



UNIVERSIDADE
CATÓLICA
PORTUGUESA

THE INFLUENCE OF ELITE ATHLETES ON INSTAGRAM ON THE BEHAVIORAL
INTENT TOWARDS PHYSICAL ACTIVITY AMONG YOUNG ADULTS

Dissertation submitted to Universidade Católica Portuguesa to obtain a Master's

Degree

in

Communication Studies

Specialization in Communication, Marketing and Advertising

By

Daniel Papadopoulos

Faculty of Human Sciences

Universidade Católica Portuguesa

September 2022



UNIVERSIDADE
CATÓLICA
PORTUGUESA

THE INFLUENCE OF ELITE ATHLETES ON INSTAGRAM ON THE BEHAVIORAL
INTENT TOWARDS PHYSICAL ACTIVITY AMONG YOUNG ADULTS

Dissertation submitted to Universidade Católica Portuguesa to obtain a Master's
Degree

in

Communication Studies

Specialization in Communication, Marketing & Advertising

By

Daniel Papadopoulos

Universidade Católica Portuguesa

Under the supervision of Jessica Roberts

September 2022

Abstract

Elite athletes are at the centre of attention among the general public due to their ability to perform at the highest level possible within the world of sport. Sports fans are able to retrieve information about elite athletes on traditional media, although elite athletes have also adopted social media platforms, particularly Instagram to provide people with an insight into their professional and personal lives. It's commonly argued that elite athletes have the ability to inspire audiences through their performance in the context of physical activity, which can result in an increase in sports participation. Traditionally, people watch elite athletes in stadiums or through traditional media, however, because of social media, audiences can access content related to any aspect of athletes' lives, so the inspirational effect can be extended to social media. However, little research has been devoted to how and if elite athletes can inspire audiences to increase their physical activity levels through social media platforms like Instagram. Therefore, this research project seeks to fill the gap within this field of literature. Through a mixed-methods approach, the researcher examined a sample of young adults through semi-structured interviews and a survey to gain insight about physical activity, elite athletes on Instagram, inspiration, and behavioural intention. The findings reflect mixed results as there must be a few conditions behind any changes to behavioural intention caused by Instagram content posted by elite athletes.

Keywords: elite athletes, physical activity, inspiration, behavioural intention, Instagram.

Resumo

Os atletas de elite estão no centro das atenções do público em geral devido à sua capacidade de desempenho ao mais alto nível dentro do mundo do desporto. Os fãs de desporto podem obter informações sobre atletas de elite nos media tradicionais. No entanto, atletas de elite também já adotaram plataformas de redes sociais, principalmente o Instagram, para fornecer às pessoas uma visão das suas vidas profissionais e pessoais. É comum argumentar que os atletas de elite têm a capacidade de inspirar o público através do seu desempenho no contexto da atividade física, o que pode resultar em um aumento na participação desportiva.

Tradicionalmente, as pessoas assistem a atletas de elite em estádios ou através dos media tradicionais, no entanto, por causa das redes sociais, o público pode aceder os conteúdos relacionados a qualquer aspecto da vida dos atletas, de modo que o efeito inspirador pode ser estendido às redes sociais. No entanto, pouca pesquisa foi dedicada a como e se os atletas de elite podem inspirar o público a aumentar os seus níveis de atividade física por meio de plataformas de redes sociais como o Instagram. Portanto, este projeto de pesquisa procura preencher a lacuna dentro desse campo da literatura. Por meio de uma abordagem de métodos mistos, o pesquisador examinou uma amostra de jovens adultos através de entrevistas semiestruturadas e um inquérito por questionário para obter informações sobre atividade física, atletas de elite no Instagram, inspiração e intenção comportamental. As descobertas refletem resultados mistos, pois deve haver algumas condições por trás de quaisquer mudanças na intenção comportamental causadas pelo conteúdo do Instagram publicado por atletas de elite.

Palavras-chave: atletas de elite, atividade física, inspiração, intenção comportamental, Instagram.

Acknowledgements

Writing a project of such calibre has been one of, if not the most challenging and biggest roller-coaster of emotions I have experienced in my life. I started off with the idea of a perfect dissertation, but through many ups and downs I came to the realization that there is no such thing as a perfect dissertation. What drove me to push my furthest limits, spend countless of hours of writing, push through my frustrations, stress about the smallest imaginable details was my true passion for sports and athletes. Without the spark of the idea of writing about elite athletes, things could have looked very differently for me today. It goes without saying that this project has taken numerous turns, however, in the end things fell into place, slowly but surely and it was worth it.

Picking the easy route has rarely been an option for me, particularly within the world of academia, as I complicate things more than I should, but it has ultimately led me to where I am today. Finishing this research project has taught me many harsh lessons, but in order to learn, I have always been a firm believer that for things to sit right, one needs to go through difficult times. My drive to constantly learn and curious nature ultimately led me to the accomplishment of my dissertation

I would like to raise a glass for everyone who stood near me during the thesis writing, friends, family and even pets. Without you, it would have been a lonely journey.

To my family, thank you for the unconditional love and support you have shown me during my incredible and unforgettable journey in Portugal.

To my amazing circle of friends in Lisbon, you have been my greatest source of life and joy, whether we only shared a few moments, spent nearly every day together, or don't speak as much anymore, you always gave me a reason to smile, to laugh and to appreciate every single moment of this life changing adventure. I will savour our friendships for the rest of my life and never forget to look back at the magical times we experienced together in Lisbon.

To Jessica Roberts, who chose to work alongside me for my thesis. Without your directness and honesty, I would not have powered through and found the rhythm I needed. I thank you for practically always being available, replying to my countless number of emails within a short notice and being patient with me during times of disorientation.

Last but not least, a thank you to everybody who participated in my study, whether it was for the interviews or the survey, any form of participation was greatly appreciated.

I am dedicating this last part of acknowledgments to the city of Lisbon. I never expected to fall in love with a city in such a short amount of time. I have grown exponentially over the two past years while living in Lisbon and I cannot believe that time flew by so fast. I will never forget my first days being met by the vivid colours, the culture, the unique architecture, the beaches filled with surfers, the international sphere among many other things which makes this city so special.

Portugal and Lisbon will always have a special place in my heart.

Thank you for everything.

Table of Contents

Abstract	3
Acknowledgements	5
Introduction	12
Background.....	12
Research purpose and question.....	13
Structure of the project and motives behind the choice of topic	14
Chapter 1: Elite athletes and celebrities	15
1. Celebrities.....	15
1.1 Athletes	16
1.2 Athletes as role models	20
1.3 Brand image	24
1.4 The source credibility scale.....	25
1.5 Celebrity endorsement	26
1.6 Elite athletes' use of social media	28
1.7 Instagram.....	32
1.8 On-field and off-field behaviour of elite athletes	33
1.9 Negatives aspect of elite athletes as role models.....	34
Chapter 2: Sports Psychology.....	36
2. Defining behaviour.....	36
2.1 Defining motivation.....	38
2.1.1 Intrinsic & extrinsic motivation	38
2.2 Admiration	39
2.3 Envy	41
2.4 Demonstration effect.....	42
2.5 Social comparison theory.....	43
2.6 Social comparison for motivation.....	44
2.7 Social cognitive theory	45
2.8 Expectancy violation theory.....	46
Chapter 3: Physical activity.....	49
3. Defining physical activity.....	49
3.1 Physical recreation activities.....	50
3.1.1 Physical fitness activities.....	50

3.1.2 Physical exploration activities	51
3.2 Measuring physical activity	52
3.2.1 Technological devices	52
3.2.2 Questionnaires and direct observation.....	53
3.3 Intensity levels of physical activity	54
3.4 Physical activity & social media, apps	56
4. Research objectives and design	59
4.1 Qualitative research design	59
4.2 Quantitative research design	61
4.3 Research Philosophies	62
4.4 Interpretivism & post-positivism.....	62
4.5 Risk Assessment	63
4.6 Conditions for interviewing	64
4.7 Qualitative Data collection.....	65
4.7.1 Recruitment method for the semi-structured interviews	65
4.7.2 Interview procedure and questions.....	66
4.7.3 Zoom.....	67
4.7.4 Recruitment.....	68
4.7.5 Data analysis for interviews.....	68
4.8 Quantitative data collection.....	69
4.8.1 Recruitment method for the survey	69
4.8.2 Survey design, scales for measurement.....	69
4.8.3 General questions	70
4.8.4 Instagram	70
4.8.5 Reasons for taking part in physical activity.....	70
4.8.6 Reasons for following active elite athletes on Instagram	71
4.8.7 Behavioural intention	71
4.8.8 Data Analysis (quantitative data).....	71
4.8.9 Descriptive statistics.....	72
4.8.10 Inferential statistics.....	72
5. Results	73
5.1 Results of the qualitative analysis	73
5.1.1 Theme 1: Physical activity.....	73

5.1.2 Theme 2: Inspiration	74
5.1.3 Body comparison for inspiration.....	76
5.1.4 Role models	76
5.1.5 Theme 3: Elite athletes on Instagram	77
5.1.6 Training	78
5.1.7 Insight into personal lives.....	78
5.1.8 Entertainment (funny content).....	79
5.1.9 Educational content (social cognitive theory).....	80
5.1.10 Purchase behaviour & promotional content.....	81
5.1.11 Traits participants admire about active elite athletes	81
5.1.12 Theme 4: Behavioural intention.....	83
5.1.13 Trying new types of physical activity	84
5.1.14 Theme 5: Fitness influencers	85
5.2 Discussion of qualitative findings	86
5.2.1 Theme 1: Physical activity.....	86
5.2.2 Theme 2: Elite athletes on Instagram	88
5.2.3 Theme 3: Inspiration	89
5.2.4 Theme 4: Behavioural intention.....	90
5.2.5 Theme 5: Fitness influencers	92
5.3 Results of quantitative data	92
5.3.1 Descriptive statistics.....	93
5.3.2 Instagram users	93
5.3.3 Physical activity levels	93
5.3.4 Following active elite athletes on Instagram	93
5.3.5 Analysis of open-ended responses in survey	93
5.3.6 Physical activity	94
5.3.7 Reasons for using Instagram.....	95
5.3.8 Qualitative responses regarding other reasons for using Instagram.....	95
5.3.9 Motivations for taking part in physical activity	96
5.3.10 Self-efficacy and self-determination	96
5.3.11 Reasons for following elite athletes on Instagram	97
5.3.12 Behavioural intention for physical activity participation	97
5.3.13 Elite athletes as product endorsers	98

5.3.14 Behavioural intention to take part in physical activity and inspiration.....	98
5.4 Inferential statistics.....	99
5.4.1 Physical activity participation.....	99
5.4.2 Behavioural intention.....	99
5.4.3 Purchase behaviour.....	100
5.4.4 Reasons for using Instagram.....	101
5.4.5 External influencers (fitness influencers, health coaches).....	101
5.4.6 Self-efficacy/self-determination.....	101
5.5 Discussion quantitative analysis.....	102
5.5.1 Theme 1: Physical activity (participation levels).....	102
5.5.2 Motivations for taking part in physical activity.....	102
5.5.3 Theme 2: elite athletes on Instagram & Instagram usage.....	103
5.5.4 Sub theme: Reasons for following active elite athletes on Instagram.....	103
5.5.5 Sub-theme: Reasons for using Instagram.....	104
5.5.6 Theme 3: Inspiration.....	104
5.5.7 Theme 4: behavioural intention.....	105
5.5.8 Physical activity participation intent.....	105
5.5.9 Purchase behaviour.....	106
5.5.10 Theme 5: Fitness influencers (external influences).....	106
5.6 General Discussion.....	107
5.6.1 Theme 1: Physical activity.....	107
5.6.2 Theme 2: Elite athletes on Instagram.....	108
5.6.3 Theme 3: Inspiration.....	109
5.6.4 Theme 4: Behavioural intention.....	110
5.6.5 Theme 5: Fitness influencers (other types of external influencers).....	111
6. Conclusion.....	113
6.1 Limitations.....	116
6.2 Recommendations for future studies.....	116
Reference list.....	118
Appendices.....	157

List of figures and tables

Table 1: Intensities of physical activity (Ainsworth et al., 2011, Ainsworth et al., 2011; Butte et al., 2018).	55
Table 2: Purchase intention mean differences.	101
Figure 1: The social cognitive theory of health behaviour (Bandura, 2004).....	46

Introduction

Background

Within the world of sport, there are a range of varieties of sports with different rules, movements, and objectives (Sutula, 2018). Sports fall into the category of physical activity, which has been associated with a variety of physical and cognitive benefits (Warburton et al., 2006). Physical activity is defined as “any bodily movement produced by skeletal muscles that results in energy expenditure” (Caspersen et al., 1985, p. 126). Although, there is one important element that all levels and types of sport have in common, the individuals taking part in sports, the performers, in other words the athletes. The definition of an athlete varies depending on the bracket of skill. Pressler and Niebauer (2020) defines an athlete “an individual who is engaged in physical activity and exercise on a regular basis” (p. 3). This definition is slightly broad as there are different characteristics of each category of athlete. For instance, grassroot sport is commonly referred to as the lowest level of sport, where anyone with or without a background in sports can take part and is typically for leisure (Sharpe, 2006). In contrast, elite sport constitutes the highest level of sport possible, with elite athletes playing at the level of international championships and highest national championships (De Hon et al., 2015). McKinney et al. (2019) defines an elite athlete as “one who participates in an organized team or individual sport that requires regular competition against others as a central component, places a high premium on excellence and achievement, and requires some form of systematic (and usually intense) training” (p. 532).

Elite athletes are at the centre of competitions which can be on a regional or international scale with sports fans eager to spectate the performances of elite athletes. Spectating elite athletes can spark a variety of emotions such as happiness, frustration, or inspiration (Greenhalgh et al., 2011). Although the simple act of spectating elite athletes for their skills can impact the behavioural intent of sports fans. On a general scale, behavioural intent can be defined as “the degree to which a person has formulated conscious plans to perform or not perform some specified future behaviour” (Ramadani et al., 2014, p. 302). In the context of physical activity, Potwarka et al. (2020) noted that behavioural intent towards physical activity is linked to the demonstration effect. According to Weed (2009) the demonstration effect “is a process by which people are inspired by elite sport, sports people, or sports events to participate themselves” (p. 4). This is typically due to different forms of inspiration that elite athletes can project over to spectators, whether it’s through their performances, hard

work or personality traits (Weed, 2009). This effect can be extended to social media (Hayes, 2022) since we are living in a digital era with people being more present online on social media than ever, with Instagram reaching over 1.44 billion active users as of July 2022 (DataReportal, 2022). Previous studies have demonstrated that athletes use social media to showcase various types of content typically related to their professional and personal life, or in other words, frontstage and backstage content (Doyle et al., 2022; Sadeghi & Leng, 2021). Athletes also use social media to manage their own image and portray themselves without the traditional media creating and controlling their image (Li et al., 2017; Sanderson, 2008). This also enables the creation of an enhanced connection between themselves and their fans which can reinforce the inspirational effect to take part in physical activity. The act of taking part in physical activity is dependent on two factors, self-efficacy, and self-determination. Firstly, having higher self-efficacy levels is associated with higher likelihood of an individual believing that he or she can perform a difficult task (Bandura, 1988) which could for example be starting with a new type of physical activity in the context of this project. In contrast, lower self-efficacy levels is associated with behaviour avoidance, meaning that a person will avoid changing their behaviour. Secondly, the self-determination theory which encompasses three different categories: intrinsic motivation, extrinsic motivation and amotivation which will be discussed in detail in the literature review (Teixeira et al., 2012; Van Lankveld et al., 2021).

Research purpose and question

Elite athletes have been chosen for this study as they are the most visible athletes in the world of sport due to their high level of skill, achievements, and ability to influence sports fans, particularly on social media (Cha et al., 2010; Pegoraro & Jinnah, 2012). The academic literature on the topic is limited and there is a need to extend the literature by exploring the relationship between elite athletes and how they can affect participation in physical activity of young adults in the context of social media. The studies of Behnoosh et al. (2017), Chmait et al. (2020), and Hayes (2022) were some of the few examples of studies that have attempted to explore the relationship between athletes and their effect at influencing their audiences in the context of physical activity through social media. Their studies are presented in some detail in the literature review. While elite athletes have the ability to influence people through social media, little is known about how and if athletes communicate physical activity promotion through their social media platforms.

Therefore, the main goal of this study is to explore the influence of active elite athletes' Instagram content on behavioural intention in the context of physical activity of adults aged 18 to 34. The researcher attempted to accomplish the primary goal through the creation of three secondary objectives: 1) determine the difference in physical activity participation between young adults who follow elite athletes on Instagram and young adults who do not, 2) investigate the reasons young adults follow active elite athletes on Instagram, and 3) assess whether there is a relationship between behavioural intention towards physical activity and following active elite athletes on Instagram. This study attempts to provide scholars and social organization focusing on physical activity participation with an overview if and how elite athletes can be implemented in the context of social media to increase participation rates of young adults.

Structure of the project and motives behind the choice of topic

The study is divided into four parts. The first part is dedicated to the existing literature and is divided into three sub-chapters. The first sub-chapter discusses the notion of an elite athlete, how they can be considered a celebrity, and their influence on consumers. The second sub-chapter presents numerous psychology theories from general literature but also in the context of sport. The third and last sub-chapter introduces notions of physical activity, the sub-categories of physical activity, and how to measure physical activity.

Part two, the methodology, introduces the research goals, the choice of the sample and the tools, but also the data collection methods that were applied. The third part presents the data collected through a mixed methods research design, an analysis of the results, and finally three discussions, each related to the respective part of the research design. Finally, the last part of the study concludes with the main takeaways and future recommendations and limitations of the study.

Chapter 1: Elite athletes and celebrities

1. Celebrities

According to Hani et al. (2018), celebrities can be defined as “famous people, distinguished from others by unique qualities, namely attractiveness and credibility”. Celebrities exist in different fields, like sports, acting, and politics, among many others. They stand out from the general public as they have excelled in their fields, earning fame, and being recognized by the public through traditional media (Hani et al., 2018; Khatri, 2006). Typically, celebrities are at the centre of attention of traditional media, which increases their visibility, often resulting “in glamorous images in the eyes of the public” (Choi et al., 2005, p. 85). Celebrities are in the eyes of the public, being recognizable and more likely to be well known. Turner (2013) follows the definition of Boorstin (1992): “the celebrity is a person who is well-known for their well-knownness” (p. 4). Achieving the status of being well-known can be achieved through various ways like “family relationships (royals)” (Turner, 2013, p. 4), unique accomplishments in the field of the celebrity, but also through the media attributing the status of celebrity to individuals (Driessens, 2013). Giles (2017) argued that any well-known public figure can be glorified by the media as a celebrity and used the example of political figures, and artists being included on the spectrum of celebrity. Celebrities can be famous for their achievements, or for being recognized/well-known, but they possess the ability to entertain others in their respective fields and to activate the curiosity of audiences (Chia & Poo, 2009). Another example includes celebrities who are well-known for their extraordinary looks, like Kim Kardashian (Driessens, 2013).

Celebrities are often looked to as heroes or role models, even being worshipped (Maltby et al., 2004). For many, celebrities play a critical role in their lives, as they can inspire people to take part in sports, take up a career in acting, or simply finding a new hobby (Driessens, 2013). People around the world are also curious to follow the lives of celebrities and to learn as much as possible about them. The rapid evolution of technology, particularly the internet, has enabled consumers and fans to find information about celebrities with a few clicks (Juthe et al., 2015). Accordingly, Khatri (2006) illustrated that celebrities stand out since they generate attention-grabbing stories, resulting in the media showcasing stories about celebrities private or professional lives. Following this statement, Turner (2013) argued that fans are more interested in the personal lives rather than the professional lives of a celebrity,

which further illustrates the curiosity from audiences towards celebrities. Driessens (2013) used the following quote “the precise moment a public figure becomes a celebrity (...) occurs at the point at which media interest in their activities is transferred from reporting on their public role (...) to investigating the details of their private lives” (p. 548). This further demonstrates the role of the media in creating celebrities, although the public’s interest in celebrities’ private lives equally plays a critical role at maintaining the well-knownness of celebrities.

Given the above, for athletes to be considered celebrities, there are a few boxes to be ticked. Firstly, as discussed previously, a (famous) individual becomes a celebrity through excelling in their field or through various accomplishments although this is not always the case as many have become famous without doing so (Khatri, 2006). In the case of elite athletes, however, accomplishments would be to break records and/or win trophies in their respective sport which in turn would attract substantial public attention through media coverage (Swann et al., 2015). Secondly, the ability of athletes to inspire audiences is also critical, as many will consider athletes their role models in an attempt to improve their performance in sports, or by enhancing their physical health through sports/physical activity (Ronkainen et al., 2019). Finally, just for any other celebrity, the media will follow the lives of athletes, both their public and personal lives. This enables the media to portray and create an image of athletes based on their positive or negative actions in their public and private lives. Positive and inspiring actions create positive stories while controversies like sport scandals will create negative stories, thus negative perceptions of an athlete. To summarise, celebrities stand out from the public since they are well-known figures in the media and the public. They are able to attract curiosity, often due to their achievements in their respective industries or because of their private lives. Many people also seek and take inspiration from celebrities in hope to improve themselves. The following subsection will discuss the concept of athletes and explore different definitions.

1.1 Athletes

Jackson and Andrews (2012) argued that sport is a cultural commodity to be enjoyed by athletes and audiences and refers sport as “a universal cultural practice with a long history” (p. 264). On the other hand, Lombardo (2012) focused on the physical act of sport and referred to it as “an activity requiring direct physical competition with an opponent(s), has established procedures and rules, and defined criteria for determining victory” (p. 2). Sport

comes in many different forms and levels and can be enjoyed by practically anybody, whether it's individually or on a team (Downward et al., 2014; Pate et al., 2000). Further, sport at the highest level typically take form in an organized manner, like sports mega events which encompass enormous and international crowds (Horne, 2007). There are various authors who note that professional and elite organized sport is desirable among the public since it has the ability to attract passionate and large audiences (Lombardo, 2012), provide audiences with stimulus and various human emotions (Greenhalgh et al., 2011), showcase athletes displaying the physical limits of the human body (Lucifora & Simmons, 2003), create and exhibit narratives of rivalries (e.g., heroes vs. villains) between countries and athletes (Jackson & Andrews, 2012) and demonstrate the health benefits of being active (Annear et al., 2019).

Athletes constitute sport as they compete in specific types of physical activity depending on the sport that they participate in. The current definition of an athlete is highly disputed, as there are many characteristics to consider given the different categories of an athlete. One definition of "athlete" is "an individual who is engaged in physical activity and exercise on a regular basis" (Pressler & Niebauer, 2020, p. 3). This definition is too broad compared to, for example, the definition of the elite athlete since it does not encompass specific criteria, meaning a vast majority of people taking part in exercise can be considered an athlete. This makes it challenging to distinguish who is considered an athlete since an individual with a full-time job can also take part in regular physical activity.

For the purposes of this study, the definition of "elite athlete" will be utilized, as the definitions that will be reviewed includes distinct criteria which makes it simpler to distinguish who the elite athlete is. According to McKinney et al. (2019), an elite athlete is "one who participates in an organized team or individual sport that requires regular competition against others as a central component, places a high premium on excellence and achievement, and requires some form of systematic (and usually intense) training" (p. 532). The reasoning behind this lies within the aspect of active elite athletes being at the top level of a sport, meaning they showcase the highest level of athletic performance, which is referred to "an athlete's performance-related features" (Arai et al., 2013, p. 387) but also because they are typically the most influential type of athletes. Verburch et al. (2016) presented arguments based on literature within the field and implied that elite athletes have superior neurocognitive skills like sport specific perceptual abilities, visual skills and attention which

separates them from less performing athletes as a result of years of training. Swann et al. (2015) conducted a systematic review and demonstrated that there are numerous factors to consider when defining an elite athlete.

Competing at an international or national level is an important indicator of an elite athlete's status and their performance standard, meaning that they are among the best performing in their respective country at a dedicated sport. Swann et al. (2015) highlighted that the notion of professional status is also a crucial indicator which helps to classify the different categories of athletes. Arguable, the professional status implies that (elite) athletes performs at such a high level that they are able to make a living from their sport. Professional athletes play in distinct tiers of sport, which means that playing standards vary according to the tier an athlete is playing (Swann et al., 2015). For example, the different football tiers in England, where the Premier League is the highest tier, while the second higher tier is the Sky Bet Championship and so on (Swann et al., 2015).

The success of an elite athlete is a critical indicator of their skill and proficiency. Swann et al. (2015) noted that titles, medals, and records are among the most important points of success, typically at an international level in sports mega events like world championships or the Olympics. Alongside international success there is also national success, which indicates that an athlete has attained a specific amount of success in their sport, tier, and country. The success of specific elite athletes is correlated to their athletic performance, meaning they are experts in their sport (Arai et al., 2013).

The experience of an athlete in their highest tier is another factor which is critical to define the "eliteness" of an athlete. Although it is important to separate the amount of experience an athlete has competed in a regional/national and international level as there is a difference in level and experience. Swann et al. (2015) specified that athletes who has been competing in a regional level for longer periods should not be deemed equivalent (in terms of eliteness) to athletes who have competed in the highest international level. According to Swann et al. (2015), the mean experience at an elite level is seven years but this can vary, as previous studies have included elite experience from four months to 35 years (Abreu et al., 2012; Baker & Young, 2014; Welch & Tschampl, 2012).

The sporting competition taking place in the athlete's nation is the first aspect of competitiveness. Each country possesses a pool of athletes in respective sports, and this

number depends on the investment of the government and on cultural differences from country to country (Grix & Carmichael, 2012). The core idea is that the eliteness of an athlete can be judged by the various competitions within a country, but also the number of athletes competing with each other on a national scale. This comparison typically differs based on the size and popularity of a sport within a country. Swann et al. (2015) highlights the example of Brazil having soccer as the national sport and noted that elite athletes naturally have faced increased competition to achieve the highest level in that sport, which results in a significant standard of performance. In contrast, if a sport is not popular within a certain country, or if a nation is small, athletes may not reach an equivalent performance standard and be less likely to reach an international level compared to a country where that specific sport is popular or has a larger pool of athletes.

The second aspect of competitiveness is the competition within the sport globally. Here it's important to distinguish that the level of an athlete will be assessed based on the number of athletes they have to compete against on a global level. This is also dependent on the international popularity of a specific sport but also on the competition structures. For instance, sports that are recognized internationally with high rates of participation across many countries cannot be compared to sports that are not globally dispersed and only have high participation rates in a small number of countries. Swann et al. (2015) uses the example of soccer and contrasts it to roller-hockey, a sport that is not as globally recognized or dispersed in comparison to soccer. The study of Arai et al. (2013) is coherent with the study of Swann et al. (2015) as similar categories were identified, although the main focus was to define athletic performance, which is categorized by four sub-categories: "athletic expertise, competition style, sportsmanship, and rivalry" (Arai et al., 2013, p. 387). It is worth mentioning that attaining the level of elite athletes and their athletic performance is nearly impossible, as only a small percentage of the world population are elite athletes (Arai et al., 2013). However, this does not mean that it's impossible for audiences to take inspiration from elite athletes competing at the high level and reach an adequate level of athleticism to improve one's physical health and fitness. This follows the same principle as one of the characteristics of celebrities, that athletes are able to inspire others.

While there are different categories of athletes, it's also important to note that there are two distinct stages of an athlete's career. Firstly, the term "active" is often applied to athletes who are competing in present time, and actively take part in competitions from a local, national, or

international perspective (Segen's Medical Dictionary, 2011). Since the focus of this research project revolves around active elite athletes the following definition will be used: "a person who is currently or has previously competed as a varsity player (individual or team), a professional player or a national or international level player" (Segen's Medical Dictionary, 2011). Active elite athletes are also more likely to share content on social media related to their sports competitions which can be a source of inspiration for their followers on social media (Li et al., 2021), which is also another reason the researcher has chosen to study active elite athletes. Secondly and lastly, athletes can also retire from their sport or their athletic career. This category is when an athlete announces their retirement which is referred to as "the clearest example of a normative and even inevitable transition" (Lewandowska et al., 2017, p. 259), in other words, it's the transition from being actively involved in athletic competitions as an athlete to not being actively competitive.

1.2 Athletes as role models

Like every celebrity, athletes frequently appear in mainstream media since they are perceived to have "positive character traits including perseverance and discipline" (Leng & Phua, 2022). This has led to many admiring their skills and character traits, resulting in many perceiving athletes as role models. Reid (2017) implied that athletes are able to showcase the social value of sport since they are portrayed (Stevens et al., 2003) as role models who can inspire and enable people push boundaries. The definition of role model refers to an "individual who is perceived as exemplary or worthy of identification or imitation" (Bandura, 2004; Guest & Cox, 2009). Similarly, Morgenroth et al. (2015) defined role models as "individuals who influence role aspirants' achievements, motivation, and goals by acting as behavioural models, representations of the possible, and/or inspirations" (p. 468). Previous literature has demonstrated that children and youth typically identify their closer circle of contacts like family members or friends as role models in their lives (Anderson & Cavallaro, 2002).

In the context of athletes, girls are less likely to identify athletes as their role models, whereas boys are more likely to identify athletes as their role models (Biskup & Pfister, 1999; Guest & Cox, 2009). The study of Fleming et al. (2005) examined a sample of young rugby athletes and showcased the characteristics that were important for role models to possess. The study noted that technical and physical skills were critical for athletes to have but certain qualities

such as temperament, decision-making, and identity were also found to be important (Fleming et al., 2005). Other examples include the study of Giuliano et al. (2007), who examined a mixed-gender sample of sports fans and illustrated that the general public typically prefer a combination of personal qualities and professional qualities of an athlete like leadership skills, self-confidence, working hard and good morals. The same study also found that it was more common for females to relate to personal qualities, compared to males who were more likely to relate to the professional qualities of athletes as role models. This is significant as it demonstrates how sports fans tend to admire their athlete role models for their personal abilities in comparison to their athletic abilities. However, the definition of role model also overlaps with similar terms like hero and mentor. While the terms are similar, there are some differences to note: Yancey et al. (2011) states that mentors are typically part of the close circle of a person like family, friends, or teachers. Mentors are purposely guiding a person toward a certain goal directly, whereas an athlete will not guide a fan directly, as there is not necessarily a direct personal relationship between an athlete and a fan (Yancey et al., 2011). Armour and Duncombe (2012) also argued that the concept of role models coincides with and share similarities with the term mentor. However, the main difference is that a mentor will follow up an individual closely, while a role model does not necessarily need to be a mentor, although it is possible (Armour & Duncombe, 2012).

On the other hand, the term hero stems from Greek and is defined as a “person distinguished for courage, fortitude or deeds” (Lines, 2001, p. 287). Sports heroes typically provides audiences with a specific sporting narrative and is constructed upon past heroic ideals from contemporary times but also includes aspects of celebrities of the modern world (Lines, 2001). In the case of elite athletes, since they are competing on the highest level possible in their respective sports, they can act as important motivators and inspiring role models (Ronkainen et al., 2019). Ronkainen et al. (2019) highlights that it’s possible for people to learn from role models and overcome obstacles in their careers, as athletes and other celebrities have done so to reach their peak. In other words, through role models, we are able to visualize our career paths and habits, and what we can become in the future. Further, Ronkainen et al. (2019) suggest that future athletes, particularly young athletes, are able to benefit from interactions with elite athletes who can direct youth in the right path, acting as role models. Guest and Cox (2009) highlighted the public’s perception of athletes as role models for children, as 75% of the participants in the study agreed that athletes were good role models for children, and 59% said that athletes were the “best” role models. Similarly,

Hyman and Sierra (2010) argued that mass media has transformed the way fans can observe and evaluate their favourite athletes from a distance. The same study showcased how sports biographies play an important role among children as they remain popular, and normally present “highly photogenic and personable stars” (Hyman & Sierra, 2010, p. 227).

However, Lyle (2009) argued that the formation of role models requires time and usually long-term media coverage, whether it is watching sports or following the lives of potential role models like athletes on social media. Historically, elite sport has been considered vital to public health and sports participation (Cocq et al., 2021). This has resulted in significant investments by governments with the belief that elite sport has the ability to encourage and inspire the public to take part in sports of all kinds, a belief that persists today (Green, 2009; Grix, & Carmichael, 2012). Grix and Carmichael (2012) emphasized the importance of government funding in elite sport, as sufficient funding can potentially lead to increased participation rates in physical activity as a result of sporting success within elite sport as the qualities related to success (e.g., hard work) can be traits fans consider inspiring in the context of role model formation.

Organized elite sport comprises various types of sports with a substantial number of athletes taking part, whether on a national or international level. De Bosscher et al. (2013) argue that elite athletes can inspire populations of ages, genders, and races. This argument is based on the “trickle-down effect” (Sotiriadou et al., 2008; Wicker & Frick, 2016). The trickle-down effect refers to the process whereby individuals take inspiration from organized elite sport, athletes, or sports mega-events to take part in sport (De Cocq et al., 2021). Hayes (2019) noted that Olympic athletes belong to the role model rhetoric which typically targets youth and quoted Lenskyj (2020) “among the intangible and unquantifiable aspects of the Olympic legacy – civic pride, community engagement, and group cohesion – is the claim that homegrown ‘role models’ will inspire children and youth to follow their example and play more sport” (p. 127). This field of literature has been widely researched, with the majority of scholars concluding that there is a correlation between spectatorship of sports and participation in physical activity, but it depends on the type of sport, titles won and the event itself (López Sánchez et al., 2019; Storm et al., 2018; Wicker & Frick, 2016; Wicker & Sotiriadou, 2013). Conversely, Misener et al. (2015) demonstrated that simply hosting sports events and receiving media attention is not enough to increase participation in sports, because there is a lack of strategic and tactical focus on specific audiences.

While athletes can be considered role models for physical activity participation, there are also other characteristics that can be admired, such as morals. For example, now retired football player Miroslav Klose showcased admirable behaviour among fans and the general public during a game between Napoli and Lazio in the Italian football league Serie A in 2012 (Melin, 2014). During that game, Klose scored a goal and celebrated, however, he came to realize that his goal should not have been allowed due to an apparent handball and ended up discussing this with the referee. As a result, the goal was ruled out by the referee, but it sparked positive behaviour amongst the fans and general public since it was deemed to be a moral act, known as fair-play, which is referred to as good sportsmanship in the world of sport (Melin, 2014, p. 5). Similarly, Parry (2010) argues that participants in sports, whether at a grassroots or elite level, are taught certain rules which revolve around respect and positive morals. Melin (2014) listed examples as “sportsmanship, fair play, determination and endurance, as sports provides circumstances where these moral goods become particularly easy to cultivate” (p. 6).

Inspiration originates from motivation and is part of the intrinsic motivation (intrinsic motivation will be discussed in chapter 2) of a person. According to Oleynick et al. (2014, p. 1), inspiration can be defined as “a motivational state that compels individuals to bring ideas into fruition”. The main characteristic of inspiration is that it is a specific intrinsic motivation since a person often acquires inspiration through external sources and is “connected to the realization of new ideas” (Böttger et al., 2017, p. 117) which could, for example, be starting with any form of physical activity, such as a sport with the external source being successful displays of elite athletes. Inspiration is typically classified as a “temporary state, rather than a more permanent trait” (Böttger et al., 2017, p. 117) which enables an individual to connect the phase of goal setting and the phase of implementation, or in other words, goal striving. Other examples of inspiration can include stories from elite athletes. Berger (2008) discussed discourses by elite athletes emerging in the early 2000s whose “inspirational stories of courage, dedication, and hard work prove that it can be done, that one can defy the odds and accomplish the impossible” (p. 648). Today, this can be extended to social media as athletes can share inspirational stories through their platforms. This can serve as a source of inspiration for fans but also evoke positive emotions since inspirational stories are personal narratives experienced by specific elite athletes (Carless & Douglas, 2012). De Bosscher et al. (2013) noted that there are three different forms of inspirational effects in sports, “1) the inspirational function of elite performances, 2) the inspirational function of elite athletes and

3) the inspirational function and legacy of elite events” (p. 321). The second category is the most relevant for this study as Lockwood and Kunda (1997) and Giuliano et al. (2007) showcased that the inspirational effect that people take from elite athletes lies in the context of exceptional achievements or qualities that people would like to possess or replicate.

Just like sports fans, athletes themselves also need inspiration and role models. Figgins et al. (2016) explored how active professional athletes’ experiences of inspiration in sports and showcased that there were various reasons. The three main sources of inspiration were the following: “personal performance, thoughts, and accomplishments; (2) interacting with and watching role models; and (3) demonstrations of leadership” (Figgins et al., 2016, p. 84). This inspirational effect can be associated with the demonstration effect (Weed, 2009) which will be discussed in depth in the later sections of the literature review.

1.3 Brand image

Meng and Pan (2013, p. 89) defined the term image as “perceptions of the source held by the audience, shaped by the words and deeds of that source, as well as by the actions of other relevant actors”. Just like traditional brands, elite athletes possess their own brand image. Sassenberg (2015, p. 78) argued that a brand image is “the cumulative product of brand associations in the mind of the consumer, which consists of brand attributes, brand benefits, and attitudes”. There are two categories of brand attributes, one being related to the physical composition of a product or celebrity and the second being brand attributes that are not related to the product/celebrity, which could be external aspects of the product or the celebrity (Keller, 1993).

The notion of human brand also comes into play as it shares some common notions with the term brand image. Hasaan et al. (2016) argues that human brands are constituted of recognizable personas like celebrities (such as athletes) who encompass additional assets and features than traditional brands. Traditional brands are typically based on people’s perceptions as they have intangible assets (e.g., brand name), therefore one can assume that human brands can be referred to a brand which is centred around the perception of a chosen individual (Hasaan et al., 2016). Drawing from this argument, it is also possible to argue that an athlete has their own brand, which is referred to as an athlete brand (Araiet al., 2013). Li et al. (2021) defined an athlete brand as “the public persona of an individual athlete who defines his or her own symbolic meaning and value by using personal name, image, and other brand

elements” (p. 110). Elite athletes create their own brand image which will be reflected and communicated towards a target audience, often their fans, but in a promotional context, to a specific target audience (Li et al., 2020). The process of branding entails that athletes have to focus on their unique traits when promoting themselves, typically through on-field and off-field activities (Carlson & Donovan, 2013; Lobpries et al., 2018). Depending on the brand image of athletes, marketers often attempt to endorse specific athletes with the hope of transferring their positive brand image or uniqueness over to their own brand. Hasaan et al. (2016, p. 68) argues that human brands are “any well-known persona in terms of marketing efforts, and celebrities (e.g., athletes) are the types of human brands that possess additional associations and features of traditional brands”. Typically, intangible assets can include likeability, charisma, or physical attractiveness (Thomson, 2006). Thus, just like traditional brands, athletes possess a brand image, and have arguably become cultural products themselves (Arai et al., 2013).

1.4 The source credibility scale

Ohanian (1991) highlighted that source credibility is often associated with celebrities as they must appear credible for audiences. Ohanian (1990, p. 41) defined source credibility as “a communicator’s positive characteristics that affect the receiver’s acceptance of a message”. There are three subcomponents of source credibility: expertise, trustworthiness, and attractiveness. Expertise is referred to as “the extent to which the source is perceived as being capable of providing correct information” (Ismagilova et al., 2020). Typically, the extent of someone’s expertise, in this case a celebrity’s, is linked to their experience in a certain field, or the training that they have received about products or services (Ismagilova et al., 2020). For instance, the consumer must perceive that there is a positive match between the celebrity and the product that the celebrity they are promoting. Till and Busler (2000) demonstrated that there are positive reactions from the consumer’s side when there is a apparent fit between a celebrity and a product. Koernig and Boyd (2009) confirmed this argument and demonstrated that elite athletes are more effective when they are endorsing a sports brand compared to a non-sports brand.

Trustworthiness is another important component of source credibility and plays a critical role regarding the persuasiveness of a message. According to Wang and Scheinbaum (2018), trustworthiness is “the attribute of dignity, believability and honesty possessed by the endorser and observed by consumers” (p. 7). Previous studies have illustrated that when an

opinion leader like a celebrity is viewed as trustworthy, it can result in a change of opinion, or even change purchase behaviours (Seiler & Kucza, 2017). Once a consumer considers a source such as a celebrity to be trustworthy, the consumer then assumes that the message being communicated by the celebrity is believable (Seiler & Kucza, 2017).

Finally, perceived attractiveness also plays an important role in the context of celebrity endorsements and the effect it has on consumers. The study of Bush et al. (2004) illustrated that physical attributes of a celebrity can influence the purchase behaviour of consumers, since a higher perceived attractiveness of a celebrity can often result in products seeming more desirable. The study of Spry et al. (2011) confirmed that a celebrity endorsement should be one who is seen as credible according to their attractiveness, knowledge, and reliability.

1.5 Celebrity endorsement

The inclusion of celebrity endorsers within a brand's marketing tactics has become a popular advertising strategy for brands over the past decades as celebrities possess various qualities that can assist a brand to reach their marketing goals (McCormick, 2018). According to McCracken (1989, p. 310), a celebrity endorser is "any individual who enjoys public recognition and who uses this on behalf of a consumer good by appearing with it in an advertisement". Typically, celebrities will endorse different products, appearing as the face of the product, but also the brand itself. As a result, marketers spend substantial amounts of capital to get celebrities to endorse since it can provide brands with various benefits as celebrities have the potential to influence consumer behaviour which will be discussed further down. Celebrity endorsements come in many different forms, and athletes represent one third of product endorsers (Tzoumaka et al., 2016). They are different from other celebrities (e.g., musicians, actors), since they have endorsed many forms of product categories in comparison to other celebrities (Carlson & Donovan, 2008).

Marketers have recognized the importance of athletes as spokespeople for their brand and ability to reach out to international audiences. Athletes are more likely to be sponsored by brands than any other type of celebrity (Costanzo & Goodnight, 2006; Tzoumaka et al., 2016). This is due to their on-pitch performances on a national and international scale, which boost their popularity and celebrity status (Hasaan et al., 2016). The importance that brands associate with celebrity endorsements like athletes is showcased by million- and billion-dollar deals between brands and celebrities. For instance, the lifetime deal between Nike and

Cristiano Ronaldo is worth \$1 billion USD illustrates the significance of Ronaldo to Nike as they see the potential for positive returns on their investment, but most importantly the influential effect he possesses at changing consumer behaviours (Gallagher, 2017). Similarly, Michael Jordan, who signed a contract with Nike in 1984 has played a critical role in promoting Nike as the leading and most valuable brand for sports apparel globally through the Jordan shoe line as he still has the ability to influence consumers even after retirement (Badenhausen, 2020).

