistics/680698/new-zealand-social-media-penetration/>
- Stavros, C., Pope, N. K. L., & Winzar, H. (2008). Relationship marketing in Australian professional sport: an extension of the Shani framework. *Sport Marketing Quarterly*, 17(3), 135-145. <https://researchers.mq.edu.au/en/publications/relationship-marketing-in-australian-professional-sport-an-extens>
- Stirling, A. E., Cruz, L. C., & Kerr, G. A. (2012). Influence of retirement on body satisfaction and weight control behaviors: Perceptions of elite rhythmic gymnasts. *Journal of applied sport psychology*, 24(2), 129-143.  
<https://doi.org/10.1080/10413200.2011.603718>
- Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & behavior*, 7(3), 321-326.  
<https://doi.org/10.1089/1094931041291295>



- Sullivan, J., & Hodge, K. P. (1991). A Survey of Coaches and Athletes About Sport Psychology in New Zealand. *Sport Psychologist*, 5(2), 140-151.  
<https://doi.org/10.1123/tsp.5.2.140>
- Sweller, J. (1994). Cognitive load theory, learning difficulty, and instructional design. *Learning and instruction*, 4(4), 295-312. [https://doi.org/10.1016/0959-4752\(94\)90003-5](https://doi.org/10.1016/0959-4752(94)90003-5)
- Tamminen, K. A., Holt, N. L., & Neely, K. C. (2013). Exploring adversity and the potential for growth among elite female athletes. *Psychology of sport and exercise*, 14(1), 28-36. <https://doi.org/10.1016/j.psychsport.2012.07.002>
- Terry, P. C., Lane, A. M., & Warren, L. (1999). Eating attitudes, body shape perceptions and mood of elite rowers. *Journal of Science and Medicine in Sport*, 2(1), 67-77.  
[https://doi.org/10.1016/S1440-2440\(99\)80185-6](https://doi.org/10.1016/S1440-2440(99)80185-6)
- Thomas, D. R., & Dyall, L. (1999). Culture, ethnicity, and sport management: A New Zealand perspective. *Sport Management Review*, 2(2), 115-132.  
[https://doi.org/10.1016/S1441-3523\(99\)70092-6](https://doi.org/10.1016/S1441-3523(99)70092-6)
- Thompson, A. J., Martin, A. J., Gee, S., & Eagleman, A. N. (2014). Examining the development of a social media strategy for a national sport organisation a case study of Tennis New Zealand. *Journal of Applied Sport Management*, 6(2), 42-63.  
<https://trace.tennessee.edu/jasm/vol6/iss2/15/>
- Thompson, A. J., Martin, A. J., Gee, S., & Geurin, A. N. (2018). Building brand and fan relationships through social media. *Sport, Business and Management: An International Journal*, 8(3), 235-256. <https://doi.org/10.1108/SBM-04-2017-0024>
- Tiggemann, M. (2004). Body image across the adult life span: Stability and change. *Body image*, 1(1), 29-41. [https://doi.org/10.1016/S1740-1445\(03\)00002-0](https://doi.org/10.1016/S1740-1445(03)00002-0)
- Tilley, S. A., & Powick, K. D. (2002). Distanced data: Transcribing other people's research tapes. *Canadian Journal of Education/Revue canadienne de l'éducation*, 27(2), 291-310. <https://doi.org/10.2307/1602225>
- Torstveit, M. K., Rosenvinge, J. H., & Sundgot-Borgen, J. (2008). Prevalence of eating disorders and the predictive power of risk models in female elite athletes: a controlled study. *Scandinavian journal of medicine & science in sports*, 18(1), 108-118.  
<https://doi.org/10.1111/j.1600-0838.2007.00657.x>
- Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative inquiry*, 16(10), 837-851.  
<https://doi.org/10.1177%2F1077800410383121>
- Trafton, J. G., Altmann, E. M., Brock, D. P., & Mintz, F. E. (2003). Preparing to resume an interrupted task: Effects of prospective goal encoding and retrospective rehearsal. *International Journal of Human-Computer Studies*, 58(5), 583-603.  
[https://doi.org/10.1016/S1071-5819\(03\)00023-5](https://doi.org/10.1016/S1071-5819(03)00023-5)

