Celebrity Athlete Endorsement and Social Marketing: Promoting Participation in Sport and Physical Activity

Shima Behnoosh

A thesis submitted to Auckland University of Technology in fulfilment of the requirements for the degree of Doctor of Philosophy (PhD)

2018

School of Sport and Recreation

Auckland University of Technology (AUT)

Primary Supervisor: Dr Michael Naylor

Secondary Supervisor: Assoc. Prof Geoff Dickson

ABSTRACT

The positive effects of sport and physical activity participation are well recognised, from improving physical health and social networks to reducing psychological issues and risky behaviours (e.g., Funk, 2008; Hassmén, Koivula, & Uutela, 2000; Miles, 2007; Penedo & Dahn, 2005; Vella, Cliff, Magee, & Okely, 2014). Despite a wide range of sport and recreation activities in society and the prevalence of campaigns promoting the health benefits of sport and physical activity, participation rates are decreasing among young adults (Barnes & Schoenborn, 2003; Ministry of Health, 2014, 2016; Sport New Zealand, 2013a, 2015; Townsend, Wickramasinghe, Williams, Bhatnagar, & Rayner, 2015). There is a need for effective communication to encourage this generation towards behavioural change from a sedentary to a more active lifestyle. Social marketing campaign effectiveness is critical as it leads to the adoption of prosocial behaviours that are sought (Huhman et al., 2005). Social marketing campaigns promoting sport and physical activity could be more effective if endorsed by a suitable individual. Endorsement is a common promotional strategy which can capture the attention of a target audience and may facilitate a more active lifestyle among young adults.

An endorser's characteristics, lifestyle and personality are important determinants of endorser-product match (Hsu & McDonald, 2002). Therefore, the purpose of this research was to investigate the role of endorsers and their attributes within the context of a social marketing campaign promoting sport and physical activity. A mixed method sequential explanatory design was implemented to investigate participants' attitudes, participation intentions, perception of endorser-campaign fit, and perception of endorser-audience fit. Three related studies were conceived and implemented, each featuring both an experiment and focus groups. The three studies build on one another

insofar as Study 1 was a relatively straightforward exploration of endorsement effectiveness in a sport/physical activity social marketing context, whereas Study 2 and 3 were more narrowly focused on endorser/audience characteristics such as expertise, gender and career status, carried out to generate deeper understanding. A total of 1063 young adults from Auckland University of Technology (AUT) participated in this research.

Study 1 of this thesis was an exploration of the effects of endorsers on young adults' attitudes towards a social marketing advertisement. A pre-test was implemented to select a credible endorser and a social marketing advertisement for use in the experiment. Differences between the experimental and control groups were uncovered through a classical conditioning procedure. Compared to the control group those in the treatment group reported more positive attitudes towards the social marketing advertisement which was attributable to the presence of the endorser alongside the campaign. Psychological involvement to sport was included in the experiment as a covariate but was not significant. Thematic analysis was used in conjunction with data generated from focus groups and findings supported the statistical results of the experiment. This study suggested that an endorsed campaign advertisement promoting sport and physical activity can elicit more favourable attitudes in young adults than an unendorsed campaign advertisement.

Study 2 of this thesis was an investigation of the effects of endorser's expertise and recognition in two campaign contexts (i.e., sport and physical activity). The quantitative phase revealed that celebrity athlete endorsers had a more positive effect on participants' attitudes in comparison with the celebrity non-athlete, unknown expert and unknown non-expert. The intention to participate was also highest for the celebrity athlete endorser group. The perceived fit between the campaign and the celebrity athlete endorser was significantly higher than for the other endorser types. Participation

intention and attitude were not significantly different between the sport versus physical activity campaign contexts. Perceived fit was significantly higher for the sport-based campaign compared to the physical activity campaign, but only for those who were highly involved in sport and physical activity. Thematic analysis of the qualitative data supported the quantitative finding that a sport-based social marketing campaign is more effective when endorsed by a celebrity athlete.

Study 3 of this thesis was an examination of the role of gender and career status of endorsers. The gender of the campaign audience was also explored in this study. The findings revealed that both endorser and audience gender as well as endorser's career status had no significant effect on participants' attitudes and intentions. However, the gender of the endorser did significantly impact perception of gender and career status fits. In addition, participants with higher levels of psychological involvement in sport and physical activity reported heightened perceptions of endorser-campaign fit towards the campaign endorsed by a former athlete as compared to a current athlete. Based on the results of this study it can be concluded that a former female athlete would be an appropriate fit for a campaign promoting sport and physical activity, and specifically for participants who are already psychologically involved in sport or physical activity.

In conclusion, although the use of an endorser within a social marketing setting for promotion of sport and physical activity is beneficial, it is not straightforward. Social marketing practitioners need to consider the expertise, recognition, gender and career status of endorsers as well as the gender of the audience in order to maximise the effect of a campaign targeting young adults.

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ATTESTATION OF AUTHORSHIP

"I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning."

Shima Behnoosh

25 February 2018

CO-AUTHORED WORKS

Behnoosh S., Naylor M., & Dickson, G. (in press). The impact of endorsement on a sport-based social marketing campaign. *International Journal of sport management and Marketing.*

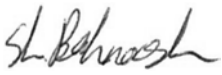
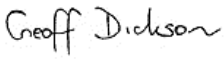
Contribution: (SB 85%, MN 10%, GD 5%)

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.

Contribution: (SB 85%, MN 10%, GD 5%)

Behnoosh S., Naylor M., & Dickson, G. (under review). An exploration of gender and the career status of athlete endorsers in a social marketing context.

Contribution: (SB 85%, MN 10%, GD 5%)

Shima Behnoosh	Michael Naylor	Geoff Dickson
		

ACKNOWLEDGMENTS

First and foremost, great thanks go to my primary supervisor, Michael Naylor, for devoting his time and efforts throughout my studies at Auckland University of Technology. I sincerely appreciate your support and encouragement and helping me to overcome challenges I had throughout this journey. Particular thanks also go to my secondary supervisor, Geoff Dickson. Geoff, you were always approachable and kind. I learnt a lot from your constructive feedback and appreciated your pleasant manner. You gave me a sense of belonging and support in a new country. Thank you!

A very special thanks to my Mum and Dad for their unconditional love and endless support. Thank you, Dad, for giving me the freedom to understand and trust my abilities. You helped me develop bravery and a sense of optimism in my life. Thank you Mum, you made me feel loved no matter where I was in the world. Thanks for your encouragement in every step I took and making me a strong and independent woman. I would also like to thank my siblings, Farshid, Shiva and Sajjad. Thank you for all your encouragement and emotional support along the way. I love you all endlessly!

I would very much like to express my gratitude to over 1000 participants in my three studies. I would also like to thank the other lecturers, staff and students within AUT who made this research project possible. I really appreciate all of you taking time out of your busy schedule and your support for moving this research forward.

And finally, I would like to thank several other amazing people who supported me emotionally and academically during my studies at AUT. True friends who helped me in difficulties and shared their happiness with me. I would like to name and thank David Parker, Katharine Hoskyn, Fahimeh Zaeri, Leila Tayebi, Hamideh Gholizadeh and Richard Ajiee for their kindness and support.

ETHICAL APPROVAL

Ethical approval was granted for all three studies of this research project by Auckland University of Technology Ethics Committee (AUTEC) on 18th June 2015 (see Appendix B). The AUTEC reference for this research was:

- 15/201 Celebrity athlete endorsement and social marketing: Promoting participation in sport and physical activity.

Chapter 1

INTRODUCTION

This chapter outlines the rationale for the research, specifies the purpose of the research, and provides an overview of the thesis structure, associated research publications and conference presentations. This research is an exploration of the effect of an endorser on a social marketing campaign promoting sport and physical activity. The focus of the research is determining the most effective endorser characteristics for a social marketing campaign targeting young adults' participation in sport and physical activity.

1.1 Rationale for the Research

The rationale for carrying out this research is based on the benefits of sport and physical activity which are well-recognised. There is consensus that participation in sport and physical activity is an effective means for regional and national governments to facilitate social benefits within a community (B. K. Johnson & Whitehead, 2000; Murphy & Bauman, 2007). These benefits include enhanced physical and psychological health, and increased engagement in social networks (Allender, Cowburn, & Foster, 2006; Funk, 2008; Hassmén et al., 2000; Penedo & Dahn, 2005). The social benefits of sport in New Zealand, including increased work productivity and improved health outcomes, were valued at $1.0 billion in 2009, even after the costs of serious sport and recreation accidents were considered (Sport New Zealand, 2012). The direct economic contribution of sport and recreation participation is estimated at $5.2 billion (2.8% of GDP) in New Zealand (Sport New Zealand, 2014).

Although sport and physical activity participation offers countless benefits at individual and societal level, fostering a more physically active lifestyle has proven

challenging, particularly amongst younger generations (Vehmas, 2012). This research project has exclusively focused on the young adult population (age 16-24) of New Zealand. The reason for the focus on young adults is that their participation in sport is decreasing (Sam, 2011; Sport New Zealand, 2013a, 2015). There is also evidence that young adults' physical activity levels declined between 2006/2007 and 2013/2014 (Ministry of Health, 2014), as part of an all-age reduction in physical activity across the country (Ministry of Health, 2016).

In addition to being relevant in New Zealand, this research is also highly applicable in global context. The trend of young people decreasing involvement in physical activity and sport has also been reported in other countries. Research has shown a notable erosion of activity between the age of 18 to 29 years in United States (Caspersen, Pereira, & Curran, 2000). Furthermore, it was found that sedentary behaviour increases by 31% from age 18 to 24 years old among Americans (Barnes & Schoenborn, 2003). Research in the United Kingdom indicated that only 10% of those above age 15 regularly exercise or play sport and only 14% are regularly engaged in physical activities (Townsend et al., 2015).

The substantial decline in sport and physical activity participation among young adults could be arrested through social marketing initiatives which have the potential to improve behaviours (National Consumer Council, 2006; Weinreich, 2011). In fact, it has been recommended that social marketing should be used in all government-led attempts to promote positive health-related behaviours (National Consumer Council, 2006). The basic tenet of social marketing is that ideas, attitudes and behaviours can be promoted in a similar manner as consumer goods and services (Weinreich, 2011). Social marketing is an attempt to influence beliefs and behaviours in target groups which brings the additional benefit of improving personal and societal welfare (Andreasen, 1995; Kotler, 1982; Kotler & Andreasen, 1991). Social marketing

initiatives can increase knowledge and therefore increase physical activity at individual level and initiate change at wider environmental and policy-levels (Gordon, McDermott, Stead, & Angus, 2006; Stead, Gordon, Angus, & McDermott, 2007).

The national 'Push Play' campaign run by Sport New Zealand is one example of a successful social marketing campaign for promoting physical activity and health in New Zealand. The campaign was initiated in 1999 and recommended daily, moderate-intensity physical activity. It was reported that the Push Play campaign increased awareness of physical activity among adults in New Zealand and increased intentions to be more active (Bauman et al., 2003). Despite its potential to create positive change, the social marketing campaigns must be creative to cut through the myriad of messaging that young adults are exposed to. The ongoing decline in young adults being physically active and playing sport may be in part due to ineffective marketing practice. There is evidence which suggests that social marketing may work in this context among New Zealand's young adults, but little is known about the impact of an endorser - and their characteristics - in a campaign of this type.

Social marketing initiatives often utilise celebrity endorsement although little is known about endorsed social marketing campaigns in the context of sport and physical activity. Celebrity endorsement is generally regarded as an effective promotional strategy and a ubiquitous feature of marketing (McCracken, 1989; Muda, Musa, & Putit, 2012). The perception of endorser credibility is important in the reception of social marketing messages (Charbonneau & Garland, 2005). Using a credible and respected celebrity or athlete as a message sender is often more effective than the organisation itself delivering a potentially unpalatable message (Charbonneau & Garland, 2005). Moreover, it has been found that the lack of a realistic role model is one limitation of sport and physical activity participation programmes (Allender et al., 2006). Endorsers as role models are particularly powerful within young adult

populations (Boon & Lomore, 2001; Jackson & Darrow, 2005; Low & Lim, 2012). One example of a credible celebrity endorser delivering a social marketing message was Tana Umaga, the former captain of the All Blacks (New Zealand national rugby union team). Umaga endorsed road safety messages for the Land Transport Safety Association in New Zealand. A native Pacific Islander, Umaga was selected because he was judged as believable to the target audience (i.e., young Pacific Islanders), with the message being considered by the children as “something Tana would say” (Charbonneau & Garland, 2005, p. 5). Based on what is known about endorsement, it is worthwhile to explore the underlying psychology of endorsed social marketing campaigns in hopes of encouraging young adults to adopt a more active lifestyle.

In spite of our knowledge about the role of sport and physical activity in reducing harm attributable to sedentary lifestyles, only a few social marketing studies have been done in this context by sport management scholars (Bauman et al., 2003; Bell & Blakey, 2010; Reger et al., 2002). Furthermore, most previous research has only examined the effects of endorser’s characteristics like expertise, recognition, gender, on attitude or purchase intention towards a sport or non-sport good (e.g., S. M. Chen & Huddleston, 2009; Ohanian, 1991; Till & Busler, 2000), and there is little endorsement research that is contextualised in social marketing settings (Brace-Govan, 2013; Keel & Nataraajan, 2012), especially in the context of young adults. In addition, this phenomenon has not yet been examined within a sport-related social marketing campaign. Therefore, this study aims to explore celebrity athlete endorser effects on a social marketing campaign for sport and physical activity promotion among young adults. Within this broad aim, the study will also explicate the effects of endorser characteristics (i.e., perceived expertise, recognition, gender and career status) on these types of social marketing campaigns.

In addition to the rationale provided for the topical area, there have been calls to carry out sport management research with mixed method designs, as it improves the quality of research and moves the discipline forward. Concerns have been raised previously that sport management researchers had not made sufficient use of the mixed methods approach (Rudd & Johnson, 2010). Therefore, this thesis features mixed methods design including a series of experiments and focus groups which remains novel in the wider body of sport management research.

1.2 Purpose of Research

To assess the role of athlete endorsement in social marketing campaigns in sport and physical activity, three sequential studies were undertaken. The central question of this research project is: how can endorsement impact attitude, intention and perceived fit related to a social marketing campaign promoting sport and physical activity? The specific objectives of the thesis are to:

1. Identify how an endorser impacts young adults' attitudes towards a social marketing advertisement promoting sport and physical activity.

2. Identify how an endorser's expertise and recognisability impact young adults' attitudes, participation intentions and perception of endorser-campaign fit in a social marketing campaign promoting sport and physical activity.

3. Identify how endorser and participants' gender impact young adults' attitudes, participation intentions and perception of audience-endorser fit in a social marketing campaign promoting sport and physical activity.

4. Identify how an endorser's career status impacts young adults' attitudes, participation intentions and perception of endorser-campaign fit in a social marketing campaign promoting sport and physical activity.

The first objective is the focus of Study 1, the second objective is the focus of Study 2. Both the third and fourth objectives are explored in Study 3.

1.3 Thesis Structure

This thesis consists of seven chapters (Figure 1.1). Chapter 1 provides the rationale for the research; purpose of the research project; thesis structure; and a list of the research publications and conference presentations. Chapter 2 is a literature review of research in sport and physical activity participation; young adults; social marketing; endorsement; attitude change and perception; and behavioural intention. Chapter 3 provides an overview of the research design for all three studies, research paradigm, and research participants. Chapters 4-6 present the introduction to each study, methods, results, discussion, limitations and future research relating to the three distinct studies that comprise the thesis. The first study (Chapter 4) is an exploration of endorsement in a social marketing advertisement in sport and physical activity. This chapter address the first research objective. Study 2 (Chapter 5) is an examination of the effect of endorser-campaign fit based on endorser's expertise and recognition. This chapter address the second research objective. Study 3 (Chapter 6) focuses on athlete campaign-endorser fit based on endorser's career status, and campaign-endorser-audience fit based on endorser and participants' gender. This chapter address the third and fourth research objectives. Chapter 7 provides a general discussion of the three studies, a conclusion, as well as an acknowledgment of the thesis limitations and suggestions for future research.

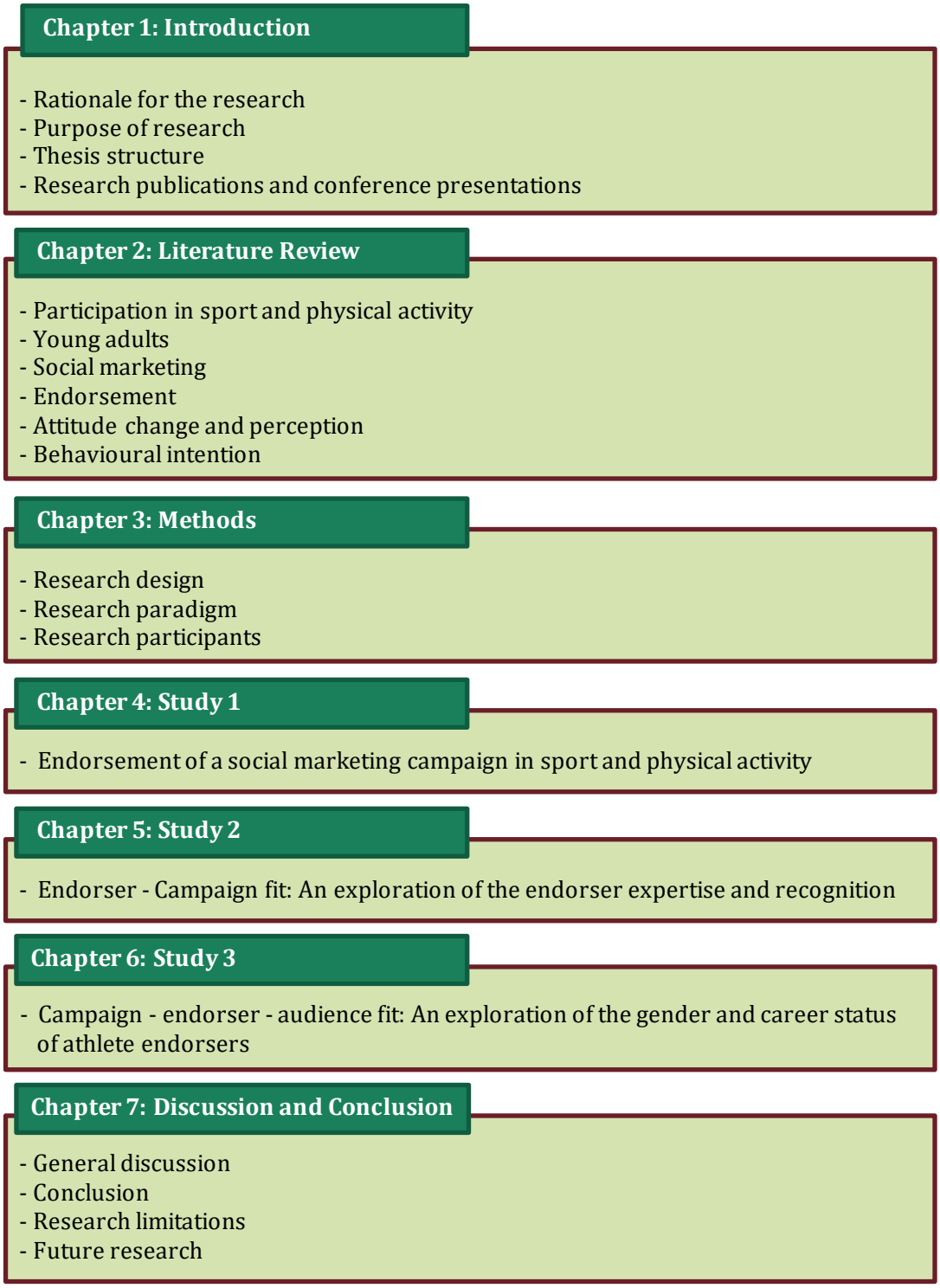


Figure 1.1. Thesis schematic

1.4 Research Publications and Conference Presentations

Each of the three studies in this doctoral thesis have been presented at conferences and submitted to respected journals (Table 1.1). The manuscript associated with Study 1

is in press, the manuscript associated with Study 2 was published in 2017, and the manuscript associated with Study 3 has been submitted and is currently under review.

Table 1.1. Publications

	Conference
Study 1	Behnoosh S., Naylor, M., & Dickson, G. (2015, November). *Celebrity athlete endorsement and social marketing: Promoting participation in sport and physical activity*. Paper presented at the 21st Sport Management Association of Australia and New Zealand (SMAANZ), Hobart, Australia.
Study 2	Behnoosh S., Naylor, M., & Dickson, G. (2016, December). *Endorsement of a social marketing campaign: The importance of expertise and recognition*. Paper presented at Australian and New Zealand Marketing Academy Conference (ANZMAC), Christchurch, New Zealand.
Study 3	Behnoosh S., Naylor, M., & Dickson, G. (2016, November). *An exploration of the gender and career status of athlete endorsers in social marketing*. Paper presented at the 22ed Sport Management Association of Australia and New Zealand (SMAANZ), Auckland, New Zealand.
	Journal
Study 1	Behnoosh S., Naylor M., & Dickson, G. (in press). The impact of endorsement on a sport-based social marketing campaign. *International Journal of Sport Management and Marketing.*
Study 2	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.
Study 3	Behnoosh S., Naylor M., & Dickson, G. (under review). An exploration of gender and the career status of athlete endorsers in a social marketing context.

Chapter 2

LITERATURE REVIEW

The literature review covers material relevant to the central research question that shapes this thesis: how can endorsement affect participants' attitudes and intentions towards a social marketing campaign promoting sport and physical activity? Included in this review is an overview of participation in sport and physical activity, young adults, as well as an assessment of previous research on social marketing, endorsement, attitude change and perception, and behavioural intention.

2.1 Participation in Sport and Physical Activity

Physical activity can be defined as any body movement produced by skeletal muscles that substantially increases energy expenditure such as exercise, sports, and occupational, household and leisure activities (Caspersen, Powell, & Christenson, 1985). Exercise and sport can be classified as subsets of physical activity that are specifically planned, structured and repetitive (Miles, 2007). The positive effects of sport and physical activity participation are well recognised, from improving physical health and social networks to reducing psychological issues and risky behaviours (e.g., Funk, 2008; Hassmén et al., 2000; Miles, 2007; Penedo & Dahn, 2005; Vella et al., 2014). A review of qualitative studies has shown that weight management, social interaction and enjoyment are the prevalent benefits of participating in sport and physical activity among children and adults (Allender et al., 2006). On the other hand, it has been identified that sedentary time is associated with an increased risk of diabetes, heart disease and all-cause mortality (Wilmot et al., 2012). Low involvement in physical activities accounted for over 4% of all illness, disability and premature mortality in New Zealand from 2006 to 2016 (Ministry of Health, 2013). Worldwide, it was estimated

that inactivity accounted for 9% of all premature mortality (i.e., 5.3 million deaths) in 2008 (Bridges Sally et al., 2013). More than 35% of young adults are sedentary for more than six hours per day, which is similar to people aged 64 to 75 - more than six hours a day (Bridges Sally et al., 2013). Risk of mortality can decrease by 14% and life expectancy can increase by three years with even a minimally activity lifestyle (Wen et al., 2011).

Despite all of the benefits of sport and physical activity participation and risks associated with inactivity, participation rates have decreased in New Zealand and many developed countries. In New Zealand, the decrease in sport participation was most notable among the young adult population (i.e., 16-24 years old) compared to other age groups. The decrease was reported in the past two Active NZ Survey periods between 1997/98 to 2007/08, and 2007/08 to 2013/14 (Sport New Zealand, 2013a, 2015). Furthermore, the Ministry of Health reported reduced physical activity participation for all adults with a little variation among different age groups in its last New Zealand Health Survey (NZHS) (Ministry of Health, 2014, 2016). Reduced participation in sport and physical activities is associated with a lack of confidence, not having a realistic role model, a poor social network and anxiety related to unfamiliar settings (Allender et al., 2006). The notable decrease in sport and physical activity participation among young adults is linked to their needs and characteristics. Therefore, the next section is an overview of this age group.

2.2 Young Adults

The body of research around the young adult age group has featured the labels '*Generation Y*' (Gen Y), Millennial and '*eco boomer'*. Although there is no consensus about the exact age bracket which defines this generation, Gen Y members are approximately 10 to 26 years old (Morton, 2002). Young adults comprise individuals

age 16 to 24 years old according to Sport New Zealand (Sport New Zealand, 2015), so therefore form a subset of Gen Y.

Participation in sport and recreational activities were an important part of young people's daily lives in the past. However, the increased popularity of sedentary recreation and digital entertainment has created a challenge for practitioners and health professionals to shift younger generations back into physical activity (Kolt et al., 2006). The trend towards less involvement in sport and physical activity among young adults (Caspersen et al., 2000; Ministry of Health, 2014, 2016; Sport New Zealand, 2013a, 2015) has been linked to their increased responsibilities to adapt into adult work and family roles (Caspersen et al., 2000).

There are many unique characteristics of young adults which have been reported and are important to consider in the context of this research. It has been reported that a lack of realistic role models is a barrier to participation in sport and physical activity (Allender et al., 2006). Young adults have a different style of communication and their perceptions in respect to role models and endorsers may differ. It has been shown that celebrities and athletes have a huge impact on this generation (Morton, 2002). They mostly perceive athletes as role models (Buksa & Mitsis, 2011), and/or sports heroes who they admire, look up to and even model their behaviours after (Shuart, 2007b). Athlete role models can positively affect young adult purchase intentions and behaviour (Dix, Phau, & Pougnet, 2010). Young adults are more likely to get help from instructors and coaches to enhance their performance (Sport New Zealand, 2015). They are more interested in team sport while they are less involved in competitions (i.e., regular and short-term) compared to other age groups (Sport New Zealand, 2015). This generation are most receptive towards celebrity athletes with heroic characteristics. The heroism perceptions relate to endorser's athletic skills, pro-social behaviour and personal traits rather than their celebrity status (Stevens, Lathrop, & Bradish, 2003). Research has

revealed that Gen Y members are more likely to recognise an athlete endorser rather than the sponsor of the event (Bennett, Henson, & Zhang, 2002). Therefore, using athlete endorsement in event sponsorship can enhance brand recall among Gen Y (Cianfrone & Zhang, 2006).

Gender is also important in understanding young adults' in this research context. Research has shown that male young adults are more likely to recognise athletes than females (Peetz, Parks, & Spencer, 2004). Therefore, the selection of the right endorser who can be recognised by both male and female participants is important. It has been noted that young adults can be sceptical regarding celebrity and athlete endorsement. They believe because endorsers get paid for all endorsements activities, it may affect the price of endorsed products (Brooks & Harris, 1998; Veltri, Kuzman, Stotlar, Viswanathan, & Miller, 2003). However, endorsement can still have an impact on young adults' intentions, despite sometimes being reluctant to admit it (Veltri et al., 2003).

Two of the important insights about young adults as it relates to the current research are that their participation in sport and physical activity is decreasing, and that they have well defined tendencies around heroic sports figures and celebrities. The next section is an outline of social marketing which has good potential to engage this generation towards a more active lifestyle.

2.3 Social Marketing

Social marketing as a discipline emerged in the 1970s, when Kotler and Zaltman (1971) proposed that the marketing principles associated with traditional product marketing could be employed to 'sell' ideas, attitudes and behaviours. The primary focus of social marketing, like commercial marketing, is on the customer. However, social marketing is different from other types of marketing with respect to objectives

(Weinreich, 2011). Traditional marketing creates wants in the form of specific pathways to persuade people towards a goal behaviour which is buying what organisations happen to be producing (Funk, 2008), while social marketing focuses on personal and societal good (Andreasen, 1994; Weinreich, 2011). It utilises a set of concepts and tools to change the behaviours of target groups (Andreasen, 2006), which benefits personal and societal welfare (Andreasen, 1995; Kotler, 1982; Kotler & Andreasen, 1991).

Although there are several definitions for social marketing, there is consensus that social marketing is about influencing behaviour through a systematic planning process and applying traditional marketing principles (Kotler & Lee, 2008). Andreasen (1994), in a critique of prior social marketing definitions, proposed one of the most oft-cited definitions of social marketing. In this definition he states "social marketing is the adaptation of commercial marketing technologies to programmes designed to influence the voluntary behaviour of target audiences to improve their personal welfare and that of the society of which they are a part" (p. 110). With regard to this definition, social marketing is a technique that effectively persuades people to voluntarily adopt positive changes towards prosocial behaviours (Weinreich, 2011). These changes can be accepting a new behaviour (e.g., composting food waste), rejecting a potentially undesirable behaviour (e.g., fast driving), modifying a current behaviour (e.g., increasing physical activity from three to five days of the week), or ceasing an old undesirable behaviour (e.g., talking on a cell phone while driving) (Kotler & Lee, 2008).

Social marketing concepts can be mistaken for societal marketing because both relate to a target market and the well-being of society. Societal marketing reflects a concern that a product should be sold while considering the impact it has on well-being of individuals and society as whole (Kang & James, 2007). Societal marketing programmes are usually aligned with wider organisational objectives including revenue

generation. However, in social marketing only prosocial change amongst a target market is sought with no ulterior or related objectives (Kotler & Armstrong, 2012).

2.3.1 Social Marketing Mix

Social marketers generally consider the traditional marketing framework by addressing the elements of the *'marketing mix'*. The marketing mix or four *'Ps'* refer to '*product*', '*price*', '*place*', and '*promotion'* but in the context of social marketing the four *'Ps'* are conceived differently (Andreasen, 1994; Cheng, Kotler, & Lee, 2011; Kotler & Lee, 2008; Weinreich, 2011). Since social marketing always includes a behaviour objective (Cheng, Kotler & Lee 2011), practitioners consider additional '*Ps*' to deal with a campaign's objectives. Weinreich (2011) suggested that '*publics*', 'p*artnership*', *policy*' and '*purse strings*' should also be considered part of the social marketing mix. All eight of these social marketing mix dimensions are discussed next.

2.3.1.1 Product

A '*Product*' is anything "offered to a market for attention, acquisition, use, or consumption that might satisfy a want or need. It includes physical objects, services, people, places, organisations and ideas" (Kotler, Chandler, Brown, & Adam, 1984, p. 260). The social marketing 'product' is often a behaviour which practitioners want the target audience to adopt (Kotler & Lee, 2008; Weinreich, 2011). These may range from use of physical products (e.g., smoke detectors), to engaging in services (e.g., getting medical examinations), practices (e.g., breastfeeding, eating a heart-healthy diet), or more intangible ideas (e.g., environmental protection) (Weinreich, 2011). The primary task in social marketing is to sell an idea or desired behaviour, so it is important that the desired behaviour be appealing to the target audience. Furthermore, the attributes and benefits of the behaviour should be clearly positioned in the mind of consumers. This is referred to as *'positioning'* and answers the "*what is in it for me*?" question that

members of a target market may pose. For example, some benefits of sport and physical activity participation that may be used in positioning are increased metabolism, decreased blood pressure and building muscle strength. Other product benefits in this case include losing weight, improved self-image and the opportunity for socialising (Weinreich, 2011, p. 14). The product of a social marketing campaign should be aligned with the needs and wants of the target group (Andreasen, 1994).

2.3.1.2 Price

In social marketing, '*Price*' refers to what members of target audience have to give up in adopting the desired behaviour. It can be monetary and non-monetary costs including time, effort, social price (e.g., peer derision when choosing a low-alcohol beer) and psychological price (e.g., embarrassment) (Andreasen, 1994; Donovan & Henley, 2003; Weinreich, 2011). For instance, the costs that may be incurred for their participation in a social marketing initiative in sport and physical activity, can include financial costs (e.g., for classes or equipment), psychological costs (e.g., not feeling good enough to participate in a particular sport), environmental costs (e.g., safe places to play), or time-related costs (e.g., having long working hours). The intention to participate in sport and physical activities is driven by an assessment of various associated costs which is affected by the perceived benefits of activities. People tend to be more motivated to take part in exercise and physical activity if they view it as meaningful (Gill & Overdorf, 1994). Therefore, to strengthen the probability of behaviour adaption through a social marketing campaign, the perceived benefits of the initiative should be greater than the costs in the minds of the target market (Weinreich, 2011).

2.3.1.3 Place

'*Place*' (also commonly referred to as '*Distribution*' in traditional marketing) is the process of making a product accessible to consumers. It includes concepts related to logistics, retailing, and wholesaling. Factors like opening hours, wheelchair access, public transport and parking availability have been linked to this element of marketing (Donovan & Henley, 2003). The place element in a social marketing campaign refers to wherever the members of the public are exposed to the campaign's messages (Weinreich, 2011). In a social marketing campaign is promoting a tangible product or service, the same principles of facilitating easy access apply. For example, if the campaign is promoting blood donation, it is important to provide convenient places to ensure simple access at any time. Another example of effective implementation of this marketing mix element by for providing convenient access is the *10,000 Steps* campaign in Queensland, Australia. As part of that program, signposts have been used in different areas to facilitate walking goals by providing distances between various points (Donovan & Henley, 2003).

2.3.1.4 Promotion

The way social marketers convey the campaign's message to the target audience is known as '*Promotion'*. Promotion involves activities that create awareness about the product and its benefits. These include advertising, endorsement, use of social media, face to face interventions, special events, promotions, sponsorship, public relations, and entertainment (Andreasen, 1994, 2002; Donovan & Henley, 2003; Weinreich, 2011). With today's fast growing technology and saturation exposure to marketing communication, social marketing practitioners must be creative and find different ways to ensure that target audience receive the message. This is a particularly important consideration when targeting young adults (Brace-Govan, 2013), because they are

comfortable with up-to-date telecommunication technologies and use an array of different platforms regularly.