Celebrity endorsements can provide brands and marketers with a competitive advantage by standing out in different markets as celebrities can break through cluttered and competitive markets to capture the attention of consumers (Charbonneau & Garland, 2005; Dix et al., 2010; Muda et al., 2012). Further, the communication benefits associated with celebrity endorsements include increased attention attraction among audiences and positive word-of-mouth (Loureiro & Sarmento, 2018). To illustrate, Cristiano Ronaldo is the most followed person on Instagram, with over 487 million followers as of August 2022 (Instagram, 2022). Similarly, on Facebook, Cristiano's page has been liked by over 150 million users, while his Twitter account has over 97 million followers (Facebook, 2022; Twitter 2022). He is able to reach fans from all around the world. Additionally, celebrity endorsements can affect purchase behaviour in target markets. As mentioned previously, celebrities including athletes possess attributes like expertise, perceived attractiveness, and credibility (Abeza et al., 2017) which can affect the consumer decision-making process (Dix & Chowdry, 2010). Ohanian (1991) highlighted that source credibility is often associated with celebrities. Abbas et al. (2018) noted that changes in purchase behaviour depend on the gender of the consumer. For instance, the purchase behaviour of female consumers was more likely to be affected by likeability, physical attractiveness, and the credibility of a celebrity. On the other hand, the purchase behaviour of male consumers was more likely to be affected by components like likeability, personality, attractiveness, and experience. Similarly, Wang and Scheinbaum (2018) argued that it is critical to endorse an attractive celebrity who is recognized globally and who is trustworthy to maximize the credibility of a brand. Dix et al. (2010) explored athletes as product endorsers and demonstrated that there was a positive influence towards "product switching intentions, complaint intentions, positive word-of-mouth and brand loyalty" (p. 43) which is clear evidence of athletes being able to influence an audience, in this case a sample of young adults as they have the ability to impact consumer behaviour and purchase intentions. The study of Dix et al. (2010) is coherent with a similar study of Bush et

al. (2004) who also illustrated that athletes are particularly effective at influencing positive word to mouth and brand loyalty of adolescents due to the perception of athletes as role models. Bush et al. (2004) concluded that athletes are critical influences for adolescents in the context of decision making and brand choice. Similarly, Wu (2015) investigated consumers reaction to athletes endorsed by brands. The findings of Wu (2015) illustrated that there is often a high likelihood of a positive effect on purchase intention due to the athletes being endorsed by a brand. This is particularly due to the brand image of athletes, as the brand image of an athlete will be transferred over to the brand hiring the athlete to represent their brand (McCracken, 1989). On the other hand, Lee and Koo (2015) showcased that it's important to consider the credibility of an athlete when endorsing athletes, as the more credible an athlete is, the higher the likelihood of change in purchase intention. Their study suggested that source credibility plays a critical role at influencing consumer behaviour and intention. Huang (2013) demonstrated the example of McDonald's endorsing Yao Ming, a Chinese basketball player, to reach out to Asian consumers. This is an example of corporate brands attempting to reach out to international markets by sponsoring athletes in the brand's target country with the aim of changing consumer behaviour and intention.

1.6 Elite athletes' use of social media

According to Kapoor et al. (2018) social media "is made up of various user-driven platforms that facilitate diffusion of compelling content, dialogue creation, and communication to a broader audience" (p. 536). Today, individuals from around the world can be part of online communities through social media platforms. Various social media platforms are available for people with smartphone and access to the internet and are typically free to use. Through the internet, it's possible to engage in conversations with other users, share image and video-based content for others to see (Hjorth & Hinton, 2019). Vaterlaus et al. (2015) demonstrated that adults aged between 18 and 25 spend substantial amounts of time using technology, including social media. For many it has become part of their daily lives, as 97% of young adults in the US use at least one social media network (Villanti et al., 2017). Further, social media is a space for many to share opinions, seek information or follow their idols.

Previous research has illustrated that there are various reasons to why athletes use social media. For example, Hayes (2019) explored the different categories of professional athlete's shared content on social media based on the study of Hambrick et al. (2011). The following

categories were used to define the content of professional athlete's content "(1) interactivity, (2) diversion, (3) information sharing, (4) content, (5) promotional, and (6) fanship" (Hayes, 2019, p. 27). Out of these six categories, interactivity proved to be the most common and critical category for elite athletes on social media. According to Hambrick et al.'s study (2011), social media is a vital tool for elite athletes to increase their relationship with fans through interaction. This can be done through posts, videos, or real-life type of content like live streams on social media platforms like Instagram. Elite athletes typically accumulate immense numbers of likes and comments instantly after publishing their content on social media (Vergeer & Mulder, 2019). In order to maintain a connection and a consistent level of interactivity, elite athletes are more likely to post content on their social media profiles during offseason periods in comparison to when they are competing (Feder, 2020). Another interactivity aspect is that social media platforms are utilized by elite athletes to maintain contact with their closer range of people like family, friends, and teammates (Browning & Sanderson, 2012). Sokolova and Perez (2021) highlighted that social media is critical as it can serve as an inspiration and ultimately entice behavioural intention among audiences following athletes on social media platforms.

Sadeghi and Leng (2021) analysed content published by Iranian football players to Instagram and divided the content into four main categories: 1) athlete, 2) sponsored content, 3) personal and 4) family. The first category typically involves an athlete sharing content related to their sport, such as training or matchday preparations which illustrates their commitment to their respective sport (Sadeghi & Leng, 2021). Frontstage content is a common term used by scholars to define content related to the sports career of an elite athlete. Doyle et al. (2022) illustrated that frontstage content is the core at "depicting the athlete engaging in their chosen sport" (p. 508.) Moreover, Pocock and Skey (2022) illustrated that elite athletes can post their achievements on Instagram which includes obtaining medals, breaking personal records or even international records. The second category of Sadeghi and Leng (2021) is related to celebrity endorsement. Elite athletes typically promote sponsored products on social media, as it is often agreed between a sponsor and an athlete (Abeza et al., 2017). Sponsored content can range from a post with athletes promoting specific products of a sponsor, the promotion of a sports event to boost ticket sales, or to a video of an athlete performing an action with sponsored sports apparel (Doyle et al., 2022). Athletes will usually recommend these products to their followers which can result in increased sales through changing intention of consumers and visibility for a sponsor. The third and fourth category being personal and

family, which also sparks interaction among fans and a key talking point (Hambrick et al., 2011; Smith & Sanderson, 2015). However, it's possible to argue that family is part of the third category, personal content.

It is also important to highlight that previous scholars have classified social media posts of athletes into two categories. Lebel and Danylchuk (2012) argued that the two main categories are frontstage messages and backstage messages. The first one being frontstage messages consists of athletes interacting with fans, self-promotion and initiating a conversation. The second category being backstage messages consists of expressing support to other athletes/teams, sharing information from other platforms, and analysing games. Frederick and Clavio (2015) and Geurin-Eagleman and Burch (2016) confirmed that these two categories were accurate but showcased that elite athletes on social media mostly post content related to backstage stories. Doyle et al. (2022) provides another definition of backstage content and defines it as “backstage content presents the athlete in personal settings” (p. 508). Smith and Sanderson (2015) demonstrated that elite athletes are more likely to post content that was not correlated to their sports career or sports content in general, with 77% of the analysed posts being backstage posts. This is in line with the study of Geurin-Eagleman and Burch (2016), who found that Olympic athletes were more probable to upload backstage content on their Instagram profiles than frontstage content in a related study. Backstage content drew more comments while frontstage content attracted more likes, (Geurin-Eagleman & Burch, 2016). Athletes can also raise awareness about social causes they care about as part of backstage content as well as their personal lives (Sadeghi & Leng, 2021).

Elite athletes have adopted social media platforms as a channel to directly share their lives and express their opinions, without mass media or marketers controlling their image (Pegoraro, 2010). This means that elite athletes can self-represent on a personal level to counter the image created by mainstream media by sharing their own personal stories, sporting journeys and personal opinions which is referred to as the theory of self-representation (Li et al., 2017; Sanderson, 2008). Li et al. (2021) defined self-representation theory as a process where “individuals attempt to convey messages or images about themselves to others and control or shape how other people view them” (p. 109). Through social media, many present themselves in a favourable way to their audiences, meaning people will share specific traits of their identities which they believe will meet the expectations of their audiences (Park et al., 2020). This also applies to athletes on social

media who post various types of content as discussed above. Hayes (2022) illustrated that social media plays an important role for elite athletes who go unnoticed and receive little attention from traditional media, like female and para-athletes. Social media can therefore result “in a wider range of role models to the community” (Hayes, 2022, p. 17). Previous research suggests that the success of elite female athletes within their sports has been associated with an increase in participation among women (Hayes, 2022). The study of Geurin (2017) highlighted that social media can also assist at increasing participation rates by showcasing successful athletes to spectators. The influence of elite athletes towards the general public varies and depends on a few factors. According to Cha et al. (2010), having an active follower base on social media is the most critical aspect to the influence of an elite athlete as followers tend to actively engage with the content of athletes and show a willingness to follow the lives of elite athletes. Chmait et al. (2020) defined social media engagement from the perspective of a (tennis) athlete as “the total number of, original and shared, posts or comments mentioning that player on social media platforms” (p. 3). In contrast, simply having a large number of followers who are not actively engaging on social media is not enough to influence the general public (Cha et al., 2010), although having a large number of followers on social media is often associated with having a larger reach.

The study of Behnoosh et al. (2017) was particularly interesting as promotional practices such as celebrity endorsement is effective at attracting attention but also at increasing the influence of social campaigns. Examples of social campaigns in the context of sports participation includes sports campaigns specifically focusing on increasing general physical activity and sports participation. Behnoosh et al. (2017) further illustrated that when endorsing an athlete for a social campaign, “attitude, intention, and perception” (p. 227) of campaigns focusing on physical activity was more positively influenced due to the matchup between the athlete and category of endorsement. Hayes (2022) argued that this phenomenon can be applied into the realm of social media and since athletes on social media platforms possess substantial influence which can positively impact sports participation rates. Similarly, Chmait et al. (2020) illustrated that people can uncover various sports through social media, particularly through athletes with a high influence on social media platforms, where athletes with high engagement rates typically have more influence. The study of Chmait et al. (2020) is one of the few studies which demonstrates that individuals can be influenced by athletes to commence participating in sports they are shown to on social media.

1.7 Instagram

Instagram is the second-most popular social media platform, with over 1 billion users worldwide (DataReportal, 2022). The most common users on Instagram are young adults aged between 18 and 35 (Statista, 2022). Weber et al. (2022) noted that Instagram is a “highly visual network as it mainly consists of photos” (p. 1) and that Instagram is particularly effective at inspiring other users, as one can choose the type of content, they wish to see through follows and hashtags. Lee et al. (2015) determined that there are five main psychological and social motives that drive users on Instagram: “social interaction, archiving, self-expression, escapism, and peeking” (p. 552). The same study also found that many Instagram users tend to use the platform to preserve and establish social relationships with other users on Instagram (Lee et al., 2015). Previous studies have demonstrated that many choose to browse products on Instagram to purchase products related to their interests, typically endorsed by celebrities or influencers (Roth & Zawadzki, 2018; Zeren & Gökdağlı, 2020). On the other hand, Meier et al. (2020) explored inspiration in the context of Instagram and noted that many Instagram users utilize Instagram to get inspiration from different types of content posted by celebrities.

Sport content is one of the more frequent types of content on Instagram as both active and retired elite athletes and sports organizations (e.g., Olympics, FIFA) utilize Instagram to advertise distinct achievements (even failures) but also sports events (Weber et al., 2022). Due to the visual, photo-based nature of Instagram, the researcher has chosen Instagram as the main social media platform to be used for this research project. As previously mentioned by Weber et al. (2022), Instagram is also used for inspiration and this corresponds with one of the research aims of this study, as the researcher will look into what type of content posted by active professional athletes is deemed motivational/inspirational for young adults and how it can affect behavioural intention to take part in physical activity. Instagram’s largest audience is aged between 18 and 34, and this also corresponds to the desired age group of the researcher.

Typically, emotions play an important part in every type of sport as both athletes and fans are subject to thrilling and intense performances (Vallerand et al., 2008). Fans identify themselves as part of a community, in this case teams, often due to the fact that fans feel there is a similarity between themselves as people and teams (Carlson et al., 2009; Carlson &

Donavan, 2013). Fans are also drawn to individual athletes through social identification and compare themselves to those whom they believe they are similar to (Carlson & Donavan, 2013; Funk & James, 2001). Fans often purchase and wear sports apparel as part of as fan identification, typically because of a feeling of similarity between an athlete or a team, but also because of the thrill of emotions associated with an athletes or sport team' performance (Smith & Stewart, 2007; Sutton et al., 1997). Many fans also tend to express their support and emotions towards their favourite celebrities on social media through likes, comments or even the creation of fan accounts (Ward, 2016).

1.8 On-field and off-field behaviour of elite athletes

While elite athletes have the ability to inspire people around the world and to create positive change through promoting physical activity or charity involvement, they are not immune from sports scandals and controversial behaviour. Storm and Wagner (2015) utilize the definition of Thomson (2006, p.13), noting that the term “scandal” implies that an action or event has taken place, typically a serious transgression that becomes known to the public, often resulting in negative perceptions towards fans and followers. Adut's (2008) definition addresses the fact that it's unimportant whether the transgression of an athlete is an accusation or real, as long as it provokes a public response. In the social media era, information about an athlete involved in a scandal can accelerate significantly due to the rapid dispersion of information in social media (Bernstein, 2012).

Fans and consumers have a set of expectations about elite athletes and consider them as role models (Meng & Pan, 2013). Over the last decades, many scandals and controversies have been associated with athletes due to their high visibility in mainstream media. Typically, the intensity of scandals and controversies increases, often as a result of constant media coverage, but also due to the rapid circulation of information between fans on social media (Meng & Pan, 2013). As a result, elite athletes subject to a scandal or controversial behaviour are expected to adopt an image repair strategy. For example, an apology statement is expected in order to clear out his/her image (Brown, 2016) and a quick and honest response from the perspective of an athlete involved in a sport scandal, will often create a more positive impression in the eyes of the public and the media (Brazael, 2008).

Athletes at the highest level of sport are required to maintain a positive image since it's central to the athlete's “self-worth” (Allison et al., 2019) but also his/her status in the

community. The financial opportunities like sponsorship and brand deals must also be considered when discussing the concept of image. Arguably, a negative image will put the cultural and material incentives at risk, and the athlete is the one having to take the responsibility for his/her actions (Blaney et al., 2012). Benoit (1997) demonstrated that there are various ways of repairing one's image through the image repair theory (IRT). There are five categories of image repair strategies, according to Benoit (1997): denial, evasion, reducing the offensiveness, corrective action and finally mortification (admitting responsibility). Typically, athletes tend to adopt the mortification approach, in other words doing compensatory acts, including an apology to restore their image (Litchfield, 2018). As seen previously, athletes attempt to maintain a positive image in the public eye, although this doesn't mean that they cannot get involved in controversies. For example, Tiger Wood's involvement in controversial behaviour ultimately resulted in Gillette stopping using Woods in their advertisements (Knittel & Stango, 2014). Similarly, Zhou and Whitla (2013) demonstrated that scandals not only damage a brand's image but also affects them economically. An estimated loss of 5 to 12 billion USD dollars was attributed to the brands endorsing Woods (e.g., Nike and EA) and the regression of the stock market after the media coverage of Woods (Knittel & Stango, 2014). Scandals and controversies involving athletes and celebrities in general often result in negative associations which affect their likeability and trustworthiness, thus damaging the endorsed brand as well.

1.9 Negatives aspect of elite athletes as role models

While it's possible for athletes to have a positive influence on fans in terms of public health, there are some negative sides to taking inspiration from elite athletes. Social media has enabled fans to stay connected with elite athletes. It has become a way of reinforcing relationships with fans and consumers (Brown & Fiorella, 2013). Some fans may feel like they are forming close bonds with celebrities like elite athletes, often referred to as parasocial relationships. The process of parasocial relationships starts with users feeling that they are face-to-face with the celebrities and engaging in internal dialogues (Yuan et al., 2016). During the dialogues, consumers typically become more emotionally attached, and they start appreciating traits of celebrities like their values and motives, which results in forming role models (Yuan et al., 2016). Accordingly, Gong and Li (2019) highlighted that the illusion of "knowing" a celebrity intensifies due to the real time updates of celebrities on social media since the fans would like to form a bond with a specific celebrity. The function to comment

and like a celebrity's post also gives the impression that fans can directly communicate with their favourite celebrities (James, 2011). This can also cause people to "praise" the wrong people as role models and can result in detrimental effects, as the study of Hyman and Sierra (2010) highlighted that celebrity worship can be harmful.

While elite athletes can provide guidance to users on social media regarding physical activity and fitness, they can also negatively affect users. For instance, previous literature has demonstrated that both traditional media and social media can cause negative perceptions about one's body image, also known as body dysmorphia (Franchina & Coco, 2018; Leitet al., 2002). Marks et al. (2020) highlighted the increased promotion of fitness culture and physical activity participation has caused a paradoxical situation. On the one hand, it has the ability to promote healthy behaviours and motivate people to take part in fitness programmes. On the other, it can also cause eating disorders with many adopting extreme measures and unhealthy behaviours. As such, scholars have addressed the importance of regulating content on social media networks in order to reduce the possibility of negative effects on users' health (Ajilore & Abdul, 2021).

Generally speaking, one may believe that the average human body in society is similar to elite athletes on social media as many strive to achieve muscular and thinner bodies (Fardouly & Vartanian, 2016; Piatkowski et al., 2020). This is not the case as elite athletes dedicate their everyday life to both sports and fitness, committing to daily workouts and strict diets (Pettersson et al., 2012). The average person with daily obligations like a full-time job, and/or a family cannot achieve the same physical activity levels as elite athletes (Fransson et al., 2012). However, it is still possible to pursue physical activity levels that can increase the overall health of an individual. Although many may feel like they are not able to replicate or attain the ideal physique, similar to what is portrayed on social media or traditional media. This can result in negative body images and general feeling of discomfort (Silva et al., 2011). In order to achieve the physical and cognitive benefits of taking part in physical activity one does not need to reach an athletic level of physical activity participation. Many studies have demonstrated that 150 to 300 minutes of physical activity a week is sufficient to generate both physical and cognitive benefits (Piercy et al., 2018; Warburton et al., 2006). It is therefore critical to display this understanding to the general population in order to avoid negative outcomes like body dysmorphia, the feeling of failure or in other cases injuries (Piercy et al., 2018).

Chapter 2: Sports Psychology

This chapter will explore the notion of behaviour and factors affecting behavioural change of people in the context of physical activity. Further, the notion of motivation will be discussed and the two subcategories of motivation: intrinsic and extrinsic motivation. Additionally, the following theories will be discussed: social cognitive theory, the demonstration effect and self-determination theory. The goal of this chapter is to give the reader an understanding of the previously mentioned theories and concepts of behavioural intention/motivation, as they are the most relevant for this study.

2. Defining behaviour

The concept of behaviour has been analysed in many different fields, including physical activity (Jackson et al., 2003). However, some scholars have pointed out the difficulty of defining behaviour, as many definitions are imprecise and complicated because “behaviour is so pervasive and intrinsic to everyday life” (Uher, 2016, p. 476). Uher (2016) examined various definitions of behaviour and concluded that the following definition is the most accurate: “external changes or activities of living organisms that are functionally mediated by other external phenomena in the present moment” (p. 490). According to Uher (2016), this definition follows the principle that humans are affected by external surroundings like their environment, which could refer to other humans (e.g., family, friends, or celebrities) or events that occur (e.g., writing on a chalk board or athletes performing exercises). The environment around an individual can be referred to as an “external phenomena that surround the individual under consideration and that are conceived of as being separated from it” (Uher, 2016, p. 486). Humans only tend to interact with external happenings that are relevant for them. It is also argued that surroundings differ from humans and what constitutes the environment around them is dependent on the individual (Uher, 2016). The term “intention” is often associated with behavioural studies and is referred to as behavioural intention. For example, in the context of behavioural intention and participation in physical activity, the study of Potwarka et al. (2020) examined the effect of spectating sports and how this can change the intention of youth to participate in sports. Potwarka et al. (2020) defined intention to participate in their study as “the perceived likelihood youth spectators will try a sport on display before and after witnessing an elite international sport event” (p. 192). This implies that an individual can be influenced by spectating an international sport event showcasing athletes, which means that their behavioural intentions can be classified as a predictor of the

future (Potwarka et al., 2020). The results of Potwarka et al. (2020) suggested that viewing elite athletes can affect the intention to participate in a new form of sport. This was particularly due to the cognitive and momentary feeling of inspiration and fantasy experienced by the spectators. A more general definition of behavioural intention can also be defined as “the degree to which a person has formulated conscious plans to perform or not perform some specified future behaviour” (Ramadani et al., 2014, p. 302). Another example is Fathema and Sutton. (2013), who applied the definition of behavioural intention from Davis (1989): “the degree to which a person has formulated conscious plans to perform or not perform some specified future behavior” (p. 4). Durau et al. (2022) attempted to examine how social media influencers could affect exercise behavioural intention among social media users and defined social media influencers as “individuals who communicate information through their social media accounts to their followers. Given their large reach, successful influencers are even considered online celebrity endorsers” (p. 2). The study applied the source credibility theory model and its three constructs being trustworthiness, expertise, and perceived attractiveness. It was concluded that men’s and women’s physical activity can be increased by following social media fitness influencers who are viewed as trustworthy knowledgeable, and perceived attractive. A crucial factor that predicted intention to exercise was the influencer’s perceived ability to motivate. While social media influencers are not the main focus of this research project, this study is an example of how online opinion leaders can affect behavioural intention of a target group.

In the context of active professional athletes, people around the world are following their favourite athletes on social media to get updates about their daily life as well as inspiration (Witkemper et al., 2012). As discussed in chapter 1, previous studies have illustrated the ability of professional athletes endorsing a product of a brand to positively change purchase behaviours of consumers (Dix et al., 2010; Djafarova & Rushworth, 2017; Wu, 2015). Additionally, Wicker and Frick (2016) demonstrated that external factors like the success of the national football team in Germany increased behavioural intention among young adults, resulting in rising participation in amateur football in Germany. Other examples of behavioural intention change are linked to interventions by governments or organizations aiming to increase physical activity levels of a target population. For example, the World Health Organization (WHO) has developed the “global action plan on physical activity” which aims to increase physical activity levels of both adolescents and adults by 15% by 2030 (Lang et al., 2018). This intervention includes a variety of approaches, including

investments and policy changes, with the ultimate goal of changing society in such a manner that physical activity is a part of people's everyday life. The WHO will be monitoring the progress of global changes in physical activity and thus evaluating the effectiveness of the intervention. Measuring physical activity levels is critical to monitoring changes to evaluate changing behaviours (Sylvia et al., 2014). There is a wide range of methods to measure physical activity, and this will be discussed more in detail in chapter 3.

2.1 Defining motivation

The term motivation is often associated with both physical activity and behavioural intention (Brunet & Sabiston, 2011). According to Guay et al. (2010, p. 712), motivation is referred to as “the reasons underlying behaviour”. Comparing this to the definition of Lai (2011, p. 4), “the attribute that moves us to do or not to do something”, we can argue that motivation is the reason or thought behind our actions. The term motivation has been widely applied in various fields of literature like education, workplace environments and physical activity (Ganta, 2014; Khan et al., 2011; Çınar et al., 2011). However, for the purpose of this study, only motivation within the field of physical activity will be discussed. There are two different categories of motivation which will be discussed below in the context of the self-determination theory.

2.1.1 Intrinsic & extrinsic motivation

The theory of self-determination (SDT) is an important principle which has been commonly applied to behavioural studies and physical activity. According to Van Lankveld et al., (2021), “SDT focusses on differences in the ways in which people's behavior can be regulated and how these differences are experienced” (p. 1). SDT includes three types of motivational categories: intrinsic, extrinsic, and amotivation. Firstly, the intrinsic type of motivation refers to the act of “doing an activity because of its inherent satisfactions” (Teixeira et al., 2012, p. 2). Examples of inherent satisfactions include enjoyment of a particular exercise, personal accomplishment, and excitement (Frederick-Recascino & Schuster-Smith, 2003). In contrast, extrinsic motivation relates to the act of doing an activity for rewards or a purpose separated from the physical activity itself, in other words instrumental rewards (Teixeira et al., 2012). Instrumental rewards could refer to a tangible or social reward, such as receiving approval from one's parents, sports coach, or even a celebrity (Buckworth et al., 2007; Reiss, 2012). The last category of SDT is amotivation,

which is the opposite of intrinsic and extrinsic motivation since it is, in simple terms “a lack of motivation or intention to participate” (p. 2) and represents the lowest level possible of self-determination (Kokkonen et al., 2020).

Kokkonen et al. (2020) argued that the highest level of SDT is the category of intrinsic motivation, when an individual is taking part in physical activity because there is a genuine interest and enjoyment from the individual’s side. The same study also demonstrated that there are four different categories of extrinsic motivation, some which can be related to elite athletes. The first category is integrated regulation and is referred to as “assimilating the regulation of exercise into personal goals” (p. 2). For this category, one can develop personal goals within the sphere of physical activity due to being motivated by elite athletes (Welker et al., 2019). Secondly, identified regulation is another category and occurs when “the outcomes of the behaviour are highly valued” (p. 2). The third category is introjected regulation and is characterized by “avoiding internal pressures of feelings of guilt” (p. 2). The fourth category of extrinsic motivation is external regulation, which revolves around external factors for taking part of physical activity and typically involves “rewards, constraints or fear of punishment” (p. 2). To give an example of the motivation of followers of influencers, Sokolova and Perez (2021) found that the followers of fitness influencers often watch the content and use it as a source of motivation. Sokolova and Perez (2021) further demonstrated that already exercising followers are more likely to interact with the content of fitness influencers to maintain their physical activity habits.

2.2 Admiration

Admiration is another component which can be linked to motivation and participation in physical activity. According to Schindler et al. (2013), admiration is defined as “a feeling of delighted approval over the accomplishment of another person”. The core component of admiration resides within the concept of “self-expansion: a desire to personally grow” (Van de Ven, 2017, p. 194). Typically, individuals considered as role models, whether the peer of an individual or an athlete, are able to increase the willingness of people to reach their goals (Schindler et al., 2013). According to Schindler et al. (2013), there are two categories of admiration: the affiliation dimension, in which a person will praise the role model and affiliate with that specific role model, and the emulation dimension, in which there is an internalisation process of the role model’s values, meaning the admirer will replicate the

values of the role model in an attempt to become a better version of themselves. Similarly, the study of Schindler et al. (2015) analysed admiration and found that it incorporates emulation, which refers to the desire of self-expansion. The same study also highlighted that admiration does not necessarily stimulate an immediate desire to accomplish personal goals, instead it creates a desire to develop adaptive benefits over longer periods. In a physical activity environment, it could be sustaining regular physical activity to attain the benefits associated with consistent levels of physical activity through admiration of a role model like an athlete (Ronkainen et al., 2019).

Chapter 1 explored the notion of a role model, which is referred to as “individual who is perceived as exemplary or worthy of identification or imitation”, although this section will also link this notion to a few examples (Bandura, 2004; Guest & Cox, 2009). The definition includes the word imitation, which is one of the essential components of the emulation process, one of the categories of which is admiration (Schindler et al., 2013). Naturally, in the context of sports and physical activity, it would be to imitate the performance of athletes, or simply taking part in physical activity or sports (Guest & Cox, 2009; Payne et al., 2003). To illustrate, Vescio et al. (2005) found that watching athletes perform could inspire adolescent girls in Australia to take part in sport. However, it was observed that girls with similarities to the athletes (e.g., interest in the same sport, motivations) were more likely to be motivated and inspired by athletes than adolescent girls who categorised themselves differently from the elite athletes. Additionally, it was found that athletes at the highest level would only be a source of motivation if the success of the athletes were realistic and achievable and would conversely result in discouragement when the level of success and self-enhancement seemed unachievable. Other examples of athletes acting as motivational role models for people can be found in the United Kingdom (UK) through programmes dedicated to increasing physical activity levels through role modelling. For instance, the “changingLIVES” programme was established in the UK through athletes’ models, which caused a positive change among youth and increased their participation in sports, physical activity but also self-esteem overall through admiration (Armour & Duncombe, 2012). This is particularly important to mention as other programmes in the UK, like The Respect Athlete Mentor Programme and Playing for Success, revolve around athletes as role models and mentors. These programs allow youth, typically the ones in need, to have a role model through the inclusion of sports and increasing physical activity participation overall (Armour & Duncombe, 2012). Athlete Development Australia is another example of a programme that aims to promote sports participation to

youth through the help of athletes as role models (Payne et al., 2003). Other studies have shown that through role model admiration, one becomes “aware of the career options and ways to overcome obstacles in our career journeys” (Ronkainen et al., 2019, p. 1). Another example is the study of Henriksen and Stambulova (2017), which demonstrated that youth athletes can find motivation and the desire for self-enhancement through senior athletes who can be categorized as role models for younger athletes.

2.3 Envy

Another component linked to motivation is envy. According to Van de Ven et al. (2011), envy is an emotion “that arises when a person lacks another’s superior quality, achievement, or possession and either desires it or wishes that the other lacked it” (p. 785). Envy is argued to be associated with the goal of reducing the level of difference with the other perceived as the superior other, or when a person’s social standing is threatened by another’s superior qualities (Van de Ven et al., 2011). Van de Ven et al. (2011) further demonstrated that under the circumstances of envy, it is critical for the person being threatened to restore their position in a social setting.

Van de Ven et al. (2009) showcased that there are two types of envy: benign and malicious envy. Their study explored both categories of envy among male and female participants who were asked to remember and assess situations where they felt envy. Participants who recalled being benignly envious noted that they felt a need for self-improvement. On the other hand, participants explaining their malicious envy experiences indicated that they are more likely to express demeaning comments with an aim of degrading another person. Van de Ven et al. (2009) also illustrated that the probability of experiencing benign envy is higher when the skill or advantage of the other person is assessed as deserved. Conversely, the probability of experiencing malicious envy is higher when the skill or advantage of the other person is considered undeserved. A number of studies have raised the importance of envy as a motivator to improve one’s skillset or ability to perform a task (Meier & Schäfer, 2018; Milovic & Dingus, 2014). For example, Meier and Schäfer (2018) analysed the responses of 385 Instagram users and how social media content can be an incentive to improve one’s skill through envy. The majority of participants felt benign envy and were therefore more motivated to try new activities or improve their already existing skills. Additionally, Johnson and Stapel (2007) brought attention to the idea of the “no pain, no gain” principle and argued

that this example ignites motivation among people through a form of self-frustration (pain provoked by envy) with the ultimate goal to perform better (gain).

2.4 Demonstration effect

According to Weed (2009, p. 4), the demonstration effect plays an important role in increasing physical activity levels of people through athletes or sports events, defining the demonstration effect as “a process by which people are inspired by elite sport, sports people, or sports events to participate themselves” (p. 4). The demonstration effect is linked to the term inspiration, which can activate a desire, in this case a desire to increase one’s physical activity levels (Potwarka et al., 2018). Inspiration “involves the transcendence of the ordinary preoccupations or limitations of human agency” (Thrash & Elliot, 2003, p. 871). According to Potwarka et al. (2018), individuals such as fans have claimed that they feel inspired by distinct role models like athletes or even mega sporting events such as the Olympics.

Accordingly, exposure to role models or events can act as a trigger to inspire people, which in turn results in people changing their behaviour, in this case taking part in physical activity (Thrash & Elliot, 2003). Potwarka et al. (2018) followed the argument of Thrash and Elliot (2003), which implies that inspiration can be defined as a psychological construct and categorized as a temporary state (short term) or a personality trait (long term). For example, Huang et al. (2022) illustrated how Chinese athletes and their sporting achievements can lead to an inspirational effect in China, and thus an increase in physical activity participation.

According to this study, winning one gold medal in a specific sport correlated with an increase of 0.93% in participation in that same sport in China. Mooney (2018) demonstrated that social media figures like athletes on social media acted as an inspiration and motivation to further increase physical activity levels. It is argued that the demonstration effect can inspire both active and non-active people, although the effect is stronger among already active people, meaning those who have incorporated a form of physical activity into their daily life (Mutter & Pawlowski, 2014; Potwarka et al., 2018). Similarly, Weed (2009) showcased that there are three possible outcomes of the demonstration effect within the sphere of professional sports based on the assumption that the demonstration effect. The first possible outcome is that the number of participants in any type of sport can increase, but this is subjective to what sport and athlete(s) an individual is watching. Further, it is argued that the second possible outcome is that “the frequency of participation of existing participants could increase” (Mutter & Pawlowski, 2014, p. 131). The third possible outcome is when

individuals switch between sporting activities. The demonstration effect can also be linked to the framework of sporting role models which implies that professional sports figures, including athletes can “influence preferences of sports participation” (Mutter & Pawlowski, 2014, p. 131). This is in part due to the status of athletes in society, but also because of the broad media coverage of athletes (Mutter & Pawlowski, 2014). In contrast, the study of Carter and Lorenc (2015) illustrated that the demonstration effect can potentially be of little use towards people who have adopted a sedentary behaviour (inactive lifestyle). Their findings found that the participants acknowledged and respected the achievements and hard work that athletes invest into their career and competitions. However, despite this, the participants did not showcase any desire to replicate the behaviour of athletes to participate in sports. Contrary to the belief and previously shown evidence of elite athletes being able to change the intent of spectators, paralympic athletes and “ordinary people engaging in mass participation events would be more likely to encourage disengaged people to try sport” (Carter & Lorenc, 2015, p. 801). Cleland et al. (2020) explored if the demonstration effect was prominent after the Commonwealth Games in Glasgow. The study focused on populations in areas close to the event itself but also in neighbourhoods with lower participation rates of physical activity. The results suggested that the demonstration effect was not effective at changing attitude or behaviours due to a lack of implementation of promotional campaigns and initiatives throughout the event aiming to increase physical activity and sports participation. Cleland et al. (2020) argued that sports organization hosting events must be more efficient with campaigns aiming to engage the audiences to increase participation levels, thus increasing the effectiveness of the demonstration effect.

2.5 Social comparison theory

Zuckerman and Ol-Gaz (2014) showcased that social comparison is a procedure that humans do in their everyday life. According to the theory, humans tend to evaluate their own abilities, opinions by contrasting them to the abilities and opinions of other individuals (Diel et al., 2021). While we tend to evaluate abilities and opinions, there are many other characteristics we tend to compare, such as physique and scores on apps (Lin et al., 2006; Shamel et al., 2017). Social comparison has widely been applied in the field of physical activity, typically in combination with gamification and the belief that a person seeks to become more physically active by outperforming others (Arigo et al., 2020). Two main conclusions can be drawn from applying this theory. Firstly, individuals may become inclined to attain better

physical and mental health through exercise by comparing their current lifestyle to role models (Sokolova & Perez, 2021). Since the lives of professional athletes and revolves around exercising and staying physically fit and can therefore be role models for many to start participating in physical activity or further increase their participation (Potwarka et al., 2018). Secondly, this theory is also related to the first chapter as elite athletes as role models can negatively affect individuals, as body dysmorphia may emerge (Chae, 2018; Pedalino & Camerini, 2022). Further, more extreme behaviours, such as excessive exercise and dieting can result in eating disorders like anorexia and a negative body image overall (Bissell & Zhou, 2004).

2.6 Social comparison for motivation

Mooney (2018) examined the use of social media by Millennials in Ireland and linked it to motivation and physical activity participation, more specifically at the gym. The study demonstrated that social media and fitness influencers had a significant effect on the physical activity participation rates of the participants of the study. The study also concluded that the most motivating type of content for the participants was “workout videos and images shared on Instagram” (Mooney, 2018, p. 58). Two main components of the content on social media were important for the participants, the information provided by fitness influencers, but also the nature of video content being educational and easy to replicate. Some participants in the study expressed that they compared themselves to fitness influencers, which resulted in increased motivation to take part in physical activity. Mooney (2018) also noted that physically inactive participants, expressed a desire to become more physically active and to re-join a gym.

Another element which is strongly related to the social comparison theory is body image. The term body image refers to “an individual’s mental image of body which consists of a perceptual component which refers to how the individual perceives the size, shape, weight, and performance of the body, as well as the attitude component which refers to how individual feelings about these attributes and lead to a behavior” (Afana et al., 2021, p. 1329). In the context of physical activity and social comparison, users will retrieve information about others, in this case elite athletes, and relate specific information to themselves (Chae, 2018). However, there are two important points to mention. Firstly, followers of elite athletes must be exposed to comparison-related information (e.g., pictures or videos about physical

activity). Secondly, the greater the exposure to elite athlete, the greater the tendency of social comparison (Chae, 2018). As a result of this process, individuals will have a greater wish to engage in physical activity, thus improving their physical health but also body image (Kim, 2022). Chapter 3 will discuss social comparison in more depth, and how it can lead to detrimental effects, such as a negative body image.

2.7 Social cognitive theory

Beauchamp et al. (2019, p. 110) applied social cognitive theory in the context of physical activity and illustrated that the “theory articulates the causal mechanisms through which efficacy beliefs, outcome expectations, socio-structural factors, and goals influence behaviour”. In other words, similar to what Bandura (1988) argued, the theory suggests that human behaviour is influenced by two categories, personal factors like cognition and environmental factors but they also influence each other. Therefore, it’s possible to argue that the social cognitive theory revolves around observational learning (Schunk, 2012).

Environmental factors can be examples of social influence, such as peers, or external figures like active elite athletes (Beauchamp et al., 2019). There is limited literature applying the social cognitive theory in the field of physical activity of adults, since the main focus is on youth and adolescents, which is not the selected age range for this study. However, Law and Hall (2009) applied the theory in the previously mentioned context, that is applying the social cognitive theory in the context of physical activity among adults. Their study demonstrated that observational learning was effective for the adult sample to learn new sports and to acquire the necessary skills to take part in sports. Additionally, the study also noted that observational learning was effective at assisting adults new to a certain type of sport to adapt to the challenges of learning a new sport.

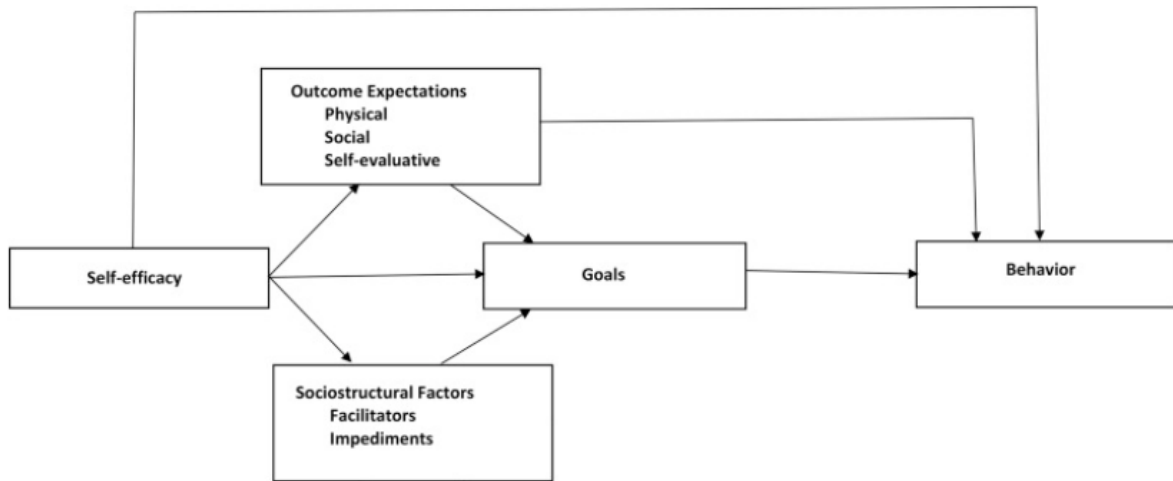


Figure 1: The social cognitive theory of health behaviour (Bandura, 2004).

Self-efficacy is the core component of the model and concerns an individual’s beliefs about their capabilities to execute a task, such as physical activity (Bandura, 2004; McAuley & Blissmer, 2000). Bauman et al. (2012) defines self-efficacy as the “confidence in the ability to be physically active in specific situations”. Exercise self-efficacy can be defined as “the degree to which an individual is confident in regulating exercise under different conditions or constraints” (Lim & Noh, 2017, p. 251). Benight and Bandura (2004) suggests that goals that an individual may want to pursue serve as a general guide to assess their current actions. Benight and Bandura (2004) also argues that goal attainment requires an individual to self-monitor progress, including self-rewards, but also to aim for specific goals. Finally, the model also indicates that socio-structural factors can influence an individual’s goals which may take the form of facilitators and impediments, which in turn can result in a change in health behaviour through an influence on goal setting. Young et al. (2014) argued that individuals with higher self-efficacy should strengthen and build relationships with others who share the same goal, which results in both parties supporting each other.

2.8 Expectancy violation theory

The Expectancy Violation Theory (EVT) is another theory which will be discussed in this chapter as it relates to negative behaviours of elite athletes. According to Campo et al. (2004, p. 452), the “theory suggests that persons have expectations about others’ nonverbal behaviours, and that violations of these held expectations result in an increase in arousal, which is then identified as either a positive or negative violation by the receiver”. When

applied to the field of celebrities, consumers and fans have a set of expectations related to the behaviour of a specific celebrity (Sato et al., 2018). When the expectations of fans or consumers are “violated”, it can result in damaging effects and people may adopt a negative view of a specific celebrity or role model (Sato et al., 2015). This is particularly relevant when discussing the admiration of elite athletes. Athletes have indoctrinated a set of values and morals (e.g., respect and fair game) that many fans look up to and may want to replicate (Feezell, 2005). Fans share a particular connection and commitment to athletes and sport in general, and when a norm is violated, the impact may be stronger due to the strong emotional attachment of fans (MacPherson & Kerr, 2021).