- Trail, G. T., Anderson, D. F., & Fink, J. S. (2005). Consumer satisfaction and identity theory: A model of sport spectator conative loyalty. *Sport Marketing Quarterly*, 14(2), 98-111. <https://www.cabdirect.org/cabdirect/abstract/20053098360>
- Tuckett, A. G. (2005). Applying thematic analysis theory to practice: A researcher's experience. *Contemporary nurse*, 19(1-2), 75-87. <https://doi.org/10.5172/conu.19.1-2.75>
- Ültanir, E. (2012). An epistemological glance at the constructivist approach: Constructivist learning in Dewey, Piaget, and Montessori. *International journal of instruction*, 5(2), 195-212.
- Vale, L., & Fernandes, T. (2018). Social media and sports: driving fan engagement with football clubs on Facebook. *Journal of strategic marketing*, 26(1), 37-55. <https://doi.org/10.1080/0965254X.2017.1359655>
- Vallerand, R. J., Deci, E. L., & Ryan, R. M. (1987). Intrinsic motivation in sport. *Exercise and sport sciences reviews*, 15(1), 389-426. [https://journals.lww.com/acsm-essr/citation/1987/00150/12\\_intrinsic\\_motivation\\_in\\_sport.15.aspx](https://journals.lww.com/acsm-essr/citation/1987/00150/12_intrinsic_motivation_in_sport.15.aspx)
- Vlachopoulos, S. P., Karageorghis, C. I., & Terry, P. C. (2000). Motivation profiles in sport: A self-determination theory perspective. *Research quarterly for exercise and sport*, 71(4), 387-397. <https://doi.org/10.1080/02701367.2000.10608921>
- Vogel, E. A., & Rose, J. P. (2016). Self-reflection and interpersonal connection: Making the most of self-presentation on social media. *Translational Issues in Psychological Science*, 2(3), 294-302. <https://psycnet.apa.org/doi/10.1037/tps0000076>
- Walters, A. J. (1995). The phenomenological movement: implications for nursing research. *Journal of advanced nursing*, 22(4), 791-799. <https://doi.org/10.1046/j.1365-2648.1995.22040791.x>
- Walther, J. B., Van Der Heide, B., Hamel, L. M., & Shulman, H. C. (2009). Self-generated versus other-generated statements and impressions in computer-mediated communication: A test of warranting theory using Facebook. *Communication research*, 36(2), 229-253. <https://doi.org/10.1177/0093650208330251>
- Walther, J. B., Van Der Heide, B., Kim, S. Y., Westerman, D., & Tong, S. T. (2008). The role of friends' appearance and behavior on evaluations of individuals on Facebook: Are we known by the company we keep?. *Human communication research*, 34(1), 28-49. <https://doi.org/10.1111/j.1468-2958.2007.00312.x>
- Walton, C. C., Rice, S., Gao, C. X., Butterworth, M., Clements, M., & Purcell, R. (2021). Gender differences in mental health symptoms and risk factors in Australian elite athletes. *BMJ open sport & exercise medicine*, 7(1), 1-6. <http://doi.org/10.1136/bmjsem-2020-000984>
- Wann, D. L., & Branscombe, N. R. (1993). Sports fans: Measuring degree of identification with their team. *International journal of sport psychology*, 24(1), 1-17. <https://psycnet.apa.org/record/1994-00035-001>