2.3.1.5 Publics

In the social marketing mix, '*Publics*' or '*People*' refer to external and internal groups who are involved in a programme. The most important external public is the target audience whose behaviour is central to the campaign. However, there might be several secondary audiences who influence the target group's decisions such as friends, family members, and policymakers. Internal groups include organisation staff and practitioners (Weinreich, 2011). Regardless of the role staff have within the organisation, their interactions with clients are very important in generating attitudes towards the organisation/campaign. For example, if a social marketing campaign is encouraging the use of public buses, the bus drivers' behaviour are important. The interpersonal skills of staff are especially important when dealing with underprivileged and disadvantaged populations. Staff need to be patient and understand their potential participants' needs. Cultural and sensitivity training also may be necessary in some cases. For example, a sense of helplessness or even an innocent gesture of staff may be misinterpreted by a person who suffers from low self-esteem (Donovan & Henley, 2003). In the current context, sedentary young adults may also suffer from low self-esteem or related issues which would require sensitivity.

2.3.1.6 Partnership

'*Partnership*' refers to cooperation with other organisations that have similar audiences and goals (Weinreich, 2011). For example for promoting sport and physical activity participation, a social marketing campaign could align with schools, media networks, Regional Sport Trusts (RST) and sporting goods retailers. The organisations most likely to partner in the development of a social marketing campaign for this

purpose could include non-for-profit organisations and foundations (Kotler, Roberto, & Lee, 2002). In New Zealand, Sport NZ, RSTs, National Sport Organisations (NSOs), and the Ministry of Health have potential to work in collaboration with each other in social marketing initiatives for the promotion of sport, physical activity and health. For instance, the '*Choose Change*' campaign to facilitate a more active lifestyle among pre-diabetics and diabetics is funded by the Ministry of Health in New Zealand but run by four RSTs in Auckland.

2.3.1.7 Policy

Another factor within the social marketing mix is the role of '*Policy*' which is often central to initiatives. Here, policy change is considered in order to foster long-term sustainability. In many cases, a change in policy can be an effective means to attaining social marketing objectives (Weinreich, 2011). For example, a policy in which recycling containers are provided for each household increases the likelihood that community members will separate garbage from recyclable materials. Another example of policy change related to the adoption of a desired behaviour like smoke cessation is increasing smoke free zones within a city, so smokers are more likely to quit the behaviour if it is prohibited in convenient locations. Campaigns and related policies usually need to be sustained over many years, as this leads to more positive and sustainable change (World Health Organization, 2000).

2.3.1.8 Purse Strings

The social marketing mix element referred to as *'Purse strings*' is the budget which is generated from sources such as foundations, government grants and donations (Weinreich, 2011). Successful social marketing campaigns do not always have a big budget. For example, the *Push Play* campaign for promotion of sport and physical activity in New Zealand was supported by the 17 RSTs around New Zealand and had a

relatively modest budget when compared with other social marketing campaigns (Bauman et al., 2003). The *Project Energize* is another example of a social marketing campaign in New Zealand that had a modest budget. This campaign has been implemented since 2005 in hopes of improving nutrition and physical activity levels of school children. It was reported that the campaign's cost just $40 per annum per child (Rush, Graham, McLennan, & Latimer, 2011).

2.3.2 Social Marketing and Public Health

There are many issues that can be addressed through social marketing such as family planning, immunisation, smoking cessation, volunteerism, recycling, voting, environmental protection, and physical activity improvement (Andreasen, 2002; Weinreich, 2011). Social marketing initiatives have been classified in four major areas (Kotler & Lee, 2008). These areas consist of health promotion (e.g., MacDonald, Cairns, Angus, & Stead, 2012), injury prevention (e.g., Newton, Ewing, & Finch, 2013), environmental protection (e.g., Inoue & Kent, 2012), and community mobilization (e.g., Cugelman, 2010). Of these four areas, health promotion and injury prevention are health-related and therefore most closely linked to the current research context.

The first social marketing work focusing on public health was implemented in the 1960s and related to family planning in India (Dholakia, as cited in Casais & Proença, 2012). The popularity of health-related social marketing campaigns has since increased (Clark, as cited in Casais & Proença, 2012). Social marketing programmes in public health have been widely researched as they can facilitate and improved individual and societal health (Gordon et al., 2006). These programmes also help prevent disease and reduce risky behaviours, all of which ultimately reduce the cost of health care and treatment (Casais & Proença, 2012). Evidence has revealed a positive influence of these

programmes on healthy behavioural change (e.g., W. D. Evans & McCormack, 2008; Gordon et al., 2006; Hoek & Jones, 2011; Morris & Clarkson, 2009).

Health-related campaigns are typically linked to one of three objectives (Kotler & Lee, 2008). First, a campaign can promote cessation or adoption of particular behaviours (e.g., Newton et al., 2013). Second, it could be a knowledge campaign in which information is communicated such that the target market may be more willing to enact behavioural change (e.g., Casey et al., 2003; D. Evans et al., 2014). Third, it could be a belief campaign in which feelings and attitudes are shaped in the hope of ultimately facilitating desired behaviours. All three of these objectives are relevant to the current research context.

Research has shown that social marketing initiatives can be effective in a variety of target age groups (Gordon et al., 2006) including young adults. Young adults are increasingly a population of interest for social marketers because they are more likely to undertake risky, unhealthy behaviours such as hazardous drinking (Brace-Govan, 2013). Evidence has emerged that social marketing can be an effective means of reducing alcohol and drug use among young adults (Gordon et al., 2006), which thereby improves their health. It is therefore warranted to explore what other health related behaviours could be improved among young adults using social marketing campaigns, and how those campaigns could be most effective.

Social marketing campaigns promoting sport and physical activity are considered health promotion initiatives due to the significant health benefits of sport and physical activity participation at individual and societal level. There are some examples of social marketing campaigns that have improved exercise and physical activity behaviours among participants (Gordon et al., 2006). However, there is a lack of empirical studies

in this area. The following section is a discussion of health-related social marketing programmes, specifically with physical activity and sport as target behaviours.

2.3.3 Social Marketing for Promoting Physical Activity and Sport

The positive effects of physical activity and sport participation are linked to many features of people's lives and society: health and well-being, social cohesion in communities, the economy and national/cultural identities (e.g., Beaton & Funk, 2008; Coalter, 2007; Funk, 2008). The implementation of physical activity and sport programmes has been an effective strategy of regional and national governments to increase participation in physical activity and sport for the provision of social benefits for the community (B. K. Johnson & Whitehead, 2000; Murphy & Bauman, 2007). However, it is "a national challenge in many countries to motivate and encourage people (especially younger generations) towards a physically active life style" (Vehmas, 2012, p. 313). This behavioural change from a sedentary to a more active lifestyle can be achieved through social marketing. Social marketing has the potential to improve the impact and effectiveness of health promotion initiatives at all levels (National Consumer Council, 2006; Stead et al., 2007).

Research is sparse on social marketing campaigns for promoting physical activity and sport in New Zealand, but does exist for other countries. In a three-year longitudinal survey, 3189 adults aged 16 to 74 years were exposed to a national physical activity campaign in England (Hillsdon, Cavill, Nanchahal, Diamond, & White, 2001). The campaign used TV advertising, posters, leaflets, postcards and two websites to promote the campaign message to the target groups in three waves. The results of the study indicated that the proportion of participants who were knowledgeable about the recommended level of physical activity had significantly increased after the campaign. It was also revealed that 38% of participants after 6-8 months of the main television

advertisement were still aware of the campaign advertising. Participants who were aware of the campaign compared to those not aware of the campaign, were significantly more likely to participate in regular physical activity. Furthermore, women and younger participants in this study were significantly more ready to adopt regular physical activity than men and older participants (Hillsdon et al., 2001). Clear evidence like this of successful social marketing campaigns promoting physical activity justify its ongoing use in this context and research to better understand the underlying psychology of target audiences.

Gordon et al. (2006) reviewed 22 studies to evaluate social marketing interventions in physical activity and exercise and found that there is strong evidence that social marketing can influence knowledge related to physical activity. Also, they found evidence that social marketing can improve exercise behaviour. It was reported that social marketing interventions can be effective in increasing exercise and provide a promising framework for improving health both at the individual level and at wider environmental and policy levels (Gordon et al., 2006). In spite of our knowledge about positive effects of social marketing interventions and the role of sport participation in reducing morbidity and mortality attributable to sedentary lifestyles, there are not many studies which focus specifically on sport participation as the target behaviour.

Over the past decade, organisations such as the Ministry of Health, Sport NZ, RSTs, the Health Sponsorship Council (HSC) and the Health Promotion Agency (HPA) have been the leading voices in the promotion of messages about the importance of physical activity and sport in New Zealand. These organisations have provided public health and physical activity programmes for improving the length and quality of life. Projects such as *Push Play*, *Project Energize*, *Choose Change*, *Green Prescription* and *Active Families* are examples of social marketing programmes in New Zealand in which physical activity and sport participation was either the campaign's key message or part

of the campaign's strategy (Ministry of Health, 2007). Despite recent efforts to promote the health benefits of sport and physical activity participation in New Zealand, participation has decreased (Ministry of Health, 2016; Sam, 2011; Sport New Zealand, 2013a). In response to this decrease, more effective social marketing campaigns are required to capture the attention of target groups. Celebrity endorsement as a marketing communication strategy (Erdogan, 1999) helps increase awareness and advertising recall (Charbonneau & Garland, 2005), and has unique potential to redress participation declines. The celebrity endorsement literature is well grounded in a variety of theoretical frameworks and coverage across scholarly literature has been thorough. An overview of endorsement is provided in the section that follows.

2.4 Endorsement

Advertising is a common promotional tool used to reach consumers and communicate product benefits. However, in the current media environment, messages may be lost because target audiences are exposed to many advertisements (Muda et al., 2012). It has been estimated that an adult may be exposed to up to 3,000 advertising messages in a day with over two million brands vying for his/her attention (Hotz, 2005). In this cluttered and highly competitive environment, endorsement can capture a target audience's attention (Kaikati, 1987). Endorsement can be defined as an act of giving approval or support to someone or something (Prastatia, 2014). Endorsement can be implemented through use of celebrity or unknown endorsers (Van der Waldt, Van Loggerenberg, & Wehmeyer, 2009)

In the communication process, an endorser is considered a message sender (Garland, Charbonneau, & Hercus, 2006 ; McCracken, 1989) who can create brand imagery and may ultimately influence product selection. An endorser can be drawn from a broad range of individuals including movie and televisions stars, athletes,

politicians, business women and men, artists and members of the military (McCracken, 1989). Friedman and Friedman (1979) categorised endorsers into three types: the celebrity, the expert, and the typical or created endorser. Celebrity endorsers are well-known individuals such as actors who do not have expertise related the endorsed product or service, while expert endorsers do have experiences and knowledge related to the product or service. Typical endorsers are people who have no special knowledge or association with the endorsed product or service. Some athlete endorsers such as David Beckham or Michael Jordan can be considered celebrities in addition to their '*expert*' status.

An endorser can also be classified by their role as message sender. McCracken (1989, p. 310) classified endorsers into four modes referred to as explicit, implicit, imperative, and co-present. In the explicit mode, an endorser clearly states her or his collaboration with the endorsed brand/product (i.e., "*I endorse this product*"). In the implicit mode, the endorser communicates that they are using the endorsed product/service (i.e., "*I use this product*"). Endorsers in the imperative mode suggest that the audience try the product/service (i.e., "*You should use this product*"). Finally, the co-present mode occurs when the endorser only appears with the endorsed product/service. It was found that about 64% of TV advertisements endorsed by celebrities were in the implicit mode (Jain, Roy, Daswani, & Sudha, 2010). Another study that investigated the different modes of celebrity athlete endorsement on Twitter, revealed that 46% of athletes appeared in the advertisements with the explicit mode, 20% have used implicit mode, 20% co-present mode, and only 13% used the imperative mode (Abeza, O'Reilly, Séguin, & Nzindukiyimana, 2017).

2.4.1 Celebrity Endorser

A '*celebrity endorser*' is a person who has public recognition and uses it in appearances in an advertisement on behalf of a consumer good (McCracken, 1989). Utilising celebrities in support of promotional initiatives is a common marketing practice. It has been estimated that about 25% of advertisements in United States use celebrities as endorsers (Shimp, 2010). The increased use of celebrities as the endorser of products and services can be explained based on two factors. First, celebrities have the potential to attract consumers' attention when the market is inundated with constant advertisement release (Kaikati, 1987). Second, celebrities' public recognition can help a brand to be perceived as more entertaining and trustworthy by consumers (Atkin & Block, 1983).

Celebrities with remarkable backgrounds can serve as a role model in an endorsement and inspire people (Lockwood & Kunda, 1997). It is well known that role models have the potential to affect consumption decisions (Bandura, 1977). There are two type of role models who can inspire people. The first groups are '*positive role models*' who are traditionally referred to as a '*role model*' in the literature. These are people who are recognised by their achievements and successes. The second group are '*negative role models*' who have experienced a misfortune in their lives. For example, an endorser may be dealing with lung cancer as a result of smoking or injuries because of an accident caused by drink driving. These role models can inspire people by highlighting the negative results of their own experience (Lockwood, Jordan, & Kunda, 2002; Lockwood & Kunda, 1997). An example of negative role model is the actress Angelina Jolie, who underwent a preventive double mastectomy. The global impact she had on increasing awareness about breast cancer, was referred to the '*Angelina Jolie effect*' (Borzekowski, Guan, Smith, Erby, & Roter, 2013; D. Evans et al., 2014).

Another factor that influences people's response to either positive or negative endorsement is the goals they pursue. Individuals who are promotion-focused normally look for an ideal self by following positive outcomes and successes. Therefore, they are most likely to be inspired by a positive role model. On the other hand, people with prevention goals try to avoid negative outcomes and failures by taking preventative strategies. These prevention-focused individuals may be more motivated by a negative role model (Lockwood et al., 2002).

The benefits of product/service endorsement can be enhanced by having several celebrities endorsing a single product. Research has found that multiple celebrity endorsers of a single product can positively impact consumers' perceptions because of wider reach and different consumers may associate with different celebrities (Hsu & McDonald, 2002; Rice, Kelting, & Lutz, 2012). Furthermore, using multiple celebrity endorsers can reduce consumer boredom and create a notion of consensus about the advertisement if backed by a group of endorsers (Hsu & McDonald, 2002). The effect of several endorsers for a single product or brand even increases when consumers are not highly involved with the product or brand (Rice et al., 2012). Use of several endorsers can cause stronger assimilation effects because product information would be more accessible to consumers (Sato, Ko, Kaplanidou, & Connaughton, 2016). Multiple celebrity athletes endorsing a single product/brand is a common practice in sport-related product/interventions. Brands such as Nike or Adidas benefit from having a number of celebrities endorsing their products. Using multiple endorsers can also reduce the risk of negative publicity that may be caused by one celebrity. For example, the negative impact of the Tiger Woods scandal on Nike was arguably lessened by the number of other celebrity athletes promoting their products at that time (Yannopoulos, 2012). The next section provides more context around celebrity athlete endorsers specifically.

2.4.2 Celebrity Athlete Endorser

A celebrity athlete endorser is a well-known athlete who has public recognition and uses this publicity to recommend or co-present with a product or service in an advertisement (McCracken, 1989). Over the years celebrity athlete endorsement has been a significant strategy within marketing contexts (e.g., Y. Lee & Koo, 2015; Sato et al., 2016; Shuart, 2007a; Stone, Joseph, & Jones, 2003). In the United States celebrity athletes are the second most common group who appear on TV advertisements after actors/actresses (Choi, Lee, & Kim, 2005). The prevalence and importance of celebrity athlete endorsement has been highlighted in New Zealand as well (Garland & Ferkins, 2003).

The increasing number of athletes serving as endorsers may be due to generally high interest in sport (Dyson & Turco, 1998) across a variety of consumer segments. Athletes known for their sporting performance and their characteristics on the field can effectively differentiate a product or service from others (S. Roy, Jain, & Rana, 2013). As with endorsers more generally, athlete endorsers can also be perceived as heroes and roles models. A celebrity athlete endorser's recognition in combination with heroic characteristics can make her or him a very the most effective spokesperson for products (Shuart, 2007a). Research on athlete endorsement has explored endorser effects on consumers' attitude (Carlson & Donavan, 2008; Y. Kim & Na, 2007; Y. Lee & Koo, 2015; Silvera & Austad, 2004), purchase intention (Fink, Parker, Cunningham, & Cuneen, 2012; K. Kim & Cheong, 2011; Y. Lee & Koo, 2015; Tzoumaka, Tsiotsou, & Siomkos, 2016) and branding (Arai, Ko, & Ross, 2014; A. C. H. Chen, Chang, Besherat, & Baack, 2013). Athletes can create an emotional tie with consumers and enhance product awareness and image of the organisation (Cornwall, as cited in Stone et al., 2003). They can positively affect attitudes towards the advertisement. Attitudes

towards an advertisement can be transferred to attitudes towards a brand and enhance willingness to purchase the endorsed product (Y. Lee & Koo, 2015).

Athlete endorsers are perceived to be more influential than non-athletes specifically when endorsing a sport-related brand or service. This product-endorser match can enhance likability and perceived trust (Koernig & Boyd, 2009). The effect of an athlete endorser's credibility on consumer responses can be more significant when there is a match between athlete endorser and product/brand. Ultimately, the interaction between an athlete's credibility and product-endorser match can significantly impact attitude towards the advertisement/brand and purchase intention (Y. Lee & Koo, 2015).

In addition to athletes' credibility and the potential for match-up, overall effectiveness can also be affected by the gender of the endorser (e.g., Peetz et al., 2004; Wolin, 2003). For example, male participants have been linked to greater product purchase intentions in conjunction with a male athlete endorser (Peetz et al., 2004). Previous research revealed that male celebrity athletes are more likely to be identified (Ewens & Lashuk, 1989; Peetz et al., 2004) and more often perceived as a role model than female celebrity athletes -specifically among youth populations (Ewens & Lashuk, 1989). This might be due to greater media coverage of male athletes than female athletes. However, evidence exists of increasing use of female athlete professionals featuring in advertisements (Fink, Kane, & LaVoi, 2014; Fink et al., 2012; Liu & Brock, 2011; Stone et al., 2003). The academic field of sport marketing and our industry partners would benefit from more research on female celebrity athlete endorsers and the underlying psychology of how they are perceived by target audiences. The following section is an overview of central theories and models explicating endorser effectiveness.

2.4.3 Endorsement Theories and Models

A source can originate the message, endorse a message, or serve as a channel to deliver the message and in each case, the same factors underpin source effectiveness (Hovland, Janis, & Kelley, 1953). There is a wealth of research that explain sources as well as the rationales and motivations of endorsement. The main theoretical models relevant to celebrity endorsement are source credibility and source attractiveness. Together these models are considered '*source models*' (Erdogan, 1999). Both were originally conceived in communications research and have later been used to shape celebrity endorsement research (McCracken, 1989; Snyder & Rothbart, 1971). Research on celebrity endorsement has been conducted in the context of the source models (e.g., D. Biswas, Biswas, & Das, 2006; McGuire, 1985; Ohanian, 1990), and three additional models: the match-up hypothesis (e.g., Fink et al., 2012; Y. Lee & Koo, 2015; Till & Busler, 2000), classical conditioning (e.g., C. Y. Chen, Lin, & Hsiao, 2012; Stuart, Shimp, & Engle, 1987; Till, Stanley, & Priluck, 2008), and the meaning transfer model (e.g., McCracken, 1989; F. M. Miller & Allen, 2012; Muda et al., 2012). Table 2.1 is a list of the main endorsement models, important studies related to each, and a basic explanation.

Table 2.1. Endorsement Models and Theories

Models	Seminal research	Basic explanation
Source Credibility	Hovland et al (1951) (1953)	Perceived expertise and trustworthiness of the source affect communication acceptance.
Source Attractiveness	McGuire (1985)	Source's attractiveness affects communication acceptance.
Match-up Hypothesis	Kamins (1990)	The fit between endorser, product and audience influence the effectiveness of endorsement.
Classical Conditioning	Stuart et al (1985) Shimp et al (1991) Till (1998)	Pairing a pleasant image as unconditioned stimulus with a conditioned stimulus (brand) leads to the favourable attitudes towards brand.
Meaning Transfer Model	McCracken (1989)	Endorsers bring their own symbolic or cultural meanings to the endorsement process.

2.4.3.1 Source Models

There are a number of elements that affect the endorsement process and are vital to the make-up of seminal models to understand the phenomenon. These include endorser characteristics (e.g., Eisend, 2006; Fink et al., 2012; Kahle & Homer, 1985; Ohanian, 1990), the extent of product-endorser match (e.g., Fleck, Korchia, & Le Roy, 2012; Till & Busler, 1998, 2000), endorser's number of endorsements (e.g., A. C. H. Chen et al., 2013), psychological involvement of audience (e.g., Homer & Kahle, 1990; Kahle & Homer, 1985), and other audience characteristics (e.g., K. Kim & Cheong, 2011; O'Regan, 2014; Tzoumaka et al., 2016).

Expertise, trustworthiness and attractiveness have been found to be the most influential endorser characteristics in advertising (La Ferle & Choi, 2005) and form the elements of the source models in the body of research. A meta-analysis of endorser's effectiveness has found that trustworthiness, expertise and attractiveness, respectively are the most influential source effects on attitudes towards the advertisement and brand as well as purchase intention (Amos, Holmes, & Strutton, 2008). The source models

contend that receivers' perception of a source influences the persuasiveness of communication.

Source models include the source credibility model (i.e. expertise and trustworthiness) and the source attractiveness model (Erdogan, 1999). Scholars have generated mixed evidence and put forth mixed views about how these two models compare in terms of importance. Premeaux (2009) suggested that expertise is the most important celebrity source characteristic, while other research has suggested that both expertise and trustworthiness are more effective source characteristics than attractiveness (Ohanian, 1991; Till & Busler, 2000). The following section moves on to describe these two elements (i.e., expertise and trustworthiness) of the source credibility model in more depth.

2.4.3.1.1 Source Credibility

A variety of studies have explored the dimensionality of credibility (e.g., Eisend, 2006; Ohanian, 1990; Whitehead, 1968). The notion of source credibility was proposed by Hovland et al. (1953) decades ago in the field of social psychology at which point it was concluded that two dimensions, expertise and trustworthiness were essential. The authors assumed that communication effectiveness is related to recipient perceptions of the communicator's credibility, including beliefs about knowledge, intelligence and sincerity. In line with this focus on credibility, the authors went on to suggest that effectiveness of communication depends on who delivers the message.

The premise of the expertise dimension of credibility is that a communicator's perceived level of intelligence and knowledge may impact message acceptance. When perceived by a receiver these two attributes make up a communicator's expertise (Hovland et al., 1953). Expertise has been linked to notions of '*competence*', '*expertness*', '*knowledgeability*', and '*qualification*' within the broader notion of source

credibility (Eisend, 2006, p. 3). However, in more recent studies of celebrity endorsement (e.g., Ohanian, 1990; Roozen, 2008; Till et al., 2008; Tzoumaka et al., 2016) the word ‘expertise’ has been used to convey this dimension which can be gained through training, experience or study (Friedman et al. 1979). Most endorsement studies have only considered expertise for celebrity or well-known endorsers (e.g., Ilicic & Webster, 2011; Malik & Guptha, 2014; Money, Shimp, & Sakano, 2006; Van der Veen & Song, 2014). However, it is important to note that non-celebrity (unknown) endorsers may also have context-specific expertise. For example, in the context of sport, both a celebrity athlete and a less-known or even unknown coach could conceivably be characterised as an expert.

Trustworthiness is the other dimension of source credibility and refers to the extent that an endorser is perceived objective and unbiased. A recipient may accept the communicator’s capability of transmitting a valid statement, but still be inclined to reject the communication if they suspect the source is motivated to make a non-valid assertion (Hovland et al., 1953). The trustworthiness dimension is linked to notions of ‘*character*' and ‘*personal integrity*' (Eisend, 2006, p. 3).

The source credibility model holds that message senders exhibiting expertise and trustworthiness are more persuasive (Erdogan, Baker, & Tagg, 2001; Hovland et al., 1953; Hovland & Weiss, 1951; McCracken, 1989; Shank, 2009). For example, athlete endorsers like Arnold Palmer and Michael Jordan are known for their perceived trustworthiness and expertise (Shank, 2009). An endorser’s perceived expertise significantly affects consumer attitudes (Lafferty, Goldsmith, & Newell, 2002), and enhances purchase intention (Lafferty et al., 2002; Ohanian, 1991). An endorser’s trustworthiness can also positively affect purchase intention among receivers of the message (S. M. Chen & Huddleston, 2009; Tzoumaka et al., 2016).

There is believed to be an interaction between type of communication and source trustworthiness. It has been revealed that endorsers who are initially perceived to be highly trustworthy are more effective in producing attitude change if the message is opinionated rather than non-opinionated. A non-opinionated message is considered a message that only conveys the source's attitude towards a particular idea (e.g., I believe that physical activity improves health), while an opinionated message not only transfers the source's attitude towards an idea, but also conveys the source's attitude towards people who agree or disagree with him/her (e.g., any intelligent person knows that physical activity improves health). Opinionated messages can be more persuasive because they can cause a fear of social disapproval. Therefore, receivers are convinced to accept the message to protect themselves from social censure (G. R. Miller & Baseheart, 1969). This interaction reflects the fact that endorsement is not a simple process and an array of peripheral factors must be considered.

In a sport context, perceived expertise and trustworthiness affect an endorser's ability to influence consumers' attitudes (Y. Kim & Na, 2007). Companies such as Adidas continuously use these attributes to promote their products. For instance, Reggie Bush, an American football player who endorses Adidas and Jeff Gordon, a race car driver who endorses Chevrolet, are presented in a way to foster perceptions of trustworthiness and expertise and are perceived as such by target audiences (Shank, 2009). In summary, the trustworthiness and expertise (i.e., credibility) of an endorser have been shown to be important characteristics in persuasion and attitude-change research (Hovland et al., 1953; McCracken, 1989), and must therefore be considered in the current research. Next, the focus of the literature review shifts from source credibility to another important consideration – source attractiveness.

2.4.3.1.2 Source Attractiveness

Along with source credibility, source attractiveness should be considered within a broader '*source model*' understanding of celebrity endorsement. Our understanding of source attractiveness in endorsement originates from the source valence model of McGuire (1985). The source valence model emerged within research in social psychology and offers an alternate way of evaluating a source. The attractiveness model contends that the effectiveness of a statement depends on a source's '*familiarity*' (i.e., knowledge of the source through exposure), *'likeability'* (i.e., affection for the source based on his or her physical appearance and behaviour), '*similarity*' (i.e., resemblance between the source and audience), and '*attractiveness*' as perceived by the respondent (McGuire, 1985). The attractiveness of an endorser is quite simply the degree to which she or he is pleasing to be observed (Patzer, 1983) both in terms of facial and physical features (M. J. Baker & Churchill Jr, 1977).

Attractiveness has become an important aspect of using celebrities as endorsers for products, services and social causes (M. J. Baker & Churchill Jr, 1977; Y. Kim & Na, 2007; Ohanian, 1990; Patzer, 1983; Roozen, 2008; Till & Busler, 2000). In comparison to other endorser characteristics, attractiveness transfers more quickly to the receiver (Kahle & Homer, 1985; Patzer, 1983). Source research has provided evidence that greater endorser attractiveness may result in higher verbal and behavioural compliance (Chaiken, 1979). It is also related to likeability and credibility of the source and can lead to acceptability of the message (Patzer, 1983; Snyder & Rothbart, 1971). Therefore, attractiveness can facilitate attitude change related to a message (Kahle & Homer, 1985; Snyder & Rothbart, 1971). This can be explained through a '*halo effect*' in which a person's specific traits may affect their overall impression about that person (Beckwith & Lehmann, 1975).

Research on celebrity endorsement continues to focus on the effects of source physical attractiveness (Y. Kim & Na, 2007; Muda, Musa, Mohamed, & Borhan, 2014; Ohanian, 1990; Roozen, 2008; Till & Busler, 2000). M. J. Baker and Churchill Jr (1977) found that physically attractive endorsers receive a higher advertisement rating if the endorser is of the opposite sex of the receiver. They concluded that the sex and physical attractiveness of an endorser impacts on people's evaluation of the aesthetic qualities of an advertisement, attracts attention and strengthens likability towards the advertisement. However, Chaiken (1979) and Patzer (1983) pointed out that source physical attractiveness affects persuasiveness and source agreement regardless of the gender.

When considering the body of research collectively, evidence has emerged that the attractiveness component of the source affects communication and persuasion of the source and ultimately the effectiveness of the advertisement (e.g., M. J. Baker & Churchill Jr, 1977; Chaiken, 1979; Erdogan, 1999; Y. Kim & Na, 2007; McGuire, 1985; Patzer, 1983; Snyder & Rothbart, 1971). In endorsement research, evidence is inconclusive as to whether an endorser's characteristics are the *sole* determinant of advertisement effectiveness. Those who believe it is *not*, suggest that endorser effectiveness also depends on perceived congruency between the endorser and the product/service (D. Biswas et al., 2006; Kamins, 1990). Therefore, in the next section of this literature review match-up hypothesis and its impact on endorsement process is overviewed.

2.4.3.2 Match-up Hypothesis

The process of creating optimal endorser-campaign fit, can be understood through match-up hypothesis. It has emerged through research that it is not simply the endorser's characteristics that are important, but also the fit between the endorser and

the endorsed product/service (e.g., Kamins, 1990; Liu & Brock, 2011; Till & Busler, 2000). According to the match-up hypothesis, endorsers are thought to be more effective when there is a congruency between the endorser and the endorsed product or service (C. Y. Chen et al., 2012; Choi & Rifon, 2012; Fink et al., 2012; Y. Kim & Na, 2007; Till & Busler, 2000; Till et al., 2008). Congruency between the endorser and the endorsed product enhances believability (Erdogan et al., 2001), attitudes towards the product or service (e.g., C. Y. Chen et al., 2012; Till & Busler, 2000; Till et al., 2008) and purchase intentions (e.g., Fink et al., 2012; Fleck et al., 2012). For example, an attractive celebrity is more effective for endorsing beauty enhancement products (M. J. Baker & Churchill Jr, 1977; Kahle & Homer, 1985; Kamins, 1990), and an athlete is more effective when matched with sport products or services (Fink et al., 2012; J. H. Martin, 1996).

Although the match-up between an endorser and product or service is important, research has shown that endorser-audience fit should be considered as well (K. Kim & Cheong, 2011; Till, 1998). In an investigation of the ethnicity of endorsers and audience, K. Kim and Cheong (2011) found that a match between athlete endorser and audience ethnicity significantly affects attitudes towards a brand. In another study, endorser-audience gender was explored and it was revealed that male participants are more likely to be influenced by male endorsers (Peetz et al., 2004). Therefore, considering a three-way match-up (i.e., product-endorser-audience) in the endorsement process is important. In New Zealand specifically, it has been found that congruency between an athlete endorser, products and target audience is very important factor in the selection of endorsers (Charbonneau & Garland, 2005).

The importance of perceived fit/match extends to endorsed events and potentially other initiatives as well. Research has showed that pairing a sport event with a well-liked athlete can positively impact consumer attitudes towards the event (C. Y. Chen et

al., 2012). Considering the tenets of the match-up hypotheses, it can therefore be postulated that using athlete endorsers for a social marketing campaign promoting sport and physical activity may be effective. The effectiveness of an endorser on consumer's attitude can be elucidated through an associative learning method known as classical conditioning (C. Y. Chen et al., 2012; Keel & Nataraajan, 2012; Till & Priluck, 2000).

2.4.3.3 Classical Conditioning

Classical (Pavlovian) conditioning is a common method of associative learning (C. Y. Chen et al., 2012; Domjan, 2005; Harris, 2006) involving the combination of two stimuli. Associative learning is "the process by which an organism represents the correlations between the events it experiences" (Harris, 2006, p. 2). Associative learning is frequently used in various marketplaces (Shimp, Stuart, & Engle, 1991), and its principles can be utilised to improve celebrity endorsement (Till, 1998). In classical conditioning, an unconditioned stimulus (US), naturally and automatically produces a response. The response to it is called an unconditioned response (UR). Whereas, the conditioned stimulus (CS), is a neutral stimulus which does not naturally evoke a response unless paired with the unconditioned stimulus (Domjan, 2005; McSweeney & Bierley, 1984; Stuart et al., 1987; Till & Priluck, 2000). The response to the conditioned stimulus is known as a conditioned response (CR). Therefore, the effectiveness of a CS depends on, or is conditional upon its pairing with the US (Domjan, 2005).

Our understanding of classical conditioning was shaped through Pavlov's (1902) experiments with dogs (Figure 2.1). In these experiments, food was included as an unconditioned stimulus and it produced a response (i.e., dog's salivation). During the conditioning, the sound of a bell was paired with the dog food. After some trials, conditioning took place and the dog responded to the bell even if there was no food (Pavlov, 1902, 1928). Watson (1921) was one of the earliest to expand Pavlov's work to

the context of human beings. Watson repeatedly paired loud sounds with the introduction of a rat which, by itself had not produced a sign of fear in an 11-month-old infant. As a result of conditioning, the infant showed a fear response even when the rat was presented in the absence of the sounds. A similar response occurred when the experiment was replicated with other similar stimuli such as a rabbit, cotton wool and a fur coat (Watson & Watson, 1921).