Athletes are vulnerable to exposure as they are visible on traditional and social media, although this is primarily the case when they violate the expected norms and behaviours that fans expect (MacPherson & Kerr, 2020). Examples include drug abuse (e.g., to increase performance), domestic abuse, driving under the influence of alcohol or drugs, and sexual misconduct (MacPherson & Kerr, 2021; Smith et al., 2014). Additionally, Sanderson and Emmons (2014) pointed to the case of a professional athlete who had a relapse in the context of doping. The same study noted that fans had a certain set of expectations, in this case, for the athlete not to relapse. Despite this relapse, fans expressed their support through empathy and encouragement on an online forum (Sanderson & Emmons, 2014). However, there were also negative reactions from fans condemning the relapse and implying the athlete had a lack of willpower, and was seeking media attention (Sanderson & Emmons, 2014).

While the paragraph above discussed norm violations elite athletes related to drugs and other scandals, other studies have illustrated that fans also have expectations about their favourite athletes’ performances. For instance, Sanderson and Truax (2014) conducted an analysis of various tweets following the loss of an American football game between the University of Alabama and Auburn University. Particular focus was given to kicker Cade Foster as he received negative backlash on social media following the loss (Sanderson & Truax, 2014). The study found that fans chose to criticize his performance during the game through mocking and threatening tweets (Sanderson & Truax, 2014). This also correlates with the study of fans when their expected norms and athletic expectations of elite athletes are violated. Fans tend to utilize personal attacks and send hateful messages, often based on the athlete’s gender or race (Jane, 2014). MacPherson and Kerr (2020) linked the expectancy violation theory to public shaming on social media as a common mechanism among fans

when their expectations were “violated”. According to Boyle and Haynes (2018, p. 327), the degree of public shaming on social media of elite athletes is more substantial compared to celebrities from other fields. Boyle and Haynes (2018) argued that this is due to the fact that elite athletes, typically athletes, have to focus both on their on-field and off-field performance simultaneously.

Chapter 3: Physical activity

This chapter will review definitions of physical activity and provide the reader with examples of different types of physical activities. This chapter will also discuss different methods to measure physical activity.

3. Defining physical activity

According to Caspersen et al. (1985, p. 126), physical activity is defined as “any bodily movement produced by skeletal muscles that results in energy expenditure”. While there are some variations of the definition of physical activity, Caspersen’s definition has been universally accepted and applied in the research field of physical activity. The World Health Organization (2020) has also applied the same definition on their guide for physical activity, which further illustrates the importance of Caspersen’s definition. Piggin (2020) illustrated that there have been some variations of the definition itself, with minor changes or additions. For instance, Welk et al. (2000) defines physical activity as: “bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above the basal level”. Similar to the definition of Caspersen et al. (1985), the emphasis on skeletal muscle remains in the definition. Other definitions have also showcased what physical activity can look like, such as Garber et al. (2011) highlighting that physical activity “broadly encompasses exercise, sports, and physical activities done as part of daily living, occupation, leisure, and active transportation” (p. 475). Physical activity is essential for improving one’s physical and mental health (Warburton et al., 2006). Taking part in physical activity regularly and over longer periods of time has been associated with various cardiovascular and cognitive benefits (Dinas et al., 2011; Saxena et al., 2005; Warburton et al., 2006).

On the other hand, Piggin (2020) argued that the definition of Caspersen et al. (1985) can be developed, similar to how other authors or institutions have extended the definition by including other terms. In another article, Piggin (2019) approached the definition of physical activity from another perspective which “involves people moving, acting, and performing within culturally specific spaces and contexts, and influenced by a unique array of interests, emotions, ideas, instructions and relationships” (p. 5). This definition is more holistic in the sense that it incorporates other aspects and surroundings which can affect the motivation for taking part in physical activity (Georgiadis, 2021). Piggin’s (2019) definition of physical activity is more suited for the nature of the study as the researcher is not looking to examine

the skeletal movement and energy expenditure of individuals. The focus lies in examining the surrounding factors, in this case active elite athletes and, and how they can inspire individuals to take part in physical activity.

There are various motives for young adults to take part in physical activity. Caglar et al. (2009) conducted a study to assess the motives behind adolescents and young adults for taking part in physical activity. The four main motives for both groups that were commonly found were health, appearance, enjoyment, and social aspects. For the purposes of this study, we only considered the results related to the sample of young adults. The study concluded that both young adult males and females were more likely to take part in physical activity because of health and appearance motives.

3.1 Physical recreation activities

Physical activities are part of what one calls recreation, which is the foundation of the term “game”. Min and Jin (2010) highlights that game is how humans express their imagination and creativity and this can be done through physical activity. Similar to leisure, physical recreation activities is something that humans take part in voluntarily with the aim of achieving a physical and mental pleasure which comes in the form of happiness or relaxation. Min and Jin (2010) further argues that no matter what type feeling (psychological or physical) recreational physical activities will bring happiness through the gathering a group of people and organization of a football, basketball, or badminton game. The competitive of a physical recreational activity aspect is insignificant, as both a non-competitive and competitive recreational activity can spark positive emotions and health benefits. Physical recreational activities can include bowling, billiard, or table tennis where the competition aspect is not as prominent as other activities like football, but it still possesses the ability to bring relaxation and happiness to the people choosing to take part (Min & Jin, 2010).

3.1.1 Physical fitness activities

The second category of leisure sports is classified as physical fitness activities. Instead of a sole focus on relaxation and happiness, the main idea revolves around people taking part in sports or any type of physical activity to sculpt and maintain a well-built body, but also to maintain a greater physical function resulting in a better physical and psychological health (Min & Jin, 2010). Within this category, people utilize their leisure time to participate in physical fitness activities to embrace the idea of a well-built and muscular body, but also to

improve “individual quality so as to become more confident of themselves” (Min & Jin, 2010, p. 101). There is also an important psychological aspect involved in the pursuit of a healthy and physically appealing body. Previous research suggested that pursuing a goal of reaching a healthier body (both physically and mentally speaking) and reaching them correlates either having a good spirit, meaning physical fitness activities has become critical in the lives of many for self-improvement (Liu et al., 2015). This is a reflection of people willing to improve their life standards and an overall healthier spiritual life.

The study of Hulteen et al. (2017) explored the most common types of physical fitness activities in each region of the world and their participation rates among adults, adolescents, and children. The top five physical activities reported that were in all the six regions (Africa, Americas, Eastern Mediterranean Europe, Southeast Asia & Western Pacific) included running, walking, cycling, swimming, and resistance training. According to the study, adults were more likely to take part in lifelong physical activities (such as leisure sports) rather than team sports which were more popular among adolescents and children. However, soccer was the only team sport which was regularly mentioned as one of the top five physical activities among the six different regions.

3.1.2 Physical exploration activities

With the technological advancement in modern society, people’s personal and professional routines have changed. Min and Jin (2010) demonstrates that for many, one’s personal life and work duties restrains the psychological need of exploration when there is a lack of new ideas and interests in one’s life. However, in modern society there is also leisure time which is often used by people to explore their interests and ideas to meet their psychological needs of exploration (Min & Jin, 2010). The study of Mitchell (2013) showcased that physical activity outside in the nature can prompt positive psychological responses among adults who are looking to ease off their pressure associated with work and everyday life duties. Min and Jin (2010) illustrated that there are various types of outside physical exploration activities such as “mountain climbing, rock climbing, skiing, drifting, outside traversing and so on” (p. 102). Physical exploration activities are typically physically distant from people’s working and everyday location and exploring nature like forests and parks has been associated with reducing stress and fulfilling the psychological need of exploration (Hansmann et al., 2007). However, the study Hug et al. (2009) noted that leisure time in modern society is shrinking which can make it difficult for people to explore outdoor physical activities as a lack of time

and access to nature (thus outdoor physical activities) can act as a barrier for physical exploration activities. That is one of the main reasons indoor activities like resistance training or martial arts have become more popular due to its accessibility, but also since it provides health benefits just like outdoor leisure activities (Hitchings & Latham, 2016). Although outdoor leisure activities like running in green environments (forests, parks etc.) has proved to provide additional psychological benefits like increased self-esteem and an increased positive mood (Loureiro & Veloso, 2014).

3.2 Measuring physical activity

3.2.1 Technological devices

Physical activity can be measured in various ways, including through the use of technological devices like pedometers/accelerometers, but also through self-reported measures like questionnaires and journals but also non-self-reported measures such as direct observation (Armstrong & Bull, 2006; Pate et al., 2010). While there are many technological devices to measure the heartrate of an individual, it is also important to understand the characteristics surrounding heartrate. Almeida et al. (2019, p. 396) illustrated that heartrate is “the most important vital sign; it is one of the most remote indicators of health since early civilizations”. From a physical activity point of view, depending on the movement of the body (e.g., exercise or any form of physical activity) the heartrate of a person normally rises, which increases the cardiac output of a person, meaning that the transport of oxygen accelerates and flows through muscle tissue while also removing CO₂ (Almeida et al., 2019). Heartrate is one of the most common metrics to measure intensity of physical activity and gives individuals an indicator of how their body reacts to different levels of intensity of exercise and physical activity (Gresham et al., 2018). It is therefore common for individuals interested in fitness and physical activity to purchase heartrate monitors, which have previously been deemed as accurate to measure heartrates levels over longer periods of time (Stahl et al., 2016).

Many measurement devices for physical activity are available for research purposes; they are also available for the general population (Ainsworth, 2009). For instance, motion sensors have been applied in clinical settings to measure physical activity levels of certain age groups (Ainsworth, 2009). Motion sensors are “mechanical and electronic devices that pick-up motion or acceleration of a limb or trunk, depending on where the monitor is attached to the

body” (Freedson & Miller, 2000). Growing concerns over physical inactivity have been expressed by governments since many studies have illustrated the negative health outcomes of lack of physical activity (Pietiläinen et al., 2008). For instance, physical inactivity increases the risk of obesity, diabetes, hypertension, strokes, and certain types of cancer (Cecchini et al., 2010; Willey et al., 2017). Commercially available fitness and technological devices can be used to tackle physical inactivity and measure physical activity levels. To illustrate, a pedometer is a motion sensor that has been widely applied in the field of physical activity, primarily to monitor the daily steps of a chosen sample and assess whether their daily energy expenditure and physical activity is adequate (Bravata et al., 2007). Pedometers are small electrical devices that enable an individual to measure their steps, and thus one aspect of physical activity (Tudor-Locke & Lutes, 2009). Tudor-Locke et al. (2002) studied the use of pedometers at reducing physical inactivity and concluded that they are “practical, accurate and accessible” tools for measuring but also motivating physical activity. Rowe et al. (2004) showcased that the pedometer has been a popular choice to measure physical activity levels in research settings due the simplicity, their low cost but also due to their accuracy. Other studies have also assessed the efficiency of pedometers to measure physical activity levels of participants in research and practical settings and have proved to be significantly more effective than questionnaires, which will be discussed further down in this chapter (Tudor-Locke et al., 2004).

Accelerometers are small devices that measure and monitor patterns of physical activity through smaller intervals (in terms of time) over the course of days or weeks (Freedson & Miller, 2000). Similar to the pedometer, it enables the user to approximate their daily caloric expenditure. Users of accelerometers have to wear it on their hip, which provides “a measure of trunk acceleration” (Freedson & Miller, 2000, p. 22). Both pedometers and accelerometers have been significant at assessing physical activity levels of populations due to growing concern regarding physical inactivity (Owen et al., 2010; Plasqui et al., 2013).

3.2.2 Questionnaires and direct observation

In a research setting, questionnaires are commonly used to gather physical activity data from selected populations (Rennie et al., 2003; Vanhees et al., 2005). Questionnaires are typically appropriate when a research project aims to assess larger populations in part due to how inexpensive they are (Jones & Gratton, 2015). This is a subjective method of measuring physical activity, as the method relies on the “subjective interpretation of the questions and

perception of the physical activity behaviour of the subject itself” (Vanhees et al., 2005, p. 105). A variety of questionnaires have been designed to understand and measure physical activity levels of different populations, although the most utilized is the Global physical Activity Questionnaire (GPAQ) developed by the World Health Organization (Armstrong & Bull, 2006). Previous research has tested and explored the reliability of the GPAQ with scholars concluding that the “GPAQ is a suitable and acceptable instrument for monitoring physical activity in population health surveillance systems” (Bull et al., 2009, p. 790).

According to Durante and Ainsworth (1996) it is important to use caution whenever using questionnaires as subjects may underestimate or overestimate their physical activity levels. This is particularly dependent of a number of different factors like the complexity of the questionnaire, seasonal variations, the desirability of PA, age, but also the length of the time period being surveyed (Durante & Ainsworth, 1996). Admittedly, based on the previously mentioned over- and underestimations of physical activity, questionnaires can be less accurate at measuring physical activity (Westerterp, 2009). In contrast, direct observation of physical activity in various settings differs from questionnaires as rather than the participants having a subjective view of physical activity, it is the observer, often a researcher who will have a subjective view of physical activity (Welk, 2002). Since there are different physical activity settings, such as “physical education, sport classes or free-living conditions” (Vanhees et al., 2005), the principle remains the same and that is to classify behaviours in the context of physical activity into different categories which in turn will be analysed. For example, direct observation has been applied in the settings of physical activity in parks and was found to be efficient at measuring different populations, geographical areas/settings, and seasons (Ward et al., 2014).

3.3 Intensity levels of physical activity

Since physical activity encompasses many different activities there are also various levels of intensity (Ainsworth et al., 2011). Below is a table with different types of activities, ranging from everyday activities to sports, including how to measure physical activity in terms of metrics which will be discussed later in this section.

Term	Examples	MET
Light intensity	Leg press, Mild stretching, Sitting at sports event (spectator), Walking (2 mph).	>3 METs (Park et al., 2011)
Moderate intensity	Handball, Gardening, Table tennis, Track & field (hammer throw), Raking lawn, Rollerblading, Walking (5 mph).	3-6 METs (Park et al., 2011)
Vigorous intensity	Basketball, Bicycling, Skiing, Stair walking (80+ per minute), Tennis, Track & field (high jump, triple jump), Volleyball (competitive).	<6 METs (Park et al., 2011)

Table 1: Intensities of physical activity (Ainsworth et al., 2011, Ainsworth et al., 2011; Butte et al., 2018).

While this study doesn't focus on the physiological side of physical activity, there are a few notions that must be understood as there are various levels of intensity when performing physical activity. For instance, the term MET (Metabolic Equivalent of Task) is "a physiological measure for expressing the energy expenditure of physical activities in relation to the resting metabolic rate" (Park et al., 2011, p. 1706). The study of Norton et al. (2010) illustrated that METs are measured in conjunction with oxygen consumption per unit of body mass, where "1 MET is equivalent to 3.5 ml O₂/kg/min" (p. 497). To give an example, a normal, or "resting metabolic rate is equivalent to 1 MET" whenever a person is lying or sitting down quietly (Norton et al., 2010, p. 497).

The definition of physical activity discussed above implies that there is a mechanical aspect when performing physical activity, by including the two terms skeletal muscles and energy expenditure. Energy expenditure can be measured in two different ways, in kilojoules (Kj) or kilocalories (kcal), although the second measurement has historically been utilized more often (Caspersen et al., 1985). While kilojoules are used to measure energy expenditure, kilocalories is a measure of heat, with 1 kcal being equivalent to 4.184 kJ (Sesso et al., 2000). Energy expenditure, normally kilocalories serve as a tool for many to measure their physical

activity input, although it's more common to be applied in the context of dieting (Sesso et al., 2000).

3.4 Physical activity & social media, apps

Many people seek health information online (Berkman et al., 2010; Jong & Drummond, 2016; Kerner & Goodyear, 2017). The notion of health information can be defined as “any information which is related to the practice of medicine and healthcare” (Jong & Drummond, 2016, p. 758). While this is a broad definition, subcategories of health, such as fitness and physical activity, correlate with the definition of health information as argued by Jong and Drummond (2016). Nowadays, seeking health information online happens because many want to retrieve information, support and advice about fitness, physical activity, and illnesses (Lupton, 2017; Lupton, 2020). According to Lofft (2020), six out of ten Canadians under age 35 use the internet and social media to retrieve health information. Traditionally, online forums and websites were the more most common sources of information for advice-seeking people (Lupton, 2020). However, social media and fitness mobile apps have quickly emerged and become popular to track physical activity levels, but also for people to share health/fitness information while supporting each other (Benetoli et al., 2017). Digital and online spaces for people can be substantial for many as it can enable one to learn about their bodies and how to improve their overall fitness and health levels (Fullagar et al., 2017; Lupton & Maslen, 2019). For instance, Lupton and Maslen (2019) studied which types of digital technologies Australian women used to retrieve health- and fitness-related information. The study concluded that social media and various websites were the most common and useful among Australian women in the context of health information retrieval. Additionally, the study also found that the participants educated peers, family and friends regarding health and fitness.

Further, many people utilize social media to retrieve health information and advice with the aim of improving their individual health, but also the health of their peers (Goldstraw & Keegan, 2016). Some social media platforms enable users to “tag” their posts, such as images with a set of words, which allows users to search for and identify specific types of content (Santarossa et al., 2019). The tag #fitspo is a trending tag on social media (primarily Instagram) which traces its roots to the internet trend of fitspiration, a combination of two words: fitness and inspiration (Goldstraw & Keegan, 2016). With the use of this tag, users

post photo- and video-based content to encourage “health, fitness, nutrition and exercise” (Goldstraw & Keegan, 2016, p. 191). The #fitspo tag is widely used on Instagram, as it has been used over 74,6 million times as of February 2022 and is used to promote fit body images and inspire people to adopt a healthy lifestyle involving both exercise and healthy eating (Instagram, 2022; Goldstraw & Keegan, 2018). Harris et al. (2018) found that the #fitspo tag on Twitter was strongly correlated to promotional content, often including a link to a website, typically for fitness-related content. Arguably, the #fitspo tag can not only be useful for common users to seek health information and inspiration, but it can also provide influencers and businesses with substantial opportunities to promote their brand or products (Hendry et al., 2021). This is also referred to as influencer marketing and can be defined as “the digital equivalent of word-of-mouth marketing. It is defined as ‘a type of marketing that focuses on using key leaders to drive a brand’s message to the larger market’ (Byrne et al., 2017). Since influencer marketing proposes customized but also targeted content to potential consumers who are already part of an online fitness community or already possess an interest in specific product categories, they are highly likely to be receptive of this type of marketing (Kostygina et al., 2020).

Tiggeman and Zaccardo (2015) argued that fitspo has become critical and a healthier option on social media to its counterpart “thinspiration”. This concept and hashtag has been criticized by scholars and health specialists as it can have detrimental effects and promote eating disorders by inspiring users to lose weight (Ghaznavi & Taylor, 2015). Typically, thinspiration encompasses images of thin individuals combined with text intended to encourage viewers to take up a weight loss journey, which often leads to negative body image (Tiggeman & Zaccardo, 2015), similar to what was discussed in chapter 1. Contrary to thinspiration, fitspiration aims to promote a healthier everyday life through exercise and empowerment. Barron et al. (2021) illustrated that exposure to fitspiration content on social media can have harmful effects for both men and women. The study found that exposure to fitspiration content resulted in increased body dissatisfaction and negative body image and recommended both men and women to reduce their exposure to fitspiration content appearing on social media through unfollowing accounts which can result have negative effects on their body image. As illustrated previously, there is a rising trend of seeking health- and fitness-related information online (Lofft, 2020). It is, however, important to discuss, as it has become a prominent notion primarily to the rising use of social media, but also due to the Covid-19 pandemic (Suarez-Lledo & Alvarez-Galvez, 2021). Suarez-Lledo and Alvarez-Galvez

(2021) showcased that there is a need to assess the credibility of online celebrities (e.g., elite athletes or fitness influencers) as there is a lack of regulation on social media surrounding trustworthy information. Lofft (2020) analysed the case of Brittany Dawn, an American fitness influencer who has amassed more than 500,000 followers on both YouTube and Instagram. Lofft (2020) addressed the issue of this specific influencer as their lack of credibility and authenticity greatly affected the followers. According to Lofft (2020), the influencer Dawn offered personalized workout plans and direct contact with the influencer at a costly price. However, this was not the case as all followers received the same workout plan, which resulted in a loss of trust and damaged the brand image of Brittany Dawn.

Part II: Methodology

4. Research objectives and design

This study was exploratory in nature, with a primary objective of exploring the influence of active elite athletes' Instagram content on the behavioural intention to participate in physical activity of young adults aged between 18 and 34. The secondary objectives were to understand how young adults perceive content posted by active elite athletes on Instagram and how this can impact their intention to participate in physical activity. In addition, this research also seeks to understand the reasons young adults follow (and don't follow) active elite athletes on Instagram, and to explore the types of content posted by active elite athletes on Instagram that can cause young adults to change their behaviour towards physical activity. This section gives the reader an overview of the research design adopted for this study. The research question guiding this study was: What is the influence of content posted by active elite athletes on Instagram on the behavioural intentions to participate in physical activity among adults aged 18 to 34?

To address the research objectives, the most appropriate design for this research project was deemed to be a mixed methods research design. Mixed methods combine both qualitative and quantitative data with both approaches investigating one distinct phenomenon simultaneously with quantitative methods typically collecting numerical data from larger samples, while qualitative methods are more tailored towards more detailed and non-numerical data from a smaller sample (Jones & Gratton, 2015). Creswell (2009) noted that combining both quantitative and qualitative methodologies provides an enhanced understanding of a specific study problem and questions than doing so separately. This is due to the fact that mixing two research designs can complement one another, offering a richer insight into a research question, which can ultimately lead to emerging questions that can be applied to future studies (Jones & Gratton, 2015).

4.1 Qualitative research design

The first aspect of this study is qualitative research, which aims to extract meanings and opinions that are not quantifiable—meaning they can't be described by numerical data—such as experiences, feelings, and thoughts (Jones & Gratton, 2015). Typically, qualitative data is collected over longer periods of time, to better examine and describe concepts (Creswell, 2009). Aspers and Corte (2019) defined qualitative research through two key points “(i) how

to do things –namely, generating and analysing empirical material, in an iterative process in which one gets closer by making distinctions, and (ii) the outcome –improved understanding novel to the scholarly community” (p. 155). The qualitative method applied in this study is interviews. Interviews may be structured, unstructured or semi-structured (Jones & Gratton, 2015). Castillo-Montoya (2016) (2016) demonstrated that interviews are central for qualitative research as they provide researchers with detailed and rich data in order to understand participants’ lived experiences, the manner they describe their experiences and how they make meaning of them. Specifically, this study will apply semi-structured interviews. As described by Longhurst (2003, p. 145) “this form of interviewing has some degree of predetermined order but still ensures flexibility in the way issues are addressed by the informant”. This allows the participants to elaborate on certain subjects and the interviewer to follow up with questions to acquire more data about a specific theme. The interviews aimed to gather qualitative data about different themes: physical activity, inspiration, elite athletes on Instagram and behavioural intention. Roberts et al. (2021) illustrated that interviews are usually considered to be the foundation of qualitative research methods and conducting interviews in person “has been considered the gold standard” (p. 1). However, due to the current situation of Covid-19 restricting face-to-face activities, conducting in-person interviews may be more challenging in terms of recruiting participants (Howlett, 2022). The Covid-19 virus is a highly contagious virus which has been spreading around the world since November 2019, with the first cases detected in Wuhan, China (Velavan & Meyer, 2020). As such, governments have implemented lockdowns to halt down the spread of the virus, but this resulted in limited physical interactions between people to ensure the safety of the vulnerable (Sjödin et al., 2020). Due to the restrictions limiting physical human interaction, conducting qualitative research has been proven to be difficult during the era of Covid-19. Conducting interviews through virtual platforms also ensure the safety of both the participants and researchers (Lobe et al., 2020). The availability of online platforms like Skype, Teams, and Zoom will enable the researcher to replicate the interviews online (Deakin & Wakefield, 2014). Online platforms will also be useful in the context of time and geographical constraints, as, even prior to the Covid-19 pandemic, barriers to the physical mobility of research populations were present (Howlett, 2022). Online interviews follow the same principles of in-person interviews as the combination of audio and video (through the use of a web camera and a microphone) can be used to create settings similar to those experienced in person (Howlett, 2022). Conducting interviews digitally can be

beneficial to the researcher as it can ensure more interaction and rapport between the interviewer and participant. A digital platform ensures the researcher that the interview will be recorded meaning the researcher will not be fully focused on taking notes which can result in the loss of attention and interaction (Jones & Gratton, 2015). While there are advantages when conducting interviews through digital platforms like Zoom, it's important to note that there can be some negative aspects. For example, Oliffe et al. (2021) noted that Zoom interviews can be challenging in the sense that participants can be distracted depending on where they are during the interview. It is therefore important to notify participants prior to the interview to find a space with no distractions and sound interference. Admittedly, observing body language of participants may be problematic as the focus of a web-camera will usually only provide the researcher with a view of the participants' head (Cater, 2011).

4.2 Quantitative research design

Quantitative research differs from qualitative research as quantitative methods are typically useful in “explaining phenomena by collecting numerical data that are analysed using mathematically based methods” (Creswell, 2009). The quantitative data of this study was gathered through surveys. According to Sukamolson (2007) surveys “provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population” (p. 2). The data obtained from surveys are typically summarised in the forms of tables, charts or “analysed statistically to answer a research question” (Jones & Gratton, 2015, p. 147). Surveys provides researchers with advantages like accessibility since surveys are primarily completed digitally in this day and age meaning it allows a researcher to retrieve data in a geographically enhanced manner, since it is possible to access a global audience (Jones & Gratton, 2015). In addition, surveys typically provide researchers with structured quantitative data which gives scholars flexibility and eases the process of comparing data if there are different groups being researcher in a project (Jones & Gratton, 2015). However, there are also some negatives aspects to surveys, such as difficulties in understanding questions, meaning that questions must be comprehensible to participants, and in such cases, it is crucial to provide definitions or short explanations of terms/question in a survey (Jones & Gratton, 2015). Additionally, there may also be a lack of control regarding who completes the survey, particularly online. Therefore, it is also important to specify the criteria for participation prior to publishing surveys online or handing them out. Finally, the

risk of low responses rates can affect the progress of a research project, which can in turn affect the overall conclusions of a research project (Jones & Gratton, 2015).

A survey was deemed appropriate for this research project, as it enabled the researcher to analyse two different groups: young adults who followed active elite athletes on Instagram and young adults who did not follow active elite athletes on Instagram. Through the set of items which will be discussed further down, the researcher analysed the results, which enabled him to determine whether there was a relationship between being exposed to content posted by active elite athletes on Instagram and behavioural intention to participate in physical activity as a result of being exposed by content posted by active elite athletes on Instagram. The semi-structured interviews enabled the researcher to understand the reasons young adults follow active elite athletes on Instagram. The chosen questions also allowed the researcher to explore what type of content the sample of young adults deemed as inspirational and how active elite athletes could be inspirational/motivational on Instagram.

4.3 Research Philosophies

Khaldi (2017) argues that research is “the acquisition of knowledge in a systematic and organised way”. There are however various routes that will lead to new findings and knowledge, but this is ultimately dependent on the philosophical approach which a researcher chooses to adopt. It is therefore critical that researchers pick the most appropriate paradigm, which will determine the structure of a specific research topic, but also which types of conclusions the research will reveal. Jones and Gratton (2015) stated that there are three approaches to the nature of knowledge: positivism, post-positivism and interpretivism. Further, Jones and Gratton (2015) also pointed out that the three different approaches encompass “epistemological and ontological assumptions” (p .19).

4.4 Interpretivism & post-positivism

An interpretivist approach will be applied for the qualitative part of this study. Since interpretivist approaches mainly adopt qualitative methods, it is the best-suited paradigm. According to Rehman and Alharthi (2016) interpretive methodology is applied when a social phenomenon needs to be understood in the context of participants. This argument is based on the study by Cohen et al. (2007, p. 21) who argued that interpretive methodology is to be understood “through the eyes of the participants rather than the researcher”. For this research project, the researcher wants to understand if elite athletes on Instagram can influence the

behavioural intention among young adults in regard to physical activity participation. Thanh and Thanh (2015) illustrate that researchers' adopting an interpretivist paradigm and a qualitative research design "often seek experiences and perceptions of individuals for their data rather than rely on numbers of statistics" (p. 26). Interpretivist scholars "seek methods that enable them to understand in depth the relationship of human beings to their environment and the part those people play in creating the social fabric of which they are part" (Thanh & Thanh, 2015, p. 25). This argument is supported by Jones and Gratton (2015), who noted that an interpretivist approach enables a researcher to understand a group of participants "from within" (p. 22) and gain an understanding of their perspective and ultimately discover multiple truths. As opposed to positivism, interpretivism acknowledges and understands that there are multiple truths to be uncovered (Jones & Gratton, 2015). Jones and Gratton (2015) further argues that in sports including physical activity, people experience physical activity in "different, subjective ways" (p. 22). As argued by Thanh and Thanh (2015), interpretivist research approaches reality from the lens of the subjects, allowing them to share their own experiences with the researcher.

On the other hand, Jones and Gratton (2015) argued that positivism and post-positivism is better suited for quantitative studies through the use of control (e.g., how a variable may affect another variable), replication and hypotheses. A post-positivist approach will therefore be applied for the quantitative aspect of this study. The researcher is looking to assess relationship between two variables, in this case content posted by elite athletes on Instagram and the behavioural intent of young adults to engage in physical activity.

4.5 Risk Assessment

The creation of a risk assessment allows researchers to evaluate any potential risks for the participants taking part in the study (Creswell, 2009; Jones & Gratton, 2015). This study adopted a mixed-methods design, and participants being interviewed were provided with an information sheet (Appendix A) outlining the nature and aims of the research, why they have been chosen for the study, and the benefits of taking part of the study (Jones & Gratton, 2015, p. 135). A consent form (Appendix B) was also provided to participants that defined their rights while taking part in the study. One critical point of the information sheet was that it outlined the right to withdraw from the study at any given time without the need of justification. Additionally, the identity of participants remained anonymous throughout the study and their data was safely stored on the researcher's password-protected USB stick

dedicated to the study. Grinyer (2009) highlighted that it is critical to keep the identity of participants confidential due to the Data Protection Act. While this study covered topics like physical activity, participants were not asked to perform any type of physical activity, there is little to no expected risk present in this study, as no sensitive questions will be included in the sample of interview questions. In regard to the survey, respondents were informed that the participation was anonymous and the only required information from the respondents were basic demographics. No sensitive questions or scale measures were implemented. Participants were also informed that participation was voluntary allowing them to withdraw from the survey at any given time.

4.6 Conditions for interviewing

Jones and Gratton (2015) highlighted the importance of designing an interview guide. For instance, introducing the intention and structure of the interview to the interviewee is critical to “set the scene” (Jones & Gratton, 2015, p. 181). The researcher conducted the interviews in a logical and organized manner by grouping questions of related topics together. The interview questions were organized in a manner for the participants to feel at ease with the first set of questions encouraging them to feel comfortable. The questions were also worded in unambiguous manner for the interviewees to understand the questions. Accordingly, the chosen questions for the interview script were derived from the presented literature. Jones and Gratton (2015) demonstrated that it is critical for an interview to take place in a location with minimal levels of background noise, as this can be distracting for the interviewee. Further, it is also important that the interview takes place in a location where the interview cannot be overheard, as the presence of other individuals could render the interviewee uncomfortable (Jones & Gratton 2015). A soundproof room is also essential for the recordings of the interviews as background noise may interfere with the recordings, thus increasing the difficulty of transcribing the interviews and the data analysis. This applies for both in-person and virtual interviews since an optimal environment (e.g., stable internet connection and noise-free room) is critical for both the researcher and subject to communicate to avoid distractions and interference during the interviews (Shapka et al., 2016).

4.7 Qualitative Data collection

4.7.1 Recruitment method for the semi-structured interviews

The chosen age range of 18 to 34 was deemed the most appropriate as people from this age group are often targeted by sports marketers (Dix et al., 2010). In addition to this, the most active social media users are aged between 18 and 34 (Statista, 2022). For instance, as of March 2022, on Instagram 61.6% of active users were aged between 18 and 34 (Statista, 2022). Kowalczyk and Pounders (2016) claim that young people also tend to be entertained by celebrities like elite athletes. Previous research has illustrated that gender plays an important role in physical activity participation, as participation rates vary based on gender, although this depends on the country of origin, and the cultures of different countries (Molanorouzi et al., 2015; Trost et al., 2002; Van Tuyckom et al., 2010). For the recruited sample to be as diverse as possible, gender, age, background, and profession were considered in selecting participants. Both active and non-active individuals (in regards to physical activity) were included in the sample, as substantial data can be retrieved which enabled the researcher to compare the perceptions and motivation(s) of active and non-active people. It was important that the participants were Instagram users but also followed at least one active elite athlete. This also implied that the participants needed to have at least some interest in physical activity such as sports.

Marshall et al. (2013) argued that an interview sample should remain small to gather rich and precise data, compared with larger samples used for quantitative studies. Due to time constraints and possible barriers of participation due to the Covid-19 pandemic, a sample of 18 participants was deemed optimal. The researcher recruited participants from two different countries, Portugal and Italy, as the researcher was travelling during the period of recruitment. This was to get different perceptions and increase the richness of the participants' backgrounds. Convenience sampling was deemed to be appropriate for this study since it enabled the researcher to distinguish participants who fulfilled the criterion for this study but also since they were convenient in terms of location and accessibility (Jones & Gratton, 2015). Knowing that the participant(s) fulfilled the criterion facilitated the recruitment process as the first participant(s) could recommend other participants to take part in the study. In addition, snowball sampling (non-random sampling) was also employed in the recruitment process. Etikan et al. (2016) argues that “respondents who have great number

of social connections are able to provide investigators with a higher proportion of other respondents who have characteristics similar to that initial respondent” (p. 2).

4.7.2 Interview procedure and questions

The main objective of this study was to explore the influence of Instagram content posted by active elite athletes and whether it causes behavioural intention to increase participation in physical activity of adults aged 18 to 34. The participants were provided with the definition of physical activity with a few examples since this study utilized the general definition by Caspersen et al. (1985). The participants were also provided with a definition of active elite athletes with a few examples of the most influential active elite athletes in the world of sport (e.g., Cristiano Ronaldo, Lebron James etc.). Interviews questions were tailored to the four themes so the researcher could retrieve relevant and rich data. Basic demographic questions were the first set of questions of the interview, which enabled the researcher to categorize variables like age, gender, ethnicity, and current occupation as suggested by Jones and Gratton (2015). The researcher followed the recommendations of Willig (2013) through the implementation of general questions about the topic, in this case physical activity and Instagram. This enabled the participants to familiarize themselves with the topics before being interviewed with more specific questions related to the topics.

The first topic of physical activity incorporated four questions related to the frequency and patterns of physical activity of the participants. The first two questions were derived from the study of Armstrong and Bull (2006). The third question was from the study of Vescio et al, (2005), while the fourth question was from the study from Hull et al. (2021).

The second and third topic consisted of nine questions related to inspiration and behavioural intention. Seven questions were categorized into inspiration while two questions were categorized into behavioural intention. The first question was created by the researcher to examine the types of active elite athletes the interviewees followed. The other intent behind this question was to assess the literature about fans taking part in the same sport as an elite athlete they admire or have watched, in other words the demonstration effect (Weed, 2009). The second question was derived from the study of Lee et al. (2021) which examined the main motives behind the following of fitness influencers. The researcher replaced fitness influencers with active elite athletes for the purposes of this study. The third question was another question derived from the study of Billings et al. (2017), replacing Snapchat with

Instagram. The fourth question was based on research from Carter and Lorenc (2015) who attempted to assess whether the performance of elite athletes could inspire people to take part in physical activity. The fifth question was created by the researcher himself to understand what type of Instagram content was inspirational and motivational in the context of physical activity. The sixth and seventh question of this category was derived from the study of Potwarka et al. (2020), replacing cycling with physical activity. Both the sixth and seventh question were categorized into behavioural intention. The last question was based on the literature regarding body comparison and technical skills, as the researcher found it to be relevant to see if the physical appearance and technical skills of elite athletes could be an inspirational factor for the participants (Meier & Schäfer, 2018; Sokolova & Perez, 2021).

Finally, the last category of active elite athletes included four questions. The first question of this category was derived from the study of Fleming et al. (2005) with the original question being “Who is your favourite professional player?”. The same study also required participants to provide the interviewer with a justification of why. The second question was adapted from the study of Ronkainen et al. (2019) as it was strictly focusing on literature about role models. Naturally the third question had to be a follow-up question asking about potential negative aspects of role models, or more precisely negative aspects of elite athletes as role models. The fourth and last question was based on the study of Marees et al. (2021).

4.7.3 Zoom

Due to Covid-19, the preferred way of conducting interviews was through Zoom. The researcher conducted 17 of 18 interviews through Zoom, while one of the interviews took place face-to-face. The interviews took place between July 11 and 23, 2022. The researcher started off the interview by retrieving demographic information from the interviewees, including age, gender, ethnicity, their current occupation, and highest level of education. Two warm-up questions regarding physical activity and Instagram use were asked, which had the aim of giving the participants an opportunity to familiarize themselves with the topics of interest during the interviews. The interview encompassed four main themes: physical activity, inspiration, behavioural intention and active elite athletes on Instagram. A fifth theme was created being fitness influencers as there were numerous mentions of this category during the interviewing phase. Each question from the four main categories were tailored so the researcher could retrieve the necessary data for the data analysis (see Appendix C). A full interview with participant 15 can be seen in Appendix AA.

4.7.4 Recruitment

Participants for this study were acquired primarily through snowball and convenience sampling. The researcher would ask participants to recommend other potential participants to take part in the study, particularly for the survey. In total, 17 participants (12 male, 5 female) volunteered to take part in the semi-structured interviews. All were aged between 18 and 34 ($M= 24.64$; $SD= 1.70$) and followed active elite athletes on Instagram.

4.7.5 Data analysis for interviews

The final sample contained audio files of 17 interviews as one of the recordings was not able to be transcribed due to sound interference, rendering the researcher unable to transcribe the interview. The software Adobe Premiere Pro was utilized for the transcription process. The researcher uploaded the recordings to the software, which would generate a draft of the transcript. After downloading the transcripts generated by Adobe Premiere Pro, the researcher reviewed them and corrected possible errors and inconsistencies. Then the researcher began the coding process. Jones and Gratton (2015) define coding as “an organisation of your raw data into conceptual categories” (p. 276). Jones and Gratton (2015) stated that coding is “the first stage to providing some form of logical structure to the data” (p. 277).

This study adopted a thematic analysis. Djafarova and Bowes (2021) defined thematic analysis as a “method for segmenting, categorising, summarising and reconstructing data in a way that captures the important concepts within the data set” (p. 4). This enabled the researcher to search for topics or patterns that were recurring throughout the interviews. With the use of Microsoft Word and following the steps suggested by Jones and Gratton (2015) for coding raw data from sports studies, the researcher adopted an open coding approach and highlighted paragraphs or specific passages. It is important to note that the codes were either derived through the studied literature or defined as emerging codes identified during the process of analysing the raw data. A total of 63 codes were identified. Since the number of codes was high, the researcher grouped them into groups or subgroups of a specific code. This enabled the researcher to reduce the complexity of the data but also to get a better overview of the main themes of the raw data and to understand the possible confirmatory or contradictory data. Additionally, the researcher created tables and figures to visualize the codes and possible correlations between the codes. This was done to facilitate the coding

process and for the researcher to have a visual representation to observe. The researcher followed the suggestions proposed by Stuckey (2015) in regard to overlapping codes. On some occasions some of the codes could overlap with one another, but the study of Stuckey (2015) suggested to not combine codes unless the similarity levels of the codes were high. As a result, the researcher did not merge any codes.

4.8 Quantitative data collection

4.8.1 Recruitment method for the survey

A survey was sent between July 22 and August 8, 2022. The researcher designed the survey with Qualtrics, a software specialized in survey design. Participants were invited to participate in the survey through email and social media groups such as Facebook groups specialized for survey promotion. Platforms for survey exchanges like PollPool and SurveySwap were utilized to further recruit participants. The researcher responded to surveys of other students to gather enough credits for participants to take part in the survey of this project. While the interviews uniquely focused on people who were following active elite athletes on Instagram and aged between 18 and 34, participants who did not follow elite active athletes on Instagram were invited to participate in the study. The main reason for this was the researcher wanted to determine whether there was a difference in behavioural intention to participate in physical activity between two groups, with the first group being individuals who follow active elite athletes on Instagram and the second being participants who don't follow active elite athletes on Instagram. Just like the interview, the survey included the same definition and examples of physical activity and active elite athletes for the participants.

4.8.2 Survey design, scales for measurement

The survey adopted a 7-point Likert scale design. Previous literature has illustrated that a 7-point Likert scale provides can provide slightly more accurate and precise results compared to a 5-point Likert scale (Joshi et al., 2015; Lewis, 1993). A larger variety of choice on a Likert scale offers participants more freedom to pick the option that feels the most accurate one rather than “to pick some nearby or close option” (Joshi et al., 2015, p. 398). The items included in the survey were based on previous literature in the same field of study. For certain measures, the researcher had to adjust them to be tailored to the study. The start of the survey included a set of questions aiming to retrieve basic demographic information such as

gender, age, ethnicity, highest level of completed education and current occupation. In order to separate the two groups of participants, the survey included questions asking whether they followed active elite athletes on Instagram and whether they used Instagram.

4.8.3 General questions

Self-reported measures were included in the survey for participants to specify their physical activity levels in minutes per session and frequency per week (Armstrong & Bull, 2006). The survey also included items to measure the duration of daily Instagram use.

4.8.4 Instagram

Lee et al. (2015) examined the reasons for users' motivations for using Instagram. In total, the researcher applied 17 items from the study of Lee et al. (2015), giving the respondents flexibility regarding their motivations for using Instagram. Participants were also able to write other reasons for using Instagram in an open-ended response box in the same section of the survey. The aim of applying these measures was to analyse the differences for using Instagram between users who follow active elite athletes on Instagram and the ones who do not follow active elite athletes on Instagram.

Below is a quick summary of the 16 items included in the survey, all extracted from the study of Lee et al. (2015). Six items under the theme of "social interaction" were included in the survey, another four items from the category of "peeking", two items were included from "escapism", three for "self-expression" and finally two for "archiving" which were all included in the survey. In addition to these items, one item from Meier et al. (2020) study was included from the category of "inspiration": "to browse products related to my interest". The researcher wanted to assess whether participants were interested in promotional content on Instagram, particularly due to celebrities like elite athletes being likely to promote products on social media but also brands (Hambrick et al., 2011).