- Watson, G. (2007). Sport and ethnicity in New Zealand. *History Compass*, 5(3), 780-801.  
<https://doi.org/10.1111/j.1478-0542.2007.00423.x>
- Weick, K. E. (2007). The generative properties of richness. *Academy of management journal*, 50(1), 14-19. <https://doi.org/10.5465/amj.2007.24160637>
- Weinstein, N., & Ryan, R. M. (2010). When helping helps: autonomous motivation for prosocial behavior and its influence on wellbeing for the helper and recipient. *Journal of personality and social psychology*, 98(2), 222-244.  
<https://psycnet.apa.org/doi/10.1037/a0016984>
- Weiyan, L. I. U. (2015). A historical overview of uses and gratifications theory. *Cross-Cultural Communication*, 11(9), 71-78.  
<http://52.196.142.242/index.php/cc/article/view/7415>
- Whitehead, J., & Duda, J. (1998). Measurement of goal perspectives in the physical domain. In J. L. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 21-48). Fitness Information Technology.  
<https://research.birmingham.ac.uk/en/publications/measurement-of-goal-perspectives-in-the-physical-domaina>
- Whiting, A., & Williams, D. (2013). Why people use social media: a uses and gratifications approach. *Qualitative market research: an international journal*, 16(4), 362-369.  
<https://doi.org/10.1108/QMR-06-2013-0041>
- Williams, G. C., Rodin, G. C., Ryan, R. M., Grolnick, W. S., & Deci, E. L. (1998). Autonomous regulation and long-term medication adherence in adult outpatients. *Health Psychology*, 17(3), 269-276.  
<https://psycnet.apa.org/doi/10.1037/0278-6133.17.3.269>
- Williams, M., Hudson, J., & Lawson, R. J. (1999). Self-presentation in sport: initial development of a scale for measuring athletes' competitive self-presentation concerns. *Social Behavior and Personality: an international journal*, 27(5), 487-502.  
<https://doi.org/10.2224/sbp.1999.27.5.487>
- Wilson, R. E., Latner, J. D., & Hayashi, K. (2013). More than just body weight: The role of body image in psychological and physical functioning. *Body image*, 10(4), 644-647.  
<https://doi.org/10.1016/j.bodyim.2013.04.007>
- Winter, G. (2000). A comparative discussion of the notion of validity in qualitative and quantitative research. *The qualitative report*, 4(3), 1-14.  
<https://doi.org/10.46743/2160-3715/2000.2078>
- Wong, E. H., Lox, C. L., & Clark, S. E. (1993). Relation between sports context, competitive trait anxiety, perceived ability, and self-presentation confidence. *Perceptual and motor skills*, 76(3), 847-850. <https://doi.org/10.2466/pms.1993.76.3.847>
- Wooley, S. (2013). Constantly connected: The impact of social media and the advancement in technology on the study abroad experience. *Elon Journal of Undergraduate*

*Research in Communications*, 4(2).

<http://www.inquiriesjournal.com/articles/822/constantly-connected-the-impact-of-social-media-and-the-advancement-in-technology-on-the-study-abroad-experience>

Yan, G., Pegoraro, A., & Watanabe, N. M. (2018). Student-athletes' organization of activism at the University of Missouri: Resource mobilization on Twitter. *Journal of Sport Management*, 32(1), 24-37. <https://doi.org/10.1123/jsm.2017-0031>

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Sage Publications.

Zell, E., & Alicke, M. D. (2010). The local dominance effect in self-evaluation: Evidence and explanations. *Personality and Social Psychology Review*, 14(4), 368-384. <https://doi.org/10.1177/1088868310366144>

Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction on Facebook: Digital empowerment in anchored relationships. *Computers in human behavior*, 24(5), 1816-1836. <https://doi.org/10.1016/j.chb.2008.02.012>

The data analysis for this paper was generated using Qualtrics software, Version July 2022 of Qualtrics. Copyright © 2022 Qualtrics. Qualtrics and all other Qualtrics produce or service names are registered trademarks or trademarks of Qualtrics, Provo, UT, USA. <https://www.qualtrics.com>

## Appendices

### Appendix A: Participant Information Sheet

#### What is involved?

Completing the survey will take approximately 5 minutes. Your responses will contribute to research designed to find information for this study. Please enter your pseudonym that was assigned to you first before continuing to the questions.

Click on the next button at the bottom of this page which will take you to the survey. Thank you for taking the time to complete this survey.

#### Who is doing this research?

My name is Hamish Gill, and I am a Masters student in Psychology at Massey University being supervised by Dr Ian de Terte and Dr Warrick Wood.

#### Who can participate?

You need to be 18 years or older to participate. Must have represented New Zealand in any sporting code and are active on social media. We are interested in responses from individuals in any sport who demonstrate competent use of social media. If you agree to participate you will be asked to complete a short survey questionnaire.

#### Your rights as a participant:

You are under no obligation to accept this invitation. If you decide to participate, completion and submission of the questionnaire implies consent. You have the right to stop participating at any point without consequence; however, once completed and submitted, you will not be able to retract your data as there is no way of tracing your data back to you.