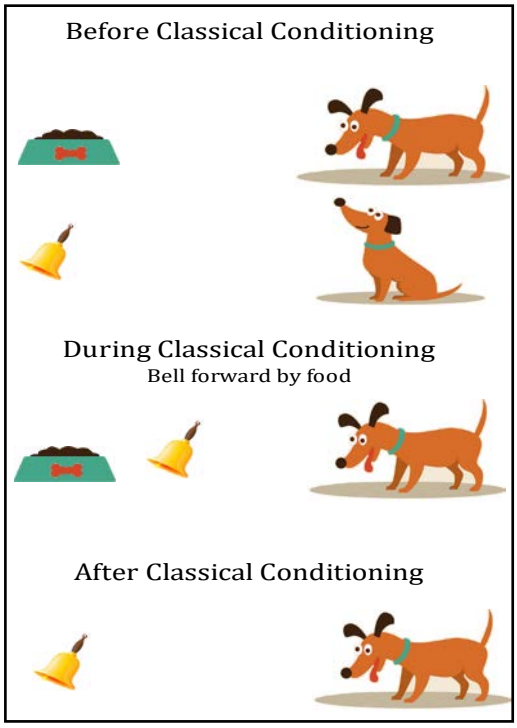


Figure 2.1. Classical conditioning- a basic form of learning. Retrieved from https://www.freepik.com/free-vector/dachshund-eating-and-playing_718543.htm. Copyright 2010-2013 by Graphic Resources LLC. Adapted with permission.

Research on classical conditioning later revealed that attitude can also be conditioned (Staats & Staats, 1958). Attitude can be positively affected through classical conditioning by a pleasant unconditioned stimulus (Jones, Olson, & Fazio, 2010; J. Kim, Allen, & Kardes, 1996; F. M. Miller & Allen, 2012). When considering classical conditioning within an advertising and consumer behaviour framework, the association of a pleasant stimulus with a brand, product or event can evoke more favourable responses towards the brand/product or the event (e.g., Allen & Janiszewski, 1989; Gorn, 1982; Shimp et al., 1991; Stuart et al., 1987). A pleasant stimulus paired

with a brand can be music (Gorn, 1982), attractive images of nature (Shimp et al., 1991; Stuart et al., 1987), or a picture of an endorser (C. Y. Chen et al., 2012; F. M. Miller & Allen, 2012; Till et al., 2008) (Table 2.2).

Table 2.2. Seminal Research in Classical Conditioning and Advertising

Study	Area of Research	Unconditioned Stimulus	Conditioned Stimulus	Conditioned Response
Ivan Pavlov (1902), (1928)	Psychology	Food	Bell	Dog's salivation
Watson & Watson (1921)	Psychology	Loud sounds	Rat	Fear
Gorn (1982)	Advertising	Pleasant music	Brand/ product	Positive attitude towards brand or product
Stuart et al (1987), Shimp et al (1991)	Advertising	Pleasant pictures	Brand/ product	Positive attitude towards brand or product
Till (1998), Till et al (2008)	Advertising	Endorser	Brand/ product	Positive attitude towards brand or product

Pairing stimuli brings the potential consumer into '*closer contact*' with the product or brand (Nord & Peter, 1980). This pairing may direct attention and increase the probability of desired behaviours (e.g., brand preference and subsequent purchase) or reduce the probability of undesired responses. Furthermore, the brand alone might later elicit a similar pleasant attitudinal response even without the presence of unconditioned stimuli (Nord & Peter, 1980; Stuart et al., 1987). Marketing practitioners use classical conditioning to evoke a desired respondent behaviour. For instance, the voice of a well-known sport journalist is often used in advertisements paired with a sport product to elicit interest as a result of associations to past events (Nord & Peter, 1980).

The underlying process of classical conditioning can be more explicitly explained using two cognitive mechanisms. It has been found that brand attitude can be conditioned via '*direct affect transfer'* and '*inferential belief-formation'* (J. Kim et al.,

1996). Direct affect transfer occurs when the linkage between a US (e.g., a picture) and a CS (e.g., brand) provokes positive or negative attitudes towards the CS without any conscious deliberation about the CS attributes. Inferential belief-formation is a mechanism through which consumers infer positive or negative beliefs about CS based on information they have received from the US (J. Kim et al., 1996).

There are several reasons to use classical conditioning as framework for marketing research. Classical conditioning has been used extensively and successfully to underpin research exploring human behaviour – a key outcome in marketing. Studies have explored how people have developed an array of associations (i.e., CS-US) either consciously or mindlessly (Domjan, 2005; J. Kim et al., 1996; Stuart et al., 1987). It is also possible for attitudes to be conditioned through classical conditioning (Staats & Staats, 1958; Stuart et al., 1987) using advertising (e.g., C. Y. Chen et al., 2012; Gorn, 1982; Stuart et al., 1987; Till & Priluck, 2000; Till et al., 2008). However, despite the importance and extensive use of classical conditioning in commercial marketing contexts, the application of this technique to promote sport and physical activity participation through social marketing has not been examined. Pairing a social marketing campaign with an appropriate celebrity endorser as a US may result in more favourable attitudes towards the campaign.

Pairing a celebrity endorser with an advertisement and evoking positive consumers' attitudes is not as straightforward as it may seem. Research has intimated that a endorser-campaign match does not always result in a successful endorsement (Erdogan, 1999) because celebrity endorsers bring their own characteristics into the endorsement process (McCracken, 1989). Unique and existing associations with a celebrity and perhaps their personal life may influence the linkage between the endorser and the endorsed product/service. Therefore, sometimes an unknown endorser may produce a stronger association in a classical conditioning paradigm because consumers can form a

new and unique linkage between the endorser and the endorsed product without endorser preconceptions. As effective endorsement is more complicated than simply pairing an endorser with a product, additional research has contributed the development of the meaning transfer model which is considered next.

2.4.3.4 Meaning Transfer Model

McCracken (1989) proposed the meaning transfer model because the source models (i.e., credibility and attractiveness) do not account for a celebrity's failure as an endorser for one brand, and success for another (Roozen, 2008). According to the meaning transfer model, celebrity endorsers bring their own symbolic or cultural meanings to the process (McCracken, 1989) which can be varied and extensive (Erdogan et al., 2001). Those cultural meanings are attached to the celebrity and include status, class, gender, age, personality traits and lifestyle types (McCracken, 1989). The receivers relate this set of meanings and integrate them with the self when using a product, service or even when attending an event that is endorsed by a celebrity (McCracken, 1989; S. Roy et al., 2013). The meaning transfer model assumes that a celebrity endorser's effectiveness is caused by a set of meanings which pass from celebrity to product and from product to recipients. Within a social marketing framework, the cultural meaning of a celebrity athlete can be transferred to the campaign and then to the potential participants (Figure 2.2).

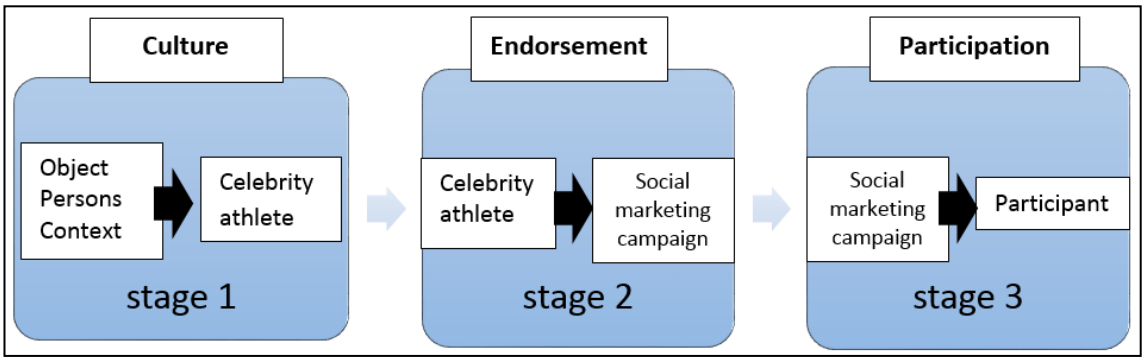


Figure 2.2. Meaning movement and the endorsement process adapted from McGuire (1985, p. 315).

Based on the meaning transfer model, compared with an unknown or lesser-known endorser, a celebrity or well-known endorser would be more effective depending on their distinguishing attributes they bring to the endorsement process. In the world of sport, the strategy of 'transfer meaning' connects the athlete's attributes and their successes to a product or service. In other words, consumers who may feel as though "we like Nike because we like Mike" (Stone et al., 2003, p. 96) illustrates how a celebrity athlete endorser affects consumers' perception through meaning transfer. These cultural meanings can be developed through roles celebrities play in society and the way they are portrayed in the media (Amos et al., 2008). Although marketers attempt to transfer only positive attributes associated with a celebrity, both negative and positive features may pass to the endorsed product/service and affect endorsement process (Erdogan et al., 2001; Muda et al., 2012). The negative attributes can even have a stronger impact because they stand out more compared to positive attributes (Muda et al., 2012). The literature review now shifts from this broad theoretical overview to an outline of celebrity and athlete endorsement specifically.

2.4.4 Athlete and Celebrity Endorsement in Non-commercial Settings

There are many celebrities and athletes who are involved in sport or non-sport product advertisement, but far fewer who engage in social marketing campaigns to promote behaviours that are beneficial to society. A celebrity's involvement in a social marketing campaign may be the result of an invitation from an organisation or an existing relationship with a community linked to a specific cause (Casais & Proença, 2012). The endorser may also herself or himself be struggling with a specific issue and then successfully bring attention to it. For example the HIV positive test of American basketball player Magic Johnson and his subsequent work as the spokesperson for HIV prevention had a significant impact on Americans (Basil & Brown, 1997).

As in commercial marketing contexts, it stands to reason that celebrity endorsement could improve the effectiveness of social marketing initiatives because it is believed a celebrity's association with a social issue can increase public attention (Babiak, Mills, Tainsky, & Juravich, 2012). Although the principles underpinning the endorsement of a social marketing campaign are similar to commercial marketing, it is more challenging to select and fit an endorser into a campaign which attempts to persuade people to voluntarily adopt behaviour changes (Brace-Govan, 2013). The believability of a social marketing advertisement to persuade people to adopt behavioural changes is important. Marketers need to be very careful selecting endorsers when the believability of the endorsed advertisement and overall attitude towards the endorsed service or product is desired (Friedman & Friedman, 1979). A message within a social marketing context may also be perceived differently from that in a commercial context. Associating a source with a non-profit organisation rather than a commercial organisation may improve the endorser's credibility (Berry & Shields, 2014; Berry et al., 2009). As a result of that enhanced credibility, the way a message source is perceived might positively influence message response (Berry & Shields, 2014).

Some evidence exists that a credible athlete or celebrity endorser can effectively deliver a social marketing message (Charbonneau & Garland, 2005). The combination of the celebrity athlete endorsement and a social marketing campaign can shed light on the focal issue by transferring an endorser's qualities to the campaign and consequently, producing favourable campaign results. One example is the professional boxer, Wladimir Klitschko, who endorsed the 'KICK im Boxring' project alongside the Laureus Sport for Good Foundation successfully. The project was established in 2008 and offered free boxing and education to tackle social issues like delinquency, unemployment, problems in school, problems with parents, violence, and lack of self-esteem (Laureus Sport for Good Foundation, 2008). In this case, the boxer's attributes

such as confidence, determination, and emotional stability transferred to the campaign's programmes and increased the effectiveness of the overall message.

Research has shown that the main reasons that celebrities endorse a cause is a belief about the seriousness of the cause and the belief that their involvement could prevent undesired behaviours, reduce the negative impacts of a disease, or otherwise improve people's lives (Casais & Proença, 2012). Although the endorsement activities of a celebrity may not lead to professional opportunities for her/him, they can help foster a positive public image of the celebrity in society (Casais & Proença, 2012). Research has found that 85% of celebrities believe that social marketing endorsement is part of their expected social role in society (Casais & Proença, 2012).

Despite the benefits that celebrities may receive by endorsing a cause, there are some obstacles preventing them from being involved in social marketing initiatives. It has been found that celebrities may decline because of unavailability, the perception that the campaign is inadequate or the organisation is unreliable and even the possibility that companies or political parties benefit from the campaign (Casais & Proença, 2012).

Like commercial contexts, one of the most important stages in developing a social marketing campaign is selecting the right promotion strategy for the target group. The strategy should take into account audience demographics, psychographics, geographics, behaviours and media habits. This is especially important if social marketers are using paid advertising because not all the media channels for promotion of the social marketing message are free (Kotler et al., 2002).

Considering young adults are most effected by role models, celebrity athletes and celebrity non-athletes (Buksa & Mitsis, 2011; Morton, 2002), it may be effective to use celebrity athlete endorsement in a social marketing campaign targeting this age group. Although most celebrities are not paid for social marketing endorsements, some believe

that if the campaign has sufficient resources, they should be compensated for their endorsement (Casais & Proença, 2012). In addition to the cost that might be involved with celebrity endorsement, there are some risks as well. Having reviewed relevant literature outlining benefits of the use of celebrities and athletes endorsers, the next section outlines the risks and possibility of negative outcomes of celebrity endorsements.

2.4.5 Negativity Associated with Celebrity Endorsement

Although the use of celebrities and athletes as endorsers of products and services is common and can be effective, it is not without risk. These risks include negative publicity associated with bad behaviour (e.g., Muda et al., 2012; Stone et al., 2003; Thwaites, Lowe, Monkhouse, & Barnes, 2012; Till & Shimp, 1998; White, Goddard, & Wilbur, 2009; Zhou & Whitla, 2013), and celebrities' multiple endorsements (e.g., A. C. H. Chen et al., 2013; Dyson & Turco, 1998; Ilicic & Webster, 2011; Tripp, Jensen, & Carlson, 1994).

A match between athlete endorsers and sport-related products or services may be perceived as a natural and logical fit considering an endorser's credibility, but they are not always a good fit in terms of personal characteristics (Stone et al., 2003). Uncivil and illegal behaviours such as drink driving, drug use and doping can cause negative publicity that impact brand image related to the athlete (Stone et al., 2003). Furthermore, it mitigates positive attitudes towards the endorsed brand which may lead to a lower evaluation of the brand (Till & Shimp, 1998), and negatively influences purchase intention (Low & Lim, 2012). That is, the celebrity endorser transfers negativity to the endorsed brand and even the wider organisation (White et al., 2009). A meta-analysis on over 30 years of celebrity endorsement literature showed that negative information about a celebrity endorser affects consumers' perception and has the largest

impact on advertisement effectiveness (Amos et al., 2008). Behaviours that result in bad publicity tends to be linked to younger celebrity athletes. This has led advertisers to use older or retired professional athletes more often, because they are associated with less negativity (Stone et al., 2003). In this regard, research comparing advertisements featuring celebrity athletes between 1980's to 1990's also found an increase use of older and retired athletes and sport coaches (Stone et al., 2003). It has been suggested that careers status (i.e., active or retired) of athlete endorsers needs further investigation (Walsh & Williams, 2017). However, no research has yet explored the career status of celebrity athlete endorsers and there may be potential for older athletes with less associated negativity to be a good fit in a social marketing campaign promoting sport and physical activity.

Another negative aspect of celebrity endorsement is the fact that celebrities may be involved with multiple endorsements. Research has shown that when athlete endorsers shift from one brand to a rival brand, their credibility and trust diminishes (Dyson & Turco, 1998). Furthermore, multiple endorsements from a single endorser can negatively impact consumer perceptions of the advertisement/brand (e.g., A. C. H. Chen et al., 2013; Tripp et al., 1994). As the number of products endorsed by a celebrity increases, the perceived credibility of the endorser, her or his likability and consumers' attitudes towards the advertisement drop (Tripp et al., 1994). However, if the celebrity's multiple endorsements fit with each other in the minds of consumers, it may have a positive effect on consumers (A. C. H. Chen et al., 2013). It has been found that the number of products supported by a single endorser impacts purchase intentions based on consumer's attachment with the endorser (Ilicic & Webster, 2011). Consumers who are more attached to a celebrity form higher satisfaction, commitment and trust to a celebrity brand (Thomson, 2006). Therefore, multiple endorsements by the celebrity can negatively influence their purchase intentions. However, when a consumer has a lower

attachment with the celebrity endorser, their purchase intentions can increase (Ilicic & Webster, 2011).

These challenges associated with celebrity endorsers have led to increased use of non-celebrity or even animated endorsers. Unknown endorsers are '*owned*' by the brand, thus removing the risk of multiple endorsements (Keel & Nataraajan, 2012). Utilising an unknown endorser such as one created through animation, can not only be cost-effective for the organisation, but also works better for target groups who are more concerned with social approval (B. A. S. Martin, Wentzel, & Tomczak, 2008). There remains questions about how unknown endorsers are perceived in comparison to well-known celebrity endorsers. This has not been explored thoroughly in the extant research, and not at all in the context of social marketing in sport. Having now reviewed the endorsement literature, the next section of the literature review provides an overview of attitude change and perception.

2.5 Attitude Change and Perception

Attitude refers to "the general and relatively enduring evaluations people have of other people, objects, or ideas" (Petty, Wheeler, & Tormala, 2003, p. 369). Attitudes are important because they are one determinant of behaviour (Ajzen, 1991). In the context of endorsers, the interactions among various factors related to the source, receivers, and message itself produce attitude change (Stoltenberg, Leach, & Bratt, 1989). Contemporary research on attitude change is based on dual process models of social judgment (Chaiken & Trope, 1999). Two seminal models for understanding attitude change are the elaboration likelihood model (ELM) and the heuristic-systematic model (HSM) (Petty & Cacioppo, 1986a, 1986b; Petty, Wegener, & Fabrigar, 1997; Petty et al., 2003). These models postulate processes and variables responsible for attitude change and strength of attitudes that results from those processes (Petty et al., 1997).

The basic tenet of the elaboration likelihood model is the existence of two '*routes*' to persuasion: central and peripheral. The central route focus is on the argument and the content of a message. It is assumed that central processing happens only when receivers are motivated and have the ability to think about the message. From this point of view, the motivation occurs when receivers are involved in the topic and the argument is important to them so that they pay attention to the message and reflect on the idea in the message. Ability, on the other hand, relates to the condition that receivers are capable of understanding the message. This can be affected by the quality of argument (e.g., a message which is easily understood) or receiver's circumstances (e.g., boredom). The peripheral route to persuasion happens when a receiver agrees with a message based on peripheral cues of the message such as the source's attractiveness and credibility, or quantity of argument. Therefore, receivers who believe the source of a message is an expert, may have more favourable thoughts and be motivated to accept the message and produce less counter arguments (Petty & Cacioppo, 1986a, 1986b). However, in terms of source expertise, there is evidence that it can be considered as a central cue to persuasion in endorsement process (Homer & Kahle, 1990; Premeaux, 2009).

As a whole, receivers who adopt peripheral processing are more passive than those doing central processing. Persuasion and attitude change caused by central processing is different from peripheral route change in terms of duration and predictability of behaviour (Petty & Cacioppo, 1986a, 1986b). The central route requires more active cognitive processing by the recipient and leads to more permanent attitudes and consequently predictable behaviour. On the other hand, attitudes derived from the peripheral route are believed to be weaker and not always predictive of subsequent behaviour (Stoltenberg et al., 1989). However, it is usually a combination of both central and peripheral processes that leads to attitude change (Petty et al., 1997). For example, when the message is relatively complex or a consumer is highly involved with

the endorsed product, an early identification of an expert endorser compared to a less expert endorser (i.e., a peripheral cue in ELM) results in more favourable brand-related evaluation (Homer & Kahle, 1990), and ultimately persuasion.

Like the ELM, the heuristic-systematic model considers multiple processes of persuasion. In this case, the two information processes are systematic and heuristic. Systematic processing is complex, and is at the higher end of the cognitive processes that human beings typically undertake. It requires thinking about persuasive argumentation and the message information in relevance to other knowledge that people may have about the issue discussed in the message. Therefore, receivers must be more motivated to systematically process a message because it requires more cognitive effort. This can be affected by situational variables (e.g., time pressure) and people differences (e.g., cognitive and interpretation capacity; and lack of knowledge) that constrain an individual's cognitive processing capacity (Chaiken, Liberman, & Eagly, 1989).

In contrast to systematic processing, judgments in heuristic processing scenarios are based on little cognitive effort and therefore a minimal amount of information processing can actually lead to an attitude change. Receivers base their agreement on a more superficial assessment of the message with extrinsic persuasion cues related to the message (e.g., length or number of arguments), communicator (e.g., source's characteristics such as expertise, likability and physical attractiveness), and audience (e.g., positive or negative reaction of audience to the message). Therefore, simple decision rules are involved in opinion change caused by heuristic processing. These simple schemas developed as the results of receivers past experiences and observations. Two examples of heuristic processing are: *more arguments are better arguments* and *arguments based on an expert opinion are valid* (Chaiken, 1987; Chaiken et al., 1989).

Dual process theories (e.g., ELM and HSM) focus mainly on the mental processes of attitude change in terms of automaticity and control (Gawronski & Creighton, 2013). Kelman (1961) proposed three processes to adaptation of attitude or behaviour that lead individuals to respond to social influence advocated by an impelling agent. These processes are compliance, identification and internalisation. Of these three, identification and internalisation are relevant to the endorsement process and can help us understand the effectiveness of celebrity endorsers (Friedman & Friedman, 1979).

In the identification process, an individual attitude or behaviour is more likely to be adopted from another person or a group because the behaviour associated with that person or group form a satisfying self-image (Kelman, 1961). Celebrity endorsement is one of the most used strategies in invoking identification (Basil & Brown, 1997). A receiver's exposure to celebrity activities over time leads them to build a sense of intimacy and identification (Basil & Brown, 1997). Identification can be associated with likability and attractiveness of the source, therefore a celebrity endorser can be persuasive within this process (Friedman & Friedman, 1979). For example, when a person mimics a celebrity's speech or wears what they wear to maintain a satisfying self-defining relationship. This phenomenon is also described as a *parasocial relationship* (Horton & Richard Wohl, 1956).

The process of internalisation, on the other hand, occurs when an individual adopts a behaviour because it is congruent with their value system. In this process the adaptation of the behaviour may be useful to solve their problem, is aligned with their own orientation, or is required based on their values. Therefore, the content of the induced behaviour which is related to source credibility is important in this process (Kelman, 1961). In the endorsement process, when an endorser is perceived to be expert, honest or sincere the internalisation process can lead to attitude change or adoption of a behaviour (Friedman & Friedman, 1979). During the process of attitude

change, an individual's involvement with the subject can also affect the persuasion process. The next section outlines involvement and how it fits alongside attitude and behaviour change within the underlying psychology of endorsement.

2.5.1 Involvement

Examination of ego involvement in social-psychology was initiated by the work of Sherif and Cantril (1947). There, it was eluded that involvement exists "when a social object is related by the individual to the domain of the ego" (Sherif and Cantril, as cited in Havitz & Dimanche, 1990, p. 179). Krugman (1965) facilitated transition of the involvement construct towards marketing and commercial settings with a focus on how it impacts the reception of messages. Involvement has been linked to communication persuasiveness in advertising settings as it can stimulate personal connection between the receiver and a related message (Petty & Cacioppo, 1981; Petty, Cacioppo, & Schumann, 1983).

According to HSM, high involvement subjects mostly employ a systematic information processing strategy in which message content is more important than source likability. For low involvement subjects, opinion change is more likely to happen through a heuristic processing strategy as long as the communicator is perceived to be likeable (Chaiken, 1980). Moreover, the ELM supports the proposition that involvement affects cognitive elaboration likelihood. When involvement is high, people are more engaged in cognitive processing (i.e., central route) about an issue or product (Petty et al., 1983). Psychological involvement must be considered in understanding attitude change because the systematic processing of HSM and cognitive processing of ELM foster acceptance of a message that may lead to enduring change.

In the context of sport, involvement is defined as "the degree to which participation in a sport activity becomes a central component of a person's life and provides both

hedonic and symbolic value" (Beaton, Funk, Ridinger, & Jordan, 2011, p. 136). Further, involvement is considered to have three components: hedonic value, symbolic value, and centrality. Hedonic value refers to the enjoyment which is derived from sport. Symbolic value indicates the self-expression value or level of symbolism of a sport, and the third dimension reflects how central the sport is within a person's life (Beaton et al., 2011). Opinion change can be affected by consumers' involvement because interests in consuming certain sport content are likely to be stronger for those who have certain knowledge of and or experiences with sport. Therefore, when exploring the impact of an endorser on attitude change, individuals' involvement with the endorsed subject should be considered. Although the involvement construct has featured in attitude change and advertising research (e.g., Rice et al., 2012; Roozen, 2008; Zaichkowsky, 1994), there is a paucity of research in endorsement and sport-based social marketing that has included the role of psychological involvement.

In addition to attitude and involvement, behavioural intention is an important proximal factor that is linked to the behaviour change that social marketers' desire. The next section of the literature review outlines concepts and theories underlying behavioural intentions.

2.6 Behavioural Intention

Several theoretical frameworks have been proposed to explore the psychological processes leading to actual behaviour. The Theory of Reasoned Action and the Theory of Planned Behaviour are two of the most recognised theories which provide conceptual frameworks to predict and explain the complexity of human behaviours in specified contexts (Armitage & Christian, 2003; Norman & Smith, 1995).

Behavioural intention is the focal outcome within the Theory of Reasoned Action. Intentions are assumed to capture motivational factors that affect individual behaviour.

That is, a person is more likely to perform a behaviour if he/she is willing to do it and plans to put in effort. Behavioural intention can be predicted by an individual's attitude, and subjective or social norms. Attitude is defined as the degree that a person has favourable or unfavourable evaluation of desired behaviour. Social norms refer to the perceived social pressure that a behaviour should or should not be performed, and an individual's motivation to comply with other people's beliefs (Ajzen, 1991; Fishbein & Ajzen, 2011; Norman & Smith, 1995).

Both attitude and subjective norms have been shown to collectively explain 30% to 50% of the variance in behavioural intention (Armitage & Conner, 2001; Sheeran & Taylor, 1999). A meta-analysis of studies on behavioural intention has also shown that intention on average accounted for 28% of the variance in behaviour across 422 prospective studies with 82,107 participants (Sheeran, Trafimow, Finlay, & Norman, 2002).

The link between intention and behaviour includes both mental and external events (M. S. Kim & Hunter, 1993). Although intention is assumed to be an immediate antecedent of behaviour, not all intentions lead to behaviours. Some intentions may be abandoned or some may be revised according to circumstances (Ajzen, 1985, 1991, 2005). For example, intentions related to a behaviour may be reduced if the behaviour is not totally voluntary, so the individual does not perform it despite having intended to. In other words, it can be concluded that the correlation between behavioural intention and behaviour is less than 1.0, and that behavioural intentions can act as a mediator in the attitude-behaviour relationship. The Theory of Reasoned Action positions intention as the only predictor of behaviour. According to the Theory of Planned Behaviour, however, the perception of behavioural control is also posited to predict actual behaviour (Ajzen, 1991).

Perceived behavioural control is a person's perception of the ease or difficulty of performing the desired behaviour. This can be affected by the person's experience as well as expected obstacles and barriers. For example, if two people were equally intent to learn a specific sport, the person who is confident that he/she can accomplish the activity would be more likely to persist than the one who doubts his/her ability. Therefore, behavioural achievement depends on both intention or individual motivation, and behavioural control. However, the strength and importance of each of these concepts in prediction of intention may vary in different situations (Ajzen, 1985, 2005).

The Theory of Reasoned Action has been explored in the context of physical activity and exercise. It was found that attitude and behavioural control are significant contributors to related behaviours (Norman & Smith, 1995). People who had positive attitudes towards exercise and believed that it is under their control, were more likely to exercise. Also, it was found that prior behaviour and involvement may lead to habitual responses and facilitates sustained exercise (Norman & Smith, 1995). Fundamentally, behavioural intention - and its most proximal predictors – remain important in the exploration of any behaviour including that which is sought in the current research context.

This chapter has reviewed literature related to sport and physical activity participation, young adults, social marketing, endorsement, attitude change, and behavioural intention. Having critically assessed the current state of knowledge on this research topic, the next chapter outlines a description of the research design and methods.

Chapter 3

METHODS

This chapter provides an outline of the research paradigm, research design, and participants. The first section explains the research paradigm followed by the sequential explanatory design of the project. The population of interest for the research is then identified and defined.

3.1 Research Paradigm

A research paradigm or philosophy is "a set of propositions that explain how the world is perceived". The research paradigm includes both the researcher's view of the real world, and also the way he/she analyses the complexity of that (Edwards & Skinner, 2009, p. 18). In this research which features a sequential explanatory design with emphasis on quantitative phase, the post-positivist approach aligns well (Creswell, 2003; Creswell & Clark, 2011; De Lisle, 2011). In the post-positivist paradigm, a researcher attempts to learn about the world by developing numeric measures based on observations of human behaviours. This paradigm challenges the traditional thinking of positivism about the absolute truth of knowledge and assume that knowledge is conjectural and absolute truth cannot be found while studying human behaviours and actions (Creswell, 2003). However, the qualitative phase of this research is aligned with the interpretive paradigm which is open to varied theoretical perspectives in order to understand people's experience and behaviour and how they describe events in their lives (Grant & Giddings, 2002).

Post-positivism and interpretivism are usually positioned at different points on the paradigm continuum. Although a mixed methods design can accommodate multiple paradigms (Creswell & Clark, 2011), having an explicit paradigm in a mixed methods

study is recommended (Creswell, 2003; Greene & Caracelli, 1997). Therefore, the pragmatic paradigm which can incorporate both quantitative and qualitative research was adopted. Pragmatism brings different research perspectives together and provides a practical and applied research philosophy (Tashakkori & Teddlie, 1998). This allows for the development of the best understanding of a phenomenon (i.e., endorsement in a social marketing context) and broadens the focus to questions instead of a specific method (Creswell, 2003). This understanding requires the use of induction (i.e., discovery of pattern), deduction (i.e., testing of theories and hypotheses), and abduction (i.e., finding and relying on the best of a set of explanations for understanding one's results) (Smith, 2010). Pragmatism has the advantage of flexibility because having quantitative methods compensates for the lack of generalisability associated with qualitative data, and the qualitative method can help deepen understanding of the relationships identified through the analysis of the quantitative data (Onwuegbuzie & Leech, 2005). Furthermore, because quantitative research is usually driven by *a priori* hypotheses, qualitative research can capture participants' voices ensuring a more holistic overall understanding. Ultimately, this allows the researcher to delve further into all the data available to understand the phenomenon more comprehensively (Onwuegbuzie & Leech, 2005).

3.2 Research Design

A research design is an "overall plan for collecting data in order to answer the research question". It includes specific data collection and analysis methods that a researcher intends to use (Fraenkel & Wallen, 2009, p. G-7). This project can be characterised as applied research because it is an examination of the effectiveness of a specific practice (Fraenkel & Wallen, 2009), which in this case is celebrity endorsement in the context of a sport and/or physical activity social marketing campaign.

Most celebrity endorsement research utilises an experimental design (e.g., Fink et al., 2012; Koernig & Boyd, 2009; Till & Busler, 2000). Such an approach allows for rigorous testing of a theory through specifying narrow hypotheses to assess dependent variables in both control and treatment groups (Creswell, 2003). In line with this tradition, a series of experiments were implemented. However, there are benefits to a varied research design, so this research project was not limited to just experimentation and included focus groups as well.

A mixed methods approach uses both quantitative and qualitative approaches in a single study (Fraenkel & Wallen, 2009). The purposes of mixed methods in this research can be characterised as '*expansion*' and '*complementarity'*. Expansion refers to the development of knowledge through use of different research approaches to expand scope and range of sport-related studies. Complementary refers to research strategies used in the study to examine different aspects or diminutions of a same phenomenon in sport (i.e., athlete endorsement) for a deeper and broader understanding (Smith, 2010, p. 190). Mixed methods can eliminate or neutralise weaknesses of a single method (Creswell, 2003; Rudd & Johnson, 2010), and enhance the validity of both the quantitative and qualitative findings (Edwards & Skinner, 2009; Onwuegbuzie & Leech, 2004). Several years ago, a concern was raised that sport management researchers had not made sufficient use of the mixed methods approach (Rudd & Johnson, 2010). A mixed methods design remains relatively novel in our literature and particularly one incorporating experimental phases.

Specifically, the research utilises a sequential explanatory design of mixed methods (Figure 3.1) in three distinct studies. The key features of a sequential explanatory design are that the quantitative phase is followed up by the qualitative phase, with the priority placed on the quantitative phase (hence the use of capital letters in Figure 3.1). The main benefit of a sequential explanatory design is that the qualitative phase helps the

researcher to interpret and expand upon the findings of the quantitative phase. The weakness of this specific design is the length of time for data collection and interpreting results of two separate phases, and also the resources needed to collect and analyse both types of data (Creswell, 2003; Creswell, Plano Clark, Gutmann, & Hanson, 2003; Fraenkel & Wallen, 2009; Ivankova, Creswell, & Stick, 2006).