4.8.5 Reasons for taking part in physical activity

In order to measure the motivations for taking part in physical activity, the researcher utilized measures from two different studies. Five items related to general reasons for taking part in physical activity were taken from the study of Gavin et al. (2014) and four items from the study of Bastos et al. (2006), one item from "health and wellbeing" and three items from "appearance", were included in the survey. Two items related physical activity participation

because of friends and family were included and adapted from the study of Chiu et al. (2016). Based on the study of Chiu et al. (2016), who applied external influences as a motive as physical activity participation, the researcher included four other items based on external influencers: elite athletes, fitness influencers, celebrities (general) and health professionals (personal trainers) to the survey. This was to examine whether there was a difference between the groups, and which group was the most likely to agree with external influences as a motive for taking part in physical activity.

4.8.6 Reasons for following active elite athletes on Instagram

Scales for reasons for following elite athletes on Instagram were divided into three different categories and derived from three different studies. Three items from the information and motivation measures were retrieved from the study of Witkemper et al. (2012), which focused on Twitter. The items were adapted to Instagram for this study. Four items related to consumption of social media from the study of Frederick et al. (2012) were applied and adapted to Instagram. One item related to consumerism through social media was applied from the study of Lee et al. (2021). Scales related to inspiration/reasons for following active elite athletes were adapted from the study of Raggatt et al. (2018) but the term fitness influencers were replaced with active elite athletes.

4.8.7 Behavioural intention

In order to measure behavioural intention, a variety of measures were applied in the survey. Five further items adapted from the study of Potwarka et al. (2020) were included in the survey to measure behavioural intention with the subcategories including inspiration, fantasy, and intention to participate in physical activity. Since the study of Potwarka et al. (2020) was focused on cycling, the researcher changed cycling to physical activity. Four items from attachment transfer from Ki et al. (2020) were adapted to the study to measure intention to purchase products and behaviour intention. In addition to this, endorser credibility was measured through three items.

4.8.8 Data Analysis (quantitative data)

For the quantitative data analysis, the researcher utilized the Statistical Package for the Social Sciences (SPSS). The researcher exported the raw data from Qualtrics to SPSS. To assess the differences between the two groups, through SPSS the researcher separated the raw data into

two groups: group 1 corresponded to participants who followed active elite athletes on Instagram and group 2 corresponded to participants who did not. The researcher adopted descriptive statistics and utilized independent t-tests to test the hypotheses.

4.8.9 Descriptive statistics

Typically, descriptive statistics lead to a measure of central tendency, defined as “a value that describes a particular characteristic of a set of scores” (Jones & Gratton, 2015, p. 253).

Following the recommendations of Jones and Gratton (2015) for descriptive statistics, the two main statistical concepts applied for the descriptive statistics were the mean and standard deviation. According to Reichardt (2010) the mean “is the average of a set of scores” (p. 1).

The standard deviation is typically defined as a measure of “how far the scores vary from their mean” (Reichardt, 2010, p. 1). If the value of the standard deviation is large, this means there is a low consistency among the set of scores obtained. In contrast, when the standard deviation is lower, there is greater consistency among the scores, meaning that there is typically a minimal dispersion of opinions.

4.8.10 Inferential statistics

According to Jones and Gratton (2015) inferential statistics “assess the association between independent and dependent variables” (p. 258). In order to test whether there was a statistical difference between the two groups, independent t-tests were conducted on SPSS. This statistical test was chosen because the two groups that were studied were independent. Gerald (2018) illustrated that “independent samples t-test is used to compare two groups whose means are not dependent on one another” (p. 51). This enables researchers to assess whether there is a statistically significant difference between the means scores of two groups. There are two hypotheses when performing an independent t-test, H₀ and H₁. For H₀ to be accepted $p > 0.05$ which means that there is a significant statistical difference between two means. In other words, if H₀ is accepted then H₁ will be rejected. For H₁ to be accepted $p < 0.05$ meaning that there is not a significant statistical difference between two means. If this is the case, H₁ is accepted and H₀ will be rejected.

Part III: Results and Analysis

5. Results

This section starts off by providing the reader with the results of the qualitative analysis performed by the researcher. A thematic analysis was performed to organize raw quotes into various themes. Firstly, the reader is provided a quick overview of the respondent profile of the interviewees. Then, the first analysis consists of the responses generated by general questions asked by the interviewer. Next, an analysis of the four main themes is presented: physical activity, inspiration, behavioural intention, and elite athletes on Instagram. A fifth theme emerged during the qualitative analysis being fitness influencers which will also be presented. The researcher grouped the interview questions into themes, providing the reader with insight into the results from each category. The results and a discussion of the quantitative analysis will be presented after the first discussion. This section concludes with a general discussion of both sets of analysed data.

5.1 Results of the qualitative analysis

The final sample included interviews with 17 participants, 12 male and 5 female. The average age of the participants was 24.6. The lowest age among the interviewees was 19 while the highest was 29. The majority of the participants were white (13), while the remaining participants were black (2) and Hispanic (2). The participants were mostly students (11), four were workers, while two were unemployed. The typical respondent also held a bachelor's degree (11), while four had completed a master's degree and two had completed high school. Based on the literature reviewed and the research question, four main themes were created: physical activity, inspiration, behavioural intention and elite athletes on Instagram. A fifth theme was created being fitness influencers after numerous participants quoted fitness influencers during the interviews. The raw quotes were categorized into the themes when appropriate.

5.1.1 Theme 1: Physical activity

There was a wide variety of types of physical activities mentioned, with walking being cited by every participant and thus being the most common type of physical activity (17). Walking was followed by the gym (9) and running (6). Exercising included home workouts and workouts outside the gym (5) and was the fourth-most mentioned type of physical activity. However, exercising (home workouts or outside resistance training as explained by the

participants) can be considered a form of resistance training which would then fall into the category of resistance training. Football was the fifth-most mentioned type of physical activity (4), followed by hiking, tennis, and swimming (3). Finally, basketball, cycling, paddle, surfing and yoga were the least common types of physical activities to be mentioned by the participants (2). The frequency of physical activity sessions per week ranged from one to seven; their frequency per week was 3.47 on average with a standard deviation of 1.61. A session of physical activity was defined as a minimum of 30 minutes or more in the form of walking or exercising. The results showed that the participants were overall physically active. On average a physical activity session of this sample was equal to 60 minutes with a standard deviation of 17.6.

A few participants mentioned their previous physical activity participation rates, typically during their childhood, and this resulted in a sub-theme. This was particularly interesting as this category was vital to understanding their current physical activity levels but also since it was a contradictory code at understanding whether active elite athletes could have an impact on their physical activity levels. For example, participants 10 and 18 stated that they did sports prior to using Instagram for following elite athletes. This indicates that participants 10 and 18 may have higher self-efficacy levels and may not be influenced by active elite athletes to further increase his physical activity levels. During the later phases of the interview, participant 18 stated the following: *“I may have increased my physical activity because of personal desire. But I would say it’s mainly because of my own desire to do so. If I were to say I increased my physical activity levels by 100%, maybe 20% would be external elite athletes’ motivation.”* This can be categorized into self-efficacy, but also influence by active elite athletes. Numerous participants mentioned that their physical activity participation depended on their life situation with examples including work, studies, personal life, geographical location, and safety.

5.1.2 Theme 2: Inspiration

The researcher also asked questions regarding content they find inspirational and/or motivational that can potentially affect their attitudes towards physical activity. There were 87 mentions of inspiration. Older active elite athletes were a popular choice among participants, particularly for participant 9 who admires older elite athletes who are still competing, but also the training aspect: *“Well, I like seeing that these older guys who are at the top of their game, I love seeing watching them train and they’re like getting that shredded*

because, it's just saying that that the work because they're not just showing up in September and like, oh, look, they still look really good." Similarly, participant 15 stated that training is the major aspect of motivation and inspiration in terms of content posted by active elite athletes: *"it's definitely the training, you know, when it's the training that goes into it behind the scenes."* While the interviewer did not ask the participants to provide a visual example of a post, participant 15 showed the researcher the Instagram post seen in Appendix D.

Participant 3 stated that training was the main type of motivational and inspirational type of content, but also mentioned injury recovery which was particularly interesting to him: *"recovering from injuries because there's there are a lot of injuries in skiing and it's always nice to see people work and bounce back up after that."* Other examples include participant 15 who stated: *"you end up watching you flick through Instagram, and you see a couple of posts from elite athletes, and you see them going to the gym on their day off and you think, you know, I'm going to go to."* Similarly, participant 8 mentioned the following: *"You could be interested in the sport...and be interested in doing sports because you see that this guy, that is an example for you. For whatever reason, he's doing sports, so he's going to inspire you to do the same sport"*. Overall, participants mentioned different sources of inspiration, but there were also similarities between the responses.

The type of inspiration mentioned by participant 18 was categorized under achievement and background which were both recurring themes. Participant 18 stated: *"Maybe the stories in which they detail or are outspoken about how they struggled a lot and how not everything is as it's shown because we are often presented to them in their most frequently higher form or biggest state of achievement"*. Participant 10 also mentioned achievement as an inspiring factor for him and said, *"I would say some, some very deep thoughts, like, stories that maybe they share, like achieving some amazing career achievements. Like that it took so long time during their professional career since they were young. So, to achieve, like, it's always amazing to break some limits"*. Participant 14 took a different approach and specified that she prefers to watch video content. Finally, similar to participant 14, participant 8 specified that he liked content in the format of a picture and indicated that the sporting context is the most inspirational to him. This theme was the most diverse, as it included a wide range of codes, with most codes recurring at an equal rate during the analysis, although training emerged slightly more than any other code in this theme.

5.1.3 Body comparison for inspiration

The researcher also asked participants if they had ever compared their own body to the body of active elite athletes through content posted on Instagram but also their technical skills.

Both participants 3 and 5 confirmed that they had done so. For example, participant 3 stated: *“all elite athletes in general are so fit and in such good shape that it’s just like I think it’s inevitable that you’re going to think that you need to improve your physical shape, and start to think well, I could do a bit more work for you and this is really motivational for me”*.

Participant 5 also stated that he had compared himself to active elite athletes on Instagram: *“Yes, for sure. I could definitely, definitely be fitter...but that’s what I’m working towards. I would say that just looking at posts of them working out when they’re like without a shirt automatically makes me compare myself to them”*. On the other hand, participant 11 said, *“Yes, definitely... I know that the pictures they’re always posting just the best pictures...they probably wouldn’t really post a picture when they’re bloated up”*. Participant 7 mentioned envy as a way of comparing himself to active elite athletes and used Steph Curry and Cristiano Ronaldo as examples: *“More inspirational side perhaps, someone who have your similar characteristics to. Steph Curry... I used to envy the body balance he had, he wasn’t buff but still very athletic and had a great physique. But unconsciously maybe you want to have a six pack like CR7”*. This was the only occasion envy came up as a code during all the interviews, and it shows that envy can be used as motivation/inspiration if it is not malicious envy, although this will be reviewed more in depth in the general discussion.

On the other hand, some participants mentioned negative aspects about active elite athletes that came to their mind, a few examples included unrealistic expectations but also body comparison. For instance, two participants put emphasis on unrealistic expectations, with participant 9 stating: *“Yeah, probably that it’s unattainable There’s no way of me achieving what they’re achieving.”* Participant 5 cited the positives about Instagram as a platform for inspiration but contrasted his answer by talking about the risks of being a public figure on a platform like Instagram and that athletes have to be careful with their posts and opinions as it can have an opposite effect of inspiration.

5.1.4 Role models

Numerous participants mentioned elite athletes as role models, there were mixed answers as one part of the respondents considered them role models while the other part of respondents did not. Participant 8 and 16 both stated that active elite athletes are suitable as role models,

but particularly for people hoping to follow a career in sports. Participant 8 stated: *“Oh yeah, definitely. Because for me a role model is, someone that gives me fuel for everything I want to do in my life in general. And sports athletes are the best role models for me because that’s my passion. That’s what I want to do, work in sports industry. I have a lot of respect for what they’re doing. Sports is a very, very hard thing”*. This response was similar to the response of participant 16: *“I would say yes, especially for people who are maybe more inclined towards some sports career. For the general public, I think they are just motivational”*. Participant 17 demonstrated why he believed active elite athletes were role models: *“I would say somehow, yes, both from like the character point of view. I used to admire some athletes because they had not only the sport mentality, but they are retired now...the sport and quality and sports skills.”* Participant 17 also mentioned a now-retired elite athlete as an example which can be considered another source of role model.

On the other end, numerous other participants did not consider active elite athletes role models, with participant 9 stating that he did not believe active elite athletes were role models for him personally unless he would be pursuing a sports career: *“I probably would not classify them as role models because I’m not pursuing the sport. So, when I do play American football, it’s just for fun.”* Participant 8 and 16 considered active elite athletes role models, but both stated they would be particularly good role models for people inclined to follow a sports career. Participant 2 acknowledged the hard work put in by active elite athletes but did not consider them role models: *“No, I know they always put themselves in situations to really to push themselves and I know it’s hard work, but I wouldn’t consider them as role models”*. Participant 12 did not consider active elite athletes role models, but said, *“No, but if we speak about active players, active athletes I will say no, but if we’re talking about retired athletes, those ones that demonstrated the love for the club and the city and but now it’s more difficult. Like Totti who was super loyal to his club Roma and stayed there his whole career then I would say yes.”* This response differed from the other participants, as participant 12 was one of the few participants mentioning retired elite athletes and not active elite athletes.

5.1.5 Theme 3: Elite athletes on Instagram

The majority of participants (13 of 17) mentioned an active elite footballer they follow on Instagram with Cristiano Ronaldo being mentioned by all who followed active elite footballers. The second-most common category of active elite athletes were basketballers, a sport that was only mentioned by 4 of the 17 participants. Athletes in the following sports

were mentioned three times each: tennis, ski, surf, Formula 1, and Mixed Martial Arts (all competing in the Ultimate Fighting Championship). Cycling and American Football were mentioned twice, while the five following sports were mentioned once: boxing, golf, hurdles, ice skating and track.

5.1.6 Training

The majority of participants mentioned training as one of the main reasons they followed elite athletes on Instagram. They mentioned the desire to get an insight into athletes' daily lives, but also to admire their skills and fitness. For example, participant 5 is curious about the fitness and training of active elite athletes: *"You want to see what they're doing. Are they taking fitness seriously? Are they doing extra training? You know what I mean? They give more insight into their lives."* On two different occasions, participant 3 mentioned his interest towards watching the performance of the players: *"I'm fascinated to see what's going on with the players,"* and: *"the alpine skiers I was following this because I used to ski quite a bit, and so I would watch the Winter Olympics. And, you know, it's just an exciting thing to do to see these people doing amazing things on skis"*. Participant 11 stated that she is interested in their workout routine which can also be categorized into the sub-theme of social cognitive theory and is coherent with the literature. Participant 11 said, *"I really like to see their workout routine, so when they just showed the different exercises that they perform, like also with the timings, the way they used, not just with a way to get like."* Finally, participant 15 provided the researcher with a specific example about Trent Alexander Arnold, who currently plays for Liverpool FC: *"Trent Alexander-Arnold, he's quite good on social media. He plays quite a lot of the training and I think it's; you know, you don't see that when you just watch them come out on the pitch. So yeah, seeing a bit of the behind the scenes, you get an idea of what goes into being able to perform at that level."* Similar to the other participants, participant 15 demonstrated an interest in the training aspect and "behind the scenes" of what happens in the professional lives of active elite athletes.

5.1.7 Insight into personal lives

Participant 13 mentioned a mix of reasons for following athletes on Instagram, but the main reason for it was related to an insight into their personal lives as illustrated by the following: *"after their performances, you can also be part of a bit of their life and to see what happened then, you know, not only the sport part, but the private life. That's also interesting...it's like a kind of nice mix and it's really interesting to see sometimes."* Participant 18 stated that getting an insight into their personal lives was her main reasoning for following: *"let's see what*

they're up to. I don't know, to like cheer them on. Maybe not leaving comments, but I don't know. Maybe liking the photo or something. Then the foreign football players at the elite level. Maybe out of curiosity as to check how do they live their personal life". This quote also demonstrates that there is a desire to interact with athletes on Instagram through "*liking the photo or something*" which was one of the few mentions of interaction among the interviewees. Participant 10 also stated that he had an interest in the personal lives of the athletes that he follows, as illustrated in the following quote: "*Like, I'm very into tennis so I mainly follow elite tennis players who are active. So, I'm just interested in what's going on in the tours and championships of those players and in their lives as well to get an idea what happens in their personal lives outside the world of sport.*" The quotes illustrate two aspects, with the first being the desire to know what happens in the world of sport of the active elite athletes who they follow on Instagram and the second being that the participants are curious about the personal lives of the athletes they follow on Instagram. This was a recurring theme, and it is possible to argue that the participants are not only interested in what happens in the professional lives of active elite athletes but also in their personal lives.

5.1.8 Entertainment (funny content)

Entertainment was a recurring theme mentioned by participants and most participants illustrated their statements by providing the researcher with examples. For example, participant 2 used Zlatan Ibrahimovic (elite footballer currently playing for AC Milan in Serie A) as an example: "*Zlatan Ibrahimovic, who displays a lot of arrogance, and...to see the kind of reactions, the kind of entertaining posts. I mean, it's something that makes me laugh.*" Participant 12 also mentioned Ibrahimovic: "*For example, let's say Ibrahimovic who can also have a funny profile sometimes since he posts entertaining content. Some of his posts can be inspirational and sometimes they can be funny.*" In addition, participant 7 stated: "*to watch their routines I find them interesting, and they do enjoy having fun outside their professional life, that's how they get their balance, so I follow them for their humour and jokes*". Participant 9 mentioned Rob Gronkowski (elite athlete playing in the National Football League in the United States) as an example: "*He is an elite athlete, but he's an absolute goofball. Like he messes around. He's funny, but at the same time, when it's go time? When he puts the helmet on, he is one of the best. So, I like that. I like that he can switch between being a funny guy*".

Outside the three most popular themes, there was a variety of other reasons the participants followed athletes on Instagram. Numerous participants mentioned social causes like charity and raising awareness about specific topics as content they expect to be exposed to through athletes on Instagram. Participant 7 stated: *“Me and my mum follow a lot of Neymar’s content, and he is very connected with a lot of charities, and he is helping a lot of communities in Brazil who are unprivileged. He doesn’t post much on his main page, but he does post on his charity page instead which is interesting to me.”* Participant 14 on the other hand went into detail about specific examples of content she believed was receptive, particularly social causes, stating, *“They can bring awareness about social issues or inside the sport, have a more open voice about some subjects...the biggest athletes are using their voice in social media...some surfers already do about keep the beaches clean, cleaning the oceans, buying wax for your board that’s good for the ocean – like a movement that people can start following for a good reason.”* Social causes was therefore considered as an important form of content for some of the participants as it was mentioned numerous times.

5.1.9 Educational content (social cognitive theory)

Other participants indicated that they were curious about the training aspect of active elite athletes and how they can learn from content posted by athletes on Instagram. This category can be associated with the social cognitive theory, which implies that people learn from observing the behaviours or actions from others. For example, participant 9 stated: *“Uh, yeah. I’d say, like in the gym, if I see like an elite athlete on Instagram do some nice things like new exercises I have not tried before or I don’t know how to do, I’ll try to do them. Like I have tried new exercises or different variants of stuff just to keep workout routines”*. Participant 11 suggested that she is interested in the workout routines of athletes and stated: *“when they’re weightlifting, for example, like with different exercise to get a good reference point. So, to know, okay, she’s doing that many repetitions or she’s lifting that many kilos...and so then just following the workout routines, this is particularly interesting to me.”* It also seemed like she trusted the abilities of elite athletes since she mentioned she uses them as a reference point to exercise. Participant 13 also showed a desire to replicate actions of athletes in the context of basketball: *“it can be regarding basketball and so yeah, I think I’ve looked at a lot of videos especially in basketball on Instagram also on some tricks players were doing and I was just trying to do the same on the pitch. Not the same results, but yeah, it’s still something you take for inspiration, and you try to do on the court, even if the success is not the same.”*

Finally, participant 14 mentioned that she had been attempting to replicate “tricks” in the context of surfing: *“I’ve been surfing for a long time and now I kind of practice, but I’m still learning, and I started watching videos on Instagram about specific things in surf and liked it a lot and I started following them and I started knowing other really good elite athletes through them.”* Overall, participants showed interest at replicating performances of athletes, which can therefore be linked to the social cognitive theory.

5.1.10 Purchase behaviour & promotional content

Lastly, a sub theme regarding branding and purchase behaviour emerged, although not as frequently as the others. Only participant 7 mentioned purchase behaviour during the interviews: *“but also, sometimes the sports fashion, the sports brands, the new sneakers, and you get to know when a new sneaker collection of your favourite athlete is coming out and it kind of makes you want to buy them”*. This suggests there is an interest regarding sports fashion and brands, but most importantly that there is an influence from active elite athletes towards the purchase behaviour of participant 7. Meanwhile, participant 5 and 8 did not mention purchase behaviour but they did state that they are interested in sports brands or collaborations that active elite athletes have, with participant 5 stating: *“So, he [British boxer Anthony Joshua] has all of these affiliates with the likes of Under Armor and people like that, which again I find fascinating that world of collaborating with and having brand ambassadors with these big names and big celebrities with these brands, I find that interesting”* and participant 8 saying: *“you know, like whenever they’re like launching a sports brand or like a collaboration, anything that’s interesting and that’s representing something interesting, I like it as well.”* This suggests that there is an interest towards promotional content from the participants’ side which can potentially affect their consumer behaviours.

5.1.11 Traits participants admire about active elite athletes

Several traits that participants were inspired by or admire in general emerged from the interviews. A total of 17 codes emerged within this category, however four codes were mentioned more frequently than the others: hard work/dedication (34 mentions), physical appearance (23), personality (22 mentions), and technical ability (22 mentions).

The first example of hard work is illustrated by participant 9 who mentioned a wide range of traits of elite athlete that he found admirable which also gives an idea to the other types of

traits participants mentioned during the interviews “*Definitely the hard work, consistency, the mental strength they have, the physical strength they have, the fact that they’re elite athletes, that they can operate under high stress situations*”. On the other hand, participant 15 went into detail and gave some examples of hard work: “*it’s just this those little details it’s that little bit of extra effort that they’re putting in knowing it’s going to pay off and then you see it pay off and you realize it’s because they train harder than the average person*. Participant 5 used Cristiano Ronaldo as an example in terms of hard work: “*he always says, if you don’t put in hard work 100% of effort the entire time, you will never reach your goals*”. This could suggest that hard work is an important factor for the participants in the case of admiration.

Physical appearance was another code frequently mentioned by the participants. To illustrate, participant 7 used Cristiano Ronaldo as an example when he said, “*But unconsciously maybe you want to have a six pack like CR7*”. As mentioned in the theme of body comparison, participant 7 also envied the physical appearance of an elite athlete and referred to Steph Curry. Participant 15 mentioned the fact that elite athletes are at their highest level and have a certain fitness standard to maintain: “*the highest level and they commit their fitness. You know, they look after their bodies. They keep in peak condition for their sport, whatever it is*”. The numerous mentions of physical appearance suggests that it was an important trait to admire.

Regarding personality, participant 8 gave a specific example of a mixed martial artist: “*I really love the Charles Oliveira... his personality, very humble, very confident, very cold... Very simple as a guy who speaks openly where he comes from since he came from a poor background*”. Meanwhile participant 18 mentioned personality as a trait on two separate occasions during the interview: “*I really like them and kind of vibe with their personality and therefore like them through their social media*” and, “*who has the ability to inspire others openly on social media. She has this amazing personality as well,*” referring to an elite athlete in Colombia.

Finally, technical ability was illustrated by participant 14, who emphasised a specific elite surfer, Gabriel Medina: “*Because he is super focused [Medina] is really good at doing everything. It is like barrels, or like tricks and like jumping on the board when he’s riding a wave. I don’t know, it’s crazy.*” Participant 13 also mentioned Medina and used him as an example: “*I think a video of Gabriel Medina surfing and doing some crazy tricks into the*

waves. *It's so impressive...I just want to do the same when I see that.*” Participant 3 also mentioned technical skills as something impressive and admirable: *“And, you know, it's just an exciting thing to do to see these people doing amazing things on skis”*. This could suggest that technical skills is an important aspect for the participants when watching content posted by elite athletes on Instagram.

5.1.12 Theme 4: Behavioural intention

Results were mixed: on one hand, numerous participants stated that they had in fact increased their physical activity levels due to elite athletes on Instagram; on the other hand, the other participants stated that they had not increased their physical activity levels due to elite athletes on Instagram. Overall, there was not a clear picture of the effect elite athletes on Instagram can have on behavioural intentions of young adults.

The researcher aimed to examine any potential behavioural change by asking two specific questions regarding changes in their physical activity levels as a result of following elite athletes on Instagram, but also whether they had tried out a new type of physical activity due to content posted by elite athletes on Instagram. In total, 9 of 17 participants answered yes to increasing their physical activity levels due to Instagram content posted by elite athletes. Participant 9, 13 and 17 all stated that watching Instagram content related to the training (exercise routine) of elite athletes was the main factor for them to increase their physical activity levels, meaning they would take part in physical activity as a result of being exposed to the previously mentioned content. Participant 9 stated, *“Yeah, definitely. When I see them throwing that ball about and doing like having a fun time, I want to go and grab my American football and I want to go out and start throwing about... I'm like, yeah, you know, I'm not just going to go sit on the sofa today.”* Participant 13 said, *“I think I've looked at a lot of videos especially in basketball on Instagram also on some tricks players were doing and I was just trying to do the same on the pitch”*. Similarly, participant 17 also said, *“I would say yes. It could be true that there maybe there were days that I didn't want to do go exercise, like my mind would not be enough to get into training. So just watching or scrolling through to see like a good performance from them or stories on Instagram of them training or something and I said okay like let's go cycling, maybe I can do this”*. On the other hand, participant 15 mentioned the accomplishments of elite athletes: *“But then sometimes it's not necessarily them training. It's them accomplishing something. It's, you know, someone putting in a really good performance and highlighting it on their Instagram, maybe the game*

of golf this weekend. I saw a couple of guys who, you know, they're putting was incredible. And you think, well, I should probably work on my putting. So, yeah, I definitely would say I've been motivated by them to help me increase my frequency of activity." It's possible to argue that there is evidence of increased physical activity due to content posted by elite athletes on Instagram.

The remaining 8 of 17 participants said following athletes on Instagram did not cause them to increase their physical activity levels. Participant 10 stated that he has not increased his physical activity levels because of elite athletes on Instagram, and that he did sports before, meaning that he is and has been physically active: *"I was doing sports before and have been doing it before Instagram came out. I would say that, uh, following an elite athlete on Instagram has not had the influence to increase the levels of physical activity or anything, not for my at least"*. Participant 8 had no specific reason for not increasing his physical activity levels due to Instagram content posted by active elite athletes: *"I'd say that recently it decreased a little bit. But it's not because of Instagram or anything but yeah."* Participants 2 and 16 simply stated that they had not increased their physical activity levels because of elite athletes but mentioned that fitness influencers had been more influential at increasing their physical activity levels compared to elite athletes.

5.1.13 Trying new types of physical activity

Participants were also asked if they had tried a new type of physical activity because of athletes on Instagram. Similar to the previous question, 9 of 17 participants answered yes. However, the participants answering yes to this question did not all answer yes to the previous question. Most participants specified a new type of sport that they engaged in because of active elite athletes on Instagram. For example, participant 1 mentioned both Instagram (and YouTube) as a source of inspiration/motivation and stated: *"Okay, I didn't commit fully to a sport, but I can say that I tried something in basketball because I was like, super, uh, how do you say, like motivated? I was following Steph Curry on Instagram and YouTube. I don't know if it counts, but on YouTube I follow what he does a lot actually. But yeah, I tried to beat those throws and to improve my basketball skills"*. Participant 5 was the only one who mentioned Instagram as a social media platform and said the following: *"Yeah, I definitely have seen sports like, you know, when you're on Instagram, you see clips of things. I've definitely seen sports that I've never played before...I'd always wanted to play American football, even though I would be terrible at it."* Finally, participant 18 said: *"I think you call them hurdles in English... I did, because of an elite Colombian elite who*

specializes in hurdles, she used to be quite active on Instagram...it really caught my attention". This implies that elite athletes can inspire people to participate in a new form of physical activity.

The remaining 8 participants stated that they had not participated in a new form of physical activity because of athletes on Instagram. However, participant 15 affirmed that he has increased his efforts in one particular type of physical activity: *"I wouldn't say I've completely started a new sport because of them, but I definitely will say that I've taken it to another level because of because of them...I've maybe seen something about the way that they train or the way that they keep fit."* Participant 13 also stated that he had increased his efforts in one specific type of physical activity. Two participants stated that they had not tried a new form of physical activity because of athletes on Instagram, and stated that they were already physically active, and that they had taken part in physical activity since their childhood. This is coherent with previous literature illustrating that regular physical activity during one's childhood is a predictor of regular physical activity during adulthood (Kjønniksen et al., 2009). Three participants stated that watching content related to active elite athletes performing in their respective sports with. For example, participant 13 stated: *"I think I've looked at a lot of videos especially in basketball on Instagram also on some tricks players were doing and I was just trying to do the same on the pitch"*. This suggests that watching content posted by elite athletes on Instagram does not always influence people to participate in a new sport, although it's likely that they can reinforce their efforts in a specific type of physical activity as seen above. It's likely that the behavioural intent towards physical activity depends on the previous participation rates of people in physical activity, and if they were physically active during their childhood.

5.1.14 Theme 5: Fitness influencers

One theme that emerged was fitness influencers as external influences for their increase in physical activity. While it was the shortest theme of this analysis, it was important to acknowledge these findings since participants may consider them as motivators, whether similar to or different from elite athletes.

For example, participant 2 stated, *"No not for active elite athletes on Instagram, but some fitness enthusiast has actually motivated me not. And he is not an elite athlete. It's like a fitness influencer for me who invested his life in actually trying to try to improve people's physical conditions. And he's also a YouTuber who is pretty famous."* Similarly, participant 16 also mentioned fitness influencers and stated that she had directly been in contact with a

fitness influencer to change her physical activity levels: *“Posted by elite athletes, maybe not so much, but posted by fitness influencers then yeah. But like people that I feel like closer to. I already set up for this fitness coach that I really like and that I work with, for example, why I’m more inclined to change my way because of her and not because of, let’s say Cristiano Ronaldo is because he is part of the smallest percentage of active elite athletes and it’s not realistic”*. Finally, participant 5 also mentioned a specific fitness influencer and stated the following: *“Joe Wicks is he’s this guy from Essex who is a fitness influencer...he basically started off as a painter and then he did like throughout the pandemic. He did like PE with Joe where basically he did these online fitness classes”*. Fitness influencers also seem to be motivational and could possibly also have the power to change physical activity levels of people.

5.2 Discussion of qualitative findings

The main question of this research project was whether Instagram content posted by active elite athletes can change behavioural intent towards physical activity levels of young adults. The following discussion will showcase the main takeaways of the qualitative analysis. During the analysis, a considerable number of codes had to be categorized into the different themes as seen in the results section. Prior to the interviews, the researcher chose inspiration as the main term to apply in the interviews, rather than motivation. The two terms overlap, but since inspiration is a construct based on intrinsic motivation, the researcher deemed it was appropriate to utilize inspiration. Motivation was mentioned on 20 occasions and was included in the analysis of inspiration. The following section will discuss each theme and link the findings to the literature.

5.2.1 Theme 1: Physical activity

The codes derived from the theme physical activity were consistent with the literature reviewed, particularly the study of Hulteen et al. (2017), which demonstrated the types of physical activities (young) adults take part in. The aspect of frequency of physical activity participation was another critical measure in the study of Hulteen et al. (2017), which enabled the researcher to assess the similarity of the results. Self-reported physical activity may suffer from inaccuracy and bias, but this will be further discussed in the limitations.

As mentioned previously the five most frequent types of physical activities cited by the participants were walking, resistance training (gym & exercising), running, football and swimming. All the participants were based in Europe. The results of this study was coherent

with the findings of Hulteen et al. (2017) to a certain extent. In Europe, the five most common physical activities are soccer, running, swimming, resistance training and cycling (Hulteen et al., 2017). Cycling was the only physical activity that did not appear in the top five types of physical mentioned by the participants. This can possibly be due to a difference in preference among the participants, as walking was preferred over cycling among the participants. Although it can also be due to the geographical locations of participants. Hulteen et al. (2017) noted that when assessing the most common types of physical activities of different populations, it's important to consider geographical factors such as the weather, since it can be a predictor of the most common types of physical. This study did not conduct an analysis to test whether there was a difference between gender or ethnic background as it was not the goal of the study, although future studies could look into this. It's also important to mention that this study only included 17 participants, while the Hulteen et al. (2017) accounted for 64 articles as part of a meta-analysis.

All participants with the exception of one participant was physically active more than twice a week with a duration of 60 minutes of physical activity sessions. Only one participant stated he was taking part in physical activity from zero to one time a week, although he was still following various elite athletes on Instagram. While there was no way of testing this through qualitative analysis, it's possible that this participant possesses low self-determination levels. Van Lankveld et al. (2021) showed that the self-determination theory is based around how the behaviour of people can be affected by experiences. It is composed of three categories: intrinsic motivation, extrinsic motivation and amotivation. Drawing on participant's 8 answer, it's possible to link this to the lowest level of self-determination which is amotivation and is in simple terms "a lack of motivation or intention to participate" (Kokkonen et al., 2020, p. 2). This suggests that the self-determination levels of people is an important factor when considering the effect that elite athletes on Instagram can have on young adults in the context of physical activity. For instance, it's possible to assume that the participants who stated that elite athletes have had an effect on them through Instagram, possess higher self-determination levels, or a combination of intrinsic and extrinsic motivation which is one of the components of the self-determination theory. Extrinsic motivation implies that individuals are performing an act (e.g., physical activity) for a reward that is distinct from physical activity itself. In this case it could be a reward such as an approval from an elite athlete who encourages individuals to take part in physical activity (Chmait et al., 2020; Teixeira et al., 2012). Intrinsic motivation on the other hand is related to the sole enjoyment of a type doing

physical activity or a personal accomplishment (Frederick-Recascino & Schuster-Smith, 2003; Teixeira et al., 2012). Through the intrinsic motivation, individuals being inspired by elite athletes on take part in physical activity may also as a result be motivated from intrinsic motivations such as the enjoyment of the same physical activity that an elite athlete is performing. Self-efficacy is also an important factor to consider when analysing the duration and frequency of physical activity, as having higher self-efficacy levels is associated with the belief of being confident at executing a task, such as a physical activity session (Lim & Noh, 2017). Individuals with higher self-efficacy levels are more likely to participate in physical activity more frequently, but also complete physical activity sessions of a higher duration (Lim & Noh, 2017). In contrast, individuals with lower self-efficacy levels typically do not feel they can execute a task in confidence and may therefore be less likely to complete a physical activity session or have shorter physical activity sessions (Bauman et al., 2012).

5.2.2 Theme 2: Elite athletes on Instagram

As seen in the literature review, the four categories of content were 1) athlete, 2) sponsored content, 3) personal and 4) family. Sadeghi and Leng (2021) noted that the first category was “athlete” which is considered as frontstage content, or in other words sports related content which could for example be training, sporting achievements, or highlights on the pitch (Doyle et al., 2022). The majority of participants said they follow active elite athletes on Instagram because of the training aspect which is related to the frontstage content posted by the elite athlete. Training is the core of the career of elite athletes and is typically seen on social media as traditional media focuses on other types of frontstage content like competitions. In total, training was mentioned 36 times by the interviewees, making it one of the most common reasons for following elite athletes. It can be argued that there is a strong desire to absorb content related to training, which ultimately can be an inspirational factor for the participants since they seek to consult training as a type of content. This could be due to the fact that traditional media does not showcase training, meaning that young adults have turned to social media to consult the training aspect in the lives of elite athletes.

Sponsored content was mentioned by some participants as a reason they followed athletes on Instagram. It can be argued that purchase behaviour falls into this category as previous literature has demonstrated that elite athletes are endorsed to promote products or services on their social media platforms, with brands aiming to affect the purchase behaviours of the

followers of elite athletes (Bush et al., 2004). Participant 7 also implied that he would purchase a branded pair of sneakers promoted by an elite athlete.

Numerous participants stated that they were curious about a combination of their professional and personal lives of elite athletes, with personal being the third category of Sadeghi and Leng (2021). The same participants stated that they were interested in content related to the family of elite athletes which was in line with the fourth category presented by Sadeghi and Leng (2021). This indicates that young adults are not only interested in the professional lives such as training (frontstage content) of elite athletes but also what happens in their personal lives, thus backstage content. As presented in the literature review, backstage content (insight into personal lives) is one of the main categories of reasons individuals choose to follow elite athletes on Instagram, as seen in the studies of Hambrick et al. (2011), Smith and Sanderson (2015), and Geurin-Eagleman and Burch (2016).

Participant 18 stated that she was likely to comment on the content posted by elite athletes but did not specify which type of content she would leave a comment on, although “*to like cheer them on*” may suggest this is related to frontstage content. If that is the case, then it is contradictory to the findings to Geurin-Eagleman and Burch (2016), who illustrated that fans were more likely to comment on Instagram posts related to backstage content. While this is just the case of one participant it suggests that it’s possible for fans to be more likely to comment on frontstage content instead of backstage content.

5.2.3 Theme 3: Inspiration

Inspiration was the most common code there were many different forms of inspiration mentioned by the participation related to physical activity, but that were also not related to physical activity. In general, it can be argued that there are various ways elite athletes can provide young adults with inspiration. The results partially support the findings of Giuliano et al. (2007) who also adopted a mixed-gender sample and noted that leadership skills, self-confidence, working hard and good morals were four common traits sports fans categorized as important. However, only working hard and good morals were mentioned by the sample of this study. This suggests that leadership skills and self-confidence are traits that are less common among this sample, and that traits could also be a personal preference or related to other characteristics like gender, as suggested by Giuliano et al. (2007).

The majority of participants said that elite athletes are considered role models. Through the portrayal of various types of behaviour, the participants stated that specific attributes of elite athletes are important since they can be replicated by others. Various traits like hard work, dedication, and morals (e.g., respect and sportsmanship) were mentioned by the participants. This was coherent with the study of Parry (2010) who argued that fans of elite athletes particularly pay attention to sportsmanship and morals of elite athletes, which can be replicated by the fans. Further, the study of Ronkainen et al. (2019) demonstrated that individuals (young athletes) aspiring to become elite athletes can take inspiration and benefit from interactions with elite athletes, resulting elite athletes being role models and providing young athletes with inspiration. The majority of participants in this study agreed that elite athletes can act as role models, although primarily for individuals who aspire to follow a sporting career. This follows the findings of Ronkainen et al. (2019) that elite athletes can act as important role models for younger athletes or individuals inclined towards a sporting career. However, this can potentially question whether elite athletes can be considered role models for people who do not desire to follow a sports career.

Finally, as seen in the results section, only one participant mentioned envy. Envy is the opposite emotion of admiration; according to Van de Ven et al. (2011) envy occurs “when a person lacks another’s superior quality, achievement, or possession and either desires it or wishes that the other lacked it” (p. 785). Through the definition of Van de Ven et al. (2011) it could be possible to argue that the “possession” in the case of participant 7 was the “body balance” to Steph Curry as he referred to it as “something I dreamt of having”. Another study by Van de Ven et al. (2009) explored the two different categories of envy being benign and malicious envy. The passage of participant 7 “something I dreamt of having” is more correlated to benign envy than to malicious envy as the study of Van de Ven et al. (2009) noted that participants who experienced benign envy were more likely to feel a need for self-improvement. While this only occurred once, it’s not possible to argue that it applies to a general population, but it’s evidence that young adults can be affected by benign envy for inspiration.

5.2.4 Theme 4: Behavioural intention

Two questions were aimed at understanding whether participants had previously increased their physical activity levels due to Instagram content posted by active elite athletes or if they had participated in a new form of physical activity as a result of being exposed to Instagram content posted by athletes. Following the definition from Potwarka et al. (2020) of

behavioural change in the context of physical activity: “the perceived likelihood youth spectators will try a sport on display before and after witnessing an elite international sport event” (p. 192). As mentioned previously, 9 participants said they had increased their physical activity levels after being exposed to Instagram content posted by active elite athletes. Coherent with the findings with the reasons for following athletes, the training and workout routines of the active elite athletes appeared to be a frequent reason to why they intended to change their behaviour towards physical activity. As shown in the results, there was clear evidence from the quotes of three participants that they had changed their behavioural intention was affected due to elite athletes.

Overall, the results seemed to support the findings of Behnoosh et al. (2017), Chmait et al. (2020), and Hayes (2022) in regard to athletes being able to inspire people to take part in physical activity through social media. Since elite athletes are influential on social media and typically showcase frontstage content related to sports, people are able to discover new sports or reignite their desire to take part in sports. This argument also extends to the suggestion of Weed (2009), who argued that the trickle-down and demonstration effect sparks participation rates of people who watch sports. This is in line with the results of this study, but in the context of social media. It’s also coherent with the findings of Hayes (2022) who demonstrated that the trickle-down and demonstration effect can be extended to social media.

However, there were some contradictory findings related to the previous argument that elite athletes can inspire people to take part in physical activity. Many participants said they did not increase their physical activity levels due to Instagram content posted by active elite athletes. Typically, the participants stated that they were already taking part in physical activity prior to following elite athletes on Instagram, with many stating that they had been taking part in different types of physical activity since their childhood which can be a predictor of physical activity participation during adulthood (Kjønniksen et al., 2009). This is in line with the study of Weed (2009) as the inspirational effect that elite athletes can cause is not applicable to everybody and can be difficult to maintain. This is particularly evident among people who have formerly started a specific sport to initiate a new behaviour like starting a new type of physical activity or joining a sports club. These results showed that many participants had increased their efforts in one physical activity or increased their overall participation levels, which is in accordance with Hayes (2022). However, the results of this study did not support the claim of Hayes (2022) in regard to elite athletes’ ability to “reignite those who lapsed their participation, and potentially lead to switching activities or trying new

sports” (p. 16). This could be due to the characteristics of the sample (age), but it could be different depending on gender, for example, although further study is needed to confirm this.