My supervisors and myself will be the only people who have access to any of your responses. I myself will be the only person who will view your chosen email address (for distribution of information). All eligible participants will be assigned a pseudonym for research purposes.

All data is kept confidential. The data collected will be used for my Master's thesis. This study may be published in an academic journal or other outlet. Either Dr Ian de Terte or Dr Warrick Wood will keep a copy for 5 years and then destroy it.

The only exception to this confidentiality is if your safety, my safety or someone else's safety is at risk.

#### Contact Information

If you have any further questions please feel free to contact the researcher or supervisor. This study will be completed by the end of February 2023. Please note that there will be no personally

identifying information published within the study. If you would like a summary of the study, upon request, this can be emailed to you once the study is completed.

*Hamish Gill (Researcher): hamishgill1@hotmail.com 02102776310*

*Dr Ian de Terte (Massey University research supervisor) I.deTerte@massey.ac.nz*

*Dr Warrick Wood (Massey University research supervisor) w.wood@massey.ac.nz*

**Massey University ethical approval statement:**

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Professor Craig Johnson, Director (Research Ethics), email [humanethics@massey.ac.nz](mailto:humanethics@massey.ac.nz).

## Appendix B: Screening Survey

### Respondent Consent

Thank you for participating in this questionnaire.

Your participation implies consent.

You have the right to decline to answer any particular question. I have read and understood the information sheet for this study and consent to collection of my responses, both in this screening questionnaire and interviews.

*(Please click on the 'Yes' choice if you wish to proceed.)*

- Yes
- No

### Demographics

What gender do you identify with?

- Male
- Female
- Other (please specify)

Which ethnicity do you most identify with?

- New Zealand European/Pākehā
- New Zealand Māori
- Pacific Islander
- Asian
- Other

How old are you?

### Sport Section

What is your primary sport?

- Rugby Union
- Rugby League
- Football/Soccer
- Basketball
- Cricket
- Netball
- Hockey
- Other (Please state):

What is the highest level you have competed at?

- International (Representing New Zealand in international competition at a senior level)
- National (Representing a region or professional team in a domestic league)
- National development (Part of a national development programme)
- Junior level (Representing New Zealand in international competition at a junior level)
- Have not represented New Zealand or region in my sporting code

How long have you spent competing at this level?

- Less than 6 months
- 6 - 12 months
- 2 years
- 3 years
- 4 years
- 5 years
- 6 years
- 7 years
- 8 years
- 9 years
- 10 years



- More than 10 years

Which of the following options best describes you?

- Professional (You are paid full-time to compete in your primary sport)
- Semi-professional (You are paid part-time to compete in your primary sport)
- Amateur (You are not paid to compete in your primary sport)

### Social Media Section

Do you have a social media account/s?

- Yes
- No

Which social media platforms do you frequently use?

- Facebook
- Twitter
- Instagram
- TikTok
- Snapchat
- Other (Please state):

To the best of your knowledge, how many hours a day do you spend on social media?

- Up to 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5 hours
- 6 hours
- 7 hours

- 8 hours
- 9 hours
- 10 or more hours

### Interview times

You have now completed the screening questionnaire. Please select a day/s of the week that works best for you so the primary researcher can schedule in an interview with you.

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday

Monday time slots (please note that interviews are anticipated to take approx. 30-60minutes):

- 8am – 9:30am
- 10am – 11:30am
- 1pm – 2:30pm
- 3pm – 4:30pm
- 5pm – 6:30pm
- 7pm – 8:30pm

Tuesday time slots (please note that interviews are anticipated to take approx. 30-60minutes):

- 8am – 9:30am
- 10am – 11:30am
- 1pm – 2:30pm

- 3pm – 4:30pm
- 5pm – 6:30pm
- 7pm – 8:30pm

Wednesday time slots (please note that interviews are anticipated to take approx. 30-60minutes):

- 8am – 9:30am
- 10am – 11:30am
- 1pm – 2:30pm
- 3pm – 4:30pm
- 5pm – 6:30pm
- 7pm – 8:30pm

Thursday time slots (please note that interviews are anticipated to take approx. 30-60minutes):