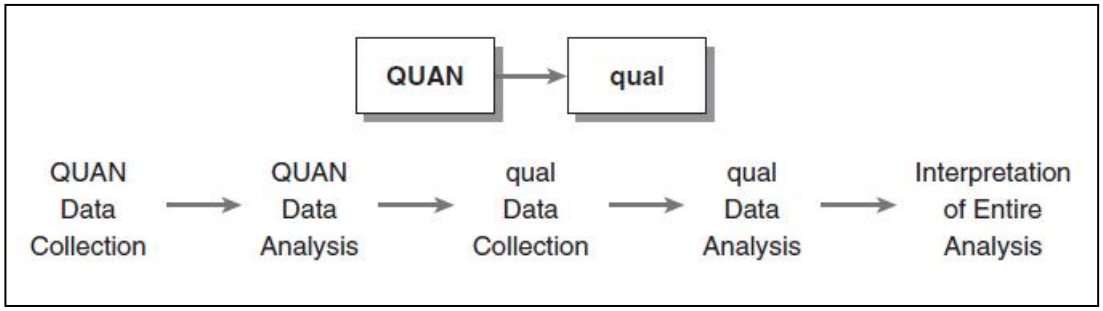


Figure 3.1. Sequential explanatory design (Creswell et al., 2003, p. 180).

The quantitative data were collected using questionnaires within experiments. The aim of the quantitative phases was to generalise results from the sample to the population of interest by controlling variables, through randomisation, and the use of valid and reliable measures (Newman & Benz, 1998). Across the quantitative phases of the three studies, three outcome variables (attitude, participation intention and perception of fit) feature which are well grounded in prior literature and together allow for a comprehensive exploration of the endorsement phenomenon. One important note related to the quantitative aspects of the research relates to use of an overall "campaign" versus an individual advertisement and how results should be interpreted thereafter. Although outcomes as they relate to a wider campaign, are ultimately of interest and likely to lead to behaviour change, research participants were presented with advertisements not entire campaigns. Therefore, the outcomes related to the broader campaign and the individual advertisement are described somewhat interchangeably.

Focus groups were utilised to generate the qualitative data. Focus groups align with the project's exploratory and explanatory nature and are s a common approach for

gathering qualitative data through interaction among the group on a topic set out by the researcher (Morgan, 1996). The objective of a focus group is to obtain participants' opinions about an issue in a setting in which she/he can hear opinions of others and reflect on her/his own view accordingly. Participants in a focus group may have different views and there is no need to get consensus of opinion about the topic (Fraenkel & Wallen, 2009) which allows for a free flowing and information rich environment. Focus groups were conducted as part of all three studies. Figure 3.2 depicts how the three studies incorporated both quantitative (i.e., experiment) and qualitative (i.e., focus group).

The aim of Study 1 was to identify the impact of an endorser on young adults' attitudes towards a social marketing campaign advertisement in sport and physical activity. In this study, classical conditioning underpinned the assessment of whether the presence of the endorser enhances attitudes towards a local campaign. A composite involvement variable was included as a covariate in all three studies. The *Push Play* campaign that was used in Study 1 was launched in 1999 by Sport New Zealand and further developed in the early 2000s. Some elements of the long-term Push Play campaign (i.e., Push Play Nation and National Push Play Day) are still used today.

The aim of Study 2 was to explore endorser's expertise and recognition in two specific campaign contexts (i.e., sport and physical activity). The match-up hypothesis underpinned this study. A series of fictitious social marketing advertisements were utilised to examine the impact of endorser's expertise, recognition, and context on participants' attitudes, intentions and perceived endorser-campaign fit.

The aim of Study 3 was to identify the impact of both an athlete endorser's career status and gender, as well as participants' gender on attitudes, intentions and perceived fit related to a social marketing campaign in sport and physical activity. Based on the

match-up hypothesis, participants' gender was also considered in this study to identify an endorser-audience fit in terms of gender.

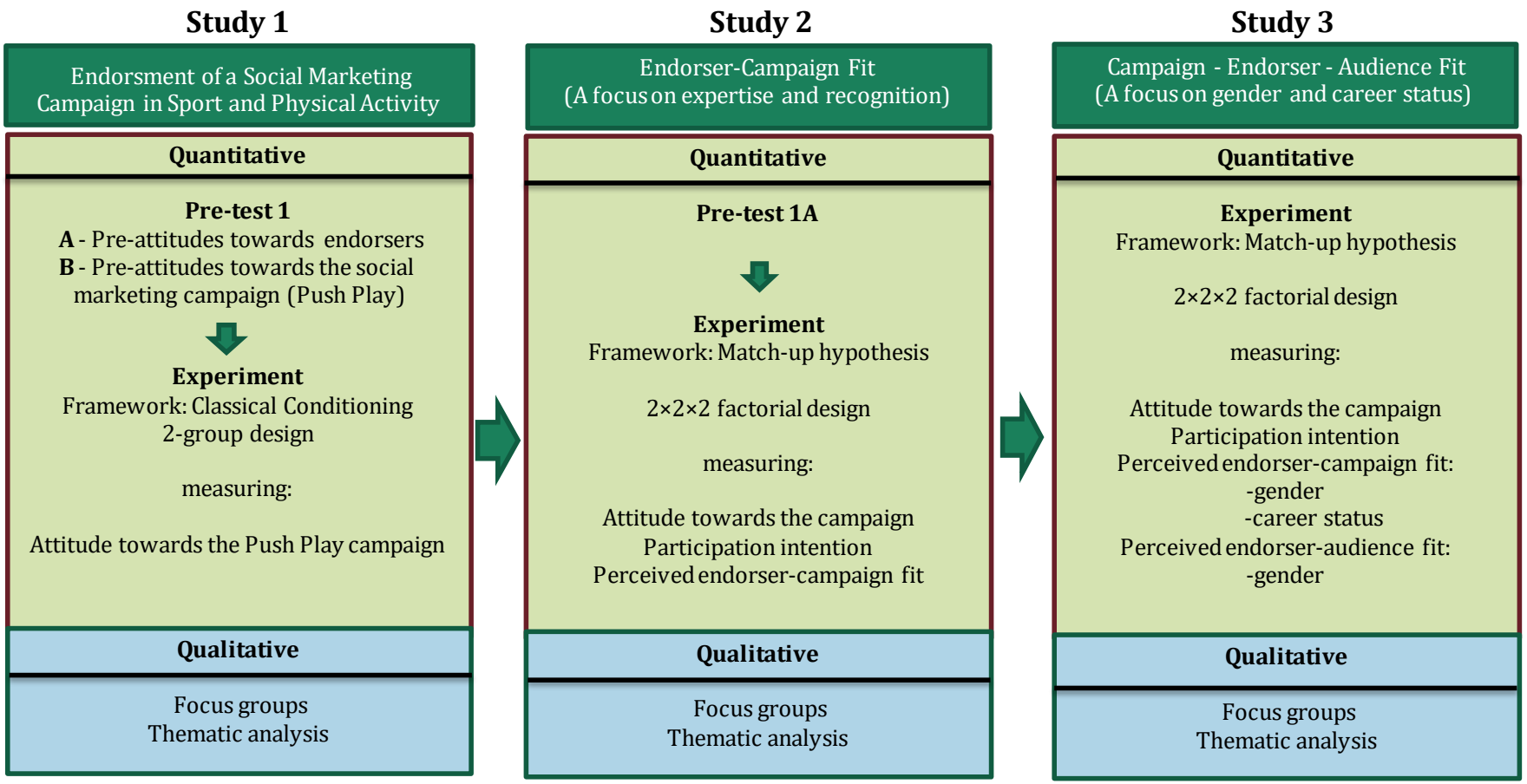


Figure 3.2. Design of studies

3.3 Research Participants

A population is referred to as “the large group to which a researcher wants to generalise the sample results” (R. B. Johnson & Christensen, 2008, p. 224). The population of interest in the three studies of the thesis were New Zealanders aged between 16 to 24 years. Research participants were recruited through convenience sampling. Convenience sampling targets people who are available, volunteer and can be easily recruited (R. B. Johnson & Christensen, 2008). The participants were undergraduate students of Auckland University of Technology (AUT). The majority of experimental research utilises convenience samples (e.g., Berry & Shields, 2014; C. Y. Chen et al., 2012; Van Norel, Kommers, Van Hoof, & Verhoeven, 2014; Xing & Chalip, 2006) because university-based researchers are able to recruit participants easily as students are readily accessible to them. Furthermore, the use of a relatively homogeneous student sample in an experiment can control for random sources of error (Cook, Campbell, & Day, 1979) because the chance of existing covariation between the variables is less (Calder, Phillips, & Tybout, 1981).

In addition, the use of undergraduate students is common in athlete endorsement research (e.g., Cunningham, Fink, & Kenix, 2008; Fink, Cunningham, & Kenix, 2004; Fink et al., 2012; Y. Kim & Na, 2007; Koernig & Boyd, 2009; Y. Lee & Koo, 2015; Liu & Brock, 2011). This reflects the widespread use of university students in the endorsement (e.g., A. C. H. Chen et al., 2013; Ilicic & Webster, 2011; Rice et al., 2012; S. Roy et al., 2013; Spry, Pappu, & Cornwell, 2011; Tzoumaka et al., 2016), and marketing literature (e.g., Eisend, 2006; J. Lee & Ferreira, 2011; Mizerski, Mizerski, & Sadler, 2002; D. P. Roy, 2011; Shimp et al., 1991; Van der Veen, 2008). Also, undergraduate university students have been used in previous research to represent the population of young adults (e.g., Boon & Lomore, 2001; Cianfrone & Zhang, 2006; Dix, 2009; Jackson & Darrow, 2005; O'Regan, 2014). Therefore, based on the nature of

this research, it is argued that the benefits of convenience sampling outweigh the limitations.

Chapter 4

STUDY 1

Endorsement of a social marketing campaign in sport and physical activity

A corresponding manuscript for this chapter will be published in the International Journal of Sport Management and Marketing: Behnoosh S., Naylor M., & Dickson, G. (in press). The impact of endorsement on a sport-based social marketing campaign. *International Journal of Sport Management and Marketing.*

4.1 Introduction

Study 1 is an exploration of how an endorser affects attitudes towards a social marketing campaign promoting sport and physical activity. Despite clear evidence that endorsements are useful for promoting public health issues (e.g., Casais & Proença, 2012; Casey et al., 2003), there is a lack of breadth to endorsement research in social marketing settings (Brace-Govan, 2013; Keel & Nataraajan, 2012). Furthermore, social marketing may be a useful tool to increase physical activity and sport participation specifically (Bauman et al., 2003; Bell & Blakey, 2010), but no research to date has explored the potential benefit of incorporating an endorser into a social marketing campaign designed for that purpose among young people. Therefore, this study adds to the body of sport-based endorsement literature (e.g., Fink et al., 2012) and the specific contribution lies within the explicit exploration of endorser effects on young people's attitudes towards a social marketing advertisement for sport and physical activity promotion.

4.2 Methods

A mixed methods, sequential explanatory design (Creswell, 2003) in which dominant quantitative phase precedes the qualitative phase was implemented in this study (see Figure 3.1). This approach allows for further interpretation of quantitative results beyond traditional descriptive and inferential statistics. In the quantitative phase, a pre-test was conducted to determine an appropriate endorser and social marketing advertisement for the main experiment. Then, a traditional classical conditioning procedure was used as a framework in the experiment to explore young adults' attitudes towards the campaign. In the context of social marketing, the US (i.e., an external stimulus which elicits positive emotion) is the endorser's image, and the CS (i.e., a neutral stimulus which does not naturally evoke a response) is the social marketing initiative. The study was designed to explore whether pairing a social marketing campaign with an endorser can result in more favourable attitudes towards the campaign (Figure 4.1).

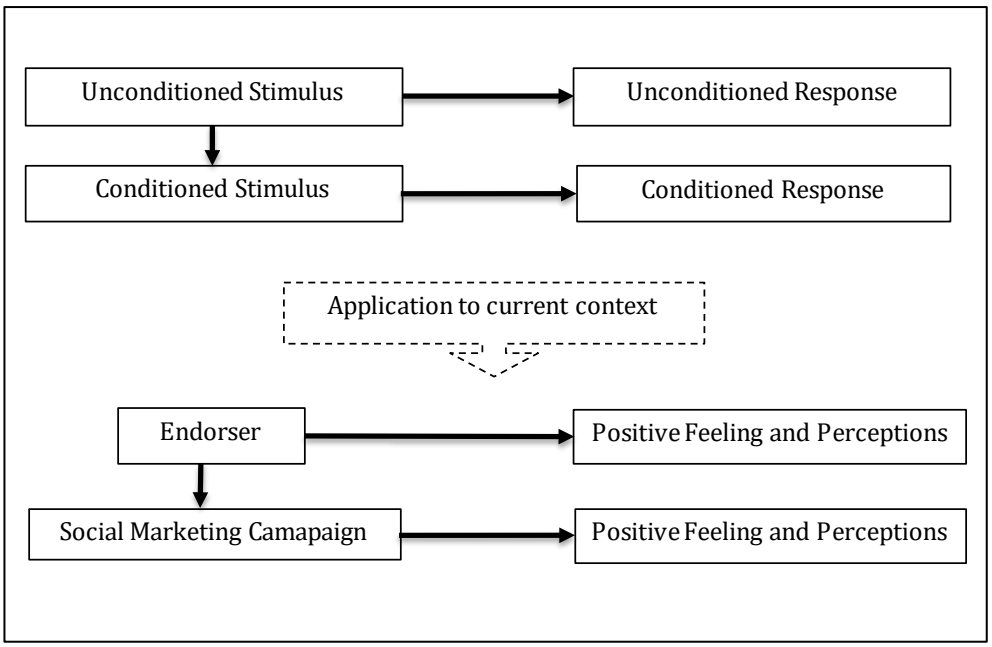


Figure 4.1. Classical conditioning paradigm in social marketing, adapted from Tom et al. (1992, p. 50).

In the qualitative phase of this study, focus groups were implemented for the purpose of generating further insights about the use of endorsers for promoting sport and physical activity. The overarching question of the study was: *How do young adults perceive the use of an endorser in a social marketing campaign promoting sport and physical activity?*

4.3 Quantitative Phase

To explore the effect of an endorser on attitudes in the context of social marketing, an experiment incorporating the tenets of classical conditioning was conducted. This procedure pairs an unconditioned stimulus (US) with a conditioned stimulus (CS) to analyse the effects of the US on the CS (Domjan, 2005; McSweeney & Bierley, 1984; Shimp et al., 1991; Stuart et al., 1987). The image of an endorser was used as the US and a local campaign advertisement was the CS. The experiment enabled exploration of whether participants exposed to the systematic pairing of an advertisement for a social marketing campaign with an endorser would report more favourable attitudes towards it than participants in the control group without the systematic CS-US pairing. Participants' psychological involvement in sport was also measured in both the pre-test and main experiment for its potentially extraneous effects on endorsement (Fink et al., 2012).

4.3.1 Pre-test 1

A pre-test was necessary to ensure that the endorser was deemed credible by the population of interest for subsequent use as an US in the main experiment. It was also needed to provide a benchmark on attitudes towards a focal social marketing advertisement campaign which was used as a CS in the experiment. The pre-test questionnaire (Appendix F) had five parts including demographic items (i.e., gender, age and ethnicity); items measuring participants' involvement in sport; items serving as

an evaluation of the social marketing advertisement; items measuring familiarity with the 10 potential endorsers and their profession; and items measuring the endorsers' credibility. The pre-test was conducted during class time and participation was voluntary. Participants received the information sheet one week before the pre-test (Appendix C2). Consistent with previous studies incorporating a similar design (e.g., Stuart et al., 1987; Till et al., 2008) participants were recruited through convenience sampling. At the outset, 73 student participants were recruited from Auckland University of Technology (AUT). Eleven questionnaires were removed due to either significant incompleteness or because the reported age was outside the 16-24 target range.

4.3.1.1 Demographic profile of the pre-test sample

Participants consisted of 31 females and 31 males and the average age was 19.9 years old. The majority of the sample reported European ethnicity (57.4%), while smaller groups reported being Maori (16.2%), Asian (4.4%), Pacific people (13.2%), and MELAA (8.8%) (Table 4.1). The ethnic groups were categorised according to Statistic New Zealand. In this category MELAA stands for Middle Eastern, Latin American and African (Statistics New Zealand, 2014).

Table 4.1. Ethnic Groups of the Pre-test Participants

Ethnicity	**Frequency**	**Percent (%)**
European	39	57.4
Maori	11	16.2
Pacific people	9	13.2
MELAA**	6	8.8
Asian	3	4.4
Total*	68	100.0

* The total sample is larger than 62 as some participants reported more than one ethnic group.
** Middle Eastern, Latin American and African

4.3.1.2 Involvement

Involvement was measured to control for potential extraneous effects on attitudes (Chaiken, 1980; Y. Lee & Koo, 2015), and perceptions of endorser credibility (Bower & Landreth, 2001) which is typical of endorsement research (C. Y. Chen et al., 2012; Goldsmith, Lafferty, & Newell, 2000; Lafferty & Goldsmith, 1999; Lafferty et al., 2002). Sport involvement represents the degree to which participation brings enjoyment and is reflected in a person's life (Beaton et al., 2011). Three involvement dimensions (i.e., centrality, symbolic value, and hedonic value) were measured with nine adapted seven-point items anchored by strongly agree and strongly disagree which were found to be reliable ($\alpha = .92$) (Table 4.2). The scale was originally developed by Kyle and Mowen (2005) and was adapted for a sport context by Beaton et al. (2011).

Table 4.2. Involvement Facets and Items

Construct	Items
Centrality	I find a lot of my life organised around sport. Sport plays a central role in my life. I enjoy discussing sport with others (e.g., friends, family, and co-workers).
Symbolic value	Sport says a lot about who I am. Sport tells something about me. Sport gives others a glimpse of the type of person I am.
Hedonic value	Sport is fun. Sport is one of the most satisfying things that I do. I really enjoy playing sport.

Involvement construct items were presented to participants on the first page of the pre-test questionnaire prior to items measuring the constructs of interest. Items were presented this way to prevent any consideration of focal variables subsequently influencing sport involvement self-reports (Pallant, 2016). Involvement is an enduring trait that is best measured at the outset of the questionnaire. To explore if attitudes towards the campaign advertisement were related to participants' psychological involvement with sport, Pearson's correlations were calculated. The results for the

broader involvement construct revealed no significant relationship (r = .01, p = .94) nor did dimension level correlations (Centrality, r = .04, p = .74; Symbolic Value, r = .04, p = .76; Hedonic Value, r = -.07, p = .58) (Table 4.3).

There was also a concern that those who reported higher involvement with sport, may also report higher perceived credibility of the athlete endorsers, of which there were four from the original set of 10 endorsers. To test for this, correlations were run between perceived credibility and both a composite involvement variable (r = .04, p = .75) as well as between perceived credibility and the three individual dimensions (Centrality, r = .07, p = .58; Symbolic Value, r = .07, p = .59; Hedonic Value, r = -.04, p = .76). No significant relationships were uncovered (Table 4.3).

Table 4.3. Correlations among Involvement, Attitude and Perceived Credibility

		N	**Pearson Correlation**	**Sig. (2-tailed)**
Involvement	Attitude	62	0.01	0.94
	Perceived Credibility	60*	0.04	0.75

* Participants who recognised celebrity athletes in the pre-test.

4.3.1.3 Pre-existing attitudes towards the campaign

As a results of an Internet search for any recent social marketing campaigns in New Zealand with a focus on sport and physical activity promotion, a Push Play campaign advertisement was chosen as the conditioned stimulus (CS) in the experiment. Push Play was a nationwide campaign designed to get New Zealanders more active, more often and is still used to a lesser extent at present. The campaign encouraged adults to be physically active for 30 minutes a day. The rationale for the campaign was the fact that even small amounts of activity are good for health (Ministry of Health, 2007). The use of an authentic advertisement increased the generalizability and ecological validity of the study (Till & Shimp, 1998). Fraenkel and Wallen (2009) suggested that ‘ecological generalizability’ is “the degree to which results can be generalized to

environments and conditions outside the research setting" (p. G-3). However, use of a campaign that participants may have had familiarity with, necessitated consideration of any existing attitudes.

Familiarity with a campaign may affect attitudes, and influence choice behaviour and likability towards the campaign (W. Baker, Hutchinson, Moore, & Nedungadi, 1986; Moreland & Zajonc, 1982). In other words, in order to examine the unique effect of an endorser (US), the CS must be perceived as neutral. Therefore, pre-existing attitudes towards the Push Play were also measured in the pre-test to verify the neutrality of the CS. Eight items using a seven-point semantic differential scale from Shimp et al. (1991) were used with semantic differential anchors: good/bad, high quality/low quality, like very much/dislike very much, superior/inferior, attractive/unattractive, pleasant/unpleasant, interesting/boring, and favourable/unfavourable (α = .95).

A one-sample *t*-test was conducted revealing that participants' overall attitudes towards the campaign advertisement (M = 3.72, SD = 1.24, d = 0.22) were not significantly different from the midpoint on the seven-point attitude scale, t (61) = -1.77, p = .08 (Table 4.4). Therefore, it was concluded that there were no significant positive or negative pre-existing attitudes towards the campaign advertisement and that it could be used in the main experiment.

Table 4.4. One-Sample t test

	Test Value = 4					
	t	**df**	**Sig. (2-tailed)**	**Mean Difference**	**95% Confidence Interval**	
					Lower Bound	**Upper Bound**
Attitude	-1.77	61	.08	-.28	-.59	.04

4.3.1.4 Pre-existing attitudes towards the endorsers

Through discussion amongst sport management and media experts, a list of 10 potential endorsers was generated and included in the pre-test. Any of these 10 endorsers therefore could have potentially featured in the experimental components of Study 1 and 2. Consistent with endorsement research (e.g., Friedman & Friedman, 1979), three types of endorsers were considered, four celebrity athletes (two males and two females), four celebrity non-athletes (two males and two females), and two unknown endorsers (one male and one female).

Celebrity athletes

Athletes were chosen from different sports because an endorser's sport may influence perceived attractiveness, especially for female athletes (Fink et al., 2012). Furthermore, to ensure that the endorsers had celebrity status, athletes who were at a high level within their profession were selected (Amos et al., 2008). Of the four celebrity athletes in the pre-test, three were Olympic gold medallists and one was a national rugby union team (All Blacks) player who was deemed to be well-known to research participants (Figure 4.2).

1. Valerie Adams

Valerie Adams is a shot putter from New Zealand. She is a four-time World champion, three-time Commonwealth champion, two-time Olympic champion (2008 Beijing and 2012 London), and a silver medallist at the last Olympic Games in Rio de Janeiro (2016).

2. Lisa Carrington

Lisa Carrington is a New Zealand flatwater canoeist. She is a five-time gold medallist in the Women's Kayak Single at the Canoe Sprint World Championships, as well as two-time gold medallist at the 2012 London and 2016 Rio de Janeiro Olympics.

3. Hamish Bond

Hamish Bond is a New Zealand rower. He has won a gold medal at the World Rowing Championships eight times as well as a gold medal at the 2012 London Olympics and 2016 Rio de Janeiro Olympic Games.

4. Sonny Bill Williams

Sonny Bill Williams is a New Zealand rugby union player and heavyweight boxer who has played rugby league and rugby union at the highest levels. He has won two consecutive Rugby World Cups with the New Zealand national rugby union team (All Blacks).

Figure 4.2. Pre-test celebrity athletes. From left to right, Valerie Adams, Lisa Carrington, Hamish Bond, and Sonny Bill Williams

Celebrity non-athletes

The four celebrity non-athletes in the pre-test were high profile New Zealanders across a range of occupations (Figure 4.3).

1. Lorde

Ella Marija Lani Yelich-O'Connor, known by her stage name ‘Lorde’, is a New Zealand singer, songwriter and record producer. She is well-known in New Zealand and around the world having won two Grammy Awards, a Brit Award, and 10 New Zealand Music Awards.

2. Hilary Barry

Hilary Ann Barry is a well-known New Zealand TV newsreader and journalist. She won the 2006 Qantas Television Award as Favourite New Zealand Female Personality. Barry also won the Best News or Current Affair Presenter award at the 2011 Aotearoa Film and Television Awards, and TV Guide's Best on The Box award for the Best Presenter in 2012 and 2013.

3. Sam Neill

Nigel John Dermot Neill (better known as Sam Neill) is a New Zealand actor who has a significant profile in New Zealand and around the world. Some of his notable roles in Hollywood movies were Jurassic Park (1993 and 2001), The Daughter (2015) and Merlin (2006).

4. Cliff Curtis

Clifford Vivian Devon Curtis is a New Zealand actor with significant notoriety. He won the Supreme Award at the inaugural Matariki Awards in 2016. Some of his notable film roles are Push (2009) and Risen (2016) alongside TV series Trauma (2009-2010), and Fear the Walking Dead (2015-2017).

Figure 4.3. Pre-test celebrity non-athletes. From left to right, Lorde, Hilary Barry, Sam Neill, and Cliff Curtis

Unknown persons

Two unknown endorsers were selected for the pre-test based on unremarkable physical attributes and convenient access. The unknown endorsers were consulted and permission was granted before using their pictures in the study. They were depicted in the pre-test with two photographs taken by the researcher (Figure 4.4).

Figure 4.4. Pre-test unknown endorsers

All the endorsers' photos were edited using Adobe Photoshop CC to ensure that they were as similar as possible. The endorsers' accessories (e.g. glasses, neckless) were removed. Logos on clothing were removed and clothing colour changed to be predominantly black. After modifying the pictures, participants were asked to identify the endorsers, and then associate the endorser with a specific profession. The latter step was necessary within the design of Study 2 as endorser expertise was included in the study. This process enabled confirmation that the celebrity endorsers were known to the participants, and that the unknown endorsers were unknown to the participants.

An endorser's perceived credibility has a significant impact on advertising effectiveness whether the endorser is a celebrity or not (Goldsmith et al., 2000; La Ferle & Choi, 2005). Therefore, participants evaluated all pre-test endorsers using Ohanian's (1990) well-established credibility scale. Ohanian (1990) merged aspects of the Source Credibility and the Source Attractiveness Models and developed a three-dimensional credibility scale (i.e., expertise, trustworthiness and attractiveness), (Table 4.5). Use of this scale in a New Zealand context has precedent. Garland et al. (2006) used it for selection of celebrity athlete endorsers in the New Zealand based research project including a confirmatory factor analysis which established its appropriateness. The evaluation of endorsers' credibility in this study was based only on perceived attractiveness and trustworthiness, which is consistent with C. Y. Chen et al. (2012); Till and Busler (2000) and Till et al. (2008). It was not deemed necessary to pre-test expertise because of the original 10 endorsers in the pre-test, eight were high profile and assumed to be expert in their field and the other two were considered non-expert unknown endorsers.

Table 4.5. Bipolar Pairs of Adjectives in the Ohanian (1990) Scale

Construct	**Bipolar pairs of adjectives**
Expertise	Expert-Not an expert, Experienced-Inexperienced, Knowledgeable-Unknowledgeable, Qualified-Unqualified, Skilled-Unskilled
Trustworthiness	Dependable-Undependable, Honest-Dishonest, Reliable-Unreliable, Sincere-Insincere, Trustworthy-Untrustworthy
Attractiveness	Attractive-Unattractive, Classy-Not Classy, Beautiful-Ugly, Elegant-Plain, Sexy-Not sexy

Participants rated all endorsers on one attribute at a time to prevent 'halo effects' that may cause specific traits of a particular endorser to subsequently bias overall impressions about that person and affect perceptions of other traits (Beckwith & Lehmann, 1975). Furthermore, the order that potential endorsers were presented for ranking the attractiveness/ unattractiveness attribute was random, as it was for other

measures as well. Therefore, the potential effect that one endorser may have on how others were assessed subsequently was reduced. Lisa Carrington (a celebrity athlete) was chosen by participants as the most credible endorser with the highest cumulative mean score of 72.43 across the two dimensions (Table 4.6). Her image was therefore used in the main experiment.

Table 4.6. Endorsers Credibility Mean Scores

Endorsers		**Dimensions**		**Total mean**
		Attractiveness	**Trustworthiness**	
Athletes	Lisa Carrington	35.86	36.57	72.43
	Sonny Bill Williams	35.67	30.78	66.45
	Valerie Adams	27.25	36.90	64.15
	Hamish Bond	21.42	32.91	54.33
Celebrities	Hilary Barry	32.70	36.82	69.53
	Lorde	29.57	30.61	60.18
	Cliff Curtis	25.03	28.74	53.77
	Sam Neill	25.41	27.48	52.90
Unknown endorsers	Female	20.21	24.54	44.75
	Male	17.39	22.25	39.63

Note. Mean scores were calculated with data only from participants who recognised celebrity athletes/ celebrity non-athletes, and did not recognise the unknown endorsers.

4.3.2 Experiment

An experiment utilising a traditional classical conditioning design was used to explore the effect of an endorser on participants' attitudes in the context of social marketing. The findings of the pre-test were used to determine which endorser was included, as well as to provide a benchmark on attitudes towards the focal social marketing advertisement. The experiment was designed to explore Hypothesis 1:

H1: Controlling for involvement, participants exposed to the *systematic pairing* of a social marketing campaign with an endorser will report more favourable *attitudes*

towards the social marketing campaign than participants in the control group with *no systematic pairing*.

4.3.3 Procedure

A post-test only, control group design was utilised in which participants were randomly assigned to a control group and treatment group. This design has been identified as one of the most popular in marketing research (Malhotra, 2010). The experiment was designed to isolate attitudinal differences between the two groups. The experiment was carried out during class time, one week after participants had received an information sheet. To prevent an endorser-advertisement association before the experiment, the word “celebrity endorsement” was removed from the information sheets (see Appendix C1). On the day of the experiment, participants were informed that the experiment required them to carefully watch a two-minute slide show and then fill out a questionnaire. The slide show included the Push Play advertisement, the endorser’s picture and filler images consisting of alternate social marketing advertisements, photos of other endorsers (athletes and non-athletes), and images of pleasant natural scenes. Use of filler images decreases bias due to participant hypothesis guessing and other demand artefacts which may cause participants to respond based on what they think a researcher is hoping or expecting to find (Sawyer, 1975).

A positive unconditioned stimulus paired with a conditioned or arbitrary stimulus can result in positive attitudes towards the CS (Domjan, 2005; McSweeney & Bierley, 1984; Shimp et al., 1991; Stuart et al., 1987). Therefore, consistent with previous endorsement studies (e.g., C. Y. Chen et al., 2012; F. M. Miller & Allen, 2012; Till et al., 2008), the photo of the endorser that emerged from the pre-test (Lisa Carrington) was used as the US and the social marketing advertisement was used as the CS. The treatment group was exposed to a slide show in which images of the social marketing

advertisement (CS) and the endorser (US) were systematically paired (i.e., presented one after the other). The CS always precedes the US in the slide show to maximise the conditioning effect, because when the CS is presented before the US, participants will more likely associate the CS to the US which is known as “forward conditioning” (Stuart et al., 1987). This enhances the conditioning and ultimately may affect attitudes towards the CS. As per Till et al. (2008), the CS-US pairing of images were presented to the treatment group a total of five times embedded among randomly assorted filler images. The filler images were also presented in pairs. Each CS-US and filler image pair were presented for eight seconds, with a two second break in between (Figure 4.5).

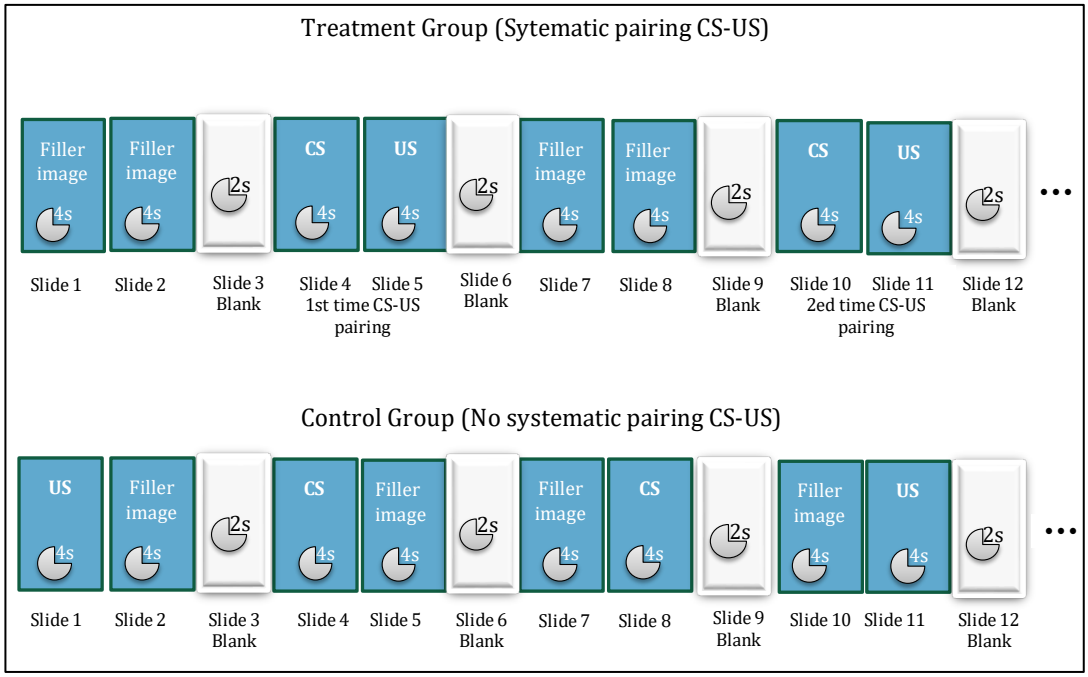


Figure 4.5. Positioning of CS-US images among filler images for the two groups

In the control group image pairs were totally at random, featuring unsystematic pairings of CS, US and the filler images (C. Y. Chen et al., 2012; Till et al., 2008). Therefore, any difference between the treatment and control groups on the outcome variable can be attributed to the association of the two stimuli rather than the repeated presentation of either the US or the CS (Stuart et al., 1987).