5.2.5 Theme 5: Fitness influencers

Fitness influencers (or social media influencers) were the reason two participants answered no to increasing their physical activity levels due to active elite athletes on Instagram. Two participants clearly stated that they were more inspired by fitness influencers compared to elite athletes. Fitness influencers are also specialized within the field of physical activity since social media influencers focus their content on one specific field (Sokolova & Perez, 2021). Elite athletes can be considered less relatable since they have dedicated their whole lives to one specific sport, and their everyday life is substantially different from the general population, rendering their goals unrealistic for the general population who typically have other responsibilities.

Fitness influencers may be considered more relatable in the sense that they are more likely to be normal people rather than celebrities since they have built their following through social media (Sokolova & Perez, 2021). The expectations are more realistic, as mentioned by participant 16 who implied that it was simpler to relate to fitness influencers since they are closer to the general public. Drawing from this, it’s possible to argue that fitness influencers are also important external influences in the context of physical activity, and elite athletes are not the only sources of influence found on Instagram. Although it was apparent that the participants were interested in following both elite athletes and fitness influencers on Instagram. The high numbers of followers of fitness influencers also suggests that there is a large interest towards their content.

5.3 Results of quantitative data

Respondents for the survey were acquired primarily through snowball and convenience sampling. In total there were 224 respondents. In an initial analysis, the researcher identified 19 incomplete surveys and therefore did not include them in the analysis. In addition to this, the researcher encountered a technical issue on Qualtrics which led to some items on the surveys not being displayed to some respondents. As a result, another 23 surveys had to be left out due to the surveys being incomplete. The total number of eligible survey responses was 182. Among the participants, 33.5% were male, 64.8% were female while 1.6% identified as other or nonbinary gender. The sample consisted of 54.9% students or student-workers, 40.2% workers, and 4.9% unemployed. Most participants had completed a bachelor’s (47.3%) or a master’s degree (41.8%), while 2.8% had a PhD. The remaining

participants had completed high school (8.3%). The majority of participants were white (75.8%), while 11.0% were Asian, 6.5% were Hispanic and 2.2% were black. The remaining 4.5% chose “other ethnicity”.

5.3.1 Descriptive statistics

5.3.2 Instagram users

95.6% of the participants were Instagram users, while 4.4% were not. Both categories of participants were eligible to participate in the study as long as they were not over the age of 34. Participants were most likely to report between 60 and 75 minutes of Instagram use per day with 22.5% selecting that option. See Appendix E for complete results.

5.3.3 Physical activity levels

Participants were most likely to perform physical activity sessions lasting for 30 to 60 minutes, with 44.5% of the participants selecting that option (see Appendix F). Participants most commonly reported they engaged in physical activity two or three times per week, with 45.1% of participants choosing that option. See Appendix G for full results.

5.3.4 Following active elite athletes on Instagram

Of the 182 respondents, 119 said they followed at least one active elite athlete on Instagram, while 63 did not follow athletes on Instagram. The participants who reported that they did not use Instagram were categorized into the same group of participants who stated that they did not follow active elite athletes on Instagram. For the upcoming analysis, group 1 corresponds to participants who follow active elite athletes, while group 2 corresponds to participants who do not.

5.3.5 Analysis of open-ended responses in survey

Participants who answered “no” to following active elite athletes on Instagram were asked to provide a justification to why they did not follow active elite athletes on Instagram. A total of 63 open ended responses were recorded, which corresponds to the number of participants who did not follow active elite athletes on Instagram. The researcher coded the responses into seven themes. The theme “lack of interest” (general sense) which occurred 25% of the time, included two sub-themes: 1) “lack of interest in sports” (32.8%) and 2) “lack of interest in the personal lives of active elite athletes (14.1%). The next theme was “other reasons for using Instagram”, which had a frequency of 10.9%. The next theme, “not an Instagram user”,

occurred 4.7% of the time. Another 4.7% of responses were categorized under the theme “negative effects”, while another 4.7% were categorized as “unfamiliar with the topic “and another 4.7% of respondents were “unsure”. Finally, the last theme was “other sources of information gathering” and was recorded 3.1% of the time. To illustrate and give a few examples, one respondent in the theme of “lack of in the personal lives of active elite athletes” said: *“they clog my feed, and I don’t care about their personal lives”*, with another stating: *“not interested in their personal lives”*. On the other hand, 10.9% of the respondents who answered no to following active elite athletes on Instagram stated that there were “other reasons for using Instagram” with one respondent saying: *“I mostly follow my friends on Instagram to keep me updated how they are doing”*, and another participant stating: *“It’s not my main focus on social media”*. Regarding the theme, “negative effects”, the following statements were placed into this category with one participant saying: *“I’m self-conscious and it would be bad for my anxiety”*, and another participant stating: *“I find it discouraging to see their incredible talent and capacities”*.

The next category consisted of participants who stated they were not familiar with the topic of active elite athletes. Participants were provided a definition of active elite athlete at the start of the survey to familiarize them with the concept of active elite athletes, particularly for participants who were unfamiliar with the definition or elite sport in general. It’s complex to assume their reasoning behind their response, therefore the researcher chose to create a theme specifically for the three responses. The theme “unsure” also created some responses could not be categorized into the other themes as the participants had no specific reason not to follow elite athletes. Finally, the last and least common theme was “other sources of information gathering” with only two responses being categorized into this theme. An example of a response in this theme is: *“do not find the need to follow them. I read about athletic news from newspapers”*.

5.3.6 Physical activity

Regarding physical activity, respondents in group 1 had a higher mean with 1.97 for the duration of normal physical activity and 2.59 for the frequency of physical activity sessions per week. In the case of group 2, the means were respectively 1.67 for the duration of a session and 2.49 for the frequency of sessions per week. An independent t-test will be conducted in order to test whether there is in fact a statistically significant difference between the means. Attitudes towards physical activity were measured by self-report. The first group

had an average mean of 5.72 while the second group had an average of 5.44. The mean difference between the two groups was 0.28 (see Appendix H). This could possibly suggest that participants in group 1 had a more favourable view towards physical activity compared to group 2.

5.3.7 Reasons for using Instagram

Responses in this category can be seen in Appendix I. The first example being “I use Instagram to: follow elite athletes on Instagram” with group 1 having a mean of 4.64 while the mean of group 2 was 1.97 meaning there was a difference of means of 2.67. An independent t-test will be performed further down in the analysis to assess whether there is a statistical difference between the two means of the groups. The item with the smallest mean difference (0.22) was “I use Instagram to get updates on close friends and family”. Both group 1 and 2 were likely to use Instagram to get updates on close friends and family, with the majority of participants in both groups positively agreeing with this statement. For instance, 50 of 119 participants from group 1 chose “agree” while 38 chose “strongly agree”. In group 2, 21 of 63 participants chose “agree” and 23 chose “strongly agree”, as seen in Appendix J.

There were no significant differences in means regarding reasons for using Instagram between the groups, with the exception of the following item: “I use Instagram to browse the daily lives of celebrities”; the mean difference between group 1 and 2 was 1.29. This is apparent in the frequency table (Appendix K) with most participants in group 1 stating that they use Instagram to browse the daily lives of celebrities, with 33 of 119 stating that they “somewhat agree”, 28 stating they “agree”, and 12 stating they “strongly agree”. Participants from group 2 were more likely to disagree with this statement as 16 of 63 participants chose “strongly disagree”, and 11 chose “disagree” (Appendix K). An independent t-test will be performed in the analysis to assess whether there is a statistical difference between the means.

5.3.8 Qualitative responses regarding other reasons for using Instagram

Participants also had the option to indicate any other reasons for using Instagram. Through a thematic analysis, the researcher grouped 29 responses into seven themes: entertainment, information retrieval, passing time, professionally related, educational purposes, social aspect, and others. Entertainment and educational purposes each comprised 7 responses

with the example of one participant stating: *“it’s just fun”*, while others said, *“have fun”* and *“entertainment”*. Examples of responses from the participants in the educational purposes category include, *“learning new things”*, *“general information and knowledge”*, and *“to educate myself by observing content marketing accounts and in areas I want to grow in”*. The other categories occurred twice (information retrieval), four times (passing time), three times (professionally related), and twice (friends).

5.3.9 Motivations for taking part in physical activity

Participants were presented with 16 different items regarding reasons for taking part in physical activity as seen in Appendix L. The item with the highest mean (5.94) was: “I take part in physical activity to improve physical appearance” for group 1, making it the most common motivation for taking part in physical activity for group 1. This can be seen in the frequency table in Appendix M. In comparison to the other means between group 1 and 2 in regard to physical activity, there were two measures that stood out between the two groups. Firstly, the following statement: “I take part in physical activity because of fitness influencers on Instagram” had a mean difference of 1.126 between the groups. Secondly, the following statement: “I take part in physical activity because of elite athletes on Instagram” had the highest mean difference of the two measures with a difference of 1.718. Of the 16 measures regarding the measures for participating in physical activity, the difference in means between the groups ranged between 0.131 and 1.718. The highest mean observed of group 2 was in response to the item: “I take part in physical activity to improve my physical fitness” with a mean of 5.67. This can be seen on the frequency table in Appendix N. The most significant difference between the means was 0.685 between group 1 and 2 and was observed in the following measure “I take part in physical activity: to enjoy a challenge”. The least significant difference between means of group 1 and 2 was observed under the item “I take part in physical activity to prevent future health problems” with a mean difference of 0.131 between group 1 and 2, meaning this item was where both groups had the most comparable view for reasons of taking part in physical activity.

5.3.10 Self-efficacy and self-determination

In regard to self-efficacy and motivation, participants were asked “are you motivated to take part in physical activity?” and “I am motivated to take part in physical activity on a frequent basis”. Group 1 had a higher mean (5.56) compared to group 2 (4.94). In addition, participants were asked to rate the following statement: “I am motivated to take part in

physical activity because I can motivate myself”. Group 1 had a higher mean (5.49) than group 2 (5.05), suggesting that group 1 may have a higher self-efficacy and motivation compared to group 2.

5.3.11 Reasons for following elite athletes on Instagram

Participants were asked to respond to 13 items related to reasons for following active athletes on Instagram (Appendix O). As can be seen in Appendix O, the highest mean observed among the 13 items was 5.65 listed under the item: “I follow elite athletes on Instagram because it offers more in-depth coverage of this elite athlete than traditional media”. On the other hand, the lowest mean of group 1 was 4.57 in response to the item: “I follow elite athletes on Instagram to hear about new products”. Overall, the participants agreed with the statements, with 12 of 13 means being greater than 5.

5.3.12 Behavioural intention for physical activity participation

As can be observed in Appendix P, the highest mean of the items was 4.81 in response to the item: “I have made plans concerning what type of regular physical activities I am going to engage in...” meaning that participants were more likely to positively agree with this statement compared to the other statements. However, the difference between the means of the items were not high, with the lowest mean of these items being 4.43 in response to the item: “I have made plans concerning where I am going to engage in regular physical activity”, as seen in Appendix Q.

Overall, the participants from group 1 agreed with the statements, meaning that their behavioural intent was mostly positive (Appendix R). Group 2 scored an average mean of 8, with a SD equal to 0 on all the items apart from the two first items, meaning that they chose “not applicable” as an option on all occasions since they did not follow any active elite athletes on Instagram. The two first items were related to elite athletes on a general scale, meaning that participants from group 2 were able to respond. This category focused on other types of media like Twitter, Youtube or traditional media like television (e.g., sports competitions). As can be seen in Appendix R, the means of group 1 were higher on both occasions meaning that group 1 was more likely to agree than being neutral or disagree with increasing physical activity participation and participating in a new sport as a result of elite athletes. However, this was a general comparison and the items did not specify to which

extent participants could have increased their physical activity levels and what context they understood it from (e.g., social media platform, traditional media).

5.3.13 Elite athletes as product endorsers

As can be seen in Appendix S, both groups responded to different items related to elite athletes as product endorsers. All the means of group 1 were higher compared to the means of group 2. The highest mean of both groups were under the item “it is important that there is a good fit between an elite athlete and a brand when endorsing a product” with group 1 having a mean of 5.82 and the mean of group 2 being 5.56, meaning both groups typically agreed with this statement. The second-highest mean of group 1 (5.65) was in response to the item “Elite athletes are attractive product endorsers” meaning of the three items from the source credibility model, attractiveness scored the highest in this study. Group 2 also had the second-highest mean in this category being 5.19. Participants from both groups were asked to consider their purchasing behaviour and intention with active elite athletes as the endorsee. Group 1 had higher means compared to group 2 for all the items. Group 1 had the highest mean (5.13) in response to the item “in the future I am likely to try one of the same brands that an elite athlete posted on his/her Instagram”, as seen on the frequency table (Appendix T). Participants from group 2 all had means between 4.16 and 4.32, meaning that a neutral/negative view was more common among this group, this can be observed in the frequencies table below with 26 of 63 participants choosing “neither agree or disagree” and 11 choosing “strongly disagree” (Appendix U).

5.3.14 Behavioural intention to take part in physical activity and inspiration

Participants were presented with items related to spectatorship and behavioural intention, as well as inspiration (Appendix V). Participants from both groups were asked to “imagine you are watching a top performance of an elite athlete on Instagram. How would you feel?”. The highest mean of group 1 was 5.97 in response to the item “I would feel inspired by something I saw or experienced”, meaning the majority of participants responded positively to this statement (Appendix W). The item under the category of fantasy “I would picture myself as one of the elite athletes” had the lowest mean in group 1 (4.92) and was the only mean to be below 5, as all other items had a mean above 5 from group 1. On the other hand, the highest mean of group 2 was 5.05 in response to the item “I would experience inspiration”. In contrast, the lowest mean of group 2 was 3.90 under the same item as group’s 1 lowest mean

“I would picture myself as one of the elite athletes”, meaning that most of the participants either chose “somewhat disagree” or “neither agree nor disagree”. On the two last items, “I would take part in physical activity because of the athlete’s performance” and “I would intend to take part in physical activity because of the athlete’s performance”, group 1 had a mean superior to 5 for both items, meaning it’s possible to suggest the participants following active elite athletes are more inclined to intend to take part in physical activity and change their behaviour. On the other hand, group 2 had lower means on both items compared to group 1 with means respectively of 4.38 and 4.75 (Appendix V). It’s possible to suggest that the participants from group 2 are less inclined to change their physical activity behaviours as a result of being exposed to an elite athlete’s performance.

5.4 Inferential statistics

A number of independent t-tests, thus inferential statistics will be presented in the following section to test whether there was a statistically significant difference between certain measures.

5.4.1 Physical activity participation

As mentioned previously, an independent t-test was performed to assess whether there is a statistically significant difference between the means related to physical activity. Two independent t-tests were conducted to assess whether there was a difference between participation rates and frequency rates of the participants from both groups. The first item proved to be statistically significant, as $p < 0.05$, which meant that there was indeed a difference in physical activity duration between the two groups, with group 1 having higher durations of their physical activity sessions. The second item was not statistically significant, as $p > 0.05$, meaning that there was no difference between the two groups in terms of frequency of physical activity per week.

5.4.2 Behavioural intention

The independent t-tests enabled the researcher to determine that two items were significantly different: “I would take part in physical activity because of the athlete’s performance” since ($p < 0.05$) and: “I would feel inspired by something I saw or experienced” ($p < 0.05$). This suggests that group 1 is more likely to experience inspiration from active elite athletes on Instagram and take part in physical activity after witnessing a top performance by an elite athlete on Instagram. On the other hand, “I would intend to take part in physical activity

because of the athlete’s performance” was not significant ($p>0.05$). Appendix X shows the p-values of the three items of behavioural intention to participate in physical activity after watching the performance of an elite athlete.

Two other independent t-tests were conducted to assess whether there was a significant difference between group 1 and 2 for behavioural intention. The mean difference between the two items related to behavioural intention towards physical activity were 0.94 and 0.97 respectively, and there was a significant difference between group 1 and 2 since $p<0.05$ for both items. This suggests that group 1 was more likely to have increased their physical activity levels and participated in a new type of sport because elite athletes (general assumption as this was not specific for Instagram).

5.4.3 Purchase behaviour

Four additional independent t-tests were conducted to assess whether there were any significant differences between the groups regarding purchase behaviour. The p values can be seen in Appendix Y. An independent showed a significant difference between group 1 and 2 for all four items in the category of purchase behaviour. The results of the independent t-test therefore suggests that there is a higher purchase intent of group 1, who follows active elite athletes on Instagram compared to group 2.

Theme	Mean Group 1	Mean Group 2	SD G1	SD G2	Mean difference	Scale item
Behavioural intention	4.87	4.24	1.67	2.22	0.63	In the future, I am likely to consider buying one of the same products that an elite athlete posted on his/her Instagram
Behavioural intention	5.11	4.32	1.62	2.13	0.79	In the future, I am likely to consider using one of the same brands that an elite athlete posted on his/her Instagram
Behavioural intention	4.93	4.16	1.54	2.16	0.77	In the future, I am likely to try one of the same products that an elite athlete has poste don his/her Instagram.

Behavioural intention	5.13	4.27	1.38	2.20	0.85	In the future, I am likely to try one of the same brands that an elite athlete has poste don his/her Instagram.
-----------------------	------	------	------	------	------	---

Table 2: Purchase intention mean differences.

5.4.4 Reasons for using Instagram

Two independent t-tests were conducted to assess whether there was a statistically significant difference between the means of the two groups for items regarding reasons for using Instagram. For the first item (I use Instagram to follow elite athletes), there was a mean difference of 2.69 between the two means of the groups and the independent t-test confirmed that this was a statistically significant difference, since $p < 0.05$. For the second item (I use Instagram to browse the daily lives of celebrities), there was a mean difference of 1.31 between the two means of the groups and the independent t-test confirmed that there was a statistically significant difference between the means of both groups since $p < 0.05$. In both cases, this means that group 1 was more likely to follow active elite athletes on Instagram, but also celebrities.

5.4.5 External influencers (fitness influencers, health coaches)

Four independent t-tests were conducted to assess whether there was a statistically significant difference between the means of the two groups for four items related to reasons for taking part in physical activity due to external influences. The mean differences between the two groups of the four items seen above were 1.13, 1,71, 0.60 and 0.99 respectively and independent t-tests confirmed that there was a significantly statistical difference between the two groups since $p < 0.05$ in all cases. The means of group 1 of the items related to external influences were all above 4, which typically means there is a neutral view among the participants.

5.4.6 Self-efficacy/self-determination

Two independent t-tests were conducted to assess whether there was a statistically significant difference between the means of the two groups for two items related to self-efficacy and self-determination. The mean differences for both items among the two groups were respectively 0.62 and 0.51, and the independent t-test both showed that this was a statistically significant difference in regard to both items, since for both cases $p < 0.05$. Since group 1 had

higher means for both items, it's possible to confirm that group 1 have higher self-efficacy and self-determination levels.

5.5 Discussion quantitative analysis

The primary aim of the quantitative aspect of the study was to assess whether there was a difference in physical activity levels and behavioural intention towards physical activity between the two groups. Group 1 corresponded to the participants who were following active elite athletes on Instagram while group 2 corresponded to the participants who did not follow active elite athletes on Instagram. The researcher also tried to determine if there were any significant differences between reasons for using Instagram between the two groups. The quantitative aspect of this study was used to complement the qualitative aspect of this study for an enhanced analysis and to answer the research question.

5.5.1 Theme 1: Physical activity (participation levels)

The independent t-test confirmed that there is a correlation between following active elite athletes on Instagram and the duration of the daily physical activity sessions. The participants may have felt a need to take part in physical activity for longer, due to the influence of elite athletes on Instagram, while participants who does not follow elite athletes on Instagram, can potentially be less likely to benefit from this effect. Or it may be that people who engage in higher levels of physical activity are more interested in athletes and sport. Although it's important to note that both groups had similar frequency levels of physical activity participation meaning that following elite athletes on Instagram does not necessarily mean that the frequency levels of physical activity increases. But it's difficult to assess this as the frequency tables in the results section were not substantially different, although this may have to be studied on a larger scale in the future to further assess this.

5.5.2 Motivations for taking part in physical activity

As observed in the previous section there are other motivations for both groups of participants to take part in physical activity instead of elite athletes. For instance, "physical appearance" for group 1 and "physical fitness" for group 2 had the highest means among motivations for physical activity participation. Both motivations for taking part in physical activity fall into the category of intrinsic motivation which is defined as "doing an activity because of its inherent satisfaction" (Teixeira et al., 2012, p. 2). With this in mind, it's

possible to suggest that intrinsic motivation is the main motivation for taking part in physical activity for both groups. This supports the argument that the sample of this group, particularly group 1, does not take part in physical activity due to extrinsic motivation, therefore external influences like elite athletes. However, to a certain extent it's possible to argue that the favour of intrinsic motivation can be affected by elite athletes due to the physical appearance of elite athletes, which could be a motivational factor for the participants. However, further study is needed to confirm whether the physical appearance of elite athletes is inspirational. The result were also coherent with the study of Caglar et al. (2009) who found that young adults, both male and female, were the most likely to take part in physical activity due to health and appearance motives. Therefore, this study further extends the literature related to motivations for taking part in physical activity although it's important to note that this study did not analyse the difference between motives of male and female young adults like the study of Caglar et al. (2009).

5.5.3 Theme 2: elite athletes on Instagram & Instagram usage

5.5.4 Sub theme: Reasons for following active elite athletes on Instagram

In regard to following active elite athletes on Instagram, the participants from group 1 were the most likely to follow active elite athletes on Instagram because it “offers more in-depth coverage of this elite athlete than traditional media”. This can be linked to the literature of Vergeer and Mulder (2019), who stated that fans are curious about the lives of elite athletes. Rather than simply watching the performances of elite athletes on traditional media like television, fans now have the opportunity to interact and connect with their favourite elite athletes since many elite athletes also choose to take the initiative to engage with their fans through social media (Hambrick et al., 2011). They are able to retrieve information from various different categories of the lives of elite athletes. In depth information as stated by the item of the survey can be linked with these categories as it encompasses a variety of in-depth information related to the athlete. Since the mean of this item was the highest, it's possible to assume that people who follow active elite athletes on Instagram want to know more about the elite athletes in general. On the other hand, the lowest mean of group 1 was equal to 4.57 in response to the item: “I follow elite athletes on Instagram to hear about new products”. This corresponds to a more neutral view compared to the item with the highest mean, and it suggests that people who follow active elite athletes on Instagram do not primarily follow them due to sponsored content. This is potentially due to what was argued previously; while there is promotional content posted by elite athletes on social media participants prefer to

gain an insight into their personal lives and training rather than information about sponsored content.

5.5.5 Sub-theme: Reasons for using Instagram

There were no major significant differences in means for participants between the two groups apart from group 1 having a significantly higher mean under the items of following elite athletes and celebrities on Instagram, as confirmed through an independent t-test. While participants from group 2 do not follow active elite athletes on Instagram, they utilize Instagram in a similar manner to participants from group 1. This was apparent in the minor difference in means between the two groups. Participants who did not follow active elite athletes on Instagram were required to justify why they did not follow active elite athletes on Instagram. While there were various themes that emerged from the analysis, the most frequent theme was a lack of interest which also compromised three other subthemes which were more specific. The most common reason was “lack of interest in sports”. It’s possible to argue that the participants stating this reason, may be less likely to take part in sports, and physical activity in general, if there is a lack of interest in sports. On the other hand, participants who stated that they had a “lack of interest in the personal lives of active elite athletes” who did not follow active elite athletes are still likely to take part in physical activity, as the majority of participants from group 2 were physically active.

5.5.6 Theme 3: Inspiration

Group 1 was more likely to be inspired by content related to performances of elite athletes in comparison to group 2, although the participants from group 2 had a mean close to 5, meaning that it was not uncommon for participants to agree with the statement regarding inspiration. It’s possible to assume that there are potentially other and more effective sources of inspiration for group 2 compared to group 1, as they don’t follow active elite athletes on Instagram. However, this could also suggest that participants who did not follow athletes on Instagram still could believe that they are a source of inspiration when elite athletes showcase a top performance. The results support the findings of Potwarka et al. (2020), who found that people watching elite sport are likely to be affected by their performance through inspiration and fantasy. The results found that inspiration scored high, which further confirms that there is an inspirational effect when watching elite athletes.

5.5.7 Theme 4: behavioural intention

5.5.8 Physical activity participation intent

These brief inspirations experienced while viewing content on Instagram can aid in the transformation of the cognition experienced by the participants into increased physical activity levels. Through a combination of the results of this study regarding behavioural intention and the findings of Potwarka et al. (2020), it is possible to argue the demonstration effect plays a critical role at evoking a desire to change behaviours in the context of physical activity. Potwarka et al. (2020) found that watching elite athletes (cyclists in their study) physically in a stadium was positively associated with increased behaviour intention to participate in cycling. While this was not in the context of social media, it's possible to argue social media platforms enable people to watch athletes and the demonstration effect (Weed, 2009) can still be apparent despite not physically being present to see the athletes. Hayes (2022) argued that this effect can be extended to social media. While this study did not directly measure behaviour, there was clear evidence of a change in intention towards physical activity. This was observed on various items related to inspiration and elite athletes, since the means of participants were inclined towards positive associations with the statement of inspiration.

The social cognitive theory by Bandura (1988) is another theory which is critical to understanding the quantitative results, particularly the items of behavioural intention. As presented in the literature, according to the social cognitive theory, human behaviour is influenced by environmental factors, which can come in the form of peers or other influencers (e.g., elite athletes). The mean score of 4.81 in response to the item: "I have made plans concerning 'what' kind of regular physical activities I am going to engage in as a result of content posted by elite athletes on Instagram" means that there is a high tendency among participants following active elite athletes to intend to engage in a specific type of physical activity. But this also suggests that participants observe one type of physical activity performed by the elite athletes. The social cognitive theory implies that humans learn from observing others, so it is probable that the participants in this study take part in a specific type of physical activity of an elite athlete to learn and improve their skills but also physical fitness.

5.5.9 Purchase behaviour

Participants from both groups were likely to agree that elite athletes were attractive endorsers, since expertise and trustworthiness had lower means compared to attractiveness. While it was not the primary goal of the study to observe this, this finding contradicts the study of Wang and Scheinbaum (2018) which found that their sample deemed trustworthiness more important than expertise and attractiveness. Accordingly, looking at the means for the items related to purchase behaviour/intention in the same category of items, it was seen that group 1 had a higher mean than group 2, meaning that the intent to purchase products from a specific brand endorsed by the athlete was higher among group 1 than group 2. What can be argued is that participants who follow active elite athletes are more likely to try a brand that elite athletes promoted on Instagram, meaning that there are more likely to change their behaviour. With this in mind, there is a possibility that participants from group 1 are more likely to change their behaviour towards physical activity if they also are likely to change their behaviour in the context of purchase decisions. Participants from group 2 are less likely to change their purchase behaviour in the context of elite athletes as the means for the items were significantly lower, however, this does not mean that they cannot be influenced by other figures on Instagram. One common aspect between the two groups is that attractiveness was the most important factor among elite athletes as endorsers. If this is applied in the context of physical activity, attractiveness can potentially be a substantial factor for changing the behavioural intent of participants for both groups.

5.5.10 Theme 5: Fitness influencers (external influences)

While most means were similar there were two items that stood out in particular: “I take part in physical activity because of fitness influencers on Instagram” with the mean of group 1 being 4.13 compared to group 2, with a mean of 3.0. Similar to the previous item, this suggests that participants had a neutral view. In the case of “I take part in physical activity because of elite athletes on Instagram” the mean of group 1 was 4.07, which was higher than group 2, which who had a mean of 2.35.

Overall, participants from group 1 were more likely to have a neutral view and/or agree compared to group 2 on external influences as reasons for taking part in physical activity (e.g., fitness influencers, celebrities). External influences like elite athletes or fitness influencers falls into the category of extrinsic motivation (Teixeira et al., 2012). It’s possible to assume that group 1 were more likely to be motivated by extrinsic motivation, in this case

elite athletes on Instagram. Despite following elite athletes, not all participants from group 1 agreed that elite athletes were the sole reason for taking part in physical activity. Instead, there was a combination of others factors as seen in the results, of both intrinsic and extrinsic motivation for taking part in physical activity, with elite athletes and fitness influencers being part of the extrinsic motivation. In contrast, group 2 participants were more likely to disagree, particularly about elite athletes, although slightly less about fitness influencers, celebrities, and personal trainers. With this in mind, it's possible to conclude that there is 1) a combination of intrinsic and extrinsic motivation for taking part in physical activity, 2) that elite athletes are not uniquely why young adults engage in physical activity, and 3) that there is a variety of external influences.

5.6 General Discussion

Drawing from both the qualitative and quantitative aspects of this study, there were areas of overlap and divergence in the results. The aim of the qualitative aspect of the study was to go more in depth about the reasons young adults follow active elite athletes on Instagram. It also enabled the researcher to understand what type of content young adults find inspirational, which can potentially change their behavioural intention towards physical activity. The quantitative aspect of this study allowed the research to compare two groups of participants where one group follow active elite athletes on Instagram while the other group did not. Ultimately it enabled the researcher to assess whether there was a relationship between active elite athletes on Instagram and behavioural intention to take part in physical activity. This section will present a general discussion based on the two previous discussions.

5.6.1 Theme 1: Physical activity

Overall, participants in both the qualitative and quantitative aspects of this study were physically active, with the exception of some participants in the quantitative study who had low levels of physical activity. The qualitative and quantitative aspects of this study enabled the researcher to get an insight at the duration and frequency of physical activity among young adults. While many participants were positive about increasing their physical activity levels because of active elite athletes on Instagram, not all participants were participating in the same type of physical activity (sport) as the elite athlete(s) they followed on Instagram. It's possible to argue that elite athletes have the ability to inspire young adults to increase their physical activity levels, and therefore change the behavioural intent of young adults. On the other hand, the sample of this study do not all take part in the same type of physical

activity (sport) as the elite athletes they followed on Instagram. This should not discredit the possible effect active elite athletes can have on young adults through Instagram but it's important to note that some participants from this study did not believe that active elite athletes could inspire them to increase their physical activity levels, as they were already physically active.

Another takeaway from the qualitative and quantitative findings is that self-determination and self-efficacy are two critical factors that determine an outcome in regard to behavioural intent. For example, the only physically inactive participant from the qualitative study who followed elite athletes stated that despite his passion for elite athletes, he was not physically active. It was therefore critical to link this to the self-determination theory, as it does play an important role at changing the behaviours of individuals. Self-efficacy is another important aspect to consider, as individuals with low self-efficacy levels are less likely to sustain physical activity over longer periods of time (Lim & Noh, 2017). The inspirational effect may not be as significant if young adults have lower levels of self-efficacy and self-determination.

Further, another important takeaway is that it's important to consider that many participants stated that they had been taking part in physical activity since their childhood, and many already took part in physical activity before following elite athletes on Instagram. As mentioned in the qualitative discussion, the inspirational effect may not be as significant, or not significant at all for people who are already active. On the other hand, it may be more significant for young adults who are not satisfied with their physical activity levels (on the condition that they have relatively high self-determination) and elite athletes on Instagram can therefore reignite their intent to increase their physical activity levels (Behnoosh et al., 2017; Chmait et al., 2020; Hayes, 2022). It's also important to remember that regular physical activity during one's childhood can be a predictor to regular physical activity during adulthood (Perkins et al., 2004). Participants who mentioned that they have been physically active since their childhood may not be as influenced by elite athletes on Instagram, although it's possible that elite athletes on Instagram can partially inspire young adults, particularly to increase their efforts in one type of physical activity.

5.6.2 Theme 2: Elite athletes on Instagram

Both the qualitative and quantitative aspect of the study had questions or items to gain insight into the reasons participants follow active elite athletes on Instagram. Both the qualitative and

quantitative aspect confirmed that the personal lives of active elite athletes was an important and common reason young adults follow them on Instagram. The findings from the qualitative aspect confirm that the personal lives of elite athletes is a popular category for young adults and one of the most common reasons for following active elite athletes. The quantitative aspect also illustrated that participants were following active elite athletes on Instagram because it provides them with “more in-depth coverage of this elite athlete than traditional media” which can be linked to the theory of self-representation mentioned in the literature. Elite athletes are able to create their own image on their social media platforms and provide their followers with a variety of information, but most importantly connect with their followers. Both results support the argument that the sample of this group is interested in backstage and frontstage information from the athlete since they are able to retrieve both on social media. Interactivity was also an important factor for the sample of participants from group 1, as there was a positive response to the item of interactivity, which is coherent with the literature of Cha et al. (2010) since it can create an enhanced connection with the fans. The quantitative aspect complemented the qualitative aspect and confirmed that young adults seek to retrieve information and get an insight into the lives of active elite athletes since the means of items related to information retrieval were high.

5.6.3 Theme 3: Inspiration

There was solid evidence from both the qualitative and quantitative aspects of this study in regard to inspiration. Firstly, various inspirational traits or factors were found, both in the professional context and personal context of elite athletes. The raw data retrieved by the qualitative aspect of this study enabled the researcher to understand what type of characteristics elite athletes are important for young adults: various types of traits like hard work, dedication, and morals (e.g., respect and sportsmanship) were mentioned. This was coherent with Parry (2010), who argued that sports fans particularly pay attention to sportsmanship and morals of elite athletes, which in turn can be replicated by the fans. The qualitative aspect of this study also confirmed that elite athletes were considered role models, which was consistent with the literature. For example, Ronkainen et al. (2019) demonstrated that individuals (young athletes) aspiring to become elite athletes can take inspiration and benefit from interactions with elite athletes, resulting in elite athletes being role models and providing young athletes with inspiration. Most participants from this study agreed that elite athletes can act as role models, although primarily for individuals who aspire to follow a sporting career. This further confirmed the findings of Ronkainen et al. (2019), as elite

athletes can act as important role models for younger athletes, or in other words individuals inclined towards a sporting career.

Although it's also important to note that the qualitative results illustrated that were negative aspects related to elite athletes as role models. Various examples were mentioned such as unrealistic expectations, controversial behaviours, and bad sportsmanship. Again, this was in line with the presented literature of Knittel and Stango (2014). It's therefore critical for young adults to consider the potential detrimental factors related to elite athletes as role models. The negative associations can affect the behaviours of young adults, or potentially reduce the behavioural intent towards physical activity.

5.6.4 Theme 4: Behavioural intention

Behavioural intention was the main construct to determine whether there was a relationship between following active elite athletes on Instagram and increased physical activity levels. It's possible to argue that there is a relationship between these two factors based on the qualitative aspect of this study, as most participants confirmed that they had previously increased their physical activity levels in a specific category of physical activity (e.g., sport) and also tried a new type of physical activity. This was coherent with the theories presented in the literature and in the previous discussion with the demonstration effect (Potwarka et al., 2018; Potwarka et al., 2020; Weed, 2009) and social cognitive theory (Bandura, 1988; Beauchamp et al., 2019). It's important to note that this assumption only applies to a certain extent since there were also participants who stated that they have not changed their behaviour intent towards physical activity because of elite athletes. This was due to the fact that they were already physically active, with many participants stating that they were active since a younger age. While there were some confirmatory findings, there are also some contradictory findings to note. The demonstration effect argues that fans tend to take part in the same sport that an elite athlete performs (Weed, 2009). However, the qualitative findings of this study contradicted those findings, as not all participants who stated they followed elite athletes from specific sports took part in the same sports as those athletes. Some participants stated that they took part in the same sports as the elite athletes they followed on Instagram, but numerous other participants mentioned elite athletes competing in the UFC, meaning mixed martial arts, and the participants did not state that they took part in mixed martial arts. Other participants took part in different types of sports that were not the same as the elite athletes they followed on Instagram but were still physically active. This suggests that the

argument of Weed (2009) does not always apply, as the results illustrated that the participants were taking part in various types of physical activity, meaning that while there is a change of intent due to the demonstration effect, spectators will not strictly take part in the same sports as the elite athletes. Further, participants from the quantitative aspect of this study seemed to respond positively to the statement of behavioural changes which could suggest that following active elite athletes can have an effect on the physical activity levels of participants. The qualitative data showed that young adults are primarily interested in the personal lives (backstage content), the training (frontstage content), and distinct traits (e.g., hard work) related to the personality of an elite athlete. The results of the qualitative aspect of the study demonstrated that young adults admire hard work, dedication, and inspirational stories of elite athletes, thus confirming the findings of Berger (2008). Frontstage content like the training and sporting achievements were the most likely to be inspirational for the participants as it is related to the sport of the elite athletes. This could potentially be related to the social cognitive theory by Bandura (1988), which suggests that humans learn from observing other behaviours or actions. Since frontstage content appeared to be important, it's possible to link this with the social cognitive theory and argue that participants associate important with that type of content due to the willingness to learn and inspirational aspect behind it.

5.6.5 Theme 5: Fitness influencers (other types of external influencers)

One interesting finding from this study was an emerging theme during the interviews, since participants were able to express themselves more freely: fitness influencers. Participants who mentioned fitness influencers during the interviews stated that they were more likely to be inspired by fitness influencers compared to elite athletes. The quantitative survey only included one item related to fitness influencers, since it was not the main focus, but it enabled the researcher to compare differences between group 1 and 2. It can be argued that fitness influencers are commonly used for inspiration and motivation for physical activity, but from an educational perspective, since some participants stated that it enabled them to exercise in a different manner (e.g., trying out new exercises or improve the form). With this in mind, it's possible to assume that participants can follow both active elite athletes and fitness influencers on Instagram (and other social media platforms) and may use both for motivation and inspiration to take part in physical activity. Sokolova and Perez (2021) noted that young adults typically consume content by fitness influencers, but similar to elite athletes, do not only post content related to physical activity. While there is a similarity in terms of content,

the major difference between elite athletes and fitness influencers is that fitness influencers have built their career on social media and are considered to be closer to the average person (Sokolova & Perez, 2021) which can result in people relating more closely to fitness influencers. However, it's important to note that the quantitative aspect of this study only included one item related to fitness influencers, and participants from group 1 were more likely to follow fitness influencers than participants from group 2, so it's possible that people who already follow public figures from one specific field (e.g., sports) on Instagram may also be more inclined to follow other celebrities on Instagram.

6. Conclusion

The primary goal of this research project was to assess whether there was a relationship between following active elite athletes on Instagram and behavioural intention towards physical activity. This study adopted a mixed-methods research design and implemented semi-structured interviews to retrieve detailed and in-depth data about five themes physical activity, inspiration, behavioural intention, active elite athletes on Instagram and fitness influencers. In addition to the semi-structured interviews, a survey was also implemented. The goal of the survey was to retrieve data from two groups of participants to support the qualitative aspect of this study. The researcher used statistical tests to assess whether there were significant differences between young adults who followed and did not follow elite athletes on Instagram.

This paper extended the literature in a limited field of research, as there is currently little to no literature focusing on (active) elite athletes on Instagram and how their content can affect the physical activity levels of young adults. The majority of previous literature analysed how elite athletes can affect purchase behaviours of young adults or how elite athletes self-represent themselves on Instagram or other social media platforms. This study built upon the previous literature on behavioural intention within purchase behaviour and the demonstration effect in sports. The literature discussed the concept of a celebrity, and the author argued that elite athletes are considered celebrities due to the similarities and traits that they share with typical celebrities. Elite athletes are also often admired by people as they possess and typically showcase traits and behaviours that are inspirational. They can therefore serve as role models for many which can result in an inspirational effect, potentially affecting the behaviours of people (Morgenroth et al., 2015). Further, elite athletes are commonly active on social media platforms and post a variety of content. Doyle (2019) demonstrated that there are two categories of content posted by elite athletes on social media: frontstage and backstage content. This enables people to gain an insight on what happens both in the professional lives and personal lives of elite athletes which can result in a deeper connection between people like fans and elite athletes (Das et al., 2017; Doyle, 2019).

The literature also showcased a number of psychology theories that are applicable to this study. The study of Potwarka et al. (2020) was particularly helpful since it enabled the researcher to extract literature and measures for the design of the survey. Concerning

motivation, the two types of motivation being intrinsic and extrinsic are two important forms of emotions that enables researchers to determine why people behave in certain manners (Teixeira et al., 2012). Social comparison is another theory which is commonly applied in the field of sports psychology, as it can be an important determinant for motivation. Further, the social cognitive theory by Bandura (1988) suggests that people learn and often replicate human behaviour by observing other human behaviour. In other words, people who tend to observe elite athletes, often seek to learn specific things within the world of the athlete but can also take part in physical activity due to observing their behaviour. The demonstration effect is also another important concept applied to this research project. When applied to the context of sport and behavioural intention, the demonstration effects implies that people can take inspiration from spectating elite athletes perform and it was critical at understanding the results of this study as it can also be extended to the field of social media (Chmait et al., 2020; Hayes, 2022; Weed, 2009).

The presented literature allowed the researcher to link the findings of this study to previous studies and answer the main research question. The combination of a qualitative and quantitative methods enabled the researcher to explore the influence of active professional athletes' Instagram content on behavioural intention in the context of physical activity of adults aged 18 to 34. It also enabled the research to achieve the three following secondary objectives:

- 1) Determine the difference in physical activity participation between young adults who follow elite athletes on Instagram and young adults who do not.
- 2) Investigate the reasons young adults follow active elite athletes on Instagram.
- 3) Assess whether there was a relationship between behavioural intention towards physical activity and following active elite athletes on Instagram.

The first objective was achieved through the semi-structured interviews and the survey. The results showcased that both groups of participants had varying levels of physical activity. It was more likely for participants who follow elite athletes on Instagram to have longer physical activity sessions, while participants who did not follow elite athletes on Instagram were slightly more likely to take part in physical activity more frequently during a week, although there was no relationship found between weekly participation and following elite athletes on Instagram.

The qualitative aspect of this study was particularly helpful at understanding why young adults follow elite athletes on Instagram. The participants of the study were interested in a combination of backstage and frontstage content, meaning that they were interested in training related to an elite athlete's career which was considered to be inspirational for many, and were also interested in their personal lives and followed elite athletes because of entertainment. The quantitative aspect supported these results, with the participants showcasing their desire to follow elite athletes on Instagram to retrieve in-depth information that can be classified as backstage and frontstage content.