- 8am – 9:30am
- 10am – 11:30am
- 1pm – 2:30pm
- 3pm – 4:30pm
- 5pm – 6:30pm
- 7pm – 8:30pm

Friday time slots (please note that interviews are anticipated to take approx. 30-60minutes):

- 8am – 9:30am
- 10am – 11:30am
- 1pm – 2:30pm
- 3pm – 4:30pm
- 5pm – 6:30pm
- 7pm – 8:30pm

Saturday time slots (please note that interviews are anticipated to take approx. 30-60minutes):

- 8am – 9:30am
- 10am – 11:30am
- 1pm – 2:30pm
- 3pm – 4:30pm
- 5pm – 6:30pm
- 7pm – 8:30pm

### **Contact**

Please enter your email address so the primary researcher can contact you to organise an interview.

Email

Please specify whether you would rather have this interview in person, or on Zoom.

- In-person
- Zoom

### **End**

Thank you for participating in the screening questionnaire for this study. The primary researcher will contact you shortly to schedule an interview.

## Appendix C: Initial Information Email



Kia ora/Hello!

My name is Hamish Gill, and I am currently completing a master's degree in Psychology at Massey University.

You are being invited to take part in a research project which aims to deepen our understanding around the use of social media by high-performance athletes. As an athlete performing at a national level, you meet the criteria for inclusion in our study. You must be 18 years or older to participate. If you wish to find out more information about this study, please see the document attached.

If you would like to be a part of this study, please follow the link below to take part in our screening questionnaire, it will take approximately 5-10 minutes to complete:

[https://massey.au1.qualtrics.com/jfe/form/SV\\_bJeCjW1qB1X0nB4](https://massey.au1.qualtrics.com/jfe/form/SV_bJeCjW1qB1X0nB4)

Once you have completed this questionnaire and are eligible, the primary researcher will contact you to schedule an interview, which can be done either in-person or on zoom.

Please note that some people are not eligible for this study for varied reasons and potential participants should not be concerned if they are not eligible for this study.

Please note that all data will be kept confidential, and all participants will be assigned a pseudonym for research purposes.

If you have any further questions or concerns, please do not hesitate to contact the primary researcher.

Thank you,

Hamish Gill  
[hamishgill1@hotmail.com](mailto:hamishgill1@hotmail.com)  
02102776310

### **Massey University ethical approval statement:**

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Professor Craig Johnson, Director (Research Ethics), email [humanethics@massey.ac.nz](mailto:humanethics@massey.ac.nz).

**Appendix D: Facebook Poster**

## **Deepening our understanding of social media use in high performance athletes**

**Are you a high-performance athlete who:**

- **has represented New Zealand and,**
- **regularly uses social media?**

**Then we want you!**

This is a master's study that aims to explore and understand:

- the use of social media in high performance athletes
- your perceptions of and experiences with social media
- how your usage may impact upon your performance, both positively and negatively

Your involvement will include:

- a quick 5–10-minute screening questionnaire
- followed by one semi-structured interview that will be organised between eligible participants and the primary researcher

**If you would like to be a part of this study, please follow the link below to complete the screening questionnaire.**

[https://massey.au1.qualtrics.com/jfe/form/SV\\_bJeCjW1qB1X0nB4](https://massey.au1.qualtrics.com/jfe/form/SV_bJeCjW1qB1X0nB4)

**If you have any further questions or concerns, please do not hesitate to contact the primary researcher. A participant information sheet will be provided.**

**Hamish Gill**  
[hamishgill1@hotmail.com](mailto:hamishgill1@hotmail.com)

## Appendix E: Semi-structured Interview Areas

### Icebreakers

- So, what got you into sport initially?
- What is the coolest place sport has taken you?