The procedure and the slide sequence just described was trialled ahead of the experiment (n = 47). Consistent with previous marketing research (e.g., C. Y. Chen et al., 2012; Till et al., 2008) a ’20-picture’ procedure was used including five pictures of the endorser (US), five pictures of the campaign advertisement (CS), and 10 filler images (five scenery images, three alternative social marketing advertisements, and two celebrities’ photos from pre-test). A manipulation check was carried out to assess participants’ interpretation of the manipulation (Gravetter & Forzano, 2012; Sigall & Mills, 1998), to ensure that the stimuli had been paired in the treatment group and not paired in the control group. Manipulation checks are particularly important in classical conditioning experiments because compared to other designs, stimuli pairings lack plausibility (Sigall & Mills, 1998).

After the trial, it was evident from the manipulation check that participants in both the treatment and control groups had paired the US and the CS. This suggested that the manipulation was not successful. Therefore, additional pictures of alternative endorsers and social marketing advertisement were included in subsequent iterations of the experiment slide show to reduce guessing. In the amended slide show the number of CS-US pairings was kept the same (e.g. five times pairings), but the number and repetition of filler images were increased. In the final version, filler images consisted of four pleasant scenery images; four alternative social marketing advertisements (skin protection, road safety, immunisation, and environment protection); and six photos of a celebrity and two athletes from the pre-test. The final 24 photos (five CS-US pairs + 14 filler images), with 11 blank slides were presented in 35 slides (Figure 4.6). The entire slide show can be viewed in Appendix G.

Treatment group

Slide No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
	CS	US	B	Ad 1	S1	B	C1	C2	B	CS	US	B	S2	Ad 2	B	CS	US	B	S3	C2	B	C3	Ad 3	B	CS	US	B	C1	S4	B	Ad 4	C2	B	CS	US

Control group

Slide No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
	CS	S1	B	Ad 1	C2	B	US	C1	B	S2	CS	B	Ad 2	US	B	C2	US	B	Ad 3	CS	B	C2	US	B	Ad 4	C1	B	CS	S3	B	C3	US	B	S4	CS

Ad:	Social marketing advertisements
S:	Scenery imagery
C:	Celebrity athletes' photos
CS:	Conditioned stimulus, Push Play advertisement
US:	Unconditioned stimulus, Chosen celebrity from pre-test
B:	Blank slide

Figure 4.6. Final version of the slide shows presented to participants

After viewing the slide show, participants completed a questionnaire (Appendix H). They reported their attitudes towards the advertisement (CS) which was also depicted in the questionnaire. Participants' psychological involvement in sport was included as a covariate for its potential effects on attitude. As in the pre-test, it was measured prior to the other variables (Pallant, 2016). The final part of the questionnaire was a manipulation check which assessed whether treatment group participants correctly associated the endorser with the advertisement (i.e., the US-CS pairing). After collecting completed questionnaires, a separate form was circulated to participants, inviting them to participate in the focus group phase of the study (see Appendix E).

4.3.4 Sampling

The minimum sample size needed for this experiment was calculated based on a one-way ANCOVA to test for a statistically significant difference between the two groups while controlling for covariate (i.e., involvement). A medium effect size (e.g., Shimp, 1991), and a confidence interval of 95% are common in advertising research involving classical conditioning (e.g., F. M. Miller & Allen, 2012; Shimp et al., 1991; Stuart et al., 1987) and were utilised for this study. The recommended statistical power of 0.8 with 0.2 probability of failing to detect a genuine effect was also used (Cohen,

1988, 1992; Field, 2013). G*Power, a general power analysis program for statistical tests (Faul, Erdfelder, Lang, & Buchner, 2007) was used to calculate a minimum sample size of 128 based on the aforementioned confidence interval, effect size and power. Since it was inevitable that the data from some of those sampled could not be used because a participant did not match the age criteria or due to questionnaire incompleteness, recruiting more participants was necessary. A total of 170 New Zealand-based undergraduate students from across subject areas were initially recruited to participate in the research. Participation was voluntary and none of the students received any gifts or extra credit for participating nor were they penalised for not participating in the study. Ultimately, 141 usable questionnaires were generated, of which 72 were from participants in the control group and 69 from the treatment group.

4.3.5 Instrumentation

The questionnaire included four parts starting with items measuring basic demographics (gender, age, and ethnicity). In the second section, participants responded to nine items measuring three involvement construct dimensions (centrality, symbolic value, and hedonic value). In subsequent analyses for all three studies, a composite involvement variable was used as the covariate. The items (Table 4.2) were adapted from Beaton et al. (2011) for general sport context applicability, utilised a seven-point agree-disagree scale and had good reliability ($\alpha = .96$). The third section of the questionnaire queried participants' attitudes towards the advertisement, which were evaluated through a seven-point semantic differential scale ($\alpha = .94$) with the following endpoints: good/bad, high quality/low quality, like very much/dislike very much, superior/inferior, attractive/unattractive, pleasant/unpleasant, interesting/boring, and a question asking about whether a respondent's overall feelings are favourable/ unfavourable (Shimp et al., 1991; Stuart et al., 1987; Till et al., 2008). A mean score was calculated for the aforementioned eight items to provide a cumulative attitude

comparison between the treatment and control groups. The final part of the questionnaire was a manipulation check which assessed whether treatment group participants correctly associated the endorser with the advertisement (i.e., the US-CS pairing). To prevent demand artefacts, the manipulation check was placed at the end of questionnaire (Mitchell & Jolley, 2013). Respondents were asked which one of the celebrity and three athletes who were presented in the slide show was associated with the advertisement. Evidence to suggest the manipulation had taken place emerged in that 72.5% in the treatment group matched the correct endorser to the advertisement, while just 8.3% were able to in the control group.

4.3.6 Results

4.3.6.1 Demographic profile of the sample

The 141 participants in the experiment (72 individuals in control group and 69 in treatment group) had an age range of 16 to 24 years old (*M* = 20.38) and 63.8% were female, and 36.2% male. The majority of participants were European (44.7%), while smaller ethnic groups reported were Asian (23.3%), Pacific people (14.7%), Maori (10.7%), and MELAA (6.7%) (Table 4.7).

Table 4.7. Ethnic Groups of the Study 1 Participants

Ethnicity	**Frequency (n)**	**Percent (%)**
European	67	44.7
Asian	35	23.3
Pacific people	22	14.7
Maori	16	10.7
MELAA**	10	6.7
Total*	150	100.0

* The total sample is larger than 141 as some participants reported more than one ethnic group.
** Middle Eastern, Latin American and African

4.3.6.2 ANCOVA assumptions

To compare attitudes between the groups while controlling for involvement, a one-way, between-subjects ANCOVA was needed. Therefore, the general assumptions for all parametric analyses (data normality and homogeneity of variance) and specific assumptions for ANCOVA (linearity and homogeneity of regression slopes) were explored (Pallant, 2016).

A Shapiro-Wilk test was performed along with an inspection of the Q-Q plot and histogram (Razali & Wah, 2011; Shapiro & Wilk, 1965). It was confirmed that the dependent variable (i.e., attitude) was normally distributed ($p = .24$, $\alpha \leq .05$) (Table 4.8). Furthermore, Levene's test revealed support for the assumption of homogeneity of variance F (1,139) = .01, $p = .92$ (Table 4.9).

Table 4.8. Test of Normality - Attitude

Groups	**Shapiro-Wilk**		
	Statistic	**df**	**Sig.**
Treatment group	.98	69	.30
Control group	.97	72	.06
Total	.99	141	.24

Table 4.9. Levene's Test

	F	**df1**	**df2**	**Sig.**
Attitude	.01	1	139	.92

To test the linearity assumption, the relationship between the dependent variable and the covariate was explored for both treatment and control groups through graphical and statistical methods. Although, the inspection of the scatterplots (Figure 4.7 and Figure 4.8) was not conclusive, the deviation from linearity test, F (44) = 1.13 $p = .31$ (Table 4.10) suggested a linear relationship and was evidence that the assumption had

been met. Further evidence emerged from the scatter plot (Figure 4.7) which showed that participants' attitudes towards the campaign advertisement increased when participants were more involved in sport.

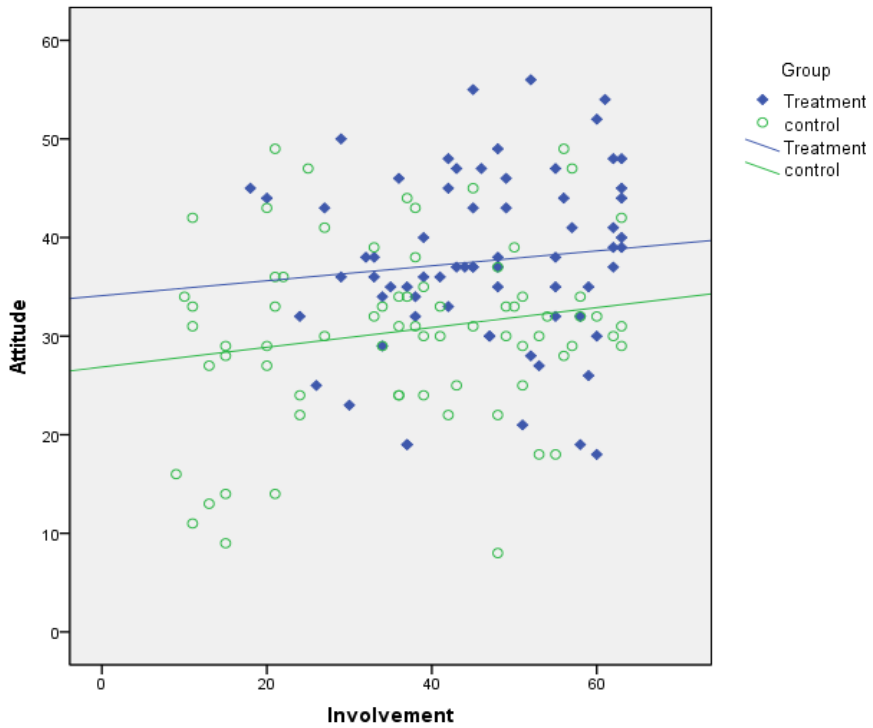


Figure 4.7. Scatter plot of attitude and involvement scores

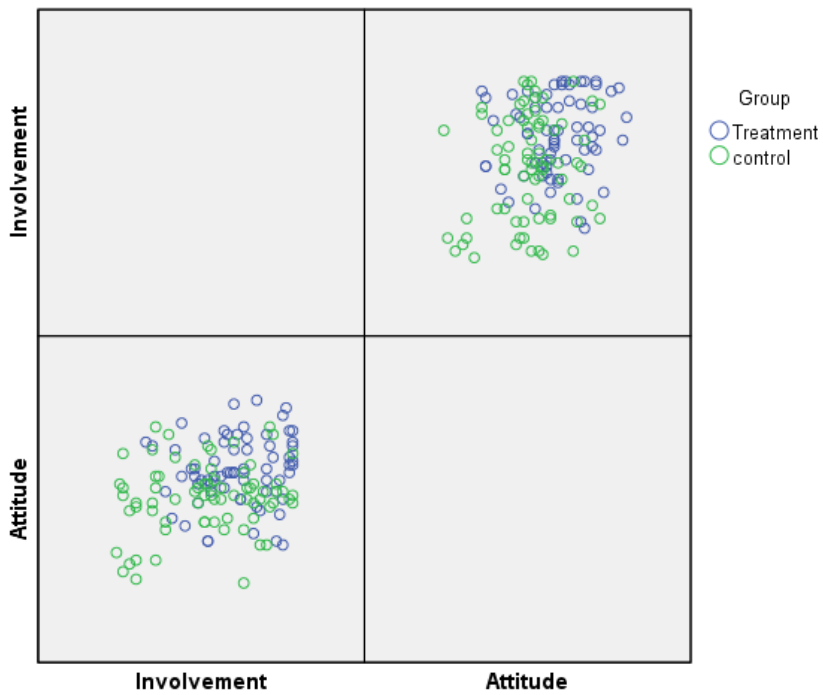


Figure 4.8. Matrix scatter for linearity assumption

Table 4.10. Deviation from Linearity

		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	**(Combined)**	5027.60	45	111.72	1.31	.14
	Linearity	783.93	1	783.93	9.19	.00
	Deviation from Linearity	4243.66	44	96.45	1.13	.31
Within Groups		8107.39	95	85.34		
Total		13134.99	140			

To test homogeneity of regression slopes, the *p*-value of the ANOVA interaction term in the General Linear Model (GLM) was considered and an inspection of the scatter plot was carried out (Norusis, 2008; Pallant, 2016). There was no significant interaction between the covariate (i.e., involvement) and the experimental manipulation (i.e., CS-US pairing) F (1, 137) = .05, p = .83 (Table 4.11). Furthermore, the scatter plot suggested that the manipulation effect on participants' attitudes was almost the same for two groups at different levels of involvement (Figure 4.7). Therefore, it was concluded that the assumption of homogeneity of regression slopes was met.

Table 4.11. Treatment-Covariate Interactions

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	31.21*	3	10.40	8.19	.00
Intercept	181.91	1	181.91	143.21	.00
Group * Involvement	.06	1	.06	.05	.83
Error	174.02	137	1.27		
Total	2753.11	141			
Corrected Total	205.23	140			

* R Squared = .152 (Adjusted R Squared = .134)

4.3.6.3 Attitude towards the campaign

After testing the assumptions, a between-subjects ANCOVA was performed. Descriptive statistics indicated that participants in the treatment group (M = 4.70, SD =

1.11) had a higher mean score on campaign attitudes than those in the control group (*M* = 3.82, *SD* = 1.14) (Table 4.12). Controlling for participants' psychological involvement in sport, the difference between groups was statistically significant with a medium-large effect size (F (1, 138) = 14.98, $p < .01$, $\eta^2 = .10$). This provided evidence in support of H1. Involvement was not found to be a significant covariate (F (1, 138) = 2.98, $p = .09$, $\eta^2 = .02$) and the adjusted mean scores were very similar to the mean scores (adj $M_{\text{Treatment}} = 4.64$, $SE = .14$; adj $M_{\text{Control}} = 3.87$, $SE = .14$) (Table 4.13, and Table 4.14).

Table 4.12. Mean Scores for Attitude

Group	N	Mean	Std. Deviation
Treatment	69	4.70	1.11
Control	72	3.82	1.14

Table 4.13. ANCOVA for Eight Groups - Attitude

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	31.15*	2	15.57	12.35	.00	.15
Intercept	211.76	1	211.76	167.86	.00	.55
Involvement	3.76	1	3.76	2.98	.09	.02
Groups	18.90	1	18.90	14.98	.00	.10
Error	174.09	138	1.26			
Total	2753.11	141				
Corrected Total	205.23	140				

* R Squared = .152 (Adjusted R Squared = .139)

Table 4.14. Adjusted Means for Attitude

Group	Adjusted Mean*	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Treatment	37.16	1.11	34.96	39.36
Control	30.98	1.09	28.83	33.13

* Covariates appearing in the model are evaluated at the following values: Involvement = 41.39.

4.4 Qualitative Phase

Although the numeric data from the quantitative phase provided important insights related to the research questions, focus groups were carried out to gain a more in-depth understanding of attitudes which are considered a significant element in the development of social marketing programs (Weinreich, 2011). Focus group participants were recruited from those who participated in the experiment, a procedure known as sequential nested sampling (Onwuegbuzie & Collins, 2007; Teddlie & Yu, 2007). The benefits of this type of sampling is that it allows the researcher "to see not only what people think, but how they think" (Billson, 1989, p. 232).

A focus group allows for diverse opinions to be expressed and discussed in a group context which is an advantage over individual interviews. Attitudes, priorities and understanding related to a subject can be fleshed out as a result of interactions between participants in the group (Kitzinger, 1994). About 6-10 respondents in each group is considered appropriate (Fraenkel & Wallen, 2009; Morgan, 1997) as a group of this size is small enough to allow for each participant's involvement but also large enough to create a reasonable range of responses (Morgan, 1996).

4.4.1 Procedure

A total of 45 participants from the experiment phase of the study expressed an interest in a follow-up focus group. Dates and locations for conducting two focus groups were arranged and communicated to those who indicated a willingness to participate. Eventually, two focus groups consisting of five and six people (six females and five males) were conducted on the university campus. Prior to starting the focus group discussion, an information sheet (Appendix C3) and a consent form (Appendix D) were handed out to participants. Several open-ended questions were generated though a review of relevant endorsement literature. The central question that guided the

focus groups was: *How do young adults perceive the use of endorsers in a social marketing campaign promoting sport and physical activity?*

Sub-questions of the focus group discussion were:

- When you look at the campaign with and without an endorser, what thoughts come to your mind?
- Does the use of endorsers to promote sport and physical activity make sense to you?
- In your opinion, what are the characteristics of an ideal or perfect endorser of sport and physical activity?
  - To what extent do you think the attractiveness of the endorser in a campaign for promoting sport and physical activity is relevant?
  - What about their expertise? Is that relevant for promoting sport and physical activity?
  - What about trustworthiness? Is that more or less important when compared to attractiveness and expertise?
- Why the campaign endorsed by an attractive and/or credible endorser is more favourable than one without an endorser?

4.4.2 Data analysis

Focus group discussions were first transcribed. Thematic analysis is common for qualitative studies that use focus group discussions (Braun & Clarke, 2006; Crotty, 1998), and was therefore used to encode the data (Boyatzis, 1998). Thematic analysis can be rendered as thematic networks because it can explore the link and meaning embedded in a piece of text. Therefore, “applying thematic networks is simply a way of organizing a thematic analysis of qualitative data” (Attride-Stirling, 2001, p. 387). The procedure consisted of finding simple characteristics across the transcribed data set and

systematically coding using NVivo. These initial codes are generated through multiple readings and are mostly text-based at the manifest level. Next, codes are categorised into groups. Similarities, differences and networks between groups of codes are then considered and themes are subsequently derived and analysed (Andreasen, 1994; Attride-Stirling, 2001). In the results section, focus group participants were identified using their first initial and a number to maintain anonymity.

4.4.3 Results

The initial codes from the transcribed data were generated and categorised into two sets: related to endorsement, and related to endorser. The first set related to benefits of endorsement in a sport and physical activity campaign, as well as endorsement characteristics that should be considered. The second set was codes related to endorser type and endorsers' characteristics (Table 4.15). Based on the research questions and networks between groups of codes, three significant themes emerged. These themes were: 1) benefits of endorsement; 2) endorser characteristics; and, 3) endorser type.

Table 4.15. Focus Groups Codes - Study 1

A: Codes Relating to Endorsement	
Benefits of Endorsement	
Believable	
Interesting, Inspiring	
Motivating, Convincing, Engaging	
Noticeable	
Achievable	
B: Codes Relating to Endorser	
Endorser type	**Endorser characteristics**
Well-known, Famous	Trust, Trustworthiness, Reliable
Professional, Elite athlete	Expertness, Expertise, Experience
Celebrity	Attractiveness, Attractive, Beauty
Unknown, Ordinary, Average bloke, Local person	Role model, Figure
	Maturity, Age
	Gender
	Nationality, Ethnicity
	Story, Background

4.4.3.1 Theme 1: Benefits of Endorsement

Almost all focus group participants outlined benefits of endorsement and interest in an endorsed social marketing advertisement. One of the participants noted, *"…I think definitely [the campaign] being endorsed by someone is important"* [B11]. Another participant stated, "*I'm not really taking any interest if there's not an endorser [in the campaign]* [S11]. One of the focus group participants suggested that "*…if there's a person out there that everyone kind of looks up to, I might be more interested in trying it"* [M11].

Several attendees linked their positive attitudes to how they see an endorser as a "*role model*" who could motivate them to participate in physical activity and sport

[M13, M12 & K11, T12 and S12]. One suggested that "*I think an endorser would motivate you to do what you want to achieve*" [T11].

It was pointed out, particularly for activities that they do not have enough knowledge or confidence to do by themselves, that a role model can help them start the activity, "*Endorser motivates me for the stuff [activities] that I don't know*" [S12]. Furthermore, participants of the study noted that the presence of an endorser in the advertisement would draw their attention, *"I think it [endorser] makes it more noticeable, if there's a familiar face on the advertisement... I'd probably be more likely to look at it. It'd probably catch my eye"* [M11]. One of the participants noted, *"… an endorser definitely heightens it [a campaign advertisement] and makes it more noticeable"* [B11]. Another participant explained, "*Because you're more familiar with it so, like, 'I know that person, what are they doing, what are they up to*?'" [L11]. Moreover, having a well-known and familiar face in the advertisement can build some degree of trust in a target group. One of the focus group participant indicated that "*I think it would make it trustable, I'd probably trust the advertisement more, as well if it was something that I've never considered before*" [M11]. Taken together, it was concluded from the focus group discussions that the presence of an endorser leads to more positive advertisement attitudes based on interest, motivation, activity commencement, drawing attention and building trust.

4.4.3.2 Theme 2: Endorser characteristics

The second theme comprised insights provided by focus group participants regarding the endorser characteristics which resonated most. Discussions were prompted with questions related to Ohanian's (1990) credibility dimensions which are attractiveness, expertise and trustworthiness. Focus group participants discussed the

importance of these characteristics in the context of a sport-related social marketing advertisement.

Several participants [L11, D11 and B11] commented specifically about the attractiveness of an endorser, with one [B11] noting that it plays a "*fair part*" in the endorsement process. B11 identified Dan Carter (NZ rugby player) as an attractive athlete and stated that *"If he's going to start promoting something relevant to us, then…yeah, one step closer [to draw my attention]*". In regard to a sport and physical activity campaign, some participants suggested that the attractiveness of an endorser should feature prominently. One of the focus group participants stated, *"… because when you're physically active, it is about your body, so if they look appealing, then you're more likely to believe them as well and definitely engage with them*" [M13]. Another young adult mentioned that "*If there was someone who I don't know and she's not that good [attractive]…*" he would not consider the endorsement as in that case physical attractiveness was the most important consideration [M21]. However, there was also strong agreement on a statement one participant made about young adults specifically not being swayed by an image alone, "*We're pretty savvy. You could probably fool a little kid [using an attractive endorser], but you couldn't fool us about who's who and what we believe. We start forming more of a strong opinion now*" [B11]. Regarding endorser attractiveness, two participants explained that "*… it would mostly come into play if it's in an advert for beauty*" [M13] or *"… if the endorser's expertise was not known*" [T12]. Participants indicated that the perception of expertise influences views of an endorsement and that endorsers should have professional knowledge [L11, K11, B11 and M12]. However, amongst a pool of endorsers with expertise, it was suggested that if one were attractive, he or she would stand out as the best option [K11].

As the discussions continued about endorser's expertise, the focus group participants related it to the degree that they can trust an endorser. One of the

participants noted that "*I think a trustworthy athlete would be someone from an actual sport because you know they're actually doing a sport and you know that it's their daily routine to keep themselves fit. That would be someone you would trust*" [S12]. One participant indicated that a sport-based campaign' endorser is an athlete, "*…you gain their trust, because you know that what they're saying is probably true*" [L11]. Participants also mentioned one of the athlete endorsers in the experiment and explained, "*I think she [Lisa Carrington] would be my choice, just because she's trustworthy, because the campaigns she's done before [were related to sport]*" [L11]. Another participant added that the athlete endorser is appropriate for a physical activity campaign because of "*…the advert she [Lisa Carrington] has been in, she's being physically active, there's one where she's rolling a tire up a sand dune, it's amazing*" [K11]. Almost all participants agreed about the importance of trustworthiness [B11, L11, M11, M13, S11, T11, T12 and K11], with one noting, "*If you're not going to trust the person, you're not going to believe anything they say, no matter what they look like or no matter what they say*" [M11]. An expert endorser was therefore perceived by the focus group participants as somehow trustworthy in a sport-related campaign.

Overall, there was not unanimous agreement among participants regarding the respective importance of endorser expertise and trustworthiness. However, agreement did emerge that the attractiveness of an endorser would be less important than the other two attributes and that some combination of these three factors is vital [L12, M13, D11, T11 and T12].

Another endorser characteristic that seemed to resonate with focus group participants was their life "*story*" or background. One participant explained the importance of an endorser's life story in relation to the campaign context. She noted that "*If the person has a really good story, like if they lost heaps of weight and they become really determined to change their lives, then people will be like wow!*" [M11]. Another

participant stated, "*If they had a good story and stuff, I think they can inspire you*" [T11]. Participants raised the example of a men's depression social marketing campaign endorsed by a high-profile NZ former athlete, John Kirwan, who had experienced it himself [K11, B11, L11 and M11]. One of the participants stated, "*He's had depression. I think, if you want someone to head a campaign, if it's a campaign about depression you kind of want someone who's been there before… that's what the people who have depression need"* [M11].

Focus group participants also mentioned the importance of audience age related to an endorser's age [T12, B11, S11, D11, M13 and T11]. One of the participants cited the New Zealand professional golfer, Lydia Ko (age 20), as someone who could be trusted, but "… *she is a bit younger than us… [and] age is important*" [B11]. Another participant in the group suggested, "*You wouldn't want to listen to an athlete who's younger*" [L11]. Focus group participants (aged 18-24) indicated more interest in an "*older/former athlete"* endorser than a younger one [L11, B11 and K11]. For example, they mentioned Lisa Carrington (27 years old), Valerie Adams (32 years old), Dan Carter (35 years old) and Richer McCaw (36 years old), as better matches for a campaign targeting young adults. One of the focus group participants stated that although these potential endorsers were older, young adults "… *have grown up with knowing them as winning…*" [L11].

Several focus group participants discussed the gender of endorsers [T11, T12 and S12]. One female participant mentioned gender as a factor that should be considered while choosing an endorser. She stated that "*I would prefer Valerie [Adams]… I prefer seeing a strong female Olympian. Like they're able to overpower males sometimes"* [M13]. Other female participants noted that *"I prefer an older woman, I'm kind of sick of seeing men"* [S11] and "*…every advert's like man, man, man*" [S12]. From this it was clear that endorser's gender matters to young adults. The gender of athlete

endorsers as well as their career status (former versus current) were explored in Study 3 of this research.

4.4.3.3 Theme 3: Endorser type

Different types of endorsers including celebrity athletes, celebrity non-athletes and unknown endorsers were presented to participants in the experiment phase of the study. Focus groups participants expressed their views on these different types of endorsers.

Several participants indicated that a celebrity athlete endorser could be a good fit for a social marketing campaign in sport and physical activity [L11, M11 and S11]. One stated, "*I think, they [endorsers] actually have to be quite famous in sport...*" [S11]. They compared two female celebrity athletes who were depicted in the experiment (i.e., Valerie Adams and Lisa Carrington) and indicated that athletes' endorsement activities should be relevant to their expertise [K11, L11 and T12]. One of them suggested, "*If Valerie [Valerie Adams] started doing campaigns that were more like Lisa's [Lisa Carrington] you'd gain that trust that, 'Oh yeah, she knows her stuff in physical activity.' For me, it's the background*" [L11]. While focus groups participants noted a preference for endorsers with knowledge and expertise, some were against using an elite athlete as an endorser specifically in a campaign promoting physical activity which is targeting public health [L11 and B11]. One of participants indicated, "*That would work, if he [Dan Carter, NZ rugby player] was advertising rugby or something having to do with rugby, because I know they're associated [to his career], but if it's in physical activity I probably wouldn't follow him*" [B11].

Furthermore, focus group participants specified that an unknown person like a coach, professor or nutritionist may be a better option for convincing them to be physically active. Participants suggested that the coach of New Zealand women's field hockey team, or the fitness trainer of New Zealand men's rugby union team could be

endorsers better suited for a physical activity campaign [L11, M11 and B11]. One of the participants stated that "*To me, if the unknown people were high experts, and they could prove it, then I'd definitely take their word into account*" [B11]. Disagreement about celebrity athletes as endorser of a campaign related to physical activity carried on and as one participant noted that "*They're [celebrity athletes] just different for me, because I know they're already so far from me [in terms of fitness] and they're athletes*" [T12]. Several participants (across both focus groups) that had raised concerns about celebrities as endorsers cited the *"Subway Guy"* (a former spokesperson for Subway restaurants) as an effective unknown endorser [L11, M13 and T11] even though that arrangement was ultimately terminated. One of focus group participants reflected on some of the positive aspects of the endorsement:

> *...even though he wasn't well known, it was still believable, because he had gone through that [lost weight by eating only Subway products], and then it makes you feel you can do it... so yeah, I think, they kind of have to be normal, gone through an experience, and then be advertising it [L11].*

Another participant noted that "*If I saw someone who was just an average bloke I would feel like it's more realistic for me, like I feel I could do it*" [S11]. One of the participants explained, *"Someone who is not high-profile [in sport], you can tell they have flaws, and that's more engaging, and a bit more achievable*" [B11].

Two participants mentioned Hilary Barry (NZ celebrity non-athlete) as a person who might fit as an endorser for physical activity [K11 and L11]. One of them stated that "*She's not a Silver Fern [NZ women's national netball team] or a Black Stick [NZ women's national field hockey team], but she's normal and she's attractive. It's all about your body, and inspiring to be that*" [K11]. Another participant indicated that,

> *I think if you are encouraging people who aren't very sporty to do sports, then you would use a person who's not necessarily an athlete. Then it's like, 'Oh, well she's not an athlete, so I can play sport and still have fun and it doesn't have to be competitive' [L11].*

As the discussion went on, the role of an athlete endorser was linked to the campaign context. Focus group participants indicated that a celebrity athlete endorser would be more appropriate for a sport campaign [K11 and B11]. One of the participants indicated that, "*I guess for sport, it's nice to have that role-model type of person [celebrity athlete] to look up to*" [B11]. However, for a campaign related to physical activity, another participant noted, "*I think it's more reliable to have just any celebrity on. A normal celebrity brings it down to earth…where the goal is actual physical activity and not to be an elite athlete"* [K11]. Then, another participant suggested,

> *With something like Push Play, if you saw one of those ads on TV and it would have been like families' stuff, and you're like, 'Oh, so that's just everyday things, yeah, our family could be involved in that.'…it's like more relatable to be run than having a celebrity athlete being like, 'This is good for you, I did this and this helped me, so you should do it too'. It's like, well, you're an athlete, and you do lots of physical activity anyway [L11].*

The emergence of this theme highlights the potential appropriateness of unknown endorsers for social marketing campaigns in physical activity. It also provided important insights into endorser-campaign match-up in terms of campaign context.

4.5 Discussion

The purpose of this study was to investigate the impact of an endorser on young adults' attitudes and perceptions related to a social marketing campaign advertisement

promoting sport and physical activity. The study involved both qualitative and quantitative procedures. The quantitative phase of the study highlighted the significance of having an endorser in a social marketing campaign which provides valuable insights about the attitudes of young adults. The qualitative phase then explicated the quantitative results through focus group discussions emphasising the benefits of endorsement in social marketing and endorser characteristics which best fit the campaign.

Consistent with C. Y. Chen et al. (2012) the results of the experimental component revealed that attitudes were more positive towards a social marketing advertisement associated with an endorser than a campaign without an endorser. This straightforward and perhaps intuitive finding is, in and of itself, quite significant because of the absence of any prior empirical research in this context. It can now be stated with some confidence that the value of endorsement extends from commercial contexts to the context of social marketing, sport participation and young adults. The implications of the findings are that those practitioners responsible for young adult's sport and physical activity participation should consider trustworthy, expert and attractive endorsers for persuasion and attitude change purposes.

Classical conditioning formed an important part of this rigorous research design and allowed for attitude differences between the control and treatment groups to be isolated based on the presence of an endorser. It was revealed that an endorser as a US can evoke more favourable results towards an advertisement CS when they are paired. The endorser itself as a positive stimulus can increase awareness and advertising recall (Charbonneau & Garland, 2005). Participants could recall the advertisement and link the positivity associated with the endorser as a result of the US-CS pairing, even though the image of the endorser (US) was not in the advertisement itself (CS). By extension, young adults' subsequent participation in the target behaviours is more likely. In

essence, classical conditioning worked in this research design and ought to be used in future to understand the nuances of endorsement.

Although the Study 1 research context of social marketing in sport/physical activity was unique, the results were consistent with the classical conditioning endorsement research of Till et al. (2008) and C. Y. Chen et al. (2012). In all three studies advertisements paired with an endorser were received more positively by audience members. In fact, the current research represents an extension of the important work of these scholars given that a potential covariate (involvement) was controlled, enhancing the veracity of the conclusion that the presence of an endorser has a positive effect on attitudes.

Despite the fact that involvement did not play a significant role on attitudes in this study, attitude change and the strength of attitudes towards an advertisement can be affected by individuals' involvement in the advertised context (Petty & Cacioppo, 1986a, 1986b). According to the tenets of the ELM, individuals' psychological involvement should lead to attitude change more readily than peripheral cues such as the number of advertisement exposures, the credibility or the attractiveness of the endorser (Petty et al., 1983; Petty et al., 2003). The classical conditioning design implemented in the current study led to evidence supporting the opposite conclusion – that peripheral cues may not be tempered by central route factors such as one's involvement. The procedure in this study relied on visual depictions of the endorser and the social marketing advertisement. By design, this procedure resulted in participants probably focusing more on peripheral route cues like the attractiveness of the endorser or number of repetitions rather than central rout cues. Although involvement was not statistically significant, its effect was *close* to statistical significance ($p = .09$), thus it was also carefully considered in Studies 2 and 3 of this research project.