The third and final objective proved to be the most challenging to definitively determine. The semi-structured interviews found mixed results, with most participants stating that they had changed their behaviour towards physical activity, but on the other hand there were numerous participants who had not changed their behaviour despite following elite athletes on Instagram. This was primarily due to their own ability to motivate and inspire themselves, meaning that they possessed high self-determination and self-efficacy levels. The quantitative aspect of this study also generated mixed results: group 1 was more likely to be inspired by performances of elite athletes compared to group 2, but results also demonstrated that there were mixed results, since the participants from both groups had a neutral view on intention to participate. Participants from group 1 responded positively when asked about elite athletes' ability to inspire young adults on Instagram to take part in physical activity but also to take part in a new form of physical activity, which were confirmatory results. Bringing the two results together enabled the researcher to conclude that there are a few points to consider. Firstly, elite athletes are able to inspire young adults as they retrieve various types of inspirational content from athletes on Instagram, although this depends on their participation in physical activity prior to being exposed to Instagram content posted by elite athletes. Secondly, self-efficacy and self-determination levels of young adults are also important determinants for behavioural intent with higher levels of self-efficacy and self-determination being associated with a higher likelihood to engage in physical activity. Last but not least, elite athletes have the ability to inspire young adults to take part in new types of physical activity, although not always the same as the sport that the elite athlete practices. Finally, it's also important to note that there are other external influences like fitness influencers and retired athletes that can inspire young adults to take part in physical activity.

6.1 Limitations

The first limitation to be mentioned is that this study focused only on 18- to 34-year-olds, therefore the results of this study may not be representative for other age groups. Further, the respondent profiles for both the interviews and survey were not very diverse, as most respondents for the interviews were students/student-workers. Most survey respondents were white, so future studies could increase efforts at diversifying the sample. Another limitation revolves around the way of conducting interviews as 17 of 18 interviews were conducted through Zoom. Due to technical issues, the researcher was forced to leave out one interview from the analysis, which reduced the amount of raw data to be analysed. This also limited the observation of the participants' body language. The use of self-reported physical activity levels by the participants may potentially have affected the results. Previous literature has illustrated that self-reporting measures for physical activity can be imprecise and not provide researchers with accurate results. In addition, the researcher only focused on one social media platform, Instagram; it could have been interesting to assess whether there was a difference between two social media platforms.

This study uniquely focused on active elite athletes. During the interviewing phase and qualitative data analysis, the researcher distinguished retired elite athletes as an emerging theme but could not include this in the analysis. The category of athletes for this study could potentially be slightly broad, therefore it may be possible to narrow it down even further. Another potential limitation of this study was the focus on physical activity as a general term and not a specific type of physical activity (e.g., category of physical activity like leisure sports or one sport). Finally, as mentioned at the start of the study, age was the main determinant for the sample population of this study. The researcher did not focus on any differences between sub-groups (gender, students, workers etc.) within the sample population, which could have potentially unveiled differences between subgroups.

6.2 Recommendations for future studies

An emerging theme was observed during the interviews: fitness influencers. Future studies could look at both active elite athletes and fitness influencers in the same study and evaluate which group of external influences is more likely to inspire young adults in the context of physical activity. Future research should also consider conducting an experiment and comparing pre-physical activity and post-physical activity levels of young adults being

exposed to distinct categories of Instagram content posted by active elite athletes to measure any change in physical activity levels instead of relying on self-reported physical activity. It could also be possible to conduct a follow-up study to assess whether the physical activity levels of young adults are caused by content posted by elite athletes on Instagram. Further studies should also emphasize the characteristics of the groups, separating participants who exercise from those who do not exercise. The frequency of exposure is an interesting variable that should be considered to assess whether a higher volume of content posted by elite athletes on Instagram is associated with increased change in behavioural intention towards physical activity. In addition, future studies could include retired elite athletes in their studies and examine their inspirational factor, as they were commonly mentioned by the participants during the interviews and compare it to active elite athletes. Finally, it could also be possible to extend the research in this field by analysing another social media platform instead of Instagram.

Reference list

- Abbas, A., Afshan, G., Aslam, I., & Ewaz, L. (2018). The effect of celebrity endorsement on customer purchase intention: A comparative study. *Current Economics and Management Research*, 4(1), 1-10.
- Abeza, G., O'Reilly, N., Séguin, B., & Nzindukiyimana, O. (2017). The world's highest-paid athletes, product endorsement, and Twitter. *Sport, Business and Management: An International Journal*.
- Abreu, A. M., Macaluso, E., Azevedo, R. T., Cesari, P., Urgesi, C., & Aglioti, S. M. (2012). Action anticipation beyond the action observation network: a functional magnetic resonance imaging study in expert basketball players. *European Journal of Neuroscience*, 35(10), 1646-1654.
- Adut, A. (2008). *On scandal: Moral disturbances in Society, Politics and Art*. Cambridge, UK: Cambridge University Press.
- Afana, N. H., Astuti, N. W., & Sari, M. P. (2021, August). The relationship between Instagram usage & body image of social media influencer followers: Social comparison as a mediator. In *International Conference on Economics, Business, Social, and Humanities (ICEBSH 2021)* (pp. 1328-1334). Atlantis Press.
- Ainsworth, B. E. (2009). How do I measure physical activity in my patients? Questionnaires and objective methods. *British Journal of Sports Medicine*, 43(1), 6-9.
- Ainsworth, B. E., Haskell, W. L., Herrmann, S. D., Meckes, N., Bassett, D. R., Tudor-Locke, C., Greer, J. L., Vezina, J., Whitt-Glover, M. C. & Leon, A. S. (2011). Compendium of Physical Activities: A second update of codes and MET values. *Official Journal of the American College of Sports Medicine*, 43(8), 1575-1581.
- Ainsworth, B. E., Haskell, W. L., Whitt, M. C., Irwin, M. L., Swartz, A. M., Strath, S. J., O'Brien, W., Bassett, JR., D. R., Schmitz, K. H., Emplaincourt, P. O., Jacobs, JR., D. R., & Leon, A. S. (2000). Compendium of physical activities: An update of activity

codes and MET intensities. *Medicine and Science in Sports and Exercise*, 32(9; SUPP/1), S498-S504.

Aktypi, A., Nurse, J. R., & Goldsmith, M. (2017). Unwinding Ariadne's identity thread: Privacy risks with fitness trackers and online social networks. In *Proceedings of the 2017 on Multimedia Privacy and Security* (pp. 1-11).

Ajilore, K., & Abdul, O. (2021). Social Media Celebrities' Depiction of Psychoactive Substance and the Attitude of Youths. *SAU Journal of Management and Social Sciences*, 5(1), 175-185.

Allison, R., Pegoraro, A., Frederick, E., & Thompson, A. J. (2019). When women athletes transgress: an exploratory study of image repair and social media response. *Sport in Society*.

Almeida, M., Bottino, A., Ramos, P., & Araujo, C. G. (2019). Measuring heart rate during exercise: From artery palpation to monitors and apps. *International Journal of Cardiovascular Sciences*, 32, 396-407.

Anderson, K. J., & Cavallaro, D. (2002). Parents or pop culture? Children's heroes and role models. *Childhood Education*, 78(3), 161-168.

Annear, M. J., Shimizu, Y., & Kidokoro, T. (2019). Sports mega-event legacies and adult physical activity: A systematic literature review and research agenda. *European Journal of Sport Science*, 19(5), 671-685.

Arai, A., Ko, Y. J., & Kaplanidou, K. (2013). Athlete brand image: Scale development and model test. *European Sport Management Quarterly*, 13(4), 383-403.

Arigo, D., Mogle, J. A., Brown, M. M., Pasko, K., Travers, L., Sweeder, L., & Smyth, J. M. (2020). Methods to assess social comparison processes within persons in daily life: a scoping review. *Frontiers in Psychology*, 10, 2909.

Armour, K., & Duncombe, R. (2012). Changing lives? Critical evaluation of a school-based athlete role model intervention. *Sport, Education and Society*, 17(3), 381-403.

- Armstrong, T., & Bull, F. (2006). Development of the world health organization global physical activity questionnaire (GPAQ). *Journal of Public Health, 14*(2), 66-70.
- Aspers, P., & Corte, U. (2019). What is qualitative in qualitative research. *Qualitative Sociology, 42*(2), 139-160.
- Badenhausen, K. (2020, May). Michael Jordan Has Made Over \$1 Billion from Nike – The Biggest Endorsement Bargain in Sports. *Forbes*.
<https://www.forbes.com/sites/kurtbadenhausen/2020/05/03/michael-jordans-1-billion-nike-endorsement-is-the-biggest-bargain-in-sports/?sh=194a56506136>
- Baker, J., & Young, B. (2014). 20 years later: deliberate practice and the development of expertise in sport. *International Review of Sport and Exercise Psychology, 7*(1), 135-157.
- Bandura, A. (1988). Self-efficacy conception of anxiety. *Anxiety Research, 1*(2), 77-98.
- Barron, A. M., Krumrei-Mancuso, E. J., & Harriger, J. A. (2021). The effects of fitspiration and self-compassion Instagram posts on body image and self-compassion in men and women. *Body Image, 37*, 14-27.
- Bastos, A. D. A., Salguero, A., González-Boto, R., & Marquez, S. (2006). Motives for participation in physical activity by Brazilian adults. *Perceptual and Motor Skills, 102*(2), 358-367.
- Bauman, A. E., Reis, R. S., Sallis, J. F., Wells, J. C., Loos, R. J., Martin, B. W., & Lancet Physical Activity Series Working Group. (2012). Correlates of physical activity: why are some people physically active and others not?. *The Lancet, 380*(9838), 258-271.
- Beauchamp, M. R., Crawford, K. L., & Jackson, B. (2019). Social cognitive theory and physical activity: Mechanisms of behavior change, critique, and legacy. *Psychology of Sport and Exercise, 42*, 110-117.

- Behnoosh, S., Naylor, M., & Dickson, G. (2017). Promoting sport and physical activity participation: The impact of endorser expertise and recognisability. *Managing Sport and Leisure*, 22(3), 214–233.
- Benetoli, A., Chen, T. F., & Aslani, P. (2017). Consumer health-related activities on social media: exploratory study. *Journal of Medical Internet Research*, 19(10), e7656.
- Benight, C. C., & Bandura, A. (2004). Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behaviour Research and Therapy*, 42(10), 1129-1148.
- Benoit, W. L. (1997). Image repair discourse and crisis communication. *Public Relations Review*, 23(2), 177-186.
- Berger, R. J. (2008). “Disability and the Dedicated Wheelchair Athlete: Beyond the ‘Supercrip’ Critique.” *Journal of Contemporary Ethnography* 27 (6): 647–678.
- Berkman, N. D., Davis, T. C., & McCormack, L. (2010). Health literacy: What is it? *Journal of Health Communication*, 15, 9–19. doi:10.1080/10810730.2010.499985
- Bernstein, B. (2012). Crisis management and sports in the age of social media: A case study analysis of the Tiger Woods scandal. *Elon Journal of Undergraduate Research in Communications*, 3(2).
- 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.
- Biskup, C., & Pfister, G. (1999). I would like to be like her/him: Are athletes role-models for boys and girls? *European Physical Education Review*, 5(3), 199-218.
- Bissell, K. L., & Zhou, P. (2004). Must-See TV or ESPN: entertainment and sports media exposure and body-image distortion in college women. *Journal of Communication*, 54(1), 5-21.
- Blaney, J. R., Lippert, L. R., & Smith, S. J. (Eds.). (2012). *Repairing the Athlete's Image: Studies in Sports Image Restoration*. Lexington Books.

- Boorstin, D. J. (1992). *The Image: A guide to Pseudo-events in America*. Vintage.
- Böttger, T., Rudolph, T., Evanschitzky, H., & Pfrang, T. (2017). Customer inspiration: Conceptualization, scale development, and validation. *Journal of Marketing*, 81(6), 116-131.
- Boyle, R., & Haynes, R. (2013). Sport, the media and strategic communications management. In *Managing Sport Business* (pp. 344-363). Routledge.
- Boyle, R., & Haynes, R. (2018). Sport, the media and strategic communications management. In *Managing Sport Business* (pp. 478-501). Routledge.
- Bravata, D. M., Smith-Spangler, C., Sundaram, V., Gienger, A. L., Lin, N., Lewis, R., Stave, C. D., Olkin, I., & Sirard, J. R. (2007). Using pedometers to increase physical activity and improve health: a systematic review. *Jama*, 298(19), 2296-2304.
- Brazael, L.M. (2008). The image repair strategies of Terrell Owens. *Public Relations Review*, 34, 145-150.
- Brown, D., & Fiorella, S. (2013). *Influence marketing: How to Create, Manage, and Measure Brand Influencers in Social Media Marketing*. Que Publishing.
- Brown, K. A. (2016). Is apology the best policy? An experimental examination of the effectiveness of image repair strategies during criminal and noncriminal athlete transgressions. *Communication & Sport*, 4(1), 23-42.
- 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).
- Brunet, J., & Sabiston, C. M. (2011). Exploring motivation for physical activity across the adult lifespan. *Psychology of Sport and Exercise*, 12(2), 99-105.
- Buckworth, J., Lee, R. E., Regan, G., Schneider, L. K., & DiClemente, C. C. (2007). Decomposing intrinsic and extrinsic motivation for exercise: Application to stages of motivational readiness. *Psychology of Sport and Exercise*, 8(4), 441-461.

- Bull, F. C., Maslin, T. S., & Armstrong, T. (2009). Global physical activity questionnaire (GPAQ): nine country reliability and validity study. *Journal of Physical Activity & Health, 6*(6).
- Bush, A. J., Martin, C. A., & Bush, V. D. (2004). Sports celebrity influence on the behavioral intentions of generation Y. *Journal of Advertising Research, 44*(1), 108-118.
- Butte, N. F., Watson, K. B., Ridley, K., Zakeri, I. F., McMurray, R. G., Pfeiffer, K. A., Crouter, S. E., Herrmann, S. D., Bassett, D. R., Long, A., Berhane, Z., Trost, S. G., Ainsworth, B. E., Berrigan, D., & Fulton, J. E. (2018). A youth compendium of physical activities: activity codes and metabolic intensities. *Medicine and Science in Sports and Exercise, 50*(2), 246.
- Byrne, E., Kearney, J., & MacEvelly, C. (2017). The role of influencer marketing and social influencers in public health. *Proceedings of the Nutrition Society, 76*(OCE3).
- Caglar, E., Canlan, Y., & Demir, M. (2009). Recreational exercise motives of adolescents and young adults. *Journal of Human Kinetics, 22*(1), 83-89.
- Campo, S., Cameron, K. A., Brossard, D., & Frazer, M. S. (2004). Social norms and expectancy violation theories: Assessing the effectiveness of health communication campaigns. *Communication Monographs, 71*(4), 448-470.
- Carless, D., & Douglas, K. (2012). Stories of success: Cultural narratives and personal stories of elite and professional athletes. *Reflective Practice, 13*(3), 387-398.
- Carlson, B. D., & Donovan, D. T. (2008). SEM. *Sport Marketing Quarterly, 17*, 154-162.
- Carlson, B. D., & Donovan, D. T. (2013). Human brands in sport: Athlete brand personality and identification. *Journal of Sport Management, 27*(3), 193-206.
- Carter, R. V., & Lorenc, T. (2015). A qualitative study into the development of a physical activity legacy from the London 2012 Olympic Games. *Health Promotion International, 30*(3), 793-802.

- Caruth, G. D. (2013). Demystifying mixed methods research design: A review of the literature. *Online Submission*, 3(2), 112-122.
- Caspersen, C. J., Powell, K. E., & Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public Health Reports*, 100(2), 126.
- Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement framework. *The Qualitative Report*, 21(5), 811-831.
- Cater, J. K. (2011). Skype a cost-effective method for qualitative research. *Rehabilitation Counselors & Educators Journal*, 4(2), 3.
- Cecchini, M., Sassi, F., Lauer, J. A., Lee, Y. Y., Guajardo-Barron, V., & Chisholm, D. (2010). Tackling of unhealthy diets, physical inactivity, and obesity: health effects and cost-effectiveness. *The Lancet*, 376(9754), 1775-1784.
- Cecchini, M., Sassi, F., Lauer, J. A., Lee, Y. Y., Guajardo-Barron, V., & Chisholm, D. (2010). Tackling of unhealthy diets, physical inactivity, and obesity: health effects and cost-effectiveness. *The Lancet*, 376(9754), 1775-1784.
- Cha, M., Haddadi, H., Benevenuto, F., & Gummadi, K. P. (2010, May). Measuring user influence in twitter: The million follower fallacy. In *Fourth International AAAI Conference on Weblogs and Social Media*.
- Chae, J. (2018). Explaining females' envy toward social media influencers. *Media Psychology*, 21(2), 246-262.
- Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing: Strategy, implementation & practice*. Pearson UK.
- Charbonneau, J., & Garland, R. (2005). Talent, Looks or Brains? New Zealand Advertising Practitioners' Views on Celebrity and Athlete Endorsers. *Marketing Bulletin*, 16.

- Chia, S. C., & Poo, Y. L. (2009). Media, celebrities, and fans: An examination of adolescents' media usage and involvement with entertainment celebrities. *Journalism & Mass Communication Quarterly*, 86(1), 23-44.
- Chiu, L. K., Yusof, M. M., Fauzee, M. S. O., Othman, A. T., Aman, M. S., Elumalai, G., & Ali, H. M. (2016). Examining sport and physical activity participation, motivations, and barriers among young Malaysians. *Asian Social Science*, 12(1), 159.
- Chmait, N., Westerbeek, H., Eime, R., Robertson, S., Sellitto, C., & Reid, M. (2020). Tennis influencers: the player effect on social media engagement and demand for tournament attendance. *Telematics and Informatics*, 50, 101381.
- Choi, S. M., Lee, W. N., & Kim, H. J. (2005). Lessons from the rich and famous: A cross-cultural comparison of celebrity endorsement in advertising. *Journal of Advertising*, 34(2), 85-98.
- Çınar, O., Bektaş, Ç., & Aslan, I. (2011). A motivation study on the effectiveness of intrinsic and extrinsic factors. *Economics & Management*, 16(5), 690-695.
- Cleland, C. L., Ellaway, A., Clark, J., & Kearns, A. (2020). Was Glasgow 2014 inspirational? Exploring the legacy impacts of a mega-sport event via the theorized demonstration and festival effects. *Sport in Society*, 23(5), 810-831.
- Coche, R. (2017). How athletes frame themselves on social media: An analysis of Twitter profiles. *Journal of Sports Media*, 12(1), 89-112.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education (6th ed.)*. New York, NY: Routledge.
- Costanzo, P. J., & Goodnight, J. E. (2006). Celebrity endorsements: Matching celebrity and endorsed brand in magazine advertisements. *Journal of Promotion Management*, 11(4), 49-62.
- Creswell, J. W., & Creswell, J. (2009). *Research design (3rd ed.)*. Thousand Oaks, CA: Sage Publications.

- Cristiano [@cristiano]. (n.d.). Posts [Cristiano Ronaldo]. Instagram. Retrieved June 5, 2022 from <https://www.instagram.com/cristiano/>
- Cristiano Ronaldo. (n.d.). Home [Cristiano]. Facebook. Retrieved June 6, 2022 from <https://www.facebook.com/Cristiano>
- Cristiano, R. [@cristiano]. (n.d.). Tweets & replies [Cristiano]. Twitter. Retrieved June 6, 2022 from <https://twitter.com/cristiano>
- Das, S., Goard, J., & Murray, D. (2017, July). How celebrities feed tweeples with personal and promotional tweets: celebrity twitter use and audience engagement. In *Proceedings of the 8th International Conference on Social Media & Society* (pp. 1-5).
- DataReportal (2022). *The latest Instagram statistics: Everything you need to know*. Retrieved July 30, 2022, from <https://datareportal.com/essential-instagram-stats>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.
- De Bosscher, V., Sotiriadou, P., & Van Bottenburg, M. (2013). Scrutinizing the sport pyramid metaphor: an examination of the relationship between elite success and mass participation in Flanders. *International Journal of Sport Policy and Politics*, 5(3), 319-339.
- De Cocq, S., Derom, I., & Bosscher, V. D. (2021). Conceptualising the inspirational effect of elite sport: A case study of field hockey in Belgium. *European Sport Management Quarterly*, 21(5), 695-713.
- De Hon, O., Kuipers, H., & Van Bottenburg, M. (2015). Prevalence of doping use in elite sports: a review of numbers and methods. *Sports Medicine*, 45(1), 57-69.
- Deakin, H., & Wakefield, K. (2014). Skype interviewing: Reflections of two PhD researchers. *Qualitative Research*, 14(5), 603-616.

- Diel, K., Broeker, L., Raab, M., & Hofmann, W. (2021). Motivational and emotional effects of social comparison in sports. *Psychology of Sport and Exercise*, 57, 102048.
- Dinas, P. C., Koutedakis, Y., & Flouris, A. D. (2011). Effects of exercise and physical activity on depression. *Irish Journal of Medical Science*, 180(2), 319-325.
- Dix, S., & Chowdry, H. (2010). Factors predicting the effectiveness of sports celebrity endorsement advertising: a partial replication and extension. In *Recent Advances in Retailing and Services Science Conference Proceedings*. Recent Advances in Retailing and Services Science.
- Dix, S., Phau, I., & Pougnet, S. (2010). "Bend it like Beckham": The influence of sports celebrities on young adult consumers. *Young consumers: Insight and Ideas for Responsible Marketers*, 11(1), 36-46.
- Djafarova, E., & Bowes, T. (2021). 'Instagram made Me buy it': Generation Z impulse purchases in fashion industry. *Journal of Retailing and Consumer Services*, 59, 102345.
- Djafarova, E., & Rushworth, C. (2017). Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in Human Behavior*, 68, 1-7.
- Downward, P., Lera-Lopez, F., & Rasciute, S. (2014). The correlates of sports participation in Europe. *European Journal of Sport Science*, 14(6), 592-602.
- Doyle, J. P., Su, Y., & Kunkel, T. (2022). Athlete branding via social media: Examining the factors influencing consumer engagement on Instagram. *European Sport Management Quarterly*, 22(4), 506-526.
- Driessens, O. (2013). The celebritization of society and culture: Understanding the structural dynamics of celebrity culture. *International Journal of Cultural Studies*, 16(6), 641-657.

- Durante, R., & Ainsworth, B. E. (1996). The recall of physical activity: using a cognitive model of the question-answering process. *Medicine & Science in Sports & Exercise*.
- Durau, J., Diehl, S., & Terlutter, R. (2022). Motivate me to exercise with you: The effects of social media fitness influencers on users' intentions to engage in physical activity and the role of user gender. *Digital Health*, 8, 20552076221102769.
- Emily, R. L. (2011). *Motivation: A literature review*. Pearson Research Report.
- Etikan, I., Alkassim, R., & Abubakar, S. (2016). Comparison of snowball sampling and sequential sampling technique. *Biometrics and Biostatistics International Journal*, 3(1), 55.
- Fardouly, J., & Vartanian, L. R. (2016). Social media and body image concerns: Current research and future directions. *Current Opinion in Psychology*, 9, 1-5.
- Fathema, N., & Sutton, K. L. (2013). Factors influencing faculty members' Learning Management Systems adoption behavior: An analysis using the Technology Acceptance Model. *International Journal of Trends in Economics Management & Technology (IJTEMT)*, 2(6).
- Feder, L. (2020). From ESPN to Instagram LIVE: The evolution of fan-athlete interaction amid the Coronavirus. *International Journal of Sport Communication*, 13(3), 458-464.
- Feezell, R. (2005). Celebrated athletes, moral exemplars, and lusory objects. *Journal of the Philosophy of Sport*, 32(1), 20-35.
- Figgins, S. G., Smith, M. J., Sellars, C. N., Greenlees, I. A., & Knight, C. J. (2016). "You really could be something quite special": A qualitative exploration of athletes' experiences of being inspired in sport. *Psychology of Sport and Exercise*, 24, 82-91.
- Fleming, S., Hardman, A., Jones, C., & Sheridan, H. (2005). 'Role models' among elite young male rugby league players in Britain. *European Physical Education Review*, 11(1), 51-70.

- Franchina, V., & Coco, G. L. (2018). The influence of social media use on body image concerns. *International Journal of Psychoanalysis and Education*, 10(1), 5-14.
- Fransson, E. I., Heikkila, K., Nyberg, S. T., Zins, M., Westerlund, H., Westerholm, P., Vaananen, A., Virtanen, M., Vahtera, J., Theorell, T., Suominen, S., Singh-Manoux, A., Siegrist, J., Sabia, S., Rugulies, R., Pentti, J., Oksanen, T., Nordin, M., Nielsen, M. L., ... Kivimaki, M. (2012). Job strain as a risk factor for leisure-time physical inactivity: An individual-participant meta-analysis of up to 170,000 men and women: The ipd-work consortium. *American Journal of Epidemiology*, 176(12), 1078–1089.
<https://doi.org/10.1093/aje/kws336>
- Frederick, E. L., & Clavio, G. (2015). Blurred Lines: An Examination of High School Football Recruits' Self-Presentation on Twitter. *International Journal of Sport Communication*, 8(3).
- Frederick, E. L., Lim, C. H., Clavio, G., & Walsh, P. (2012). Why we follow: An examination of parasocial interaction and fan motivations for following athlete archetypes on Twitter. *International Journal of Sport Communication*, 5(4), 481-502.
- Frederick-Recascino, C. M., & Schuster-Smith, H. (2003). Competition and intrinsic motivation in physical activity: A comparison of two groups. *Journal of Sport Behaviour*, 26(3), 240-254.
- Freedson, P. S., & Miller, K. (2000). Objective monitoring of physical activity using motion sensors and heart rate. *Research Quarterly for Exercise and Sport*, 71(sup2), 21-29.
- Fullagar, S., Rich, E., Francombe-Webb, J., & Maturo, A. (2017). Digital ecologies of youth mental health: apps, therapeutic publics and pedagogy as affective arrangements. *Social Sciences*, 6(4), 135.
- Funk, D. C., & James, J. (2001). The psychological continuum model: A conceptual framework for understanding an individual's psychological connection to sport. *Sport Management Review*, 4(2), 119-150.
- Gallagher, K. (2017). Ronaldo's \$1 billion Nike deal could be the future of social media marketing. Business Insider. Retrieved from

<https://www.businessinsider.com/ronaldos-1-billion-nike-deal-could-be-the-future-of-social-media-marketing-2017-3?r=US&IR=T>

- Ganta, V. C. (2014). Motivation in the workplace to improve the employee performance. *International Journal of Engineering Technology, Management and Applied Sciences*, 2(6), 221-230.
- Garber, C. E., Blissmer, B., Deschenes, M. R., Franklin, B. A., Lamonte, M. J., Lee, I. M., & Swain, D. P. (2011). American College of Sports Medicine position stand. Quantity and quality of exercise for developing and maintaining cardiorespiratory, musculoskeletal, and neuromotor fitness in apparently healthy adults: guidance for prescribing exercise. *Medicine and Science in Sports and Exercise*, 43(7), 1334-1359.
- Gavin, J., Keough, M., Abravanel, M., Moudrakovski, T., & Mcbrearty, M. (2014). Motivations for participation in physical activity across the lifespan. *International Journal of Wellbeing*, 4(1).
- Georgiadis, E. (2021). Design Thinking Applications in Physical Activity and Exercise Literacy. In Taiar, R. (Ed.), *Contemporary Advances in Sports Science*. IntechOpen. <https://doi.org/10.5772/intechopen.97479>
- Gerald, B. (2018). A brief review of independent, dependent and one sample t-test. *International Journal of Applied Mathematics and Theoretical Physics*, 4(2), 50-54.
- 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.
- 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.
- Ghaznavi, J., & Taylor, L. D. (2015). Bones, body parts, and sex appeal: An analysis of# thinspiration images on popular social media. *Body Image*, 14, 54-61.

- Giles, D. (2017). *Illusions of Immortality: A Psychology of Fame and Celebrity*. Bloomsbury Publishing.
- Giuliano, T. A., Turner, K. L., Lundquist, J. C., & Knight, J. L. (2007). Gender and the selection of public athletic role models. *Journal of Sport Behavior, 30*(2).
- Goldstraw, D., & Keegan, B. J. (2016). Instagram's 'Fitspiration' trend and its effect on young women's self-esteem. *BLED Proceedings, 35*.
- Gong, W., & Li, X. (2019). Microblogging reactions to celebrity endorsement: effects of parasocial relationship and source factors. *Chinese Journal of Communication, 12*(2), 185-203.
- Green, M. (2009). Podium or participation? Analysing policy priorities under changing modes of sport governance in the United Kingdom. *International Journal of Sport Policy and Politics, 1*(2), 121-144.
- Greenhalgh, G. P., Simmons, J. M., Hambrick, M. E., & Greenwell, T. C. (2011). Spectator support: Examining the attributes that differentiate niche from mainstream sport. *Sport Marketing Quarterly, 20*(1), 41.
- Gresham, G., Schrack, J., Gresham, L. M., Shinde, A. M., Hendifar, A. E., Tuli, R., Rimel, B., Figlin, R., Meinert, C. L., & Piantadosi, S. (2018, January). Wearable activity monitors in oncology trials: Current use of an emerging technology. *Contemporary Clinical Trials, 64*, 13–21.
- Grinyer, A. (2009). Assumption, ethics, and practicalities. *Pan, 12*(1), 49-58.
- Grix, J., & Carmichael, F. (2012). Why do governments invest in elite sport? A polemic. *International Journal of Sport Policy and Politics, 4*(1), 73-90.
- Guay, F., Chanal, J., Ratelle, C. F., Marsh, H. W., Larose, S., & Boivin, M. (2010). Intrinsic, identified, and controlled types of motivation for school subjects in young elementary school children. *British Journal of Educational Psychology, 80*(4), 711–735.

- Guest, A. M., & Cox, S. (2009). Using athletes as role models? Conceptual and empirical perspectives from a sample of elite women soccer players. *International Journal of Sports Science & Coaching*, 4(4), 567-581.
- Hambrick, M. E., & Mahoney, T. Q. (2011). 'It's incredible—trust me': exploring the role of celebrity athletes as marketers in online social networks. *International Journal of Sport Management and Marketing*, 10(3-4), 161-179.
- Hani, S., Marwan, A., & Andre, A. (2018). The effect of celebrity endorsement on consumer behavior: Case of the Lebanese jewelry industry. *Arab Economic and Business Journal*, 13(2), 190-196.
- Hansmann, R., Hug, S. M., & Seeland, K. (2007). Restoration and stress relief through physical activities in forests and parks. *Urban Forestry & Urban Greening*, 6(4), 213-225.
- Harris, J. K., Duncan, A., Men, V., Shevick, N., Krauss, M. J., & Cavazos-Rehg, P. A. (2018). Peer reviewed: Messengers and messages for tweets that used# thinspo and# fitspo hashtags in 2016. *Preventing Chronic Disease*, 15.
- Hasaan, A., Kerem, K., Biscaia, R., & Agyemang, K. J. (2016). Understanding the implications of athlete brand among fans. *Technics Technologies Education Management*, 11(1), 68-81.
- Hayes, M. (2019). *Social Media Usage Among Elite Athletes: An Exploration of Athlete Usage During Major Events* (Doctoral dissertation, Doctoral dissertation. Brisbane: Griffith University).
- Hayes, M. (2022). Social media and inspiring physical activity during COVID-19 and beyond. *Managing Sport and Leisure*, 27(1-2), 14-21.
- Hendry, N. A., Hartung, C., & Welch, R. (2021). Health education, social media, and tensions of authenticity in the 'influencer pedagogy' of health influencer Ashy Bines. *Learning, Media and Technology*, 1-13.

- Henriksen, A., Mikalsen, M. H., Woldaregay, A. Z., Muzny, M., Hartvigsen, G., Hopstock, L. A., & Grimsgaard, S. (2018). Using fitness trackers and smartwatches to measure physical activity in research: analysis of consumer wrist-worn wearables. *Journal of Medical Internet Research*, 20(3), e9157.
- Henriksen, K., & Stambulova, N. (2017). Creating optimal environments for talent development: A holistic ecological approach. In *Routledge handbook of talent identification and development in sport* (pp. 270-284). Routledge.
- Hitchings, R., & Latham, A. (2016). Indoor versus outdoor running: understanding how recreational exercise comes to inhabit environments through practitioner talk. *Transactions of the Institute of British Geographers*, 41(4), 503-514.
- Hjorth, L., & Hinton, S. (2019). *Understanding Social Media*. Sage.
- Horne, J. (2007). The four 'knowns' of sports mega-events. *Leisure Studies*, 26(1), 81-96.
- Howlett, M. (2022). Looking at the 'field' through a Zoom lens: Methodological reflections on conducting online research during a global pandemic. *Qualitative Research*, 22(3), 387-402.
- Huang, F. (2013). Glocalisation of sport: The NBA's diffusion in China. *The International Journal of the History of Sport*, 30(3), 267-284.
- Huang, J., Lin, S., Hu, X., & Lin, R. (2022). Are sports champions also anti-epidemic heroes? Quantitative research on the influence of sports champions' demonstration effect on the COVID-19 epidemic in China. *International Journal of Environmental Research and Public Health*, 19(4), 2438.
- Hug, S. M., Hartig, T., Hansmann, R., Seeland, K., & Hornung, R. (2009). Restorative qualities of indoor and outdoor exercise settings as predictors of exercise frequency. *Health & Place*, 15(4), 971-980.

- Hull, R., Zaidell, L., Mileva, K., & de Oliveira, R. F. (2021). This Girl Can, can't she? Perspectives from physical activity providers and participants on what factors influence participation. *Psychology of Sport and Exercise, 57*, 102043.
- Hulteen, R. M., Smith, J. J., Morgan, P. J., Barnett, L. M., Hallal, P. C., Colyvas, K., & Lubans, D. R. (2017). Global participation in sport and leisure-time physical activities: A systematic review and meta-analysis. *Preventive Medicine, 95*, 14-25.
- Hutchison, A. J., Johnston, L. H., & Breckon, J. D. (2013). A grounded theory of successful long-term physical activity behaviour change. *Qualitative Research in Sport, Exercise and Health, 5*(1), 109-126.
- Hyman, M. R., & Sierra, J. J. (2010). Idolizing sport celebrities: a gateway to psychopathology?. *Young Consumers*.
- Ismagilova, E., Slade, E., Rana, N. P., & Dwivedi, Y. K. (2020). The effect of characteristics of source credibility on consumer behaviour: A meta-analysis. *Journal of Retailing and Consumer Services, 53*, 101736.
- Jackson, C., Smith, A., & Conner, M. (2003). Applying an extended version of the theory of planned behaviour to physical activity. *Journal of Sports Sciences, 21*(2), 119-133.
- Jackson, S., & Andrews, D. L. (2012). Olympic celebrity—introduction. *Celebrity Studies, 3*(3), 263-269.
- James, C. A. (2011). Communication in online fan communities: The ethics of intimate strangers. *Empedocles: European Journal for the Philosophy of Communication, 2*(2), 279-289.
- Jane, E. A. (2014). “Your a ugly, whorish, slut” understanding E-bile. *Feminist Media Studies, 14*(4), 531-546.
- Johnson, C. S., & Stapel, D. A. (2007). No pain, no gain: The conditions under which upward comparisons lead to better performance. *Journal of Personality and Social Psychology, 92*(6), 1051.

- Jones, I., Gratton, C., & Jones, I. (2015). *Research Methods for Sports Studies: Third Edition* (3rd ed.). Routledge.
- Jong, S. T., & Drummond, M. J. (2016). Exploring online fitness culture and young females. *Leisure Studies*, 35(6), 758-770.
- Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, 7(4), 396.
- Juthe, R. H., Zaharchuk, A., & Wang, C. (2015). Celebrity disclosures and information seeking: the case of Angelina Jolie. *Genetics in Medicine*, 17(7), 545-553.
- Kapoor, K. K., Tamilmani, K., Rana, N. P., Patil, P., Dwivedi, Y. K., & Nerur, S. (2018). Advances in social media research: Past, present and future. *Information Systems Frontiers*, 20(3), 531-558.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22.
- Kerner, C., & Goodyear, V. A. (2017). The motivational impact of wearable healthy lifestyle technologies: a self-determination perspective on Fitbits with adolescents. *American Journal of Health Education*.
- Khaldi, K. (2017). Quantitative, qualitative or mixed research: which research paradigm to use?. *Journal of Educational and Social Research*, 7(2), 15-15.
- Khan, Z., Haider, Z., Ahmad, N., & Khan, S. (2011). Sports achievement motivation and sports competition anxiety: A relationship study. *Journal of Education and Practice*, 2(4), 1-5.
- Khatri, P. (2006). Celebrity endorsement: A strategic promotion perspective. *Indian Media Studies Journal*, 1(1), 25-37.
- Ki, C. W. C., Cuevas, L. M., Chong, S. M., & Lim, H. (2020). Influencer marketing: Social media influencers as human brands attaching to followers and yielding positive

- marketing results by fulfilling needs. *Journal of Retailing and Consumer Services*, 55, 102133.
- Kilpatrick, M., Hebert, E., & Jacobsen, D. (2002). Physical activity motivation: A practitioner's guide to self-determination theory. *Journal of Physical Education, Recreation & Dance*, 73(4), 36-41.
- Kim, H. M. (2022). Social comparison of fitness social media postings by fitness app users. *Computers in Human Behavior*, 107204.
- Kjønniksen, L., Anderssen, N., & Wold, B. (2009). Organized youth sport as a predictor of physical activity in adulthood. *Scandinavian Journal of Medicine & Science in Sports*, 19(5), 646-654.
- Knittel, C. R., & Stango, V. (2014). Celebrity endorsements, firm value, and reputation risk: Evidence from the Tiger Woods scandal. *Management Science*, 60(1), 21-37.
- Koernig, S. K., & Boyd, T. C. (2009). To Catch a Tiger or Let Him Go: The Match-Up Effect and Athlete Endorsers for Sport and Non-Sport Brands. *Sport Marketing Quarterly*, 18(1).
- Kokkonen, J., Gråstén, A., Quay, J., & Kokkonen, M. (2020). Contribution of motivational climates and social competence in physical education on overall physical activity: A self-determination theory approach with a creative physical education twist. *International Journal of Environmental Research and Public Health*, 17(16), 5885.
- Kostygina, G., Tran, H., Binns, S., Szczyпка, G., Emery, S., Vallone, D., & Hair, E. (2020). Boosting health campaign reach and engagement through use of social media influencers and memes. *Social Media+ Society*, 6(2), 2056305120912475.
- Kowalczyk, C. M., & Pounders, K. R. (2016). Transforming celebrities through social media: the role of authenticity and emotional attachment. *Journal of Product & Brand Management*, 25 (4), pp. 345-356.

- Lai, E. R. (2011). Collaboration: A literature review. *Pearson Publisher*. Retrieved November, 11, 2016.
- Lang, J. J., Wolfe Phillips, E., Orpana, H. M., Tremblay, M. S., Ross, R., Ortega, F. B., Silva, D. A. S., & Tomkinson, G. R. (2018,). Field-based measurement of cardiorespiratory fitness to evaluate physical activity interventions. *Bulletin of the World Health Organization*, 96(11), 794–796. <https://doi.org/10.2471/blt.18.213728>
- Law, B., & Hall, C. (2009). Observational learning use and self-efficacy beliefs in adult sport novices. *Psychology of Sport and Exercise*, 10(2), 263-270.
- 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.
- Lee, E., Lee, J. A., Moon, J. H., & Sung, Y. (2015). Pictures speak louder than words: Motivations for using Instagram. *Cyberpsychology, Behavior, and Social Networking*, 18(9), 552-556.
- Lee, J. A., Sudarshan, S., Sussman, K. L., Bright, L. F., & Eastin, M. S. (2021). Why are consumers following social media influencers on Instagram? Exploration of consumers' motives for following influencers and the role of materialism. *International Journal of Advertising*, 1-23.
- Leit, R. A., Gray, J. J., & Pope Jr, H. G. (2002). The media's representation of the ideal male body: A cause for muscle dysmorphia?. *International Journal of Eating Disorders*, 31(3), 334-338.
- Leng, H. K., & Phua, Y. X. P. (2022). Athletes as role models during the COVID-19 pandemic. *Managing Sport and Leisure*, 27(1-2), 163-167.
- Lenskyj, H. J. (2020). *The Olympic Games: a critical approach* (pp. 121–144). Emerald Group Publishing.

- Lewandowska, E., Kostencka, A., Dziembowska, I., & Gotowski, R. (2017). Happiness in active and retired athletes. *Studia Sportiva*, 11(1), 258-268.
- Lewis, B. R. (1993). Service quality measurement. *Marketing Intelligence & Planning*.
- Li, B., Scott, O. K., Naraine, M. L., & Ruihley, B. J. (2021). Tell me a story: Exploring elite female athletes' self-presentation via an analysis of Instagram Stories. *Journal of Interactive Advertising*, 21(2), 108-120.
- Li, B., Stokowski, S., Dittmore, S. W., Malmo, J. R., & Rolfe, D. T. (2017). A case study of self-representation on Twitter: A gender analysis of how student-athletes portray themselves. *Global Sport Business Journal*, 5(1), 61-75.
- Lim, J. S., & Noh, G. Y. (2017). Effects of gain-versus loss-framed performance feedback on the use of fitness apps: Mediating role of exercise self-efficacy and outcome expectations of exercise. *Computers in Human Behavior*, 77, 249-257.
- Lin, J. J., Mamykina, L., Lindtner, S., Delajoux, G., & Strub, H. B. (2006, September). Fish'n'Steps: Encouraging physical activity with an interactive computer game. In *International Conference on Ubiquitous Computing* (pp. 261-278). Springer, Berlin, Heidelberg.
- Lines, G. (2001). Villains, fools or heroes? Sports stars as role models for young people. *Leisure Studies*, 20(4), 285-303.
- Litchfield, C., Kavanagh, E., Osborne, J., & Jones, I. (2018). Social media and the politics of gender, race and identity: The case of Serena Williams. *European Journal for Sport and Society*, 15(2), 154-170.
- Liu, M., Wu, L., & Ming, Q. (2015). How does physical activity intervention improve self-esteem and self-concept in children and adolescents? Evidence from a meta-analysis. *PloS One*, 10(8), e0134804.