### Social Media & Sport

Areas of interest	Questions
<b>Experiences &amp; motivations, and general aspects of social media usage</b>	<ul style="list-style-type: none"> <li>• How long have you been using social media?</li> <li>• What are the uses and motivations for social media in your life?               <ul style="list-style-type: none"> <li>○ Distraction</li> <li>○ Sponsorship interactions/communicating with fans and younger audiences</li> <li>○ To stay in touch with people</li> <li>○ Sporting news                   <ul style="list-style-type: none"> <li>▪ E.g., competitors' results/events</li> </ul> </li> </ul> </li> <li>• Do you think your motivations for social media use has changed over the years? If so, please describe your experience               <ul style="list-style-type: none"> <li>○ E.g., beginning of social media = vain experience, but now more professional outlook – face value</li> </ul> </li> <li>• What does your daily social media use look like?               <ul style="list-style-type: none"> <li>○ Is it about actively posting/engaging with others/communities?</li> <li>○ Or, scrolling and consuming?</li> </ul> </li> <li>• Do you feel any pressure associated with social media? Not just limited to competition environment               <ul style="list-style-type: none"> <li>○ If so, is there a difference between the pressure you experience through social media when <i>compared</i> to traditional media outlets (i.e., 6pm news, NSO websites)</li> </ul> </li> </ul>
<b>Mental health &amp; wellbeing</b>	<ul style="list-style-type: none"> <li>• What impact does social media have on your wellbeing?</li> <li>• How do you feel when you see someone else (particularly your competition) performing well? And it being displayed on social media?               <ul style="list-style-type: none"> <li>○ Does it inspire/motivate? Or produce anxiety</li> <li>○ Does it facilitate competitiveness?</li> </ul> </li> <li>• What happens when you do not check social media?               <ul style="list-style-type: none"> <li>○ Could it be a conditioned response at home/training to constantly check social media?</li> </ul> </li> </ul>
<b>Social media as a positive and negative distraction</b>	<ul style="list-style-type: none"> <li>• Can you describe how social media impacts your performance?               <ul style="list-style-type: none"> <li>○ Positive/negative distractions</li> </ul> </li> <li>• Do you think you should be spending less time on social media?</li> </ul>
<b>Competition environment</b>	<ul style="list-style-type: none"> <li>• What challenges are present for your use of social media when you are travelling for competitions/event?               <ul style="list-style-type: none"> <li>○ Is engagement increased or decreased?</li> </ul> </li> <li>• Do you have someone else who is responsible for your social media account(s) when you are away or in-competition?               <ul style="list-style-type: none"> <li>○ If so, how does this help with your performance and overall wellbeing?</li> <li>○ If not, is this something that could be implemented to help benefit your performance and overall wellbeing?</li> </ul> </li> </ul>

### Extra questions:

- As a high-performance athlete, have you had to attend/or had access to any social media training?
  - If so, what impact did it have?



- If no positive impact, what would have been beneficial to know?
- Can you describe how you feel when you are using social media platforms?

Social media as a positive distraction	<ul style="list-style-type: none"> <li>• How do you manage social media usage in day-to-day life and at major events, so they do not cause distractions or impact performance?</li> <li>• Is social media used as a positive escape/outlet (e.g., content completely unrelated to themselves)</li> <li>• Why do you think social media distracting for some athletes and not for others?</li> </ul>
Social media as a negative distraction	<ul style="list-style-type: none"> <li>• Do you think there is a possibility that time spent on social media negatively impacts your sporting performance or goals?</li> <li>• Are there times when you need to implement strategies to help minimize the distraction of social media</li> </ul>

- Have you experienced any restrictions from NSO's around the use of social media when in a team/competitive environment?
  - If so, how do you feel about it?
  - If not, do you think they should impose restrictions? Do you think it is a benefit for the athlete and their performance/wellbeing?
- Do you treat/manage social media differently when you are in a competition environment or preparing for one? Both in and out of NZ
  - Does your view differ between the two?
  - How does this compare to use outside of competition?

## **Appendix F: Follow-up Member Checking Email**

Hi [NAME]

Hope is all well.

Thank you so much for your participation in my research, your contribution to my project has been invaluable.

I am sending out this email with your interview transcript attached for you to go over to check that you are comfortable with your answers.

Also, if there is anything I would like to follow-up on, would it be possible to talk you again? If so, please let me know and I will be touch with potential times.

If you could please return this the attached transcript to me by the 24th October that would be appreciated. If I do not hear from you by the 24th of October I will assume that the transcript is a correct record of what we talked about and you are not available to be interviewed a second time.

Thank you again,  
Hamish

### **Massey University ethical approval statement:**

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Professor Craig Johnson, Director (Research Ethics), at [humanethics@massey.ac.nz](mailto:humanethics@massey.ac.nz)