It is well known that audience inferences about an endorser (e.g., attractiveness and recognition) can affect attitudes towards the advertisement (Silvera & Austad, 2004). These inferences were explored further in three themes that emerged from the focus groups. Focus group participants indicated that the presence of an endorser led to a positive attitude towards the campaign in part because the endorser drew their attention to the advertisement. This was consistent with research elsewhere which has suggested that capturing consumer's attention through an endorser can shift attitudes towards the endorsed subject (S. Biswas, Hussain, & O'Donnell, 2009; Van der Veen, 2008). The endorser in the current study was a celebrity athlete, so her positive reception in the experiment could be the result of the public recognition that she has received through media coverage of real events (Babiak, Mills, Tainsky, & Juravich, 2012).

Focus group participants noted that an endorser could motivate a young person to engage in an activity promoted through social marketing – a notion also grounded in related literature. It was consistent with the work of Hung (2014) who indicated that a campaign audience member may be motivated to commence an activity, through a parasocial (a powerful and one-way) bond with the celebrity. That sense of motivation and related positive attitude could also be explained in terms of the aspirational link between consumer and celebrity endorser which may lead to a perception of ideal-self that consumers are driven to realise (Banister & Cocker, 2014). Young adults specifically are more inclined to initiate celebrity-influenced behaviours as they may relate to improvements in feelings of self-worth (Boon & Lomore, 2001). Motivation for emulating a celebrity endorser increases as a young adult invests more of themselves in parasocial interaction (Boon & Lomore, 2001).

Not surprisingly, it emerged from the focus groups that expertise, trustworthiness, and attractiveness were important. In fact, focus group participants discussed at length the respective importance of these characteristics which resonated with them. Although

an attractive endorser was preferable, it was agreed that attractiveness alone was not enough and that trustworthiness and expertise were in fact more important. This finding was consistent with the source credibility model which suggests that sources exhibiting expertise and trustworthiness are most persuasive (Amos et al., 2008; Erdogan et al., 2001; Hovland et al., 1953; McCracken, 1989; Shank, 2009). The findings were also consistent with other research indicating that credibility (a combination of expertise and trustworthiness) is the most effective source characteristic (e.g., Amos et al., 2008; Ohanian, 1991; Stevens et al., 2003; Till & Busler, 2000). However, in some cases in which the relative expertise of an endorser is not known, or receivers have little knowledge or motivation about the endorsed subject, attractiveness becomes paramount. Although it is not rated as the most important, compared to other endorser characteristics, attractiveness is perceived more quickly by the receiver (Kahle & Homer, 1985; Patzer, 1983), so it can particularly affect attitudes for those who are less involved with the context.

Another endorser characteristic which resonated with focus group participants was life story. This notion is well grounded theoretically, as an athlete's off-field life story forms part of a marketable lifestyle and contributes to that athlete's brand image (Arai et al., 2014). The life story of celebrity endorsers shape meaning transfer (Banister & Cocker, 2014) and this delivery of cultural meaning, information, depth and power ultimately impacts advertisement effectiveness (McCracken, 1989; F. M. Miller & Allen, 2012). An ongoing local example of an endorser's life-stories resonating with consumers is that of former NZ All Blacks rugby player, John Kirwan which was discussed in the focus group. In a campaign to raise awareness of depression, Kirwan's own struggles have been highlighted in an effort to help others. The findings of the focus group suggest that would be an effective strategy and would resonate with young adults.

An endorser can transfer cultural meaning, information, depth and power to the advertisement (Amos et al., 2008; McCracken, 1989). However, when young adults are exposed to a social marketing endorsement, separate cognitive processes may underpin the reasons why they can be persuaded to engage in a target behaviour. The positive attitudes in the experiment can be explained in part by peripheral route factors like image repetition and endorser attractiveness. However, evidence emerged from the focus groups that more complex cognitive processing related to motivation and the endorser's life story - which also seems to lead to positive advertisement attitudes - was occurring simultaneously. In fact, it has been found that a combination of both central and peripheral processes often lead to attitude change (Petty et al., 1997). It can be concluded that an endorser paired with a social marketing advertisement leads to more positive campaign attitudes, but the underlying rationale for why that is the case is not straightforward or one-dimensional. It is also evident that the symbolic meanings that an athlete can bring into the endorsement process are important to young adults. Therefore, choosing an athlete endorser when young adults are the audience should be considered carefully, particularly as it relates to their individual characteristics and life story.

Taken together, the results of the experimental and qualitative phases of this study lead to initial insights as to if (and how) the presence of an endorser in a social marketing campaign promoting sport and physical activity affect attitudes towards the campaign. Put simply, the results of the two phases of Study 1 lead to the same conclusion that a social marketing campaign designed to promote sport and physical activity among young adults should include an endorser. Endorsement is used extensively and effectively in other settings and the results here suggest that it has great potential to also help get young people playing more sport and being more physically active.

4.6 Limitations and Future Research

Several limitations in this study are worth noting. About sixty percent of the experiment participants were female which means that gender neutral conclusions about attitudes should be made guardedly. Another limitation is the fact that physical activity was not measured explicitly as a covariate, rather sport was the focus of items implemented to measure involvement. Therefore, conclusions about the influence of involvement as a covariate in this relationship can be drawn more confidently related to sport campaigns than physical activity campaigns. Despite not being significant in this study, involvement was still measured in the subsequent studies of this thesis in order to provide more evidence to build our understanding of this relationship. It should also be acknowledged that any findings derived from a classical conditioning procedure are not necessarily replicable outside of controlled laboratory environments (McSweeney & Bierley, 1984).

In endorsement research, evidence has been inconclusive about the impact of endorsers' characteristics on advertisement effectiveness. The differential effects of endorsers can be influenced by perceived congruency between the endorser, product and audience (Kamins, 1990; Koernig & Boyd, 2009; Liu & Brock, 2011). It was indicated by focus groups participants that an unknown endorser can be as, or even more, effective than a celebrity athlete in a social marketing campaign promoting physical activity. The perceived congruence or match-up between endorser and campaign in the context of social marketing in sport and physical activity was the focus of Study 2 which is outlined subsequently. In addition, since this study was focused exclusively on participants' attitudes towards a social marketing campaign, two other dependent variables including behavioural intentions and perceptions of endorser-campaign fit featured in Study 2 and Study 3.

That female endorser emerged from pre-test of the study as having higher perceived credibility than male endorsers was unsurprising (Charbonneau & Garland, 2006). However, limited studies have focused on endorser and participants' gender (Tzoumaka et al., 2016). Therefore, Study 3 of the thesis was designed to explore the effect of an interaction between endorser and audience gender on attitudes, intentions, perception of endorser-campaign fit, and endorser-audience fit in social marketing campaigns promoting sport and physical activity. In short, the important and foundational finding of this study begs further analysis, some of which are incorporated within Study 3.

Chapter 5

STUDY 2

Endorser - campaign fit: An exploration of endorser expertise and recognition

This chapter aligns with the following paper published in Managing Sport and Leisure: 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.

5.1 Introduction

The effect of an endorser in a social marketing advertisement was explored in Study 1 of the research. In this study the effect of endorser's expertise and recognition on participants' attitudes, intentions and perception of endorser-campaign fit related to both sport and physical activity campaigns was explored. For the purposes of this study, the words 'match', 'fit' and 'congruency' are used synonymously and interchangeably. Considering the tenets of the match-up hypothesis, it is expected that athletes and others connected to sport fit best as an endorser of a sport or physical activity social marketing campaign. A match between an endorser and a campaign can enhance recall and facilitate the transfer of positive characteristics from endorser to brand (Misra & Beatty, 1990). Based on previous studies of endorser's expertise (e.g. Bailey & Cole, 2004; Garland et al., 2006 ; Homer & Kahle, 1990; Ohanian, 1991), it is expected that an athlete's expertise resonates in sport context endorsement. However it is important to note that endorser's recognition can also influence advertisement effectiveness (e.g., Erdogan et al., 2001; Kahle & Homer, 1985; Kamins, 1989). Endorser expertise (i.e.,

proficiency), (e.g., Amos et al., 2008; Tzoumaka et al., 2016) and endorser recognition (i.e., celebrity) (e.g., Erdogan et al., 2001; Kahle & Homer, 1985; Kamins, 1989) are the two characteristics that have featured most prominently in the literature. Based on a traditional 2 x 2 matrix (see Table 5.1), four endorser types are therefore possible.

Table 5.1. Endorser Type

Endorser's characteristics		**Recognition**	
		Well known	**Unknown**
Expertise	**Expert**	Celebrity athlete endorser	Unknown expert endorser
	Non-expert	Celebrity non-athlete endorser	Unknown non-expert endorser

In the context of this study, celebrity athlete endorsers are both well-known and have expertise in sport. The second group are celebrity non-athlete endorsers, or people who are well known (e.g., actors and musicians) but do not have sporting expertise. The third group are unknown experts who are those endorsers with expertise in sport or physical activity but are not known to the public (e.g., most coaches, sport scholars). The last group are unknown non-experts. These endorsers have neither public recognition nor expertise in sport. Celebrity experts and celebrity non-experts have been the focus of most previous endorsement research while the other two endorsement types have not featured as much (B. A. S. Martin et al., 2008). In sport management research specifically, celebrity athletes (experts) have been explored extensively (e.g., Hambrick & Mahoney, 2011; Y. Lee & Koo, 2015; Simmers, Damron-Martinez, & Haytko, 2009; Walsh & Williams, 2017). However, the four endorsement types have never featured simultaneously in an experiment designed to isolate group differences. In addition, despite clear evidence that endorsement is useful for promoting public health issues (Casais & Proença, 2012; Casey et al., 2003), the use of endorsers to promote participation in sport and physical activity has not been researched. The selection of an endorser who fits in a social marketing campaign can be challenging (Brace-Govan,

2013) and the exploration of expertise and recognition in this study would be novel within a sport-related social marketing context.

In this study female endorsers only featured in the experiment for two reasons. First, Lisa Carrington (female celebrity athlete) and Hilary Barry (female non-athlete celebrity) respectively were chosen by participants as the most credible endorsers in Pre-test 1. Second, despite their increased prevalence (Stone et al., 2003), there are very few studies about female endorsers (Fink et al., 2012). All in all, an exploration of female endorsers, within this research design and context addresses gaps in the literature.

5.2 Methods

A mixed methods, sequential explanatory design (see Figure 3.1) was utilised in which findings from the quantitative phase were explored further in a subsequent qualitative phase (e.g., Bailey & Cole, 2004). The match-up hypothesis was the underpinning theory that shaped the research design. The purpose of the experimental phase was to identify the best endorser-campaign match based on expertise and recognition in two campaign context, sport and physical activity. Focus groups were then used to elucidate additional, deeper insights on different type of endorsers in social marketing campaigns promoting sport and physical activity.

To explore potential endorsers who match with a social marketing campaign based on their expertise and recognition, the overarching research question was: *How do endorser's expertise and recognition affect participants' attitudes, intentions and perception of endorser-campaign fit related to a social marketing campaign?*

5.3 Quantitative Phase

An experiment was implemented in which participants' attitudes, intentions and perception of endorser-campaign fit were compared across the eight conditions with varying degrees of endorser's expertise, endorser's recognition, and campaign context. The endorsers were a celebrity athlete, celebrity non-athlete, unknown expert and unknown non-expert endorser in two distinct campaign contexts, sport and physical activity. The hypothetical model of the study is depicted in Figure 5.1 and six hypotheses were subsequently tested. As has been outlined, related literature suggested that outcomes in this research would be more positive for participants in celebrity athlete groups as compared to the other endorser types, so hypotheses were worded accordingly. There was no related literature to guide the directionality of the context variable hypotheses, so outcomes related to the sport based campaign were hypothesised to be more positive. The first three hypotheses focused on the three outcomes related to endorser type, while the last three are related to the campaign context variable.

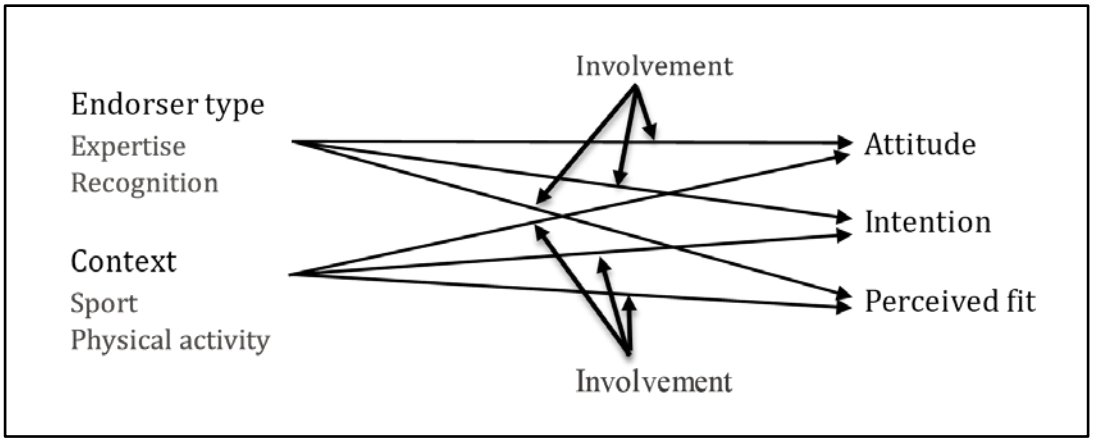


Figure 5.1. Hypothetical endorsement model of Study 2

Hypotheses:

H1: Controlling for involvement, *attitude* towards a social marketing campaign is more positive when using a celebrity athlete endorser versus a celebrity non-athlete, an unknown expert or an unknown non-expert endorser.

H2: Controlling for involvement, *participation intention* related to a social marketing campaign is higher when using a celebrity athlete endorser versus a celebrity non-athlete, an unknown expert or an unknown non-expert endorser.

H3: Controlling for involvement, *perception of endorser-campaign fit* is higher for a social marketing campaign when using a celebrity athlete endorser versus a celebrity non-athlete, an unknown expert or an unknown non-expert endorser.

H4: Controlling for involvement, *attitude* towards a *sport-based* social marketing campaign is more positive than a *physical activity* campaign when using an endorser

H5: Controlling for involvement, *participation intention* towards a *sport-based* social marketing campaign is more positive than a *physical activity* campaign when using an endorser

H6: Controlling for involvement, *perception of endorser-campaign fit* for a *sport-based* social marketing campaign is more positive than a *physical activity* campaign when using an endorser

5.3.1 Pre-test

The results of Study 1 pre-test were used to select appropriate celebrity endorsers for the Study 2 main experiment. Eight potential celebrity endorsers including four celebrity athletes (two females and two males) and four celebrity non-athletes (two females and two males) were examined in the pre-test. For Study 2, only the perception

data of participants who could correctly identify the celebrity status and profession of potential endorsers were included in the pre-test analysis. This was because in order to choose an endorser based on specific traits, the participants had to be aware of those traits. The celebrity endorser with the largest cumulative mean score was the Olympic gold medallist (Lisa Carrington). The celebrity non-athlete with the largest cumulative mean score was the television news reader (Hilary Barry) (Table 4.6). Both Carrington and Barry are female. These endorsers were used in the experiment.

Table 5.2. Endorser Credibility as Measured in the Pre-test

Endorsers		**Mean**
Celebrity athletes	Lisa Carrington	73.57
	Sonny Bill Williams	66.45
	Valerie Adams	64.07
	Hamish Bond	54.80
Celebrity non-athletes	Hilary Barry	69.55
	Lorde	60.18
	Sam Neill	57.30
	Cliff Curtis	55.32

5.3.2 Procedure

The main study employed a 2 × 2 × 2 factorial design making for a total of eight conditions. The first two dimensions were endorser expertise (i.e., expert and non-expert), the next two dimensions were endorser recognition (i.e., celebrity and unknown), and the last two dimensions were the campaign contexts. The first context was sport (S) and the second was physical activity (PA). The four endorser types (Table 5.1) were a celebrity athlete, a celebrity non-athlete, an unknown expert and an unknown non-expert. The two celebrity endorsers (as selected in the pre-test) were described as an “Olympic kayaking gold medallist” and a “Journalist and Newsreader”. The two unknown endorsers (i.e., previously unknown to participants) were depicted using an image of the same unknown woman to create consistency across the

conditions. To convey sport or physical activity expertise (or the lack thereof) for the unknown endorsers, the image of the unknown non-expert was accompanied by the phrase “Customer Service Manager”, while the unknown expert image was accompanied by the phrase “Professor of Sport and Exercise Science”. Two endorsers, an Olympic gold medallist and the other presented as a professor of Sport and Exercise, were included based on expertise associated with athletic success and a sport-related terminal qualification. The eight conditions featured in eight distinct A5 sized colour print advertisements (and versions of the questionnaire) relating to fictitious campaigns designed to both facilitate adoption of behaviour and to shape attitudes (Kotler & Lee, 2008). The mock advertisements embedded in the eight questionnaires can be viewed in Appendix I. The advertisements were formatted identically. The name of the campaign was at the top. Below the campaign name, the photo and name of the endorser were presented along with the relevant description of their expertise. The lower portion of each advertisement featured a short slogan and a generic depiction of either the sport or physical activity context (Figure 5.2).

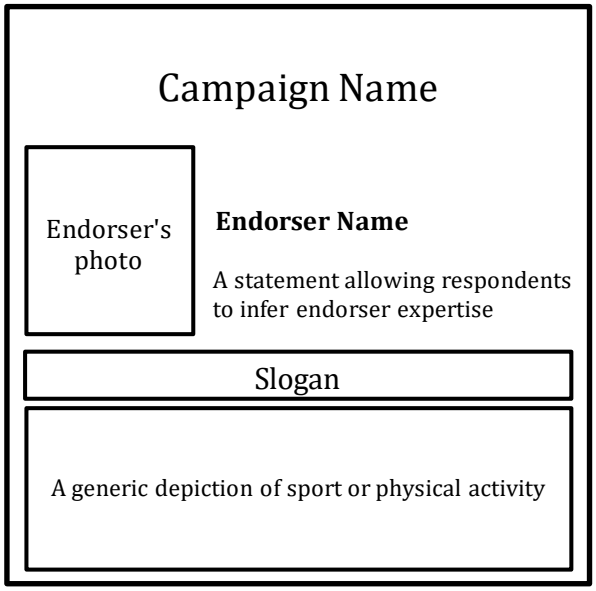


Figure 5.2. Advertisement layout for fictitious campaign

To enhance credibility, the advertisements were developed with the help of a professional graphic designer. To minimise familiarity effects (Park & Lessig, 1981), a fictitious name, *ACTIVE LIFE*, was chosen for the campaign. The name fit both the sport and physical activity context, was easy to remember, and had not been used previously in the local marketplace. Participants were recruited from undergraduate classes and spent about 15 minutes completing the questionnaire on a voluntary basis. Participant information sheets were handed out to students one week before the experiment (Appendix C2). Participants reported their attitudes towards the social marketing campaign, participation intention and perception of endorser-campaign fit.

Participants' psychological involvement in sport and physical activity was measured as a covariate to explore potential relationships with the outcome variables. It has been recommended that it should be controlled in endorsement research (Y. Lee & Koo, 2015) because the degree to which participation in sport or physical activity brings enjoyment and reflects in a person's life can affect attitudes (Beaton et al., 2011). High involvement can initiate cognitive processing for participants in a variety of contexts and consequently change attitudes (Petty & Cacioppo, 1981; Petty et al., 1983). The involvement construct was measured before the experimental manipulation in the questionnaire to decrease the influence of the treatment on the measurement of the covariate (Pallant, 2016). A manipulation check also ensured that participants perceived the endorsers' expertise in the way that was intended and could recognise the celebrity endorsers (Gravetter & Forzano, 2012; Sigall & Mills, 1998). After collecting completed questionnaires, a separate form was circulated to participants, inviting them to participate in the focus group phase of the study and asking for contact details (Appendix E).

5.3.3 Sampling

The minimum sample size needed for the study was calculated using G*Power based on effect size, statistical power and confidence intervals. In the absence of any other basis, statistical power of 0.8 is suggested (Cohen, 1988). Consistent with previous endorsement research (e.g., Y. Lee & Koo, 2015; F. M. Miller & Allen, 2012; Veer, Becirovic, & Martin, 2010), the standard alpha level of 0.05 and a conventional medium effect size (Cohen's $f = 0.25$) utilised. A total of 326 undergraduate students were recruited across different subject areas and were randomly assigned to eight groups. This sampling approach is common in experimental endorsement research (e.g., C. Y. Chen et al., 2012; Y. Kim & Na, 2007; Lafferty et al., 2002; Peetz et al., 2004; Silvera & Austad, 2004; Till & Busler, 2000). Young adults are the population of interest and the use of a homogeneous sample of respondents is also beneficial because it can control for random sources of error (Calder et al., 1981; Cook et al., 1979). Ultimately, 287 usable questionnaires were generated. Thirty nine questionnaires were discarded based on a participant not meeting the age criteria and incompleteness.

5.3.4 Instrumentation

The questionnaire consisted of demographics and several items designed to measure respondents' involvement in sport/physical activity, attitude, intention, perception of endorser-campaign fit, and experiment's manipulation. To measure participants' involvement in sport and physical activity, three dimensions (i.e., centrality, symbolic value, and hedonic value) were measured with items ranging from strongly agree to strongly disagree ($\alpha = .95$). The scale was originally developed by Kyle and Mowen (2005) and was adapted for a sport context by Beaton et al. (2011). In subsequent analyses, a composite involvement variable encompassing the nine seven-point items was used as the covariate.

Attitudes towards the social marketing campaign were measured using four seven-point semantic differential scales (α = .87): bad/good, unfavourable/favourable, unpleasant/pleasant and positive/negative (MacKenzie & Lutz, 1989; Till & Busler, 2000). Items used to measure participation intentions (α = .95) were adapted from Yi (1990) and Till and Busler (2000). Respondents rated their likelihood of increasing current level of sport/physical activity as a result of this campaign using three seven-point semantic differential scales: unlikely/likely, definitely would not/definitely would, improbable/ probable. Endorser-campaign fit was measured using four items. For two of the items, participants rated their agreement with two statements based on seven-point scales ranging from strongly agree to strongly disagree. The statements were "The campaign and ENDORSER go well together" and "The campaign is well matched with ENDORSER". For each of the eight conditions, the name of each endorser was written into the item. For the two remaining fit items, participants were asked to assess appropriateness and effectiveness of the endorser-campaign fit based on a statement that read "As an endorser for the campaign, I think ENDORSER is:". The perceived fit items were adapted from Till and Busler (2000) and Fleck et al. (2012), and showed excellent reliability (α = .92). Composite variables were also created for the three dependent variables for subsequent group difference analyses.

The five items used for the manipulation check were drawn from Ohanian's (1990) source-credibility scale (α = .97) for endorser expertise. The items were presented alongside a seven-point semantic differential scale: expert/not an expert, experienced/ inexperienced, knowledgeable/unknowledgeable, qualified/unqualified, and skilled/ unskilled. Familiarity was also measured using one item: extremely unfamiliar/ extremely familiar. Participants responded to the question "How familiar are you with the endorser, NAME?" on seven-point semantic differential scale (Kamins & Gupta, 1994).

5.3.5 Manipulation checks

Manipulation checks were used to assess the expertise and recognition of the endorsers used in the main study. One-way ANOVA for perceived expertise was used. The results indicated a significant difference among groups with various endorser type, F (3, 283) = 78.91, $p < .01$ (Table 5.3). The means plot also showed the difference between endorsers in terms of expertise. The celebrity athlete (M = 30.36) and the unknown expert (M = 23.63) were rated higher for sport and physical activity expertise compared to the celebrity non-athlete (M = 16.21) and the unknown non-expert (M = 15.97) (Figure 5.3).

Table 5.3. ANOVA - Endorser Expertise

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10163.421	3	3387.81	78.91	.00
Within Groups	12149.26	283	42.93		
Total	22312.68	286			

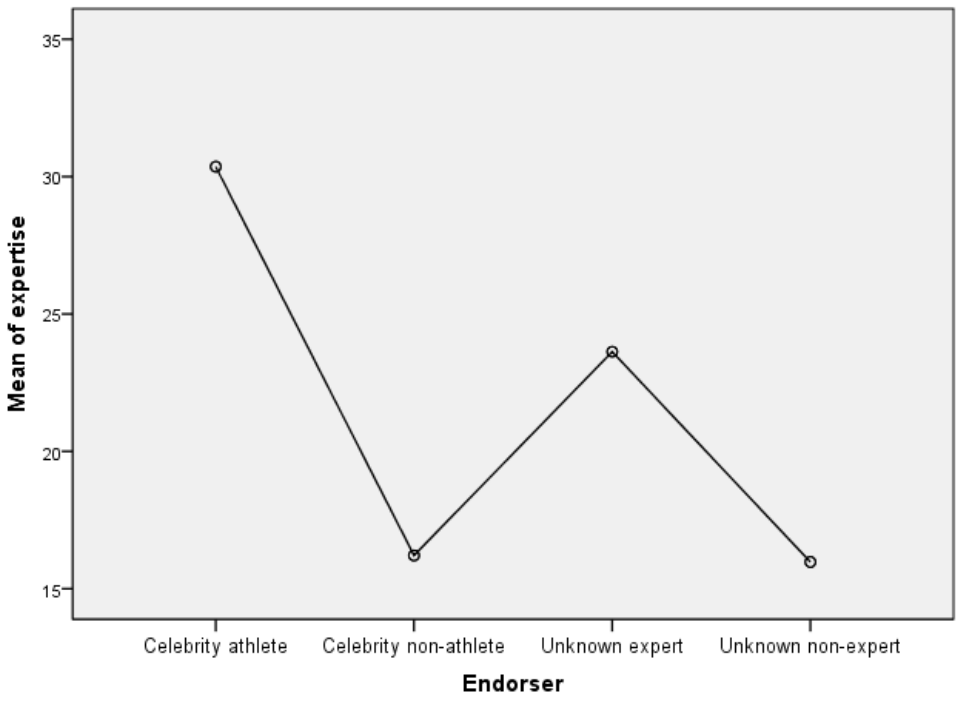


Figure 5.3. Endorsers' expertise mean scores

The data met the homogeneity of variances assumption ($p = .27$), therefore a Tukey post-hoc was conducted to test for group differences in terms of endorser expertise (Table 5.4). The celebrity athlete endorser and unknown expert were significantly different from the celebrity non-athlete and the unknown non-expert on expertise ($p < .01$). The difference between celebrity non-athlete endorser and unknown non-expert endorser was not significant in terms of perceived expertise in sport and physical activity ($p = 1.00$). Unexpectedly, there was a significant difference between the celebrity athlete endorser and unknown expert endorser in that the celebrity athlete was perceived as more expert in sport and physical activity than the fictitious unknown expert endorser ($p < .01$). Nevertheless, due to the significant differences between expert endorsers and non-expert/non-athlete endorsers, it was deemed that the experimental manipulation was successful for endorser's expertise.

Table 5.4. Manipulation Check - Expertise

Groups	Endorser type	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Celebrity athlete	**Celebrity non-athlete**	14.15*	1.10	.00	11.32	16.98
	Unknown expert	6.74*	1.09	.00	3.91	9.56
	Unknown non-expert	14.39*	1.09	.00	11.57	17.21
Celebrity non-athlete	**Celebrity athlete**	-14.15*	1.10	.00	-16.98	-11.32
	Unknown expert	-7.41*	1.10	.00	-10.25	-4.58
	Unknown non-expert	.24	1.10	1.0	-2.59	3.07
Unknown expert	**Celebrity athlete**	-6.74*	1.09	.00	-9.56	-3.91
	Celebrity non-athlete	7.41*	1.10	.00	4.58	10.25
	Unknown non-expert	7.65*	1.09	.00	4.83	10.47
Unknown non-expert	**Celebrity athlete**	-14.39*	1.09	.00	-17.21	-11.57
	Celebrity non-athlete	-.24	1.10	1.0	-3.07	2.59
	Unknown expert	-7.65*	1.09	.00	-10.47	-4.83

* The mean difference is significant at the 0.05 level.

To ensure that participants were more familiar with two celebrity endorsers than the two unknown endorsers, recognition was also manipulation checked (Kamins & Gupta, 1994; Misra & Beatty, 1990). ANOVA uncovered significant differences among the four endorsers, F (3, 283) = 149.70, $p < .01$, in terms of recognition (Table 5.5). Moreover, from the means plot differences on recognition among endorsers are readily apparent (Figure 5.4). The celebrity athlete (M = 5.15) and celebrity non-athlete (M = 5.34) had higher mean scores compared to the unknown expert (M = 1.46) and unknown not-expert (M = 1.54).

Table 5.5. ANOVA - Endorser Recognition

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1007.63	3	335.88	149.70	.00
Within Groups	634.96	283	2.24		
Total	1642.58	286			

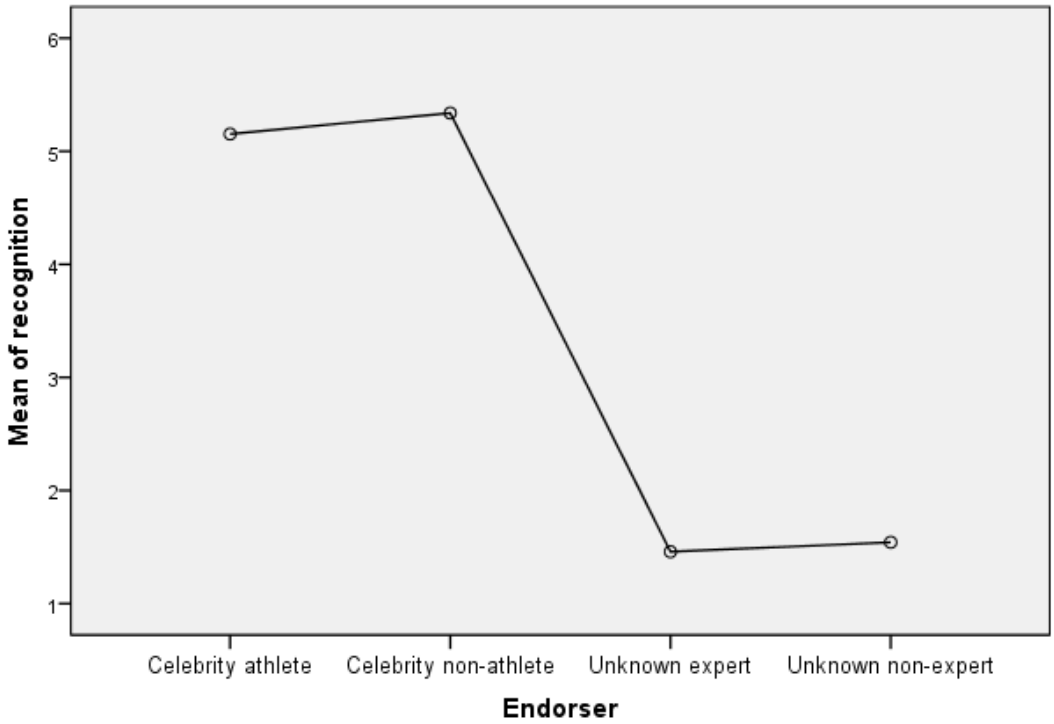


Figure 5.4. Endorsers' recognition mean scores

Due to heterogeneity of variances within the recognition data (Levene's test $p < .01$), a Games-Howell post-hoc test was performed to assess group differences (Table 5.6). Although the Levene's test indicated a significant level of less than .05, ANOVA is reasonably robust to violation of this assumption when size of the groups are similar (Pallant, 2016). In addition, with the large sample size Levene's test can be significant even if these are small differences in groups' variances (Field, 2013). Results of post-hoc test revealed that participants were significantly more familiar with the celebrity athlete and celebrity non-athlete endorsers than both of the unknown endorsers ($p < .01$). Therefore, the results indicated that the experimental manipulation for recognition (i.e. celebrity vs unknown status) was successful.

Table 5.6. Manipulation Check - Recognition

Groups	Endorser type	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Celebrity athlete	**Celebrity non-athlete**	-.18	.30	.93	-.97	.60
	Unknown expert	3.69*	.27	.00	2.98	4.41
	Unknown non-expert	3.61*	.27	.00	2.90	4.33
Celebrity non-athlete	**Celebrity athlete**	.18	.30	.93	-.60	.97
	Unknown expert	3.88*	.22	.00	3.30	4.46
	Unknown non-expert	3.80*	.22	.00	3.21	4.38
Unknown expert	**Celebrity athlete**	-3.69*	.27	.00	-4.41	-2.98
	Celebrity non-athlete	-3.88*	.22	.00	-4.46	-3.30
	Unknown non-expert	-.08	.18	.97	-.56	.40
Unknown non-expert	**Celebrity athlete**	-3.61*	.27	.00	-4.33	-2.90
	Celebrity non-athlete	-3.80*	.22	.00	-4.38	-3.21
	Unknown expert	.08	.18	.97	-.40	.56

*The mean difference is significant at the 0.05 level.

5.3.6 Results

5.3.6.1 Demographic profile of the sample

In total, 287 young adults participated in the experiment. 168 females (58.5%) and 119 males (41.5%). The age of participants ranged from 18 to 24 years, with a mean age just below twenty (19.95). The majority of respondents were European (43.2%), while smaller ethnic groups reported were Asian (24.7%), Pacific people (10.1%), Maori (8.1%), MELAA (6.2%) and other (7.8%), (Table 5.7).