- Liu, S., & Willoughby, J. F. (2018). Do fitness apps need text reminders? An experiment testing goal-setting text message reminders to promote self-monitoring. *Journal of Health Communication, 23*(4), 379-386.
- Lobe, B., Morgan, D., & Hoffman, K. A. (2020). Qualitative data collection in an era of social distancing. *International Journal of Qualitative Methods, 19*, 1609406920937875.
- Lobpries, J., Bennett, G., & Brison, N. (2018). How I Perform is Not Enough: Exploring Branding Barriers Faced by Elite Female Athletes. *Sport Marketing Quarterly, 27*(1).
- Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology, 73*(1), 91.
- Lofft, Z. (2020). When social media met nutrition: How influencers spread misinformation, and why we believe them. *Health Science Inquiry, 11*(1), 56-61.
- Lombardo, M. P. (2012). On the evolution of sport. *Evolutionary Psychology, 28*, 10(1).
- Longhurst, R. (2003). Semi-structured interviews and focus groups. *Key Methods in Geography, 3*(2), 143-156.
- López Sánchez, G. F., Gordon, D., Hodgson, L., Stubbs, B., Gardner, B., & Smith, L. (2019). The effect of the 2016 Rio de Janeiro Olympics on spectators' physical activity. *Atena Journal of Sports Sciences, 1*, 1-1.
- Loureiro, A., & Veloso, S. (2014). Outdoor exercise, well-being and connectedness to nature. *Psico, 45*(3), 299-304.
- Loureiro, S. M. C., & Sarmento, E. M. (2018). The role of word-of-mouth and celebrity endorsement in online consumer-brand relationship: the context of Instagram. *The role of word-of-mouth and celebrity endorsement in online consumer-brand relationship: the context of Instagram, 1119-1129*.

- Lucifora, C., & Simmons, R. (2003). Superstar effects in sport: Evidence from Italian soccer. *Journal of Sports Economics*, 4(1), 35-55.
- Lupton, D. (2017). *Digital health: critical and cross-disciplinary perspectives*. Routledge.
- Lupton, D. (2020). 'Better understanding about what's going on': young Australians' use of digital technologies for health and fitness. *Sport, Education and Society*, 25(1), 1-13.
- Lupton, D., & Maslen, S. (2019). How women use digital technologies for health: qualitative interview and focus group study. *Journal of Medical Internet Research*, 21(1), e11481.
- Lyle, J. (2009). *Sporting Success, Role Models and Participation: A Policy Related Review*. Edinburgh: SportScotland.
- MacPherson, E., & Kerr, G. (2020). Online public shaming of professional athletes: Gender matters. *Psychology of Sport and Exercise*, 51, 101782.
- MacPherson, E., & Kerr, G. (2021). Sport fans' responses on social media to professional athletes' norm violations. *International Journal of Sport and Exercise Psychology*, 19(1), 102-119.
- Maltby, J., Day, L., McCutcheon, L. E., Gillett, R., Houran, J., & Ashe, D. D. (2004). Personality and coping: A context for examining celebrity worship and mental health. *British Journal of Psychology*, 95(4), 411-428.
- Marks, R. J., De Foe, A., & Collett, J. (2020). The pursuit of wellness: Social media, body image and eating disorders. *Children and Youth Services Review*, 119, 105659.
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. *Journal of Computer Information Systems*, 54(1), 11-22.
- McAuley, E., & Blissmer, B. (2000). Self-efficacy determinants and consequences of physical activity. *Exercices and Sport Sciences Reviews*, 28(2), 85-88.

- McCracken, G. (1989). Who is the celebrity endorser? Cultural foundations of the endorsement process. *Journal of Consumer Research*, 16(3), 310-321.
- McCutcheon, L. E., Lange, R., & Houran, J. (2002). Conceptualization and measurement of celebrity worship. *British Journal of Psychology*, 93(1), 67-87.
- McKinney, J., Velghe, J., Fee, J., Isserow, S., & Drezner, J. A. (2019). Defining athletes and exercisers. *The American Journal of Cardiology*, 123(3), 532-535.
- Meier, A., & Schäfer, S. (2018). The positive side of social comparison on social network sites: How envy can drive inspiration on Instagram. *Cyberpsychology, Behavior, and Social Networking*, 21(7), 411-417.
- Meier, A., Gilbert, A., Börner, S., & Possler, D. (2020). Instagram inspiration: How upward comparison on social network sites can contribute to well-being. *Journal of Communication*, 70(5), 721-743.
- Melin, R. (2014). Are Sportspersons Good Moral Role Models?. *Physical Culture and Sport. Studies and Research*, 64(1), 5-17.
- Meng, J., & Pan, P. L. (2013). Revisiting image-restoration strategies: An integrated case study of three athlete sex scandals in sports news. *International Journal of Sport Communication*, 6(1), 87-100.
- Milovic, A., & Dingus, R. (2014). Everyone loves a winner... Or do they? Introducing envy into a sales contest to increase salesperson motivation. *American Journal of Management*.
- Min, J., & Jin, H. (2010). Analysis on Essence, Types and Characteristics of Leisure Sports. *Modern Applied Science*, 4(7), 99.
- Misener, L., Taks, M., Chalip, L., & Green, B. C. (2015). The elusive “trickle-down effect” of sport events: Assumptions and missed opportunities. *Managing Sport and Leisure*, 20(2), 135-156.

- Mitchell, F. R., Santarossa, S., & van Wyk, P. M. (2021). The emergence of a paradox of assimilation: an analysis of Olympic and Paralympic athletes' Instagram posts. *Sport in Society*, 1-20.
- Mitchell, R. (2013). Is physical activity in natural environments better for mental health than physical activity in other environments? *Social Science & Medicine*, 91, 130-134.
- Molanorouzi, K., Khoo, S., & Morris, T. (2015). Motives for adult participation in physical activity: type of activity, age, and gender. *BMC Public Health*, 15(1), 1-12.
- Mooney, R. (2018). *The Impact of Social Media and Social Media Influencers on Millennials Motivation Towards Gym usage* (Doctoral dissertation, Dublin, National College of Ireland).
- Morgan, A. [@alexmorgan13]. (n.d.). Posts [Alex Morgan]. Instagram. Retrieved June 5, 2022, from <https://www.instagram.com/alexmorgan13/>
- Morgenroth, T., Ryan, M. K., & Peters, K. (2015). The motivational theory of role modeling: How role models influence role aspirants' goals. *Review of General Psychology*, 19(4), 465-483.
- Muda, M., Musa, R., & Putit, L. (2012). Breaking through the clutter in media environment: how do celebrities help?. *Procedia-Social and Behavioral Sciences*, 42, 374-382.
- Mutter, F., & Pawlowski, T. (2014). The monetary value of the demonstration effect of professional sports. *European Sport Management Quarterly*, 14(2), 129-152.
- Noll, R. G. (2003). The organization of sports leagues. *Oxford Review of Economic Policy*, 19(4), 530-551.
- Noonan, M. (2018). *Social media fitness influencers: innovators and motivators* (Doctoral dissertation, University of Iowa).

- Norton, K., Norton, L., & Sadgrove, D. (2010). Position statement on physical activity and exercise intensity terminology. *Journal of Science and Medicine in Sport*, 13(5), 496-502.
- Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19(3), 39-52.
- Ohanian, R. (1991). The impact of celebrity spokespersons' perceived image on consumers' intention to purchase. *Journal of Advertising Research*.
- Oleynick, V. C., Thrash, T. M., LeFev, M. C., Moldovan, E. G., & Kieffaber, P. D. (2014). The scientific study of inspiration in the creative process: Challenges and opportunities. *Frontiers in Human Neuroscience*, 8, 436.
- Oliffe, J. L., Kelly, M. T., Gonzalez Montaner, G., & Yu Ko, W. F. (2021). Zoom interviews: benefits and concessions. *International Journal of Qualitative Methods*, 20, 16094069211053522.
- Owen, N., Healy, G. N., Matthews, C. E., & Dunstan, D. W. (2010). Too much sitting: the population-health science of sedentary behavior. *Exercise and Sport Sciences Reviews*, 38(3), 105.
- Park, J., Williams, A., & Son, S. (2020). Social media as a personal branding tool: a qualitative study of student-athletes' perceptions and behaviors. *Journal of Athlete Development and Experience*, 2(1), 2.
- Park, M., Yoo, H., Kim, J., & Lee, J. (2018). Why do young people use fitness apps? Cognitive characteristics and app quality. *Electronic Commerce Research*, 18(4), 755-761.
- Park, S. A., Lee, K. S., & Son, K. C. (2011). Determining exercise intensities of gardening tasks as a physical activity using metabolic equivalents in older adults. *HortScience*, 46(12), 1706-1710.

- Parry, J. (2010). Sport, Ethos and Education. In M. McNamee (Ed.) *The Ethics of Sport: A Reader*. London: Routledge
- Pate, R. R., O'Neill, J. R., & Mitchell, J. (2010). Measurement of physical activity in preschool children. *Medicine and Science in Sports and Exercise*, 42(3), 508-512.
- Pate, R. R., Trost, S. G., Levin, S., & Dowda, M. (2000). Sports participation and health-related behaviors among US youth. *Archives of Pediatrics & Adolescent Medicine*, 154(9), 904-911.
- Payne, W., Reynolds, M., Brown, S., & Fleming, A. (2003). Sports role models and their impact on participation in physical activity: A literature review. *Victoria: VicHealth*, 74, 1-55.
- Pedalino, F., & Camerini, A. L. (2022). Instagram Use and Body Dissatisfaction: The Mediating Role of Upward Social Comparison with Peers and Influencers among Young Females. *International Journal of Environmental Research and Public Health*, 19(3), 1543.
- Pegoraro, A. (2010). Look who's talking—Athletes on Twitter: A case study. *International Journal of Sport Communication*, 3(4), 501-514.
- Pegoraro, A., & Jinnah, N. (2012). Tweet 'em and reap 'em: The impact of professional athletes' use of Twitter on current and potential sponsorship opportunities. *Journal of Brand Strategy*, 1(1), 85-97.
- Perkins, D. F., Jacobs, J. E., Barber, B. L., & Eccles, J. S. (2004). Childhood and adolescent sports participation as predictors of participation in sports and physical fitness activities during young adulthood. *Youth & Society*, 35(4), 495-520.
- Pettersson, S., Ekström, M. P., & Berg, C. M. (2012). The food and weight combat. A problematic fight for the elite combat sports athlete. *Appetite*, 59(2), 234-242.
- Piatkowski, T. M., White, K. M., Hides, L. M., & Obst, P. L. (2020). Australia's Adonis: Understanding what motivates young men's lifestyle choices for enhancing their appearance. *Australian Psychologist*, 55(2), 156-168.

- Piercy, K. L., Troiano, R. P., Ballard, R. M., Carlson, S. A., Fulton, J. E., Galuska, D. A., George, S. M., & Olson, R. D. (2018). The physical activity guidelines for Americans. *Jama*, *320*(19), 2020-2028.
- Pietiläinen, K. H., Kaprio, J., Borg, P., Plasqui, G., Yki-Järvinen, H., Kujala, U. M., Rose, R. J., Westerterp, K. R., & Rissanen, A. (2008). Physical inactivity and obesity: a vicious circle. *Obesity*, *16*(2), 409-414.
- Pietiläinen, K. H., Kaprio, J., Borg, P., Plasqui, G., Yki-Järvinen, H., Kujala, U. M., ... & Rissanen, A. (2008). Physical inactivity and obesity: a vicious circle. *Obesity*, *16*(2), 409-414.
- Piggin, J. (2019). *The Politics of Physical Activity*. Routledge.
- Piggin, J. (2020). What is physical activity? A holistic definition for teachers, researchers and policy makers. *Frontiers in Sports and Active Living*, *2*, 72.
- Plasqui, G., Bonomi, A. G., & Westerterp, K. R. (2013). Daily physical activity assessment with accelerometers: new insights and validation studies. *Obesity Reviews*, *14*(6), 451-462.
- Pocock, M., & Skey, M. (2022). 'You feel a need to inspire and be active on these sites otherwise... people won't remember your name': Elite female athletes and the need to maintain 'appropriate distance' in navigating online gendered space. *New Media & Society*, *0*(0).
- Potwarka, L. R., Drewery, D., Snelgrove, R., Havitz, M. E., & Mair, H. (2018). Modeling a demonstration effect: the case of spectators' experiences at 2015 Pan Am Games' track cycling competitions. *Leisure Sciences*, *40*(6), 578-600.
- Potwarka, L. R., Snelgrove, R., Wood, L., Teare, G., & Wigfield, D. (2020). Understanding demonstration effects among youth sport spectators: cognitive and affective explanations. *Sport, Business and Management: An International Journal*, *10*(2), 187-206.

- Pressler, A., & Niebauer, J. (Eds.). (2020). *Textbook of Sports and Exercise Cardiology* (pp. 3-15). Cham, Switzerland: Springer.
- Rafa Nadal [@rafaelnadal]. (n.d.). Posts [Rafa Nadal]. Instagram. Retrieved June 5, 2022 from <https://www.instagram.com/rafaelnadal/>
- Raggatt, M., Wright, C. J., Carrotte, E., Jenkinson, R., Mulgrew, K., Prichard, I., & Lim, M. S. (2018). "I aspire to look and feel healthy like the posts convey": engagement with fitness inspiration on social media and perceptions of its influence on health and wellbeing. *BMC Public Health*, 18(1), 1-11.
- Ramadani, V., Demiri, A., & Saiti-Demiri, S. (2014). Social media channels: The factors that influence the behavioural intention of customers. *International Journal of Business and Globalisation*, 12(3), 297-314.
- Rehman, A. A., & Alharthi, K. (2016). An introduction to research paradigms. *International Journal of Educational Investigations*, 3(8), 51-59.
- Reichardt, C. S. (2010). Standard deviation. *The Corsini Encyclopedia of Psychology*, 1-1.
- Reid, H. (2017). Athletes as heroes and role models: An ancient model. *Sport, Ethics and Philosophy*, 11(1), 40-51.
- Reiss, S. (2012). Intrinsic and extrinsic motivation. *Teaching of Psychology*, 39(2), 152-156.
- Rennie, K. L., Hemingway, H., Kumari, M., Brunner, E., Malik, M., & Marmot, M. (2003). Effects of moderate and vigorous physical activity on heart rate variability in a British study of civil servants. *American Journal of Epidemiology*, 158(2), 135-143.
- 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, 101562.
- Roth, A., & Zawadzki, T. (2018). Instagram as a tool for promoting superfood products. *Annals of Marketing Management and Economics*, 4(1), 101-113.

- Rowe, D. A., Mahar, M. T., Raedeke, T. D., & Lore, J. (2004). Measuring physical activity in children with pedometers: Reliability, reactivity, and replacement of missing data. *Pediatric Exercise Science, 16*(4), 343-354.
- Ruihley, B. J., Runyan, R. C., & Lear, K. E. (2010). The use of sport celebrities in advertising: A replication and extension. *Sport Marketing Quarterly, 19*(3), 132.
- Sadeghi, S., & Leng, H. K. (2021). Self-presentation of Iranian football players on Instagram during the 2018 World Cup. *Soccer & Society, 22*(5), 502-510.
- Sanderson, J. (2008). The blog is serving its purpose: Self-presentation strategies on 38pitches.com. *Journal of Computer-Mediated Communication, 13*(4), 912-936.
- Sanderson, J., & Emmons, B. (2014). Extending and withholding forgiveness to Josh Hamilton: Exploring forgiveness within parasocial interaction. *Communication & Sport, 2*(1), 24-47.
- 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.
- Santarossa, S., Coyne, P., Lisinski, C., & Woodruff, S. J. (2019). #fitspo on Instagram: A mixed-methods approach using Netlytic and photo analysis, uncovering the online discussion and author/image characteristics. *Journal of Health Psychology, 24*(3), 376-385.
- Sassenberg, A. (2015). Effects of sport celebrity transgressions: An exploratory study. *Sport Marketing Quarterly, 24*(2), 78-90.
- Sassenberg, A. M., Verreynne, M. L., & Johnson Morgan, M. (2012). A sport celebrity brand image: a conceptual model. *International Journal of Organisational Behaviour, 17*(2), 108-121.

- Sato, S., Ko, Y. J., & Kellison, T. B. (2018). Hot or cold? The effects of anger and perceived responsibility on sport fans' negative word-of-mouth in athlete scandals. *Journal of Global Sport Management*, 3(2), 107-123.
- Sato, S., Ko, Y. J., Park, C., & Tao, W. (2015). Athlete reputational crisis and consumer evaluation. *European Sport Management Quarterly*, 15(4), 434-453.
- Saxena, S., Van Ommeren, M., Tang, K. C., & Armstrong, T. P. (2005). Mental health benefits of physical activity. *Journal of Mental Health*, 14(5), 445-451.
- Schindler, I., Paech, J., & Löwenbrück, F. (2015). Linking admiration and adoration to self-expansion: Different ways to enhance one's potential. *Cognition and Emotion*, 29(2), 292-310.
- Schindler, I., Zink, V., Windrich, J., & Menninghaus, W. (2013). Admiration and adoration: Their different ways of showing and shaping who we are. *Cognition & Emotion*, 27(1), 85-118.
- Schunk, D. H. (2012). Social cognitive theory. In K. R. Harris, S. Graham, T. Urdan, C. B. McCormick, G. M. Sinatra, & J. Sweller (Eds.), *APA Educational Psychology Handbook, Vol. 1. Theories, Constructs, and Critical Issues* (pp. 101–123).
- Segen's Medical Dictionary*. (2011). *Elite athlete*. Retrieved June 2, 2022, from <https://medical-dictionary.thefreedictionary.com/elite+athlete>
- Seiler, R., & Kucza, G. (2017). Source credibility model, source attractiveness model and match-up-hypothesis: An integrated model. *Journal of International Scientific Publications: Economy & Business*, 11.
- Sesso, H. D., Paffenbarger Jr, R. S., & Lee, I. M. (2000). Physical activity and coronary heart disease in men: The Harvard Alumni Health Study. *Circulation*, 102(9), 975-980.
- Shameli, A., Althoff, T., Saberi, A., & Leskovec, J. (2017, April). How gamification affects physical activity: Large-scale analysis of walking challenges in a mobile application.

In *Proceedings of the 26th International Conference on World Wide Web Companion* (pp. 455-463).

- Shapka, J. D., Domene, J. F., Khan, S., & Yang, L. M. (2016). Online versus in-person interviews with adolescents: An exploration of data equivalence. *Computers in Human Behavior, 58*, 361-367.
- Sharpe, E. K. (2006). Resources at the grassroots of recreation: Organizational capacity and quality of experience in a community sport organization. *Leisure Sciences, 28*(4), 385-401.
- Silva, D. A. S., Nahas, M. V., de Sousa, T. F., Del Duca, G. F., & Peres, K. G. (2011). Prevalence and associated factors with body image dissatisfaction among adults in southern Brazil: a population-based study. *Body Image, 8*(4), 427-431.
- Sjödén, H., Wilder-Smith, A., Osman, S., Farooq, Z., & Rocklöv, J. (2020). Only strict quarantine measures can curb the coronavirus disease (COVID-19) outbreak in Italy, 2020. *Eurosurveillance, 25*(13), 2000280.
- Sjörs, C., Bonn, S. E., Lagerros, Y. T., Sjölander, A., & Bälter, K. (2014). Perceived reasons, incentives, and barriers to physical activity in Swedish elderly men. *Interactive Journal of Medical Research, 3*(4), e3191.
- Smith, A. C., & Stewart, B. (2007). The travelling fan: Understanding the mechanisms of sport fan consumption in a sport tourism setting. *Journal of Sport & Tourism, 12*(3-4), 155-181.
- Smith, A. C., Stavros, C., Westberg, K., Wilson, B., & Boyle, C. (2014). Alcohol-related player behavioral transgressions: Incidences, fan media responses, and a harm-reduction alternative. *International Review for the Sociology of Sport, 49*(3-4), 400-416.
- 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.

- Sokolova, K., & Perez, C. (2021). You follow fitness influencers on YouTube. But do you actually exercise? How parasocial relationships, and watching fitness influencers, relate to intentions to exercise. *Journal of Retailing and Consumer Services*, 58, 102276.
- Sotiriadou, K., Shilbury, D., & Quick, S. (2008). The attraction, retention/transition, and nurturing process of sport development: Some Australian evidence. *Journal of Sport Management*, 22(3), 247-272.
- Spry, A., Pappu, R., & Cornwell, T. B. (2011). Celebrity endorsement, brand credibility and brand equity. *European Journal of Marketing*, 45 (6), pp. 882-909.
- Stahl, S. E., An, H. S., Dinkel, D. M., Noble, J. M., & Lee, J. M. (2016). How accurate are the wrist-based heart rate monitors during walking and running activities? Are they accurate enough?. *BMJ Open Sport & Exercise Medicine*, 2(1), e000106.
- Statista (2022). *Distribution of Instagram users worldwide as of April 2022, by age group*. Retrieved February 2, 2022, from <https://www.statista.com/statistics/325587/instagram-global-age-group/>
- Stevens, J. A., Lathrop, A. H., & Bradish, C. L. (2003). " Who is Your Hero?" Implications for Athlete Endorsement Strategies. *Sport Marketing Quarterly*, 12(2).
- Storm, R. K., & Wagner, U. (2015). The Anatomy of the Sports Scandal: An Outline for a Theoretical Contextualization. *International Journal of Sport Communication*, 8(3).
- Storm, R. K., Nielsen, C. G., & Jakobsen, T. G. (2018). Can international elite sport success trickle down to mass sport participation? Evidence from Danish team handball. *European Journal of Sport Science*, 18(8), 1139-1150.
- Stuckey, H. L. (2015). The second step in data analysis: Coding qualitative research data. *Journal of Social Health and Diabetes*, 3(01), 007-010.
- Suarez-Lledo, V., & Alvarez-Galvez, J. (2021). Prevalence of health misinformation on social media: systematic review. *Journal of Medical Internet Research*, 23(1), e17187.

- Sukamolson, S. (2007). Fundamentals of quantitative research. *Language Institute Chulalongkorn University, 1*(3), 1-20.
- Sutton, W. A., McDonald, M. A., Milne, G. R., & Cimperman, J. (1997). Creating and fostering fan identification in professional sports. *Sport Marketing Quarterly, 6*, 15-22.
- Sutula, V. (2018). General definition of the concept sports. *Journal of Physical Fitness, Medicine & Treatment in Sports, 4*(4), 8-9.
- Swann, C., Moran, A., & Piggott, D. (2015). Defining elite athletes: Issues in the study of expert performance in sport psychology. *Psychology of Sport and Exercise, 16*, 3-14.
- Sylvia, L. G., Bernstein, E. E., Hubbard, J. L., Keating, L., & Anderson, E. J. (2014). A practical guide to measuring physical activity. *Journal of the Academy of Nutrition and Dietetics, 114*(2), 199.
- Teixeira, P. J., Silva, M. N., Mata, J., Palmeira, A. L., & Markland, D. (2012). Motivation, self-determination, and long-term weight control. *International Journal of Behavioral Nutrition and Physical Activity, 9*(1), 1-13.
- Thanh, N. C., & Thanh, T. T. (2015). The interconnection between interpretivist paradigm and qualitative methods in education. *American Journal of Educational Science, 1*(2), 24-27.
- Thomson, M. (2006). Human brands: Investigating antecedents to consumers' strong attachments to celebrities. *Journal of Marketing, 70*(3), 104-119.
- Thrash, T. M., & Elliot, A. J. (2003). Inspiration as a psychological construct. *Journal of Personality and Social Psychology, 84*(4), 871.
- Tiggemann, M., & Zaccardo, M. (2015). "Exercise to be fit, not skinny": The effect of fitpiration imagery on women's body image. *Body Image, 15*, 61-67.

- Till, B. D., & Busler, M. (2000). The match-up hypothesis: Physical attractiveness, expertise, and the role of fit on brand attitude, purchase intent and brand beliefs. *Journal of Advertising*, 29(3), 1-13.
- Trost, S. G., Owen, N., Bauman, A. E., Sallis, J. F., & Brown, W. (2002). Correlates of adults' participation in physical activity: review and update. *Medicine & Science in Sports & Exercise*, 34(12), 1996-2001.
- Tudor-Locke, C., & Lutes, L. (2009). Why do pedometers work?. *Sports Medicine*, 39(12), 981-993.
- Tudor-Locke, C., Williams, J. E., Reis, J. P., & Pluto, D. (2002). Utility of pedometers for assessing physical activity. *Sports Medicine*, 32(12), 795-808.
- Tudor-Locke, C., Williams, J. E., Reis, J. P., & Pluto, D. (2004). Utility of pedometers for assessing physical activity. *Sports Medicine*, 34(5), 281-291.
- Turner, G. (2013). *Understanding celebrity*. Sage: London.
- Tzoumaka, E., Tsiotsou, R. H., & Siomkos, G. (2016). Delineating the role of endorser's perceived qualities and consumer characteristics on celebrity endorsement effectiveness. *Journal of Marketing Communications*, 22(3), 307-326.
- Uher, J. (2016). What is behaviour? And (when) is language behaviour? A metatheoretical definition. *Journal for the Theory of Social Behaviour*, 46(4), 475-501.
- Vallerand, R. J., Ntoumanis, N., Philippe, F. L., Lavigne, G. L., Carbonneau, N., Bonneville, A., Lagacé-Labonté, C., & Maliha, G. (2008, October). On passion and sports fans: A look at football. *Journal of Sports Sciences*, 26(12), 1279–1293.
<https://doi.org/10.1080/02640410802123185>
- Van de Ven, N. (2017). Envy and admiration: Emotion and motivation following upward social comparison. *Cognition and Emotion*, 31(1), 193-200.

- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2009). Leveling up and down: The experiences of benign and malicious envy. *Emotion, 9*(3), 419.
- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2011). Why envy outperforms admiration. *Personality and Social Psychology Bulletin, 37*(6), 784-795.
- Van Lankveld, W., Linskens, F., & Stolwijk, N. (2021). Motivation for physical activity: Validation of the Dutch version of the Physical Activity and Leisure Motivation Scale (PALMS). *International Journal of Environmental Research and Public Health, 18*(10), 5328.
- Van Tuyckom, C., Scheerder, J., & Bracke, P. (2010). Gender and age inequalities in regular sports participation: A cross-national study of 25 European countries. *Journal of Sports Sciences, 28*(10), 1077-1084.
- Vanhees, L., Lefevre, J., Philippaerts, R., Martens, M., Huygens, W., Troosters, T., & Beunen, G. (2005). How to assess physical activity? How to assess physical fitness?. *European Journal of Preventive Cardiology, 12*(2), 102-114.
- Vaterlaus, J. M., Patten, E. V., Roche, C., & Young, J. A. (2015). # Gettinghealthy: The perceived influence of social media on young adult health behaviors. *Computers in Human Behavior, 45*, 151-157.
- Veal, A. J., Toohey, K., & Frawley, S. (2019). Sport participation, international sports events and the 'trickle-down effect'. *Journal of Policy Research in Tourism, Leisure and Events, 11*(sup1), s3-s7.
- Velavan, T. P., & Meyer, C. G. (2020). The COVID-19 epidemic. *Tropical Medicine & International Health, 25*(3), 278.
- Verburgh, L., Scherder, E. J. A., Van Lange, P. A. M., & Oosterlaan, J. (2016). The key to success in elite athletes? Explicit and implicit motor learning in youth elite and non-elite soccer players. *Journal of Sports Sciences, 34*(18), 1782-1790.

- Vergeer, M., & Mulder, L. (2019). Football players' popularity on Twitter explained: Performance on the pitch or performance on Twitter?. *International Journal of Sport Communication*, 12(3), 376-396.
- Vescio, J., Wilde, K., & Crosswhite, J. J. (2005). Profiling sport role models to enhance initiatives for adolescent girls in physical education and sport. *European Physical Education review*, 11(2), 153-170.
- Villanti, A. C., Johnson, A. L., Ilakkuvan, V., Jacobs, M. A., Graham, A. L., & Rath, J. M. (2017). Social media use and access to digital technology in US young adults in 2016. *Journal of Medical Internet Research*, 19(6), e7303.
- Wang, S. W., & Scheinbaum, A. C. (2018). Enhancing brand credibility via celebrity endorsement: Trustworthiness trumps attractiveness and expertise. *Journal of Advertising Research*, 58(1), 16-32.
- Warburton, D. E., Nicol, C. W., & Bredin, S. S. (2006). Health benefits of physical activity: the evidence. *Cmaj*, 174(6), 801-809.
- Ward, P., McKenzie, T. L., Cohen, D., Evenson, K. R., Golinelli, D., Hillier, A., Lapham, S. C., & Williamson, S. (2014). Peer Reviewed: Physical Activity Surveillance in Parks Using Direct Observation. *Preventing Chronic Disease*, 11.
- Weber, S., Olsen, M., & Martiny, S. E. (2022). Effects of Instagram sports posts on the athletic motivation of female elite athletes: Do they inspire or backfire?. *Psychology of Sport and Exercise*, 58, 102080.
- Weed, M. (2009). The potential of the demonstration effect to grow and sustain participation in sport. *Review Paper for Sport England*. Canterbury Christ Church University: Centre for Sport, Physical Education & Activity Research (SPEAR).
- Welch, A. S., & Tschampl, M. (2012). Something to shout about: a simple, quick performance enhancement technique improved strength in both experts and novices. *Journal of Applied Sport Psychology*, 24(4), 418-428.
- Welk, G. (2002). *Physical activity assessments for health-related research*. Human Kinetics.

- Welk, G. J., Corbin, C. B., & Dale, D. (2000). Measurement issues in the assessment of physical activity in children. *Research Quarterly for Exercise and Sport*, 71(sup2), 59-73.
- Welker, K., Krysiuk, A., Philpot, S., Nabors, L., Goffena, J., Bernard, A., & Vidourek, R. (2019). An evaluation of fitspiration viewing and exercise behavior in college students. *The Journal of Social Media in Society*, 8(2), 51-62.
- Westerterp, K. R. (2009). Assessment of physical activity: a critical appraisal. *European Journal of Applied Physiology*, 105(6), 823-828.
- Wicker, P., & Frick, B. (2016). The inspirational effect of sporting achievements and potential role models in football: A gender-specific analysis. *Managing Sport and Leisure*, 21(5), 265-282.
- Wicker, P., & Sotiriadou, P. (2013). The trickle-down effect: What population groups benefit from hosting major sport events. *International Journal of Event Management Research*, 8(2), 25-41.
- Willey, J. Z., Moon, Y. P., Kulick, E. R., Cheung, Y. K., Wright, C. B., Sacco, R. L., & Elkind, M. S. (2017). Physical inactivity predicts slow gait speed in an elderly multi-ethnic cohort study: The Northern Manhattan Study. *Neuroepidemiology*, 49(1-2), 24-30.
- Williams, S. L., & French, D. P. (2011). What are the most effective intervention techniques for changing physical activity self-efficacy and physical activity behaviour—and are they the same?. *Health Education Research*, 26(2), 308-322.
- Willig, C. (2013). *EBOOK: introducing qualitative research in psychology*. McGraw-hill education (UK).
- Witkemper, C., Lim, C. H., & Waldburger, A. (2012). Social media and sports marketing: Examining the motivations and constraints of Twitter users. *Sport Marketing Quarterly*, 21(3).

- World Health Organization (2020). *Physical activity*. Retrieved January 21, 2022, from <https://www.who.int/news-room/fact-sheets/detail/physical-activity>
- Wu, C. S. (2015). A study on consumers' attitude towards brand image, athletes' endorsement, and purchase intention. *International Journal of Organizational Innovation*, 8(2).
- Yancey, A. K., Grant, D., Kurosky, S., Kravitz-Wirtz, N., & Mistry, R. (2011). Role modeling, risk, and resilience in California adolescents. *Journal of Adolescent Health*, 48(1), 36-43.
- Young, M. D., Plotnikoff, R. C., Collins, C. E., Callister, R., & Morgan, P. J. (2014). Social cognitive theory and physical activity: a systematic review and meta-analysis. *Obesity Reviews*, 15(12), 983-995.
- Yuan, C. L., Kim, J., & Kim, S. J. (2016). Parasocial relationship effects on customer equity in the social media context. *Journal of Business Research*, 69(9), 3795-3803.
- Zeren, D., & Gökdağlı, N. (2020). Influencer versus celebrity endorser performance on Instagram. In *Strategic Innovative Marketing and Tourism* (pp. 695-704). Springer, Cham.
- Zhou, L., & Whitla, P. (2013). How negative celebrity publicity influences consumer attitudes: The mediating role of moral reputation. *Journal of Business Research*, 66(8), 1013-1020.
- Zuckerman, O., & Gal-Oz, A. (2014). Deconstructing gamification: evaluating the effectiveness of continuous measurement, virtual rewards, and social comparison for promoting physical activity. *Personal and Ubiquitous Computing*, 18(7), 1705-1719.

Appendices

Appendix A

Information sheet

Title of study: Elite athletes on Instagram, how can they inspire physical activity participation in young adults?

Researcher: Daniel Papadopoulos

About the project:

This project aims to explore the motives of young adults behind following elite athletes on Instagram and what type of content posted by elite athletes is appealing.

Your rights as a participant:

As a participant you have agreed to take part in this study by signing a consent form. Your data and identity will not be shared with any third parties, and you will remain anonymous in the official publication of the study. As a participant in this study, you have the right to withdraw at any time without any form of justification.

Why have you been chosen?

This study's sample group is defined by two different factors, and you are eligible to participate if you are aged between 18 and 34 and use Instagram.

The benefits of taking part in the study:

Your participation will be highly appreciated and will benefit a field of study with limited literature. You will not incur any financial cost by taking part in the study.

The risks of taking this study:

While one of the main themes is physical activity, this study does not involve any form of physical activity, so there will be no direct health risks. No sensitive questions will be asked during the interviews.

Appendix B: Consent Form

CONSENT FORM FOR PARTICIPATION IN RESEARCH INTERVIEW

By signing the following consent form, you agree to participate in a research project conducted by master's student Daniel Papadopoulos who is currently studying at the Universidade Catolica Portuguesa Lisboa in the faculty of Human Sciences.

- 1.** I have received sufficient information about this research project and understand my role in it. The purpose of my participation as an interviewee in this project and the future processing of my personal data has been explained to me and are clear.
- 2.** My participation in this project is completely voluntary. There is no explicit or implicit coercion whatsoever to participate.
- 3.** Participation involves being interviewed by researcher Daniel Papadopoulos from the Universidade Catolica Portuguesa. The interview will last approximately 20 minutes. I consent to the researcher taking notes during the interview. I also consent to the recording of the interview and subsequent dialogue by audio/video. It is clear to me that in case I do not want the interview and dialogue to be taped I am fully entitled to withdraw from participation.
- 4.** I have the right not to answer questions. If I feel uncomfortable in any way during the interview session, I have the right to withdraw from the interview and ask that the data collected prior to the withdrawal be deleted.
- 5.** I have been given the explicit guarantee that the researcher will not identify me by name or function in any reports using information obtained from this interview, that my confidentiality as a participant in this study remains secure. Personal data will be processed in full compliance with the EUI's Data Protection Policy.

6. I was assured that this research project has been reviewed and approved by the ethics committee of Universidade Catolica Portuguesa.

7. I have carefully read and fully understood the points and statements on this form. All my questions were answered to my satisfaction, and I voluntarily agree to participate in this study.

8. I obtained a copy of this consent form co-signed by the interviewer.

Signature of the participant _____ **Date** _____

Signature of the researcher _____ **Date** _____

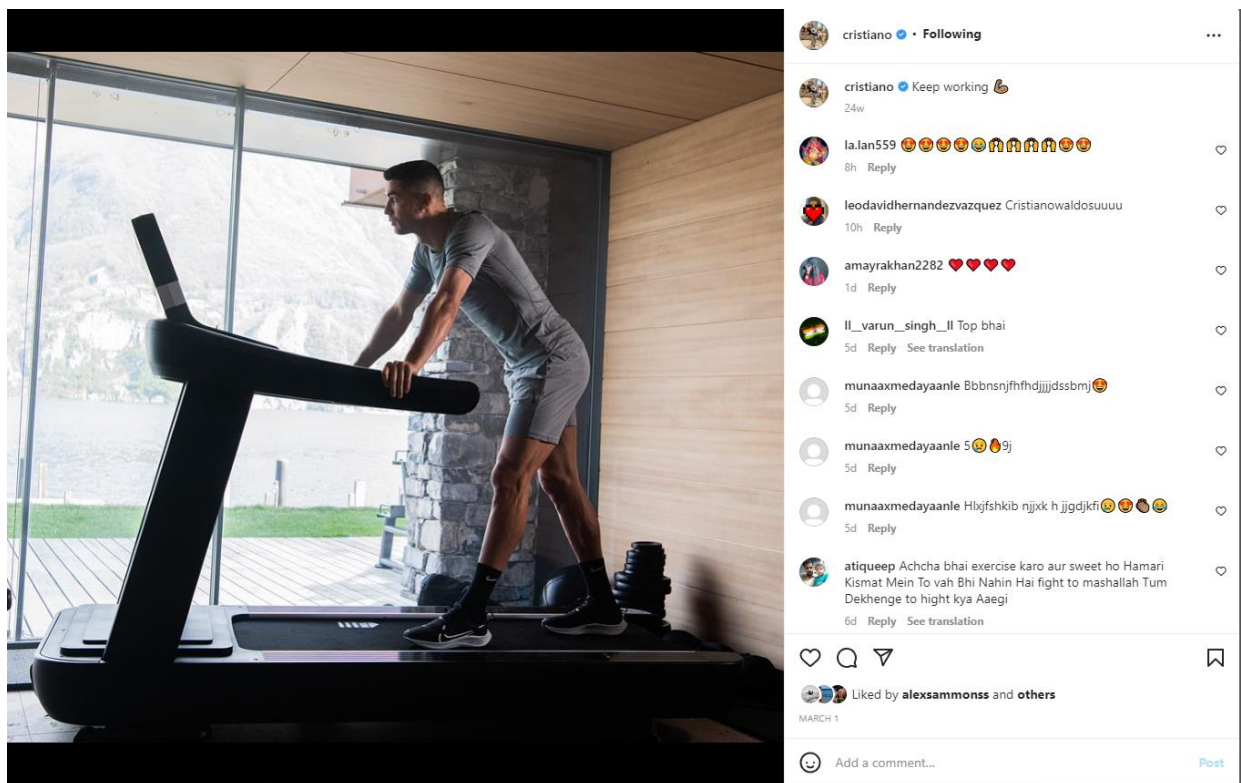
For further information or questions, please contact Daniel Papadopoulos through email at ratchetdani@gmail.com or WhatsApp at +4795778768.

Appendix C: Interview script

<p>Demographics</p>	<ul style="list-style-type: none"> • How old are you? • Male/Female/Other? • Ethnicity? • Current occupation? • What is your level of education?
<p>Warm up questions</p>	<ul style="list-style-type: none"> • Can you tell me about your interests towards health, exercise, and sports? • What are your main reasons for using Instagram?
<p>Physical Activity</p>	<ul style="list-style-type: none"> • In a typical week, on how many days do you take part in physical activity do sports, fitness or recreational (leisure) activities? • How much time (in minutes) do you spend doing sports, fitness or recreational (leisure) activities on a typical day? • What form does this usually take? • To what extent are you satisfied with your current levels of activity? Why?
<p>Inspiration and behavioural intention</p>	<ul style="list-style-type: none"> • Which active elite athletes do you follow on Instagram? Which sports do they take part in? • What are your main reasons for following elite athletes on Instagram? • How many minutes per day on an average day do you use Instagram specifically to follow sports and elite athletes? • Can you think of a few reasons why elite athletes can inspire people to take part in physical activity? • What type of content posted by elite athletes do you personally find inspirational/motivational? • Can you remember a post you personally find motivational/inspirational posted by an elite athlete? • Have you previously increased your physical activity levels due to Instagram content posted by elite athletes?

	<ul style="list-style-type: none"> • Have you previously started with a new type of physical activity (e.g, sport) due to Instagram content posted by elite athletes? • Do you compare your physical appearance and technical skills to elite athletes on Instagram? Why?
Active elite athletes	<ul style="list-style-type: none"> • Who is your favourite active elite athlete? Why? • Do you consider any elite athletes as your role model? Why? • Can you think of any negatives to having elite athletes as role models? • What do you expect from elite athletes in general but also on social media? (e.g., behaviour on social media, involvement in social causes)

Appendix D. Example of inspirational post provided by participant 15.



Appendix E. Duration of Instagram use among the participants.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-15 minutes per day.	20	11.0	11.0	11.0
	15-30 minutes per day.	33	18.1	18.1	29.1
	30-45 minutes per day.	37	20.3	20.3	49.5
	45-60 minutes per day.	37	20.3	20.3	69.8
	60-75 minutes per day.	41	22.5	22.5	92.3
	Over 75 minutes per day.	14	7.7	7.7	100.0
	Total	182	100.0	100.0	

Appendix F. Duration of a physical activity session among the participants of the sample.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-30 minutes.	65	35.7	35.7	35.7
	30-60 minutes.	81	44.5	44.5	80.2
	60-90 minutes.	31	17.0	17.0	97.3
	90+ minutes.	5	2.7	2.7	100.0
	Total	182	100.0	100.0	

Appendix G. Frequency of physical activity sessions per week among the participants.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Once a week.	24	13.2	13.2	13.2
	Two to three times a week.	82	45.1	45.1	58.2
	Four to five times a week.	40	22.0	22.0	80.2
	Five to six times a week.	23	12.6	12.6	92.9
	Seven times a week.	13	7.1	7.1	100.0
	Total	182	100.0	100.0	

Appendix H. Participants' view towards physical activity.