Table 5.7. Ethnic Groups of the Study 2 Participants

Ethnicity	Frequency (n)	Percent (%)
European	133	43.2
Asian	76	24.7
Pacific people	31	10.1
Maori	25	8.1
Other	24	7.8
MELAA**	19	6.2
Total*	308	100.0

* The total sample is larger than 287 as some participants reported more than one ethnic group.
** Middle Eastern, Latin American and African

5.3.6.2 General assumptions

Prior to exploring group differences and testing the potential impact of the covariate, a thorough examination of general assumptions of parametric tests including normality and homogeneity of variance was undertaken (Pallant, 2016). The distributions of dependent variables (i.e., attitude, participation intention and perceived fit) were checked for normality using the Shapiro-Wilk test (Razali & Wah, 2011; Shapiro & Wilk, 1965). Skewness/kurtosis values were also considered in conjunction with a visual examination of histograms, Q-Q plots and box plots (Field, 2013).

A Shapiro-Wilk test ($p > .05$) and a visual inspection of histograms, Q-Q plots and box plots indicated that the attitude variable was approximately normally distributed for all eight groups (Table 5.8). The Shapiro-Wilk tests for intention (Table 5.9), and perceived fit (Table 5.10) were significant in some groups. However, because of the large sample (287 participants) even very minor deviations from normality can be detected by this test (Field, 2013), so data normality should be interpreted in conjunction with histograms, Q-Q plots and the values of skewness and kurtosis (Doane & Seward, 2011; Field, 2013).

Table 5.8. Test of Normality - Attitude

Groups*	Shapiro-Wilk		
	Statistic	**df**	**Sig.**
Celebrity athlete (S)	.97	37	.42
Celebrity athlete (PA)	.96	35	.22
Celebrity non-athlete (S)	.97	33	.40
Celebrity non-athlete (PA)	.96	38	.14
Unknown expert (S)	.96	37	.26
Unknown expert (PA)	.96	35	.24
Unknown non-expert (S)	.97	38	.37
Unknown non-expert (PA)	.97	34	.35

* (S) = Sport context, (PA) = Physical activity context

Table 5.9. Test of Normality - Intention

Groups**	Shapiro-Wilk		
	Statistic	**df**	**Sig.**
Celebrity athlete (S)	.93	37	.06
Celebrity athlete (PA)	.96	35	.03*
Celebrity non-athlete (S)	.90	33	.00*
Celebrity non-athlete (PA)	.94	38	.00*
Unknown expert (S)	.94	37	.04*
Unknown expert (PA)	.97	35	.01*
Unknown non-expert (S)	.98	38	.00*
Unknown non-expert (PA)	.95	34	.00*

* Significant at the 0.05 level
** (S) = Sport context, (PA) = Physical activity context

Table 5.10. Test of Normality - Perceived Fit

Groups**	**Shapiro-Wilk**		
	Statistic	**df**	**Sig.**
Celebrity athlete (S)	.93	37	.02*
Celebrity athlete (PA)	.96	35	.21
Celebrity non-athlete (S)	.90	33	.01*
Celebrity non-athlete (PA)	.94	38	.04*
Unknown expert (S)	.94	37	.05
Unknown expert (PA)	.97	35	.37
Unknown non-expert (S)	.98	38	.57
Unknown non-expert (PA)	.95	34	.17

* Significant at the 0.05 level
** (S) = Sport context, (PA) = Physical activity context

An inspection for normality of the intention variable through Shapiro-Wilk tests histograms, Q-Q plots and skewness/kurtosis values showed that the data were positively skewed (Table 5.9). Therefore, the data were transformed using the logarithmic transformation (Pallant, 2016; Tabachnick & Fidell, 2007). After this transformation, the assumption of normality was satisfied across the data set allowing parametric analysis to commence. The transformed intention data was approximately normally distributed in all eight groups (Table 5.11).

For the perceived fit variable, of the eight groups, three had a significant *p*-value on Shapiro-Wilk's tests indicating non-normality. The three groups were those with a celebrity athlete endorser (S), a celebrity non-athlete endorser (S) a celebrity non-athlete endorser (PA) (Table 5.10). However, histograms, Q-Q plots and the values of skewness and kurtosis indicated that all eight groups were approximately normally distributed outweighing the Shapiro-Wilk results. The skewness and kurtosis values for the three groups with significant *p*-value on Shapiro-Wilk's tests were: the celebrity athlete endorser (S) group with a skewness of -.687 (*SD* = .388) and a kurtosis of -.41 (*SD* = .759); the celebrity non-athlete endorser (S) with a skewness of .531 (*SD* = .409)

and a kurtosis of -.894 (*SD* = .798); and the celebrity non-athlete endorser (PA) with a skewness of -.324 (*SD* = 383) and a kurtosis of -1.082 (*SD* = .750).

Table 5.11. Normality - Skewness/Kurtosis values - intention

Group	**Skewness**		**Kurtosis**	
	Statistics	**Std. Error**	**Statistics**	**Std. Error**
Celebrity athlete (S)	-.564	.388	-.800	.759
Celebrity athlete (PA)	-.493	.398	-1.051	.778
Celebrity non-athlete (S)	.692	.409	-1.023	.798
Celebrity non-athlete (PA)	.218	383	-.90	.750
Unknown expert (S)	-.728	388	-.621	.759
Unknown expert (PA)	-.297	398	-.1.376	.778
Unknown non-expert (S)	-.167	383	-.018	.750
Unknown non-expert (PA)	.095	403	1.184	.788

Note. Transformed data.

Homogeneity of variance was also explored using Levene's tests for all dependent variables (i.e., attitude, participation intention and perceived fit) (Table 5.12). For all groups, equal variances were established ($p > .05$). The remainder of the results section is organised around analyses in conjunction with the three dependent variables.

Table 5.12. Levene's Test

	F	**df1**	**df2**	**Sig.**
Attitude	1.70	7	279	.11
Participation intention	1.47	7	279	.18
Perceived fit	1.80	7	279	.09

5.3.6.3 Attitude towards the campaign

Participants' attitudes towards the campaign were measured for each of the eight groups. Prior to the analysis, the specific assumptions of ANCOVA including linearity between the covariate and the attitude variable as well as the homogeneity of regression slopes were checked (Pallant, 2016).

An inspection of the scatter plot and the deviation from linearity test, F (53) = 1.02 p = .43 suggested a linear relationship and evidence that the assumption had been met (Table 5.13). Both the attitude-involvement scatter plot and the General Linear Model (GLM) for the interaction between the involvement and the independent variable can help assess the assumption of homogeneity of regression slops (D'Alonzo, 2004; Norusis, 2008; Pallant, 2016). An inspection of the scatter plot revealed that the independent variables' effect on participants' attitudes was not exactly the same for all groups at different levels of participants' involvement in sport and physical activity. However, the ANOVA p-value of the interaction term in GLM revealed evidence that the regression slopes were homogeneous for all independent variables (F (1, 279) = .12, p = .72; F (1, 279) = 4.06, p = .08; F (1, 279) = 1.77, p = .18) (Table 5.14). It was then concluded that the observed interactions in the scatter plot were not problematic and ANCOVA was robust enough to overcome this issue, as the p-value of the interaction term was above .05 (Pallant, 2016) and slightly below .10 (D'Alonzo, 2004).

Table 5.13. Deviation from Linearity - Attitude

		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	**(Combined)**	1350.34	54	25.01	1.16	.22
	Linearity	183.17	1	183.17	8.52	.04
	Deviation from Linearity	1167.17	53	22.02	1.02	.44
Within Groups		4988.81	232	21.50		
Total		6339.16	286			

Table 5.14. Treatment-Covariate Interactions

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	691.67*	7	98.81	4.88	.00
Intercept	7382.14	1	7382.14	364.70	.00
Endorser Expertise * Involvement	2.51	1	2.51	.12	.72
Endorser Recognition * Involvement	82.19	1	82.19	4.06	.08
Campaign Context * Involvement	35.85	1	35.85	1.77	.18
Error	5647.49	279	20.24		
Total	90066.00	287			
Corrected Total	6339.16	286			

* R Squared = .109 (Adjusted R Squared = .087)

Group Differences (ANCOVA)

After testing the assumptions, a between-subjects ANCOVA was conducted. Descriptive statistics revealed that participants in the group with the celebrity athlete endorser in the physical activity campaign advertisement (*M* = 18.97 *SD* = 4.99) and sport campaign advertisement (*M* = 18.78, *SD* = 4.68) had the highest attitude mean scores. In contrast, those in the unknown non-expert, physical activity context group had the lowest mean score (*M* = 15.15, *SD* = 3.44) (Table 5.15).

Table 5.15. Means Scores for Attitude

Group*	N	Mean	Std. Deviation
Celebrity athlete (S)	37	18.78	4.68
Celebrity athlete (PA)	35	18.97	4.99
Celebrity non-athlete (S)	33	16.61	5.33
Celebrity non-athlete (PA)	38	16.61	4.08
Unknown expert (S)	37	17.70	4.67
Unknown expert (PA)	35	15.91	5.47
Unknown non-expert (S)	38	16.76	3.84
Unknown non-expert (PA)	34	15.15	3.44
Total	287	17.08	4.71

* (S) = Sport context, (PA) = Physical activity context

After controlling for participants' psychological involvement in sport or physical activity, ANCOVA revealed a statistically significant difference among the eight groups (F (7, 278) = 3.31, $p < .01$, $\eta^2 = .08$). Furthermore, involvement was a significant covariate of the relationship in which participants' attitudes towards the campaign were influenced by their psychological involvement in sport or physical activity (F (1, 278) = 10.55, $p < .01$, $\eta^2 = .04$), (Table 5.16). Overall, participants' attitudes towards the campaigns increased when participants were more involved in sport or physical activity. In the other words, the independent variables was less influential at a low level of involvement in sport or physical activity, while it was more influential when participants were highly involved in sport or physical activity.

Table 5.16. ANCOVA for Eight Groups - Attitude

Source	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Partial Eta Squared**
Corrected Model	657.08*	8	82.13	4.02	.00	.10
Intercept	7346.12	1	7346.12	359.41	.00	.56
Involvement	215.73	1	215.73	10.55	.00	.04
Group	473.91	7	67.70	3.31	.00	.08
Error	5682.08	278	20.44			
Total	90066.00	287				
Corrected Total	6339.16	286				

* R Squared = .104 (Adjusted R Squared = .078)

A one-way ANOVA was used to determine whether the eight groups differed on attitude without consideration of the covariate. Results revealed that the manipulation significantly impacted participants' attitudes (Table 5.17). However after including the covariate into the design, the amount of variation accounted for by the independent variable increased and the unexplained variance reduced (Table 5.16). Therefore, use of the covariate in the model was deemed effective and appropriate.

Table 5.17. ANOVA for Eight Groups - Attitude

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	441.35*	7	63.05	2.98	.00	.07
Intercept	83341.99	1	83341.99	3942.55	.00	.93
Group	441.35	7	63.05	2.98	.00	.07
Error	5897.80	279	21.14			
Total	90066.00	287				
Corrected Total	6339.16	286				

* R Squared = .070 (Adjusted R Squared = .046)

Having established that participant attitudes towards the campaign differed among the eight groups, an additional ANCOVA identified the separate effects of context and endorser type (interaction between endorser's expertise and recognition) on participants' attitudes (F (3, 278) = 5.58, $p < .01$, $\eta^2 = .06$). Involvement remained a significant covariate in these analyses. Participants' attitudes towards the sport-based campaign were not significantly different from attitudes towards the physical activity campaign (F (1, 278) = 3.80, $p > .05$, $\eta^2 = .01$), which was evidence for refuting H4. The interaction between endorser type and campaign context was also insignificant F (3, 278) = 1.01, $p = .39$, $\eta^2 = .01$, (Table 5.18). The two-way and three-way interactions among all independent variables (i.e., expertise, recognition and campaign context) were insignificant. However, endorser types with the separate effects of endorser expertise (F (1, 278) = 8.00, $p < .01$, $\eta^2 = .03$) and endorser recognition (F (1, 278) = 7.12, $p < .01$, $\eta^2 = .02$) were significant on participants' attitudes towards the campaign. (Table 5.19), although the effects were small.

The interaction between the recognition and expertise of endorsers (F (1, 278) = 1.55, $p = .21$, $\eta^2 = .01$) revealed that participants' attitudes towards experts were more positive than non-experts. Among expert endorsers, the well-known (celebrity) endorser was perceived more favourably than the unknown expert (Figure 5.5). In addition, experts were rated more positively when endorsing a sport-based campaign rather than a

physical activity campaign (F (1, 278) = .004, p = .95, η^2 < .01) (Figure 5.6 and Table 5.19).

Table 5.18. ANCOVA for Campaign Context and Endorser Type Groups - Attitude

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	657.08*	8	82.13	4.02	.00	.10
Intercept	7346.12	1	7346.12	359.41	.00	.56
Involvement	215.73	1	215.73	10.55	.00	.04
Campaign Context	77.73	1	77.73	3.80	.05	.01
Endorser Type	342.49	3	114.16	5.58	.00	.06
Campaign Context * Endorser Type	61.83	3	20.61	1.01	.39	.01
Error	5682.08	278	20.44			
Total	90066.00	287				
Corrected Total	6339.16	286				

* R Squared = .104 (Adjusted R Squared = .078)

Table 5.19. Group Differences - Attitude

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	657.08*	8	82.13	4.02	.00	.10
Intercept	7346.12	1	7346.12	359.41	.00	.56
Involvement	215.73	1	215.73	10.55	.00	.04
Expertise	163.56	1	163.56	8.00	.00	.03
Recognition	145.49	1	145.49	7.12	.01	.02
Campaign Context	77.73	1	77.73	3.80	.05	.01
Expertise*Recognition	31.70	1	31.70	1.55	.21	.01
Expertise*Campaign Context	.08	1	.08	.00	.95	.00
Recognition*Campaign Context	59.24	1	59.24	2.90	.09	.01
Expertise*Recognition*Campaign Context	2.39	1	2.39	.12	.73	.00
Error	5682.08	278	20.44			
Total	90066.00	287				
Corrected Total	6339.16	286				

* R Squared = .104 (Adjusted R Squared = .078)

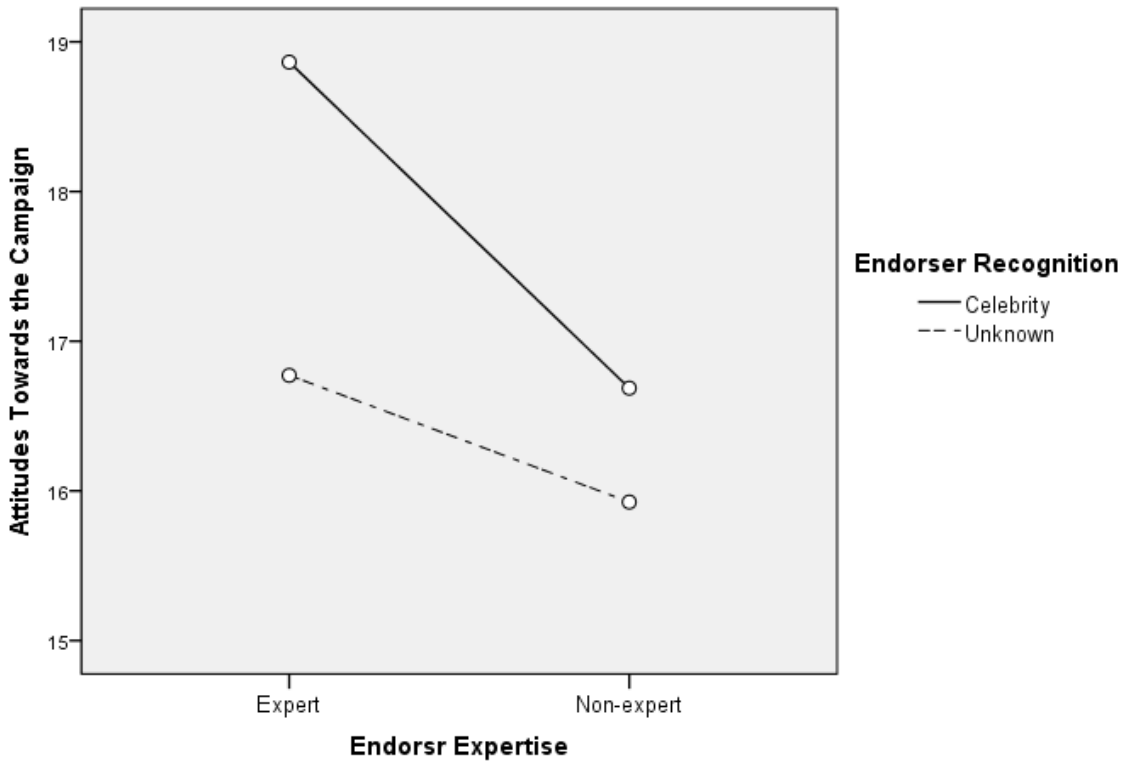


Figure 5.5. The interaction between expertise and recognition on attitude

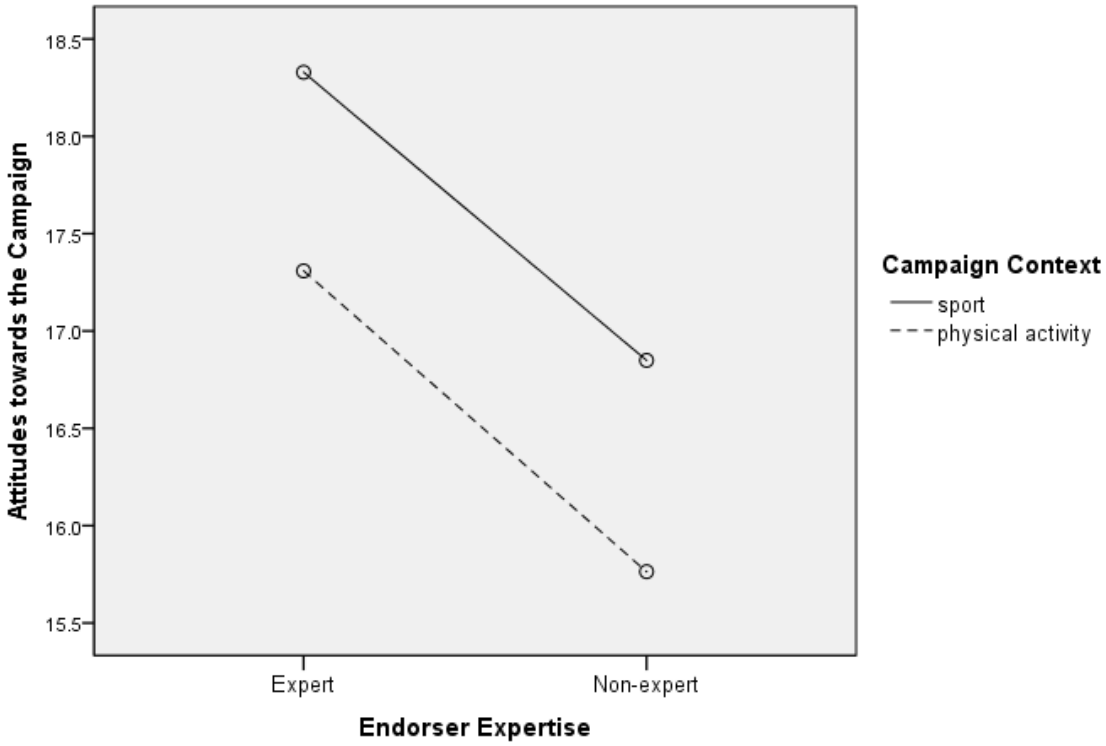


Figure 5.6. The interaction between expertise and campaign context on attitude

Participants' attitudes were significantly different towards the campaigns of the four endorser types (F (3, 278) = 5.58, $p < .01$, $\eta^2 = .06$) and there was a medium effect size. Therefore, a Bonferroni post-hoc test was used to specify those group differences (Field, 2013). Results uncovered a significant difference between the celebrity athlete and the celebrity non-expert ($p = .03$), the unknown expert ($p = .04$) and the unknown non-expert ($p < .01$). Participant attitudes were not significantly different ($p > .05$) among the celebrity non-athlete, the unknown expert and the unknown non-expert (Table 5.20). This provided evidence in support of H1.

Table 5.20. Pairwise Comparisons - Bonferroni

Groups	Endorser type	Mean Difference	Std. Error	Sig.**	95% Confidence Interval**	
					Lower Bound	Upper Bound
Celebrity athlete	**Celebrity non-athlete**	2.18*	.76	.03	.16	4.19
	Unknown expert	2.09*	.75	.03	.09	4.10
	Unknown non-expert	2.94*	.75	.001	.93	4.94
Celebrity non-athlete	**Celebrity athlete**	-2.18*	.76	.03	-4.19	-.16
	Unknown expert	-.09	.76	1.00	-2.10	1.93
	Unknown non-expert	.76	.76	1.00	-1.25	2.78
Unknown expert	**Celebrity athlete**	-2.09*	.75	.03	-4.10	-.09
	Celebrity non-athlete	.09	.76	1.00	-1.93	2.10
	Unknown non-expert	.85	.75	1.00	-1.16	2.85
Unknown non-expert	**Celebrity athlete**	-2.94*	.75	.001	-4.94	-.93
	Celebrity non-athlete	-.76	.76	1.00	-2.78	1.25
	Unknown expert	-.85	.75	1.00	-2.85	1.16

Note. Based on estimated marginal means
* The mean difference is significant at the 0.05 level.
** Adjustment for multiple comparisons: Bonferroni.

It was found that after taking into account the effect of the covariate, the celebrity athlete had the highest adjusted mean score (adj M = 18.86, SE = .53) followed by the

unknown expert (adj *M* = 16.77, *SE* = .53), celebrity non-expert (adj *M* = 16.69, *SE* = .54) and unknown non-expert (adj *M* = 15.92, *SE* = .53) (Table 5.21).

Table 5.21. Adjusted Means for Attitude

Endorser Type	N	Mean	Std. Deviation	Adj. Mean*	Std. Error	95% Confidence Interval	
						Lower Bound	Upper Bound
Celebrity athlete	72	18.88	4.80	18.86	.53	17.81	19.91
Celebrity non-athlete	71	16.61	4.67	16.69	.54	15.63	17.75
Unknown expert	72	16.83	5.12	16.77	.53	15.72	17.82
Unknown non-expert	72	16.00	3.72	15.92	.53	14.87	16.98

* Covariates appearing in the model are evaluated at the following values: Involvement = 38.54.

5.3.6.4 Participation intention

Prior to testing group differences on the transformed intention variable, assumptions for ANCOVA were checked. Both a visual inspection of the scatterplot and a statistical test for deviation, F (53) = 1.10, p = .31, supported the assumption of linearity between the intention variable and the involvement covariate (Table 5.22).

The interactions of groups at different levels of involvement with the intention variable were also tested through the interaction term of GLM and an inspection of the intention-involvement scatter plot (Norusis, 2008; Pallant, 2016). Although the scatter plot revealed a violation of the assumption of homogeneity of regression slopes, support for the assumption was uncovered through an insignificant GLM interaction term for all independent variables: endorser expertise (F (1, 279) = .37, p = .54), endorser recognition (F (1, 279) = 2.28, p = .13), and campaign context (F (1, 279) = .79, p = .38) (Table 5.23). Because the p-values were more than 0.10, the interactions depicted in the scatter plot cannot be a significant problem and ANCOVA remains robust (D'Alonzo, 2004).

Table 5.22. Deviation from Linearity - Participation Intention

		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	**(Combined)**	5.22	54	.10	1.70	.00
	Linearity	1.91	1	1.91	33.67	.00
	Deviation from Linearity	3.31	53	.06	1.10	.31
Within Groups		13.15	232	.06		
Total		18.37	286			

Table 5.23. Treatment-Covariate Interactions

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1001.71*	7	143.10	8.26	.00
Intercept	618.00	1	618.00	35.66	.00
Endorser Expertise * Involvement	6.40	1	6.40	.37	.54
Endorser Recognition * Involvement	39.53	1	39.53	2.28	.13
Campaign Context * Involvement	13.65	1	13.65	.79	.38
Error	4834.86	279	17.33		
Total	25540.00	287			
Corrected Total	5836.57	286			

* R Squared = .172 (Adjusted R Squared = .151)

Group Differences (ANCOVA)

The descriptive statistics for the raw data and transformed data are presented in Table 5.24 and Table 5.25 respectively. The group presented with the celebrity athlete endorser in the physical activity campaign advertisement reported the highest participation intentions (M_g = 8.55, 95% CI [6.87, 10.62]) followed by the unknown expert group in the sport campaign (M_g = 8.36, 95% CI [6.98, 10.01]). The celebrity non-athlete group in the sport campaign (M_g = 5.22, 95% CI [4.15, 6.56]) and physical activity campaign (M_g = 5.73, 95% CI [4.87, 6.75]) reported the least participation intention respectively (Table 5.25). The values for these groups are presented initially

using the more easily interpretable geometric mean scores, calculated from the log transformed data. Geometric means are beneficial when dealing with skewed data as they are less distorted by outliners than arithmetic mean (Olivier, Johnson, & Marshall, 2008). Geometric means and geometric confidence interval limits are normally less than those of the raw data as they are less affected by sampling error when data are positively skewed (Bland & Altman, 1996). The raw data median of each group was also presented (Table 5.24), because for the skewed data, the mean is not a good representation of the centrality of data distribution (Tabachnick & Fidell, 2007).

Table 5.24. Mean Scores for Participation Intention

				95% Confidence Interval	
Group*	**N**	**Mean**	**Median**	**Lower Bound**	**Lower Bound**
Celebrity athlete (S)	37	8.78	9.00	7.41	10.15
Celebrity athlete (PA)	35	10.14	10.00	8.29	12.00
Celebrity non-athlete (S)	33	6.52	4.00	4.80	8.23
Celebrity non-athlete (PA)	38	6.47	6.00	5.37	7.58
Unknown expert (S)	37	9.46	10.00	8.05	10.86
Unknown expert (PA)	35	8.66	9.00	7.05	10.27
Unknown non-expert (S)	38	8.63	8.00	7.24	10.02
Unknown non-expert (PA)	34	7.53	6.50	6.06	9.00
Total	287	8.29	7.00	7.76	8.81

Note. Calculated from raw data.
* (S) = Sport context, (PA) = Physical activity context

Table 5.25. Geometric Means for Participation Intention

Group*	N	Geometric Mean	95% Confidence Interval	
			Lower Bound	Lower Bound
Celebrity athlete (S)	37	7.72	6.44	9.26
Celebrity athlete (PA)	35	8.55	6.87	10.62
Celebrity non-athlete (S)	33	5.22	4.15	6.56
Celebrity non-athlete (PA)	38	5.73	4.87	6.75
Unknown expert (S)	37	8.36	6.98	10.01
Unknown expert (PA)	35	7.31	5.91	9.04
Unknown non-expert (S)	38	7.71	6.57	9.05
Unknown non-expert (PA)	34	6.48	5.33	7.88
Total	287	7.06	6.60	7.56

Note. Calculated from transformed data.
* (S) = Sport context, (PA) = Physical activity context

ANCOVA results using the log transformed data uncovered a statistically significant main effect among the eight groups controlling for participants' psychological involvement in either sport or physical activity (F (7, 278) = 3.85, p < .01, η^2 = .09). Involvement was a significant covariate (F (1, 278) = 34.75, p < .01, η^2 = .11), with a large effect on participation intention (Table 5.26).

Table 5.26. ANCOVA for Eight Groups - Participation Intention

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3.36*	8	.42	7.79	.00	.18
Intercept	13.37	1	13.37	247.65	.00	.47
Involvement	1.88	1	1.88	34.75	.00	.11
Group	1.45	7	.21	3.85	.00	.09
Error	15.01	278	.05			
Total	225.18	287				
Corrected Total	18.37	286				

* R Squared = .183 (Adjusted R Squared = .160)

An additional ANCOVA for this dependent variable examined the separate effect of context and endorser type. It was found that participation intention was significantly different between endorser type groups with a medium effect size (F (3, 278) = 6.97, p <.01, η^2 = .07). However, participation intention was not significantly different for those who viewed the sport or physical activity advertisements (F (1, 278) = 1.62, p = .20, η^2 = .01), which was evidence to reject H5. It was also revealed that the interaction between the endorser type and campaign context was insignificant F (3, 278) = 1.41, p = .24, η^2 = .01, (Table 5.27).

Table 5.27. ANCOVA for Campaign Context and Endorser Type Groups - Participation Intention

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3.36*	8	.42	7.79	.00	.18
Intercept	13.37	1	13.37	247.65	.00	.47
Involvement	1.88	1	1.88	34.75	.00	.11
Campaign Context	.09	1	.09	1.62	.20	.01
Endorser Type	1.13	3	.38	6.97	.00	.07
Campaign Context * Endorser Type	.23	3	.08	1.41	.24	.01
Error	15.01	278	.05			
Total	225.18	287				
Corrected Total	18.37	286				

* R Squared = .183 (Adjusted R Squared = .160)

The separate effects of expertise and recognition on participants' intentions were also investigated. It was revealed that expertise (F (1, 278) = 14.08, p < .01, η^2 = .05) significantly impacted on participation intention, while endorser recognition was insignificant on campaign-related intentions (F (1, 278) = 2.24, p = .13, η^2 = .01). The interaction between endorser expertise and recognition was significant F (1, 278) = 4.77, p = .03, η^2 = .02. Although participants had higher intentions to participate in a campaign endorsed by experts, there was an interaction between unknown and celebrity

endorsers at a lower level of expertise. Among non-expert endorsers, an unknown endorser was associated with higher participation intention related to the campaign than a celebrity (Figure 5.7). Also, the interaction between recognition and campaign context was significant (F (1, 278) = 4.12, p = .04, η^2 = .01). Participation intention was higher related to the physical activity campaign when the endorser was highly recognisable but unexpectedly this was not the case in the sport context (Figure 5.9). The two-way interactions between expertise and campaign context F (1, 278) = .08, p = .78, η^2 < .01); and the three-way interaction among all independent variables (F (1, 278) = .03, p = .85, η^2 < .01) were insignificant. The scatter plot related to the interaction between endorser and campaign context revealed that intentions to participate in the sport campaign endorsed by either the experts or non-experts were higher rather than the physical activity campaign (see Table 5.28 and Figure 5.8).