		General questions - Do you follow active elite athletes on Instagram?			
		N	Mean	Std. Deviation	Std. Error Mean
Attitude towards physical activity - Overall my attitude towards physical activity is favorable.	Yes	119	5.72	1.207	.111
	No	63	5.44	1.292	.163

Appendix I. Reasons for using Instagram

Group Statistics

		General questions - Do you follow active elite athletes on Instagram?			
		N	Mean	Std. Deviation	Std. Error Mean
I use Instagram - To interact with different types of people (e.g., celebrities).	Yes	119	4.71	1.575	.144
	No	63	3.97	1.805	.227
I use Instagram - To follow elite athletes.	Yes	119	4.64	1.500	.137
	No	63	1.97	1.231	.155
I use Instagram - To get updates on close friends and family.	Yes	119	5.92	1.094	.100
	No	63	5.70	1.603	.202
I use Instagram - To keep in touch with friends and family far away.	Yes	119	5.91	1.255	.115
	No	63	5.52	1.605	.202
I use Instagram - To know about things that are happening around me.	Yes	119	5.87	.999	.092
	No	63	5.41	1.738	.219
I use Instagram - To connect/meet with people who share similar interest.	Yes	119	5.11	1.472	.135
	No	63	4.43	1.973	.249
I use Instagram - Because people around me use Instagram.	Yes	119	4.62	1.642	.150
	No	63	4.33	1.901	.239
I use Instagram - To browse photos related to my interests.	Yes	119	5.72	1.142	.105
	No	63	5.59	1.593	.201
I use Instagram - To browse a variety of fancy photos.	Yes	119	4.93	1.471	.135
	No	63	4.79	1.628	.205
I use Instagram - To browse daily lives of people all over the world.	Yes	119	4.97	1.570	.144
	No	63	4.32	1.702	.214
I use Instagram - To browse products related to my interests.	Yes	119	4.81	1.585	.145
	No	63	4.30	1.775	.224
I use Instagram - To browse daily lives of celebrities.	Yes	119	4.62	1.636	.150
	No	63	3.33	1.867	.235
I use Instagram - To record daily events through photos.	Yes	119	4.79	1.736	.159
	No	63	4.29	1.963	.247
I use Instagram - To create my personal space.	Yes	119	4.82	1.640	.150
	No	63	4.32	1.999	.252
I use Instagram - To express my actual self.	Yes	119	4.57	1.773	.163
	No	63	4.16	1.944	.245
I use Instagram - To be noticed by others.	Yes	119	4.13	1.818	.167
	No	63	3.75	1.967	.248
I use Instagram - To show off.	Yes	119	3.81	1.838	.168
	No	63	3.02	1.709	.215
I use Instagram - To relax.	Yes	119	5.05	1.534	.141
	No	63	4.56	1.702	.214
I use Instagram - To escape from reality.	Yes	119	4.66	1.768	.162
	No	63	4.38	1.717	.216
I use Instagram - To feel inspired.	Yes	119	5.23	1.380	.127
	No	63	4.86	1.721	.217
I use Instagram - To feel motivated.	Yes	117	4.86	1.536	.142
	No	63	4.43	1.614	.203

Appendix J. Frequencies of scale item of Instagram use related to friends and family.

General questions - Do you follow active elite athletes on Instagram? * I use Instagram - To get updates on close friends and family. Crosstabulation

Count

		I use Instagram - To get updates on close friends and family.							Total
		Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	
General questions - Do you follow active elite athletes on Instagram?	Yes	1	1	1	7	21	50	38	119
	No	4	1	1	3	10	21	23	63
Total		5	2	2	10	31	71	61	182

Appendix K. Frequencies of scale item of Instagram use related to daily lives of celebrities.

General questions - Do you follow active elite athletes on Instagram? * I use Instagram - To browse daily lives of celebrities. Crosstabulation

Count

		I use Instagram - To browse daily lives of celebrities.							Total
		Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	
General questions - Do you follow active elite athletes on Instagram?	Yes	6	9	14	17	33	28	12	119
	No	16	11	4	13	8	10	1	63
Total		22	20	18	30	41	38	13	182

Appendix L. Reasons for taking part in physical activity.

Group Statistics

		General questions - Do you follow active elite athletes on Instagram?			
		N	Mean	Std. Deviation	Std. Error Mean
I take part in physical activity - Because I want to learn new skills.	Yes	119	5.17	1.440	.132
	No	63	4.92	1.527	.192
I take part in physical activity - Because of health professionals on Instagram (e.g., coaches, personal trainers)	Yes	119	4.13	1.804	.165
	No	63	3.14	1.813	.228
I take part in physical activity - To improve physical appearance.	Yes	119	5.94	1.130	.104
	No	63	5.62	1.313	.165
I take part in physical activity - For enjoyment.	Yes	119	5.73	1.226	.112
	No	63	5.37	1.360	.171
I take part in physical activity - To enjoy a challenge.	Yes	119	5.48	1.234	.113
	No	63	4.79	1.557	.196
I take part in physical activity - Because of my family.	Yes	119	3.77	1.843	.169
	No	63	3.33	1.823	.230
I take part in physical activity - To reduce stress and tension.	Yes	119	5.90	1.108	.102
	No	63	5.56	1.341	.169
I take part in physical activity - To prevent future health problems.	Yes	119	5.78	1.151	.106
	No	63	5.65	1.334	.168
I take part in physical activity - To create opportunities for personal achievements (e.g., goal setting).	Yes	119	5.34	1.166	.107
	No	63	4.67	1.636	.206
I take part in physical activity - To build self-esteem.	Yes	119	5.76	1.221	.112
	No	63	5.32	1.490	.188
I take part in physical activity - To develop mental toughness.	Yes	119	5.82	1.097	.101
	No	63	5.25	1.492	.188
I take part in physical activity - To improve physical fitness.	Yes	119	5.87	.979	.090
	No	63	5.67	1.344	.169
I take part in physical activity - Because of my friends.	Yes	119	4.21	1.677	.154
	No	63	3.81	1.874	.236
I take part in physical activity - Because of fitness influencers on Instagram.	Yes	119	4.13	1.834	.168
	No	63	3.00	1.823	.230
I take part in physical activity - Because of elite athletes on Instagram.	Yes	119	4.07	1.711	.157
	No	63	2.35	1.686	.212
I take part in physical activity - Because of celebrities on Instagram (e.g., actors).	Yes	119	3.75	1.819	.167
	No	63	3.14	1.950	.246

Appendix M. Frequency table for item scale related to reasons for taking part in physical activity related to physical appearance.

I take part in physical activity - To improve physical appearance. * General questions - Do you follow active elite athletes on Instagram? Crosstabulation

Count

		General questions - Do you follow active elite athletes on Instagram?		Total
		Yes	No	
I take part in physical activity - To improve physical appearance.	Strongly disagree	0	2	2
	Disagree	2	1	3
	Somewhat disagree	1	2	3
	Neither agree nor disagree	7	7	14
	Somewhat agree	20	9	29
	Agree	48	26	74
	Strongly agree	41	16	57
Total		119	63	182

Appendix N. Frequency table for item scale related to reasons for taking part in physical activity related to physical fitness.

I take part in physical activity - To improve physical fitness. * General questions - Do you follow active elite athletes on Instagram? Crosstabulation

Count

		General questions - Do you follow active elite athletes on Instagram?		Total
		Yes	No	
I take part in physical activity - To improve physical fitness.	Strongly disagree	0	1	1
	Disagree	1	1	2
	Somewhat disagree	4	2	6
	Neither agree nor disagree	5	5	10
	Somewhat agree	21	13	34
	Agree	58	22	80
	Strongly agree	30	19	49
Total		119	63	182

Appendix O. Reasons for following elite athletes on Instagram.

Group Statistics

General questions - Do you follow active elite athletes on Instagram?		N	Mean	Std. Deviation	Std. Error Mean
Why do you follow active elite athletes on Instagram? - I follow elite athletes on Instagram because it provides quick and easy access to large volumes of athlete information.	Yes	119	5.30	1.624	.150
	No	63	8.00	.000	.047
Why do you follow active elite athletes on Instagram? - I follow elite athletes on Instagram because I get information on what this elite athlete is doing that I can't get elsewhere.	Yes	119	5.23	1.504	.138
	No	63	8.00	.000	.047
Why do you follow active elite athletes on Instagram? - I follow elite athletes on Instagram because I can learn about things happening in the athlete's world.	Yes	119	5.28	1.473	.136
	No	63	8.00	.000	.047
Why do you follow active elite athletes on Instagram? - I follow elite athletes on Instagram because this athlete posts pictures, stories and/or video links of what is going on in his/her personal life.	Yes	119	5.15	1.718	.158
	No	63	8.00	.000	.047
Why do you follow active elite athletes on Instagram? - I follow elite athletes on Instagram because they appear engaging and interactive on Instagram.	Yes	119	5.25	1.426	.131
	No	63	8.00	8.000	.047
Why do you follow active elite athletes on Instagram? - I follow elite athletes on Instagram because I want to know what happens in their personal lives.	Yes	119	5.07	1.767	.163
	No	63	8.00	.000	.047
Why do you follow active elite athletes on Instagram? - I follow elite athletes on Instagram because it offers more in-depth coverage of this elite athlete than traditional media.	Yes	119	5.65	1.434	.132
	No	63	8.00	.000	.047
Why do you follow active elite athletes on Instagram? - I follow elite athletes on Instagram because to hear about new products	Yes	119	4.57	1.897	.175
	No	63	8.00	.000	.047
Why do you follow active elite athletes on Instagram? - I follow elite athletes Instagram account because I feel inspired by their pictures.	Yes	119	5.46	1.381	.127
	No	63	8.00	.000	.174
Why do you follow active elite athletes on Instagram? - I follow elite athlete's Instagram accounts because it provides me with inspiration.	Yes	119	5.54	1.448	.133
	No	63	8.00	.000	.174
Why do you follow active elite athletes on Instagram? - I follow elite athlete's Instagram accounts because it inspires me to participate in physical activity.	Yes	119	5.59	1.503	.138
	No	63	8.00	.000	.174
Why do you follow active elite athletes on Instagram? - I follow elite athlete's Instagram accounts because it inspires me to improve my body shape, tone, or size.	Yes	119	5.51	1.573	.145
	No	63	8.00	.000	.174
Why do you follow active elite athletes on Instagram? - I follow elite athlete's Instagram accounts because it inspires me to exercise to gain muscle/become stronger.	Yes	119	5.48	1.534	.141
	No	63	8.00	.000	.174
Why do you follow active elite athletes on Instagram? - The achievements of elite athletes inspires me to take part in physical activity.	Yes	119	5.49	1.401	.129
	No	63	8.00	.000	.106

Appendix P. Frequencies of behavioural intention related to type of physical activity.

		Physical activity - I have made plans concerning 'what' kind of regular physical activities I am going to engage in as a result of content posted by elite athletes on Instagram.								
		Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree	Not applicable	Total
General questions - Do you follow active elite athletes on Instagram?	Yes	2	10	11	22	35	22	17	0	119
	No	14	0	0	0	0	0	0	63	63

Appendix Q. Frequencies of behaviorual intention related to when a participant will engage in physical activity.

		Physical activity - I have made plans concerning 'when' I am going to engage in regular physical activity as a result of content posted by elite athletes on Instagram.								
		Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree	Not applicable	Total
Yes		8	12	15	20	31	19	14	0	119

Appendix R. Behavioural intention towards physical activity.

Group Statistics

		General questions - Do you follow active elite athletes on Instagram?			
		N	Mean	Std. Deviation	Std. Error Mean
Physical activity - I have previously increased my physical activity participation because of elite athletes.	Yes	119	4.77	1.649	.151
	No	63	3.83	2.531	.319
Physical activity - I have previously participated in a new sport because of elite athletes.	Yes	119	4.61	1.766	.162
	No	63	3.63	2.629	.331
Physical activity - I have made plans concerning 'when' I am going to engage in regular physical activity as a result of content posted by elite athletes on Instagram.	Yes	119	4.43	1.764	.162
	No	63	8.00	.000	.346
Physical activity - I have made plans concerning 'where' I am going to engage in regular physical activity as a result of content posted by elite athletes on Instagram.	Yes	119	4.54	1.755	.161
	No	63	8.00	.000	.349
Physical activity - I have made plans concerning 'what' kind of regular physical activities I am going to engage in as a result of content posted by elite athletes on Instagram.	Yes	119	4.81	1.564	.143
	No	63	8.00	.000	.342
Physical activity - I have made plans concerning 'how' I am going to get to a place to engage in regular physical activity as a result of content posted by elite athletes on Instagram.	Yes	119	4.67	1.668	.153
	No	63	8.00	.000	.348
Physical activity - It is very likely that I will participate in physical activity over a longer period of time because of elite athletes on Instagram.	Yes	119	4.56	1.665	.153
	No	63	8.00	.000	.356

Appendix S. Representation of means of items related to elite athletes as product endorsers.

Group Statistics					
		General questions - Do you follow active elite athletes on Instagram?			
		N	Mean	Std. Deviation	Std. Error Mean
Elite athletes as product endorsers - Elite athletes are expert product endorsers.	Yes	119	5.11	1.561	.143
	No	63	4.54	1.882	.237
Elite athletes as product endorsers - Elite athletes are knowledgeable product endorsers.	Yes	119	4.99	1.623	.149
	No	63	4.52	1.916	.241
Elite athletes as product endorsers - Elite athletes are trustworthy product endorsers.	Yes	119	4.85	1.522	.140
	No	63	4.37	2.058	.259
Elite athletes as product endorsers - Elite athletes are attractive product endorsers.	Yes	119	5.65	1.279	.117
	No	63	5.19	1.795	.226
Elite athletes as product endorsers - It is important that there is a good fit between an elite athlete and a brand when endorsing a product.	Yes	119	5.82	1.338	.123
	No	63	5.56	1.890	.238
Elite athletes as product endorsers - In the future, I am likely to consider buying one of the same products that an elite athlete posted on his/her Instagram.	Yes	119	4.87	1.670	.153
	No	63	4.24	2.220	.280
Elite athletes as product endorsers - In the future, I am likely to consider using one of the same brands that an elite athlete posted on his/her Instagram.	Yes	119	5.11	1.625	.149
	No	63	4.32	2.139	.269
Elite athletes as product endorsers - In the future, I am likely to try one of the same products that an elite athlete posted on his/her Instagram.	Yes	119	4.93	1.544	.142
	No	63	4.16	2.164	.273
Elite athletes as product endorsers - In the future, I am likely to try one of the same brands that an elite athlete posted on his/her Instagram.	Yes	119	5.13	1.387	.127
	No	63	4.27	2.201	.277

Appendix T. Frequency table of behavioural intent product item.

General questions - Do you follow active elite athletes on Instagram? * Elite athletes as product endorsers - In the future, I am likely to try one of the same products that an elite athlete posted on his/her Instagram. Crosstabulation

Count

		Elite athletes as product endorsers - In the future, I am likely to try one of the same products that an elite athlete posted on his/her Instagram.							Total
		Strongly Disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree	
General questions - Do you follow active elite athletes on Instagram?	Yes	5	4	9	20	39	30	12	119
	No	11	4	4	26	13	5	0	63
Total		16	8	13	41	48	31	12	182

Appendix U. Frequency table of behavioural intent brands items.

General questions - Do you follow active elite athletes on Instagram? * Elite athletes as product endorsers - In the future, I am likely to try one of the same brands that an elite athlete posted on his/her Instagram. Crosstabulation

Count

		Elite athletes as product endorsers - In the future, I am likely to try one of the same brands that an elite athlete posted on his/her Instagram.							Total
		Strongly Disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree	
General questions - Do you follow active elite athletes on Instagram?	Yes	4	2	6	16	46	26	19	119
	No	11	4	3	24	14	6	1	63
Total		15	6	9	35	56	32	19	182

Appendix V. Athlete performance and behavioural intent means.

Group Statistics					
General questions - Do you follow active elite athletes on Instagram?		N	Mean	Std. Deviation	Std. Error Mean
Imagine you are watching a top performance of an elite athlete on Instagram. How would you feel? - I would feel inspired by something I saw or experienced.	Yes	119	5.97	.999	.092
	No	63	4.87	1.791	.226
Imagine you are watching a top performance of an elite athlete on Instagram. How would you feel? - I would be inspired to take part in physical activity.	Yes	119	5.82	1.135	.104
	No	63	4.68	1.891	.238
Imagine you are watching a top performance of an elite athlete on Instagram. How would you feel? - I would experience inspiration.	Yes	119	5.83	.924	.085
	No	63	5.05	1.611	.203
Imagine you are watching a top performance of an elite athlete on Instagram. How would you feel? - I would evaluate the performance of the elite athletes.	Yes	119	5.35	1.388	.127
	No	63	4.48	2.007	.253
Imagine you are watching a top performance of an elite athlete on Instagram. How would you feel? - I would picture myself as one of the elite athletes.	Yes	119	4.92	1.720	.158
	No	63	3.90	2.212	.279
Imagine you are watching a top performance of an elite athlete on Instagram. How would you feel? - I would take part in physical activity because of the athlete's performance.	Yes	119	5.13	1.470	.135
	No	63	4.38	2.003	.252
Imagine you are watching a top performance of an elite athlete on Instagram. How would you feel? - I would intend to take part in physical activity because of the athlete's performance.	Yes	119	5.24	1.517	.139
	No	63	4.75	1.796	.226

Appendix W. Frequency table of athlete performance item.

General questions - Do you follow active elite athletes on Instagram? * Imagine you are watching a top performance of an elite athlete on Instagram. How would you feel? - I would feel inspired by something I saw or experienced. Crosstabulation

Count

		Imagine you are watching a top performance of an elite athlete on Instagram. How would you feel? - I would feel inspired by something I saw or experienced.							Total
		Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree	
General questions - Do you follow active elite athletes on Instagram?	Yes	0	1	1	7	22	51	37	119
	No	5	3	2	12	17	19	5	63
Total		5	4	3	19	39	70	42	182

Appendix X. Independent t-test and p-values of behavioural intention items.

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
Imagine you are watching a top performance of an elite athlete on Instagram. How would you feel? - I would be inspired to take part in physical activity.	Equal variances assumed	20.886	<.001	5.046	180	<.001	<.001	1.133	.224	.690	1.576
	Equal variances not assumed			4.357	86.250	<.001	<.001	1.133	.260	.616	1.649
Physical activity - I have previously increased my physical activity participation because of elite athletes.	Equal variances assumed	20.038	<.001	3.046	180	.001	.003	.948	.311	.334	1.562
	Equal variances not assumed			2.686	90.600	.004	.009	.948	.353	.247	1.649
Physical activity - I have previously participated in a new sport because of elite athletes.	Equal variances assumed	20.877	<.001	2.985	180	.002	.003	.979	.328	.332	1.625
	Equal variances not assumed			2.654	92.401	.005	.009	.979	.369	.246	1.711

Appendix Y. Independent t-test and p-values of purchase intention items.

		Levene's Test for Equality of Variances				t-test		
		F	Sig.	t	df	Significance		
						One-Sided p	Two-Sided p	
Elite athletes as product endorsers - In the future, I am likely to try one of the same brands that an elite athlete posted on his/her Instagram.	Equal variances assumed	16.988	<.001	3.210	180	<.001	.002	
	Equal variances not assumed			2.806	88.756	.003	.006	
Elite athletes as product endorsers - In the future, I am likely to try one of the same products that an elite athlete posted on his/her Instagram.	Equal variances assumed	7.269	.008	2.787	180	.003	.006	
	Equal variances not assumed			2.519	96.260	.007	.013	
Elite athletes as product endorsers - In the future, I am likely to consider using one of the same brands that an elite athlete posted on his/her Instagram.	Equal variances assumed	5.344	.022	2.795	180	.003	.006	
	Equal variances not assumed			2.571	100.736	.006	.012	
Elite athletes as product endorsers - In the future, I am likely to consider buying one of the same products that an elite athlete posted on his/her Instagram.	Equal variances assumed	5.686	.018	2.174	180	.016	.031	
	Equal variances not assumed			1.995	100.016	.024	.049	

Appendix Z

Survey Elite Athletes

Q2 How old are you?

- 18-20. (1)
 - 21-25. (2)
 - 26-29. (3)
 - 30-34. (4)
 - 35+ (5)
-

Q3 Which gender do you identify as?

- Male. (1)
 - Female. (2)
 - Non-binary / third gender. (3)
 - Prefer not to say. (4)
 - Other. (5) _____
-

Q4 What is your ethnicity?

- White. (1)
 - Asian. (2)
 - Black. (3)
 - Hispanic. (4)
 - Middle Eastern or North African. (5)
 - Other ethnic group. (6)
-

Q5 What is your highest level of completed education? (BA, MA, PhD)

- High-school. (1)
 - Bachelors degree. (2)
 - Masters degree. (3)
 - PhD. (4)
 - Other. (5) _____
-

Q6 What is your current occupation?

- Student. (1)
- Employed. (2)
- Unemployed. (4)
- Other. (3) _____

End of Block: Default Question Block

Start of Block: Block 7

Q7 General questions

	Yes (1)	No (2)
Do you use Instagram? (1)	<input type="radio"/>	<input type="radio"/>
Do you follow active elite athletes on Instagram? (2)	<input type="radio"/>	<input type="radio"/>

Q8 If you answered "No" to following elite athletes on Instagram, please specify why.

End of Block: Block 7

Start of Block: Block 11

Q9 I use Instagram

- 0-15 minutes per day. (1)
- 15-30 minutes per day. (2)
- 30-45 minutes per day. (3)
- 45-60 minutes per day. (4)
- 60-75 minutes per day. (5)
- Over 75 minutes per day. (6)

End of Block: Block 11

Start of Block: Block 1

Q10 During a normal day, I take part in physical activity for

- 0-30 minutes. (1)
 - 30-60 minutes. (2)
 - 60-90 minutes. (3)
 - 90+ minutes. (4)
-

Q11 During a normal week, I take part in physical activity

- Once a week. (1)
 - Two to three times a week. (2)
 - Four to five times a week. (3)
 - Five to six times a week. (4)
 - Seven times a week. (5)
-

Q12 Attitude towards physical activity

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Overall my attitude towards physical activity is favorable. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q13 I use Instagram

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
To interact with different types of people (e.g., celebrities). (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To follow elite athletes. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To get updates on close friends and family. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To keep in touch with friends and family far away. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To know about things that are happening around me. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To
connect/meet
with people
who share
similar
interest. (5)



Because
people
around me
use
Instagram.
(6)



Q14 I use Instagram

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
To browse photos related to my interests. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To browse a variety of fancy photos. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To browse daily lives of people all over the world. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To browse products related to my interests. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To browse daily lives of celebrities. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 I use Instagram

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
To record daily events through photos. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To create my personal space. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To express my actual self. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be noticed by others. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To show off. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To relax. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To escape from reality. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To feel
inspired.
(8)

To feel
motivated.
(9)

Q53 Other reasons for using Instagram

Q16 Why do you follow active elite athletes on Instagram?

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (5)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Not applicable (8)
I follow elite athletes on Instagram because it provides quick and easy access to large volumes of athlete information. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I follow elite athletes on Instagram because I get information on what this elite athlete is doing that I can't get elsewhere. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I follow elite athletes on Instagram because I can learn about things happening in the athlete's world. (3)



I follow elite athletes on Instagram because this athlete posts pictures, stories and/or video links of what is going on in his/her personal life. (4)



I follow elite athletes on Instagram because they appear engaging and interactive on Instagram. (5)



I follow elite athletes on Instagram because I want to know what happens in their personal lives. (6)



I follow elite athletes on Instagram because it offers more in-depth coverage of this elite athlete than traditional media. (7)



To hear
about new
products
(8)



Q17 Why do you follow active elite athletes on Instagram?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree or disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Not applicable (8)
I follow elite athletes Instagram account because I feel inspired by their pictures. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I follow elite athlete's Instagram accounts because it provides me with inspiration. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I follow elite athlete's Instagram accounts because it inspires me to participate in physical activity. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I follow elite athlete's Instagram accounts because it inspires me to improve my body shape, tone, or size. (3)

I follow elite athlete's Instagram accounts because it inspires me to exercise to gain muscle/become stronger. (4)

The achievements of elite athletes inspires me to take part in physical activity. (5)

Q18 Imagine you are watching a top performance of an elite athlete on Instagram. How would you feel?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree or disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I would feel inspired by something I saw or experienced. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be inspired to take part in physical activity. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would experience inspiration. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would evaluate the performance of the elite athletes. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would picture myself as one of the elite athletes. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I would take part in physical activity because of the athlete's performance . (6)

I would intend to take part in physical activity because of the athlete's performance . (7)

Q19 Elite athletes as product endorsers

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree or disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Elite athletes are expert product endorsers. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elite athletes are knowledgeable product endorsers. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elite athletes are trustworthy product endorsers. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elite athletes are attractive product endorsers. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important that there is a good fit between an elite athlete and a brand when endorsing a product. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In the future,
I am likely to
consider
buying one of
the same
products that
an elite
athlete posted
on his/her
Instagram. (5)

In the future,
I am likely to
consider
using one of
the same
brands that an
elite athlete
posted on
his/her
Instagram. (7)

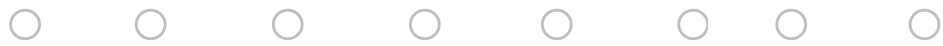
In the future,
I am likely to
try one of the
same
products that
an elite
athlete posted
on his/her
Instagram.
(13)

In the future,
I am likely to
try one of the
same brands
that an elite
athlete posted
on his/her
Instagram.
(14)

Q20 Physical activity

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree or disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Not applicable (8)
I have previously increased my physical activity participation because of elite athletes. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
I have previously participated in a new sport because of elite athletes. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

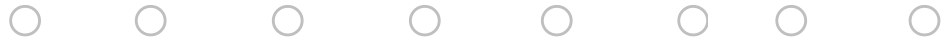
I have made plans concerning 'when' I am going to engage in regular physical activity as a result of content posted by elite athletes on Instagram.
(3)



I have made plans concerning 'where' I am going to engage in regular physical activity as a result of content posted by elite athletes on Instagram.
(4)



I have made plans concerning 'what' kind of regular physical activities I am going to engage in as a result of content posted by elite athletes on Instagram.
(5)



I have made plans concerning 'how' I am going to get to a place to engage in regular physical activity as a result of content posted by elite athletes on Instagram.
(6)



It is very likely that I will participate in physical activity over a longer period of time because of elite athletes on Instagram.
(7)



Q21 I take part in physical activity

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
To improve physical fitness. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To develop mental toughness. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To build self-esteem. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To create opportunities for personal achievements (e.g., goal setting). (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To reduce stress and tension. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To prevent future health problems. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To enjoy a challenge. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For
enjoyment.
(12)

To improve
physical
appearance.
(13)

Q22 I take part in physical activity

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree not disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Because of my family. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because of my friends. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because of fitness influencers on Instagram. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because of elite athletes on Instagram. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because of health professionals on Instagram (e.g., coaches, personal trainers) (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because of celebrities on Instagram (e.g, actors). (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Because I want to learn new skills.
(6)

Q23 Are you motivated to take part in physical activity?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree or disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I am motivated to take part in physical activity on a frequent basis. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am motivated to take part in physical activity because I can motivate myself. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Block 13

Appendix AA: Full interview with participant 15

Speaker 1: Interviewer – Speaker 2: Interviewee

Speaker 1:

How old are you?

Speaker 2:

I am 24.

Speaker 1:

And which gender you identify as?

Speaker 2:

I identify as a male.

Speaker 1:

And what is your ethnicity?

Speaker 2:

White Caucasian.

Speaker 1:

And what is your current occupation?

Speaker 2:

I work in a reinsurance company in London.

Speaker 1:

And what is your highest level of education?

Speaker 2:

A bachelor's degree

Speaker 1:

All right. Let's start off with some general questions before we go more in depth. So here I'm going to ask you about physical activity, it can be anything from walking, running, swimming to surfing. Playing sports with your friends in a park also counts.

So, can you tell me about your interests towards physical activity, health, and exercise in general?

Speaker 2:

Uh, I think it's very good. I think it's very important that people do keep as active as they can. But I think it's important that people do it in a way that they get a little joy out of it. So, whether that's going to the gym or keeping fit through sports or even something as simple as going for walks every day, you know, just with friends or by yourself, just to get away from the desk and stuff.

It just gets you going, keeps you, keeps your heart healthy, keeps you from getting bogged down by, you know, your daily activities, whether that's working from home, working in the city. Yeah, I think it's very important that people get out and exercise is good for your health mentally and physically.

Speaker 1:

Great, thank you. Now, let me ask you this, what are your main reasons for using Instagram?

Speaker 2:

My main reasons for Instagram are probably to message friends and keep up to date on things happening around in the world, sports included. I like to have a mix of things, like from my friends, news or sports sportsmen and women, but also a lot of governing bodies. And quite often, you know, those governing bodies, they put out updates, big announcements of games, events and yeah, that way I keep up to date with any, any sporting stuff.

Speaker 1:

Okay, great. Let's move on from the general questions to more specific questions. So, during a typical week, how many days a week do you take part in physical activity?

Speaker 2:

Any kind of physical activity? Let's see, you know, I've got a walk from the house every day and walk even just go into the office. This involves a couple of minutes, like 15, 20-minute walks to get to the office, which is, you know, on days where I'm not going to the gym means I'm still getting out and I go to I try to actually do a workout 3 to 4 times a week, sometimes 4 to 5.

Speaker 1:

When do you take part in the workout or any type of physical activity for how long in minutes does a typical session last for?

Speaker 2:

A typical session, it's about an hour. But my workouts do vary but yeah, sometimes a bit shorter, sometimes a bit longer. But the average is about an hour, and I try and do that so four or five times a week. But then I also, you know, like when I play golf that takes up 4 hours. But it's not as demanding as you're walking but it's still an activity.

Speaker 1:

Great. So, you mentioned, you know you go to the gym, maybe some walking, but are there any other forms of physical activity that you take part in?

Speaker 2:

I play football once a week. So again, I don't do I don't associate that with being a workout. I think of that as sport with my friends, but is obviously also very good for my health, you know, because it does it's my main form of cardio each week, I'll put it that way. But I also swim here and there. I've got bad back, so I do that to help with that. But also again, as you know, swimming is cardio, so it's good for it's good for all your muscles, good for your heart. And again, doing that has helped with the football and various swimming seven times a week. So once a week in the gym.

Speaker 1:

You've already slightly touched upon this but what are your main reasons for taking part in physical activity?

Speaker 2:

My two main reasons. Just enjoy enjoying playing sports with my friends, really passionate about sport. I love watching sport and I love playing as well, but I like playing it with playing sport with friends. I don't play any sports for any teams. And then the other reason is, is for fitness purposes. You know, I get a lot of satisfaction out of doing a workout and feeling fitter for it, whether that can be as simple is just going for a run is the satisfaction of you know, you're stretching, you know, you sit at a desk all day and then going for a run, you feel like you stretch the muscles in your legs so that they don't sit up just sitting around. But yeah,

again, just, being generally just fitter. Just makes me feel a lot better. So, I feel healthier and feel like I can do more things.

Speaker 1:

Interesting, thank you. Let me ask you this now, to what extent are you satisfied with your current levels of physical activity?

Speaker 2:

It's always it's always up and down. But at the moment, I'm very happy with where things are going because I've started swimming. I've been maybe a dozen times now in the last month, and every time it feels like I'm swimming further and faster and just, yeah, I'm feeling fitter when I when I run. Now I notice that my breathing's a lot better because you build a lot of lung capacity by swimming. So yeah, I'm definitely noticing that when I play football or go for a run at the gym.

Speaker 1:

Nice. So, let's move on to the next theme here. So which active elite athletes do you follow on Instagram and which sports to take part in?

Speaker 2:

I follow a lot of individual athletes, but to not go into all their names. But I follow the UFC, so I follow c fighters, I follow for a lot of golf players, and I follow quite a lot of football players. I'm sure there's probably one or two from most other sports, but in those main three, I follow some athletes from Formula One as well.

Speaker 1:

Great. What are your main reasons for following active elite athletes?

Speaker 2:

A couple of main reasons, I think in every sport, I follow a couple of the real sort of MVP of the sport. And I think it's just because their work ethic and how successful they are in that sport, you know, even compared to other professionals, they're sort of like their league ahead of them. You know, take someone like Lewis Hamilton in Formula One and, you know, no one's achieved what he has in an F1 career, not even Michael Schumacher. And he's, you know, he's considered one of the greatest of all time. So, you know, it's definitely very inspirational and it's also it's following them and getting a bit of an insight. It's interesting to see their work ethic. Um, and it's nice, it's good to see a lot of the behind the scenes. I definitely, I get that a lot of following footballers. Um, you know, to name a couple other Trent Alexander-Arnold from Liverpool, he's quite good on social media. He shows quite a lot of the training and I think it's; you know, you don't see that when you just watch them come out on the pitch. So yeah, seeing a bit of the behind the scenes, you get an idea of what goes into being able to perform at that level.

And that's where I find very interesting. And then the other reason is just because, you know, you root for certain players because you know, they've got good sportsmanship and you know, they've got a good presence on the field. Also, you want to see how they're doing compared to others. So, if you follow a lot of sports people within a lot of players within a single sport, um, you can make your predictions for how the next season is going to go.

Speaker 1:

Interesting, thank you. Let me follow up with another, question, for instance, are you interested in what type of products they use if they endorse a specific product? Do you personally find that interesting?

Speaker 2:

I find it interesting whether or not I but regardless of if I use the product or want to use it, I find it interesting when they market that stuff, when they advertise products, because you know that the main reason for that is because they have the platform and they're getting paid a lot. But at the end of the day, they're looking to sell products that people who follow, you

know, these individual sportsmen and sportswomen. Yeah, they present them with products that they think, oh, if you're a fan of this, this player or this driver, you're probably going to be interested in this product. And I think the marketing very interesting. But yeah, there's definitely been times where I've seen a product that they're advertising, and I've taken more interest in it. I can see why people would get influenced by it.

Speaker 1:

Nice. And if you had to make a guess, a rough guess, how many minutes per day on average do you spend interacting with content posted by any elite athletes? It can be everything from, you know, behind the scenes to matchday preparations.

Speaker 2:

Just on Instagram or can I mention any other social medias?

Speaker 1:

Just on Instagram please.

Speaker 2:

Okay Instagram. Uh, I would definitely say just for sports people 20 minutes a day at least. Some that some days could be a lot. I mean sometimes there's a I follow like the UFC page, sometimes they'll upload a press conference and I'll listen to it through either Instagram or YouTube. So, depending on the day I might spend an hour and a half listening to a press conference because they post it on Instagram. But yeah, they can also be longer than half an hour.

Speaker 1:

Can you think of a few reasons to why elite athletes can inspire people to take part in physical activity through Instagram?

Speaker 2:

Well, like I said before, I think the behind-the-scenes stuff can probably get people going a bit because, you know, when you see them on TV, maybe they come across, you know, they don't seem real. But following them on social media, you can see maybe what goes into their training a bit more. And maybe and sometimes they do their live streaming, don't they? And they talk to fans, and they do Q&A. And I think that just makes the person a bit more relatable. And then, you know, once they become bit more relatable, maybe they're not, you know, might not be so different from yours than it might. You might feel like you can achieve something of what they've achieved by having that insight.

Speaker 1:

Great, so for you personally, what type of content posted by elite athletes on Instagram do you find inspiration and/or motivational for you?

Speaker 2:

Um, it's, it's, it's definitely the training, you know, when it's the training that goes into it behind the scenes, seeing, you know, a lot of the F1 drivers, they'll post when they go to a track, they do they do a whole day's practice. I hope they're qualifying a whole day race and some of the countries they go to the heat that they're driving and they're burning thousands of calories every day for three days. And you'll see on their Instagram that the day before that they're doing a couple of hundred laps in the simulator, and you think they're already getting enough practice as they need to, but they are doing that extra bit, um, but then even something as simple as just seeing some of the football players, you know, doing that. So, the physiotherapists are doing the smaller things like stretching and, and things like that. I would say that plays an important role too.

Speaker 1:

Building upon the previous question. Is there a specific post that you can remember that you found personally inspiring or motivating for you in terms of getting started with physical activity or just in general inspirational?

Speaker 2:

I definitely am not to name names, but I definitely think following footballers, you know, you do see a lot of the physical training on TV. You might see them at the training ground kicking a ball around. But when you follow them personally, you see them back at home. And they a lot of them have home gyms and you see them where they might do a video where they stressed the importance of warming up or stretching or know they'll say, oh, it's important that you get your stretching in because that way, you know, you keep up those the high intensity workouts, you know, rather than just jogging.

So, a lot of footballers do that. But also, with the with the UFC, the UFC guys, you know, there's so much to their sport with the grappling on the ground and all the different forms of martial arts that go into it. You'll see that some days they'll just focus a bit more and then they're more hypertensive or that kickboxing and it's just this those little details it's the is the that little bit of extra effort that they're putting in knowing it's going to pay off. And then you see it pay off and you realize it's because they train harder than the average person.

Speaker 2:

Do you actually want a specific example?

Speaker 1:

Yeah of course. If you have one, I would love to hear it.

Speaker 2:

But I like those that are general types of posts that I would say. But I mean, without recalling a date and specific name, I could probably find one. Send it to you if that would help, I'll check my Instagram in a moment after this.

Speaker 1:

Great, thank you for that. Would you say that you've previously increased your physical activity levels because of elite athletes posting content on Instagram?

Speaker 2:

Yes.

Speaker 1:

And why is that?

Speaker 2:

You know It's definitely motivating to see their content, especially the training. There's been days where you maybe think, oh, I could go to the gym today, I could go tomorrow, and maybe you end up watching you flick through Instagram and you see a couple of posts from elite athletes and you see them going to the gym on their day off and you think, you know, I'm going to go to. There's definitely been times where that's changed my opinion. But then sometimes it's not necessarily them training. It's them accomplishing something. It's, you know, someone putting in a really good performance, maybe watching the golf this weekend. I saw a couple of guys who, you know, they're putting was incredible. And you think, well, I should probably work on my putting. So, yeah, I definitely would say I've been motivated by them to help.

Speaker 1:

Great. Would you say that you have previously started with a new sport because of elite athletes on Instagram?

Speaker 2:

I wouldn't say I've completely started a new sport because of them, but I definitely say that I've taken it to another level because of because of them. Like, for instance, you know, I definitely saw I already played football every week. I've always played the Saturday, Saturday morning. I play football every week. But, you know, there's been times where I've through the influence of someone that I follow an elite sportsman on Instagram, I've maybe seen something about the way that they train or the way that they keep fit. And I feel when I play football, that's how I would like to I'd like to approach it in a similar way. So, there's more they've influenced the existing sports. I'll put it that way.

Speaker 1:

Okay. And have you ever find yourself comparing? Let's say, your technical skills or your physical appearance to elite athletes and Instagram?

Speaker 2:

Yes, for sure.

Speaker 1:

And what was the reason for that?

Speaker 2:

What I mean, certainly. So, since I've started swimming, I follow a couple of swimming athletes and they'll post the videos on technique. And because I'm still getting into that, I feel like my techniques' improving, but it's improving naturally. So just by me swimming, I've never been taught and by following certain pages, they, they often will send on their story. I also follow some swimming pages. They'll repost actual athletes, swimming athletes or Olympians and, and yeah, I'll see the technique and also the fact that I could say the same. So yeah definitely. They a lot of players they'll post, you know, just like a 3-minute video and they'll just do quick tips. And I just suggest, you know, when you're on your short game, a little something you can change, and I'll definitely then take it to the range when I go next and try and work on it.

Speaker 1:

Yeah. All right. So, the last set of questions, we'll be talking about elite athletes who are currently active. So now the big question comes in, who is your favourite elite athlete is currently active and why?

Speaker 2:

Lewis Hamilton.

Speaker 1:

Why is that?

Speaker 2:

That is because there are a lot of reasons. One of the reasons is because I think he's obviously he's a seven-time world champion. He's already the most decorated F1 driver of all time, but he's actually getting a bit older now. And the fact that he can still keep up with everyone to the same extent as when he was when he was younger, you know, his car's not amazing this year, but he is performing at that highest level even though he's getting older.

Speaker 2:

So, I think that's an incredible on its own. But also, what he does away from the sport. I think he of all people, he uses his Instagram or any social media platform. I think he uses it really well whenever there's a big a big concern in the news, he often puts out comments on it. But doesn't it do so much share his own opinion. He's also advising people to stay at home because of the heatwave or COVID. You know he's using his platform to promote good things that, so he uses it in a good way I think. But then also obviously yeah, just the things he's accomplished, you know, his work ethic and how good he is at driving and just how exciting a driving is. It's no one. No one could have done it better.

Speaker 1:

So, when you say there are elite athletes at the same level as Lewis Hamilton, who else would you say comes to mind? It could be in any other sports in terms of work ethic.

Speaker 2:

I think Cristiano Ronaldo. I mean, I know this is probably a bit of an obvious name in football, but again, he's a bit similar. He's, you know, he's one of the most decorated, if not the most decorated footballer of all time. And he's getting older. And I'd take last season when he joined the United. How, how old is he?

Speaker 1:

He's 37 years old now.

Speaker 2:

For a footballer, that's, that's not far off retirement age. And he's turning up and he's winning the matches. And I just think, you know, the amount of people that that is one, one in a million, you know, and can do something like that. It's just it's inspiring.

Speaker 1:

Great. And for you, do you consider any elite athletes as your role models, or you consider them as role models in general?

Speaker 2:

Yeah, I'd say Lewis Hamilton, for the reasons I already mentioned.

Speaker 1:

Okay so from a general point of view, why do you think elite athletes can be role models?

Speaker 2:

I think the way elite athletes just being what they are, naturally, anything but whatever the sport is, whether you like them or not, an elite athlete should let you know they're inspirational just because they, whatever their sport is, they commit to it to the highest level and they commit their fitness. You know, they look after their bodies. They keep in peak condition for their sport, whatever, whatever it is. And yeah, like I said, whether you like them or not, that's you got to respect that. And if everyone had that mentality, you know, everyone would be very healthy and probably get the goals that they are trying to achieve.

Speaker 1:

In that case, can you think of any negative aspects of having elite athletes as role models?

Speaker 2:

Obviously the second you go as a role model overall, not so much having an Instagram platform, but I think from being a role model, I think sometimes because they perform to such a high level as most people can't achieve that. So, I think, you know, some people may be with, you know, see how hard someone has to train to get what they want. And they might put in the most training because they think, oh, I can't do that. But I think you have to look at it with a different mindset. You have to see, you know, if you see someone that you like and admire and you see them accomplish something incredible, you might not be able to do it yourself, but you might be able to do something, you know, to a slightly lower standards, but still very impressive.

So, I think you've got to manage your expectations because they are athletes that what they do but as far as Instagram is concerned, I think I think it's, you know, 90% of the time it's a good thing that they have a platform because they've worked hard to get to where they are. And people, you know, a lot of people enjoy seeing what they do, but, you know, you're always going to get a couple of bad stuff.

The people who maybe don't have they shouldn't know that their opinions are probably best kept to themselves because they might offend people with that platform. But for the most

part, you know, most influencers, they don't do that. They try to post content that the people that follow them are going to appreciate rather than, you know, be hurtful.

Speaker 1:

Okay. So, let's go for the last question here then. What do you expect from elite athletes on Instagram?

Speaker 2:

To be good role models? Um, I think they need to be good role models in almost every, every sense of the word because whether it's the food they're eating or the way they, the way they talk to people, the way they compete, the way they, you know, the way they conduct themselves, they have a lot of followers, and a lot of people are going to see that. And if they behave in a in a positive, healthy way, then that's going to encourage other people to do the same. Yeah.