Table 5.28. Group Differences - Participation Intention

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3.36*	8	.42	7.79	.00	.18
Intercept	13.37	1	13.37	247.65	.00	.47
Involvement	1.88	1	1.88	34.75	.00	.11
Expertise	.76	1	.76	14.08	.00	.05
Recognition	.12	1	.12	2.24	.13	.01
Campaign Context	.09	1	.09	1.62	.20	.01
Expertise*Recognition	.26	1	.26	4.77	.03	.02
Expertise*Campaign Context	.004	1	.004	.08	.78	.00
Recognition*Campaign Context	.22	1	.22	4.12	.04	.01
Expertise*Recognition*Campaign Context	.002	1	.002	.03	.85	.00
Error	15.01	278	.05			
Total	225.18	287				
Corrected Total	18.37	286				

* R Squared = .104 (Adjusted R Squared = .078)

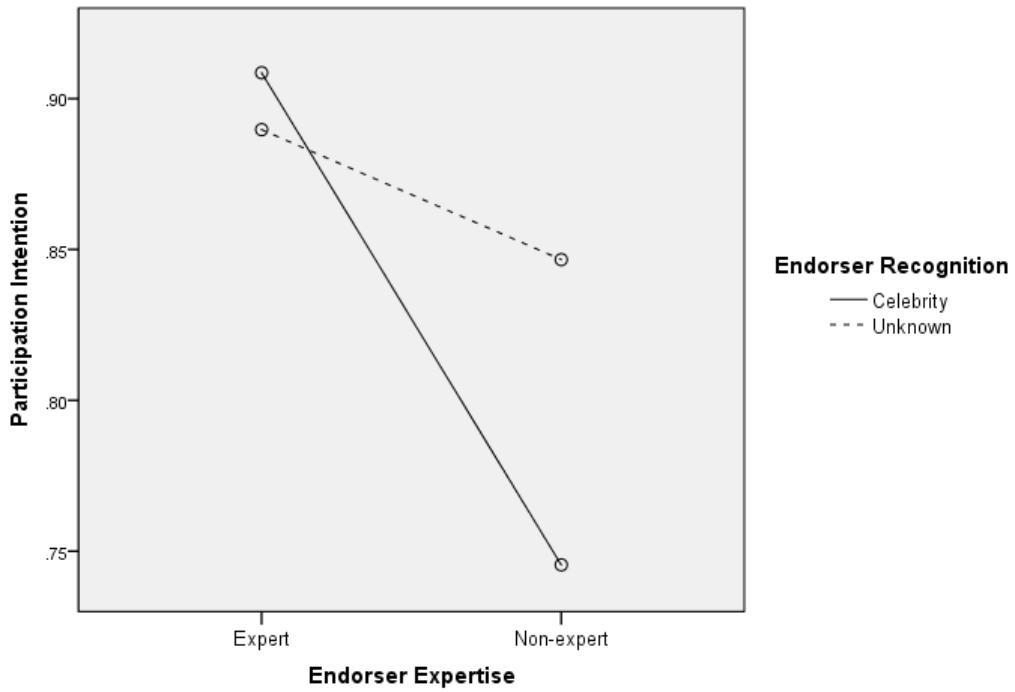


Figure 5.7. The interaction between expertise and recognition on participation intention

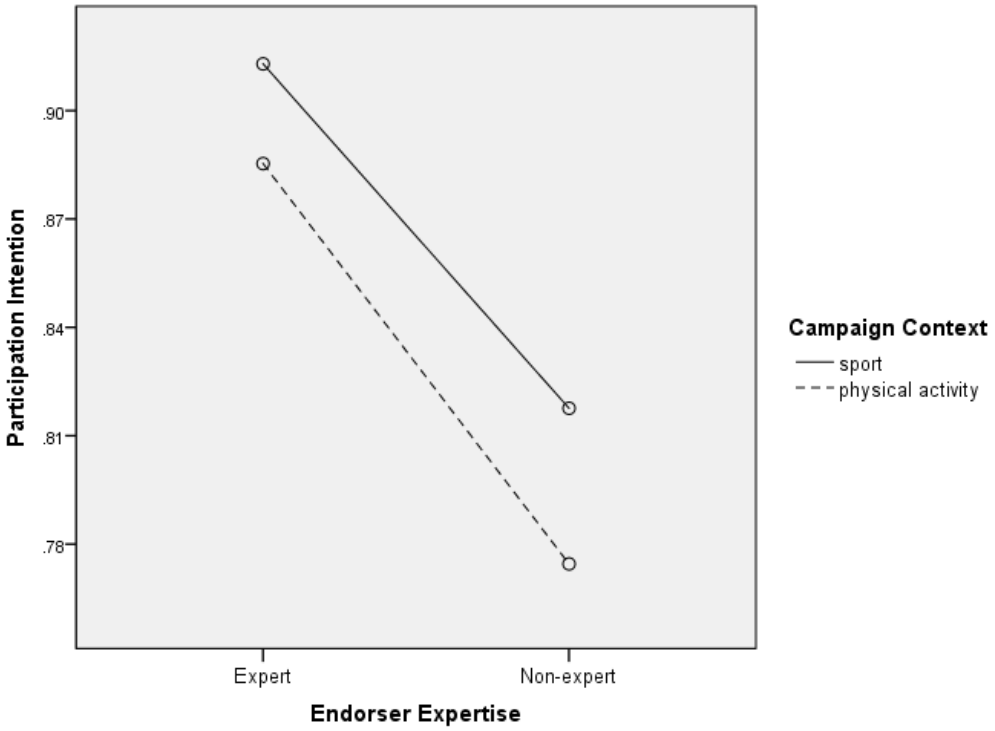


Figure 5.8. The interaction between expertise and campaign context on participation intention

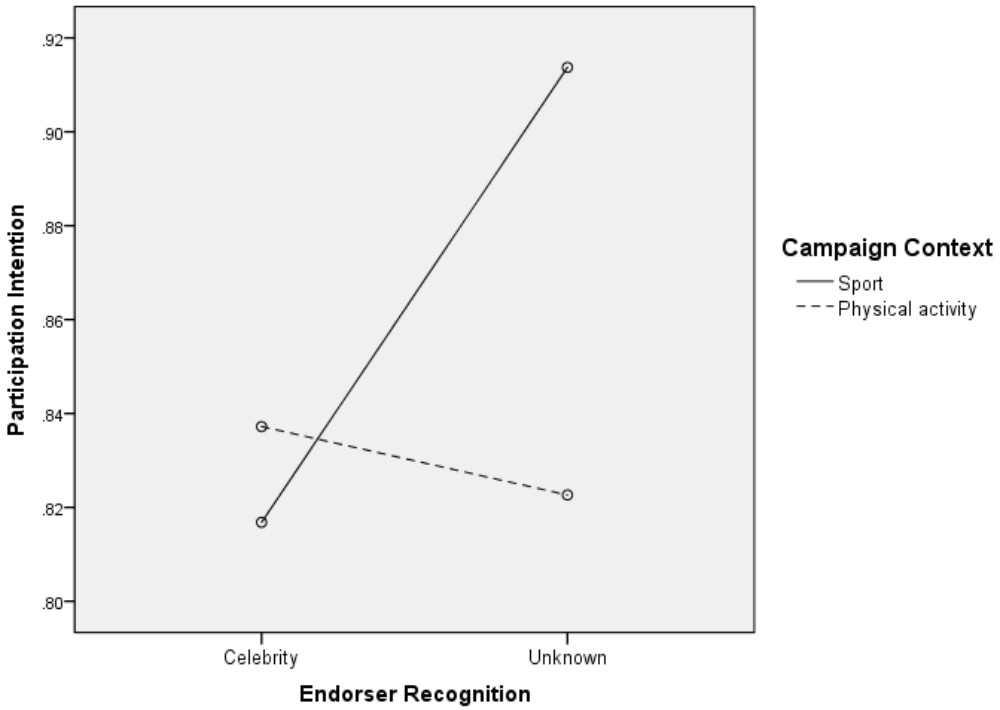


Figure 5.9. The interaction between recognition and campaign context on participation intention

Participants' intentions were not significantly different as they related to the sport and physical activity campaigns. The scatter plot (Figure 5.10) revealed that when participants are more involved in sport or physical activity, participation intentions increase. The interaction between the two lines indicates that individuals with a low level of involvement in sport or physical activity almost have the same participation intention related to the sport and physical activity campaigns. Psychological involvement in sport and physical activity was found to have a large effect on participants' intentions related to the campaign ($\eta^2 = .11$).

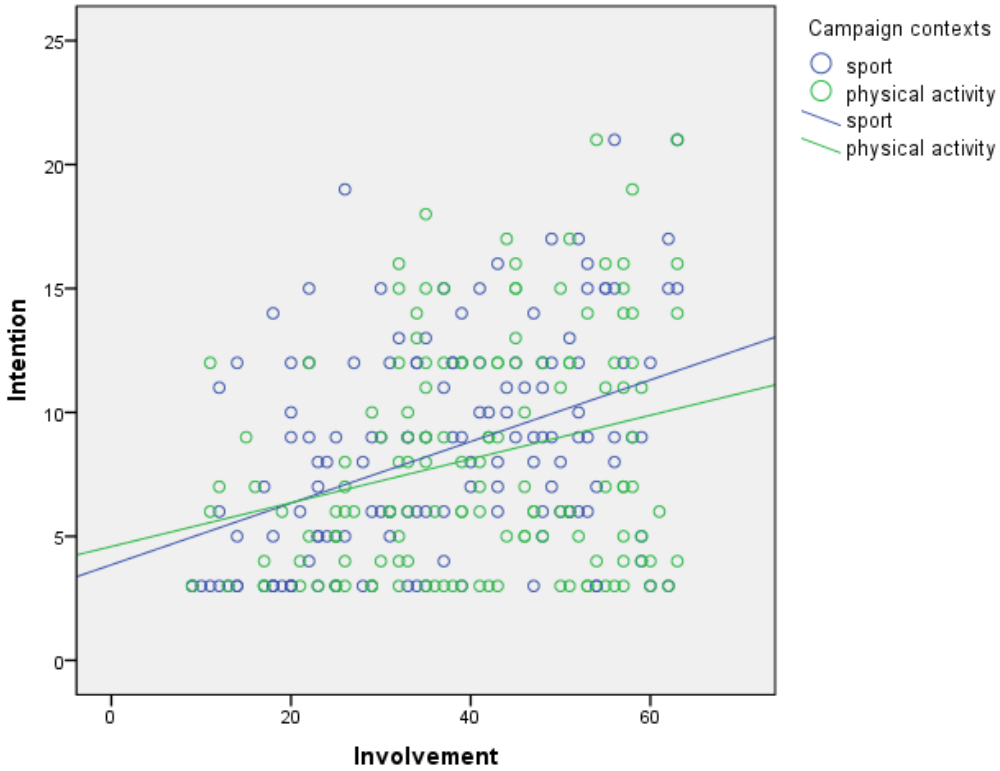


Figure 5.10. Participation intention and involvement

A Bonferroni post hoc test isolated group mean differences. Participation intentions towards the celebrity-athlete endorsed campaign were significantly different from the celebrity non-athlete campaign ($p < .01$). This was partial support for H2. Moreover, participation intention was significantly higher for the unknown expert group compared to the celebrity non-athlete group ($p < .01$). However, there were no significant participation intention differences between the celebrity athlete group and the unknown groups. Back-transformed adjusted means (i.e., geometric means) were also calculated for endorser type groups (Table 5.29).

Table 5.29. Pairwise Comparisons - Bonferroni

Groups	Endorser type	Mean Difference	Std. Error	Sig.**	95% Confidence Interval**	
					Lower Bound	Upper Bound
Celebrity athlete	**Celebrity non-athlete**	.16*	.04	.00	.06	.27
	Unknown expert	.02	.04	1.00	-.08	.12
	Unknown non-expert	.06	.04	.67	-.04	.16
Celebrity non-athlete	**Celebrity athlete**	-.16*	.04	.00	-.27	-.06
	Unknown expert	-.14*	.04	.00	-.25	-.04
	Unknown non-expert	-.10	.04	.06	-.20	.00
Unknown expert	**Celebrity athlete**	-.02	.04	1.00	-.12	.08
	Celebrity non-athlete	.14*	.04	.00	.04	.25
	Unknown non-expert	.04	.04	1.00	-.06	.15
Unknown non-expert	**Celebrity athlete**	-.06	.04	.67	-.16	.04
	Celebrity non-athlete	.10	.04	.06	-.00	.20
	Unknown expert	-.04	.04	1.00	-.15	.06

Note. a. Based on estimated marginal means. b. Calculated from transformed data.
* The mean difference is significant at the 0.05 level.
** Adjustment for multiple comparisons: Bonferroni.

As the data for participation intention were not normally distributed, bootstrapping can be performed (Efron & Tibshirani, 1993) along with the transformation to reduce the impact of bias associated with data. Bootstrapping estimates “the population distribution of s statistics (e.g., r_{xy}) by iteratively resampling cases from a set of observed data”. The log transformation may increase the probability of Type-II error (Russell & Dean, 2000, p. 169), so the bootstrapping results were considered over the transformation results (Field, 2013; Russell & Dean, 2000). The pairwise comparisons results of bootstrapping were slightly different in that there were significant differences between the unknown non-expert group and both the celebrity athlete group (p = .04) and celebrity non-athlete group (p = .04) (Table 5.30). Therefore, these bootstrapping results also provided partial support for H2.

Table 5.30. Bootstrapping - Participation Intention

Groups	Groups by endorser type	Mean Difference	Bootstrap*				
			Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval	
						Lower	Upper
Celebrity athlete	**Celebrity non-athlete**	2.81	.02	.67	.00	1.52	4.16
	Unknown expert	.44	-.00	.71	.54	-1.06	1.82
	Unknown non-expert	1.41	.04	.68	.04	.15	2.88
Celebrity non-athlete	**Celebrity athlete**	-2.81	-.02	.67	.00	-4.16	-1.52
	Unknown expert	-2.36	-.02	.69	.00	-3.70	-1.02
	Unknown non-expert	-1.39	.01	.66	.04	-2.64	-.07
Unknown expert	**Celebrity athlete**	-.44	.00	.71	.54	-1.82	1.06
	Celebrity non-athlete	2.36	.02	.69	.00	1.02	3.70
	Unknown non-expert	.97	.04	.70	.18	-.39	2.36
Unknown non-expert	**Celebrity athlete**	-1.41	-.04	.68	.04	-2.88	-.15
	Celebrity non-athlete	1.39	-.01	.66	.04	.07	2.64
	Unknown expert	-.97	-.04	.70	.18	-2.36	.39

* Bootstrap results are based on 1000 bootstrap samples

Participants in the celebrity athlete group had the highest geometric adjusted mean score (adj M_g = 8.11, 95% CI [7.16, 9.18]) followed by the unknown expert endorser group (adj M_g = 7.76, 95% CI [6.85, 8.79]), the unknown non-expert endorser group (adj M_g = 7.03, 95% CI [6.21, 7.96]), and the celebrity non-athlete endorser group (adj M_g = 5.56, 95% CI [4.91, 6.31]), (Table 5.31).

Table 5.31. Geometric Adjusted Means for Participation Intention

Endorser type*	N	Geometric Mean	Geometric Adj Mean**	95% Confidence Interval	
				Lower Bound	Upper Bound
Celebrity athlete	72	8.11	8.11	7.16	9.18
Celebrity non-athlete	71	5.48	5.56	4.91	6.31
Unknown expert	72	7.83	7.76	6.85	8.79
Unknown non-expert	72	7.10	7.03	6.21	7.96

* Covariates appearing in the model are evaluated at the following values: Involvement = 38.54.
** Back-transformed data.

5.3.6.5 Perceived fit

The linearity and homogeneity of regression slopes ANCOVA assumptions were checked for the third dependent variable, perceived fit. A visual inspection of the scatter plot revealed a linear relationship between perceived fit and involvement as the covariate. The deviation from linearity test was also insignificant, (F (53) = .95 p = .58), (Table 5.32). Therefore, the assumption of linearity between the dependent variable and covariate was met.

The homogeneity of regression slopes assumption was not met due to evidence from both the perceived fit-involvement scatter plot and a significant GLM interaction term among the eight groups (F (7, 271) = 2.43, p = .02). Heterogeneity of regression slopes implies that the impacts of the independent variables are not the same at different levels of the covariate (Huitema, 2011). Further investigation uncovered that the interactions among groups with various endorser's expertise and recognition were not statistically significant, (F (1, 279) = 2.03, p = .15; F (1, 279) = 1.63, p = .20) which was an indication of support for homogeneity of regression slopes for these groups. In contrast, a significant interaction between campaign context (i.e., sport and physical activity) and involvement indicated heterogeneity of regression slopes (F (1, 279) = 7.27, p = .01) (Table 5.33).

Table 5.32. Deviation from Linearity - Perceived Fit

		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	**(Combined)**	2166.63	54	40.12	.97	.53
	Linearity	91.66	1	91.66	2.22	.14
	Deviation from Linearity	2074.97	53	39.15	.95	.58
Within Groups		9565.12	232	41.23		
Total		11731.75	286			

Table 5.33. Treatment-Covariate Interactions

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3661.28*	7	523.04	18.08	.00
Intercept	7999.92	1	7999.92	276.56	.00
Endorser Expertise * Involvement	58.84	1	58.84	2.03	.15
Endorser Recognition * Involvement	47.11	1	47.11	1.63	.20
Campaign Context * Involvement	210.27	1	210.27	7.27	.01
Error	8070.47	279	28.93		
Total	89884.00	287			
Corrected Total	11731.75	286			

* R Squared = .312 (Adjusted R Squared = .295)

Scatter plots were then inspected for endorser type and campaign context separately. The observed interactions among groups with various endorsers in the scatter plot (Figure 5.11) were not problematic as they lay at one extreme of the scatter plot in an area that there were no data points (Huitema, 2011). Furthermore, having a relatively large sample size, equal groups, and a p-value of above .10 for the interaction term between endorser involvement and both expertise and recognition, ANCOVA can remain robust for exploring group difference among endorser types (Huitema, 2011). However, for groups with different campaign context (e.g., sport and physical activity), an inspection of the scatter plot (Figure 5.12) suggested an interaction between groups.

The interaction observed in the scatter plot along with the significant interaction in GLM ($p < .01$) revealed that the assumption of homogeneity of regression slopes was violated for the sport and physical activity context groups. On this basis, it was concluded that an alternative procedure is needed for the context independent variable. Picked-points analysis, a procedure appropriate for data in which regression slopes are heterogeneous (Huitema, 2011).

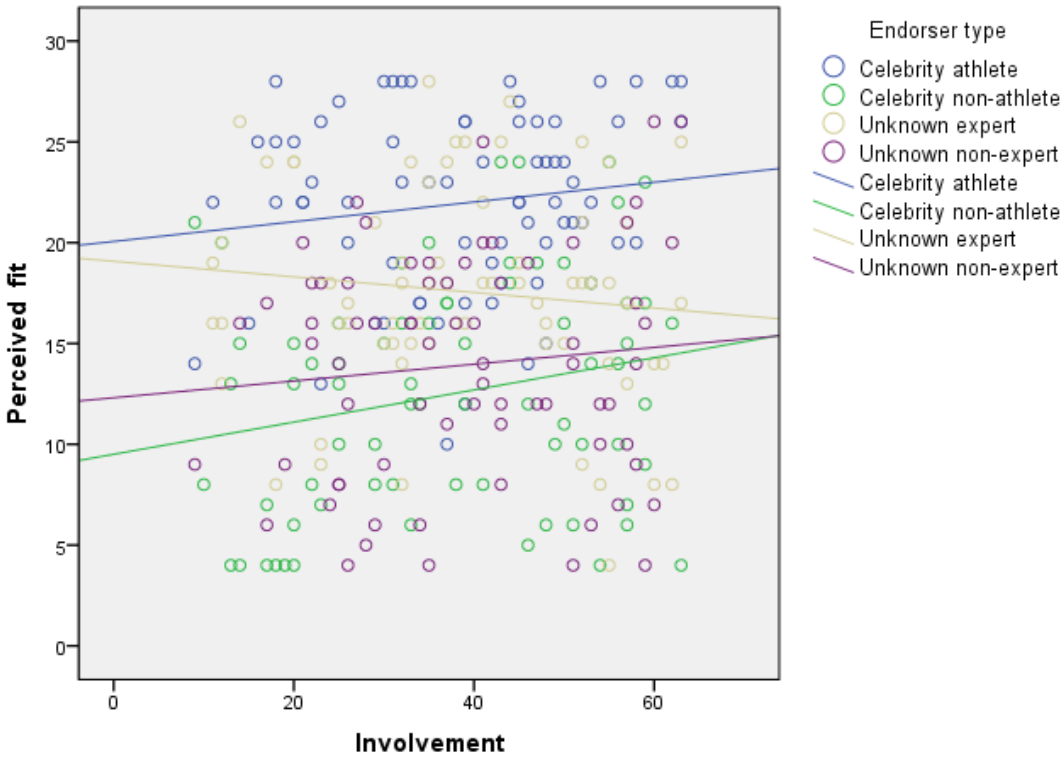


Figure 5.11. Endorser type groups' interactions

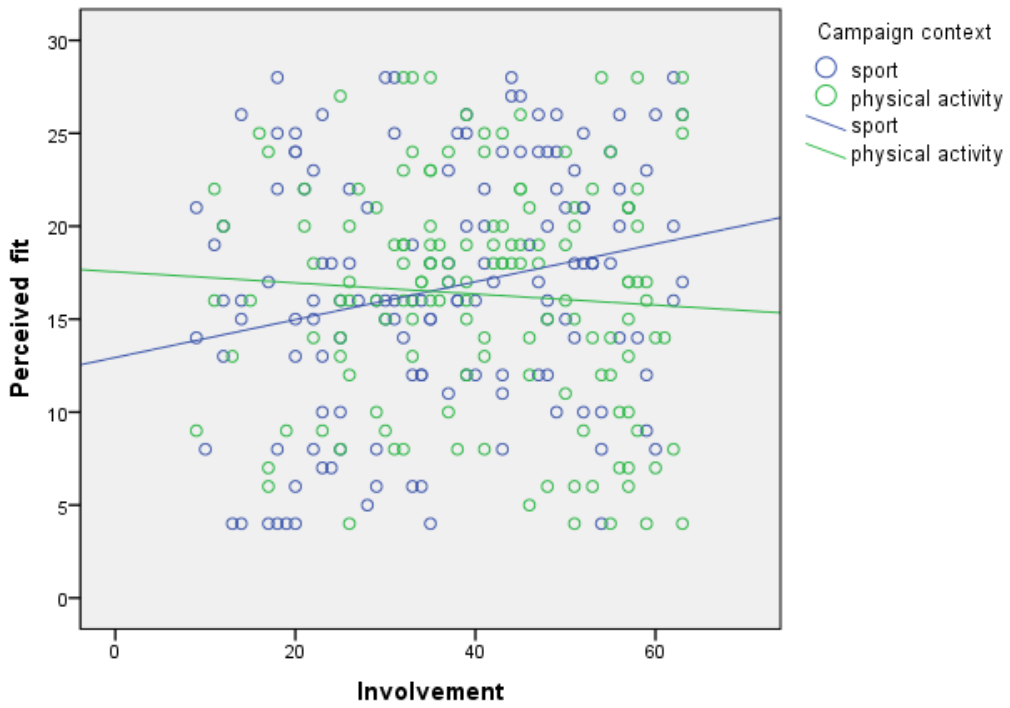


Figure 5.12. Campaign context groups' interaction

Group Differences (ANCOVA)

The ANCOVA indicated a significant difference on perceived campaign-endorser fit among groups with various endorsers and the effect size was large (F (3, 282) = 45.86, $p < .01$, $\eta^2 = .33$). Furthermore, involvement in sport or physical activity had no significant effect on perception of fit (F (1, 282) = 2.37, $p = .12$, $\eta^2 = .01$), (Table 5.34).

Table 5.34. Group Differences Based on Endorser Type - Perceived Fit

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3908.59*	4	977.15	35.22	.00	.33
Intercept	8017.70	1	8017.70	289.01	.00	.51
Involvement	65.77	1	65.77	2.37	.12	.01
Endorser Type	3816.93	3	1272.31	45.86	.00	.33
Error	7823.16	282	27.74			
Total	89884.00	287				
Corrected Total	11731.75	286				

* R Squared = .333 (Adjusted R Squared = .324)

Next, the separate effects of expertise and recognition on participants' perception of fit was explored. It was revealed that endorser expertise (F (1, 282) = 110.15, $p < .01$, $\eta^2 = .26$) and endorser recognition (F (1, 282) = 5.86, $p = .02$, $\eta^2 = .01$) significantly impacted on perception of endorser-campaign fit. Although both attributes were significant on perception of fit, it was evident that the effect of endorser's expertise ($\eta^2 = .26$) was notably larger than endorser's recognition ($\eta^2 = .01$).

The interaction between endorser expertise and recognition was also significant with a medium effect size (F (1, 282) = 21.64, $p < .01$, $\eta^2 = .05$), (Table 5.35). This indicates that the effect of each separate variable is not consistent across conditions (Mitchell & Jolley, 2013). That is, the effect of endorser expertise is different depending on the level of endorser recognition. Participants generally had higher perceptions of endorser-campaign fit for the campaign featuring expert endorsers. However, at lower levels of expertise, the unknown endorser was linked to higher perceptions of fit than the celebrity (Figure 5.13).

Table 5.35. ANCOVA for Endorser Expertise and Endorser Recognition Groups - Perceived Fit

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3908.59*	4	977.15	35.22	.00	.33
Intercept	8017.70	1	8017.70	289.01	.00	.51
Involvement	65.77	1	65.77	2.37	.12	.01
Expertise	3055.86	1	3055.86	110.15	.00	.28
Recognition	162.66	1	162.66	5.86	.02	.02
Expertise*Recognition	600.47	1	600.47	21.64	.00	.07
Error	7823.16	282	27.74			
Total	89884.00	287				
Corrected Total	11731.75	286				

* R Squared = .333 (Adjusted R Squared = .324)

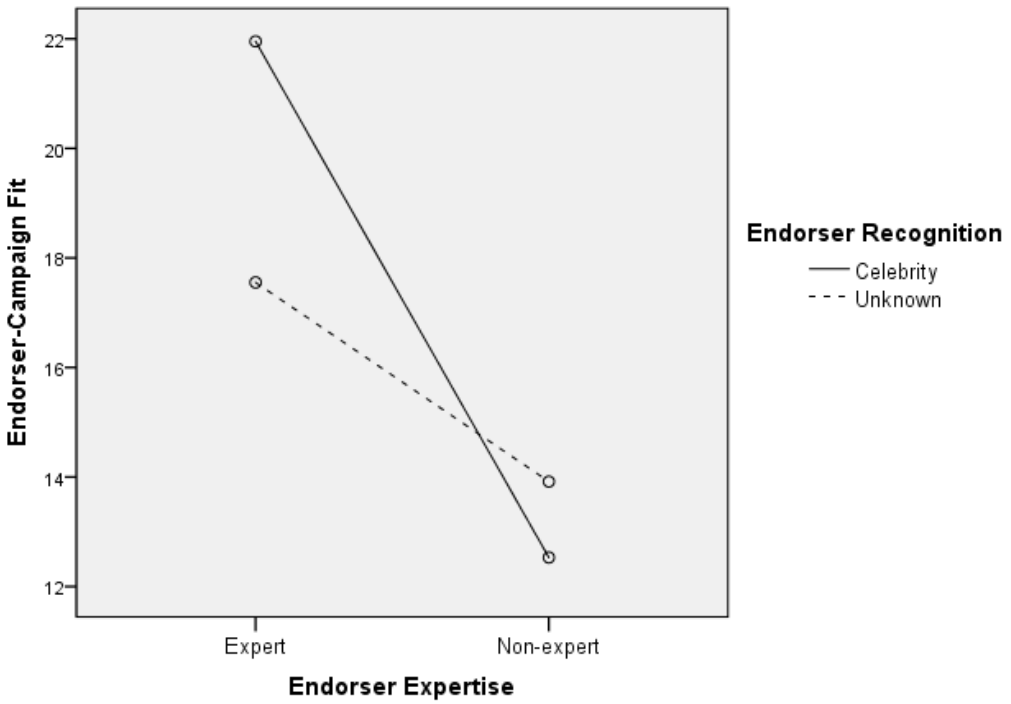


Figure 5.13. The interaction between endorser expertise and recognition for perceived fit

A Bonferroni post hoc test revealed that perceptions of campaign-endorser fit for the celebrity athlete group were significantly greater than the celebrity non-athlete group ($p < .01$), the unknown expert group ($p < .01$) and the unknown non-expert group ($p < .01$), which provided support for H3. Perceptions of fit were also significantly greater for the unknown expert group as compared to the celebrity non-athlete group ($p < .01$) and the unknown non-expert group ($p < .01$). No significant difference on perception of fit was found between the celebrity non-athlete group and the unknown non-expert group ($p = .70$) (Table 5.36).

Table 5.36. Pairwise Comparisons - Bonferroni

Groups	Endorser type	Mean Difference	Std. Error	Sig.**	95% Confidence Interval**	
					Lower Bound	Upper Bound
Celebrity athlete	**Celebrity non-athlete**	9.42*	.88	.00	7.08	11.76
	Unknown expert	4.40*	.88	.00	2.07	6.73
	Unknown non-expert	8.03*	.88	.00	5.70	10.37
Celebrity non-athlete	**Celebrity athlete**	-9.42*	.88	.00	-11.76	-7.08
	Unknown expert	-5.02*	.88	.00	-7.36	-2.68
	Unknown non-expert	-1.39	.88	.70	-3.73	.95
Unknown expert	**Celebrity athlete**	-4.40*	.88	.00	-6.73	-2.07
	Celebrity non-athlete	5.02*	.88	.00	2.68	7.36
	Unknown non-expert	3.63*	.88	.00	1.30	5.97
Unknown non-expert	**Celebrity athlete**	-8.03*	.88	.00	-10.37	-5.70
	Celebrity non-athlete	1.39	.88	.70	-.95	3.73
	Unknown expert	-3.63*	.88	.00	-5.97	-1.30

Note. Based on estimated marginal means
* The mean difference is significant at the 0.05 level.
**Adjustment for multiple comparisons: Bonferroni

The adjusted mean scores for groups with different endorsers were calculated controlling for participant psychological involvements in sport or physical activity (Table 5.37). Perceived campaign-endorser fit was highest for the celebrity athlete endorser group (adj M = 21.95, SE = .62), followed by the unknown expert group (adj M = 17.55, SE = .62), the unknown non-expert person group (adj M = 13.92, SE = .62) and the celebrity non-athlete group (adj M = 12.53, SE = .63).

Table 5.37. Adjusted Means for Perceived Fit

Endorser type	N	Mean	Std. Deviation	Adj Mean*	Std. Error	95% Confidence Interval	
						Lower Bound	Upper Bound
Celebrity athlete	72	21.96	4.50	21.95*	.62	20.73	23.17
Celebrity non-athlete	71	12.49	5.73	12.53*	.63	11.30	13.76
Unknown expert	72	17.57	5.18	17.55*	.62	16.33	18.77
Unknown non-expert	72	13.93	5.62	13.92*	.62	12.69	15.14

* Covariates appearing in the model are evaluated at the following values: Involvement = 38.54.

Group Differences (Picked-Points Analysis)

A picked-points analysis was used to compare perceptions of campaign-endorser fit between the sport and physical activity contexts. The analysis was based on three levels of participants' psychological involvement so that groups in each of the sport and physical activity contexts could be compared with one another in same level of involvement. To represent three disparate levels of involvement, three points were chosen based on standard deviation as outlined by Huitema (2011). The first picked point (PP1) was one standard deviation below the respondents' mean score for involvement. This represents a low level on the covariate (PP1 = 24.21). The second point (PP2) was the mean score itself (PP2 = 38.54) which represented a moderate level of involvement in sport or physical activity. The third point (PP3) was one standard deviation above the mean, which represents participants with a high level of involvement in sport or physical activity (PP3 = 52.87) (Table 5.38).

Table 5.38. Involvement

	N	Mean	Std. Deviation	Minimum	Maximum
Involvement	287	38.54	14.33	9	63

After the picked points were identified, a dummy variable (D) capturing the two contexts (i.e., sport and physical activity) was created and new variables were computed

to facilitate the analysis. First, each picked point was subtracted from an individual's involvement score (Centered PP). Second, each of those scores were multiplied with the context-based dummy variable for subsequent use in the multiple regression (D*Centered PP). Finally, multiple regression was used to compare perceived fit between sport and physical activity context groups at each picked point.

A significant regression equation was found for the model (R^2 = .03, F (3, 283) = 2.95, p = .03) in which campaign context explained a significant amount of the variance in the value of perceived fit (Table 5.39 and Table 5.40).

Table 5.39. Model Summery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.17	.03	.02	6.34

Table 5.40. ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	355.98	3	118.66	2.95	.03
	Residual	11375.77	283	40.20		
	Total	11731.75	286			

The results of multiple regressions for PP1 and PP2 indicated that context was not a significant predictor of campaign-endorser perceived fit for those with a lower level of involvement in sport or physical activity (β = -1.42, t (283) = -1.32, p = .189), and moderate level of involvement (β = .46, t (283) = .61, p = .54). However, for high involvement individuals (PP3), participant perception of campaign-endorser fit was a significant predictor in the model (β = 2.35, t (283) = 2.21, p = .028), (Table 5.41). These results partially supported H6 of the study.

Table 5.41. Multiple Regressions in Three Picked Points

	Coefficients	Std. Error Coefficients	t	Sig.	95% Confidence Interval for B	
					Lower Bound	Upper Bound
PP1	-1.42	1.08	-1.32	.19	-3.54	.70
PP2	.46	.76	.61	.54	-1.02	1.95
PP3	2.35	1.06	2.21	.03	.25	4.44

In PP3 which represented higher involvement in sport/physical activity, perceived fit was higher for sport context groups than physical activity context groups, $\beta = 2.35$, *SE* = 1.06. However, the reverse was true for PP1 (low involvement in sport/physical activity), as perceived fit in the physical activity context was higher than sport context, $\beta = -1.42$, *SE* = 1.08. Furthermore, at PP2 (moderate involvement in sport/physical activity) participant perception of fit was almost equivalent between the contexts, $\beta = .46$, *SE* = .76.

In summary, perception of campaign-endorser fit was significantly predicted by context but only at higher levels of psychological involvement. Specifically, those at higher levels of involvement perceived more fit between campaign and endorser in the sport context than the physical activity context.

5.4 Qualitative Phase

Study 2 also included a qualitative investigation of how young adults perceive different types of endorsers based on expertise and recognition for social marketing campaigns in sport and physical activity. Transitioning to the qualitative paradigm at this stage allowed for further exploration of the findings from the quantitative phase.

5.4.1 Procedure

Two focus groups were conducted to generate insights on perceptions of endorser characteristics. Consistent with the sequential nested sampling procedure (Onwuegbuzie

& Collins, 2007; Teddlie & Yu, 2007), 65 students from the experiment phase expressed an interest in the focus group discussions after being recruited and were invited to participate. The two focus groups would eventually consist of six and eight people (seven females and seven males). Prior to starting the focus group discussion, participants received an information sheet (Appendix C3) and a consent form (Appendix D). Several open ended questions were derived from relevant endorsement literature. The central question explored during this phase of the research was: *How do young adults perceive the use of different types of endorsers in a social marketing campaign promoting sport or physical activity?*

The sub-questions were:

- In your opinion, can an endorser add value to a campaign for promoting sport participation?
  - What about a campaign for promoting physical activity?
  - Which campaign (sport or physical activity) do you think benefits most from an endorser?
  - Why do you think that?
- Which kind of endorser (athlete, celebrity or unknown person) would you choose for a campaign promoting sport participation?
  - Which one do you think is better for a campaign promoting physical activity?
- How does an athlete endorser differ from a celebrity or an unknown person in general?
  - Why do you prefer this type of endorser?
- Which endorser is more likely to encourage people to respond?
  - Why is that?
  - If you saw your favourite endorser would it influence you?

5.4.2 Data analysis

Focus group discussions were transcribed and thematically analysed (Braun & Clarke, 2006) using NVivo software (Boyatzis, 1998). Transcriptions were read and reread and codes were identified by finding repetition, similarities and differences. Codes were then grouped into similar categories. Finally, themes were derived and analysed regarding intimacy (Braun & Clarke, 2006) and these were carefully considered alongside the results of the quantitative phase. The procedure for data analysis here was identical to the qualitative phase of Study 1. For the purpose of retaining anonymity, focus group participants are identified subsequently using their first initial and a number.

5.4.3 Results

Two main sets of codes were generated from initial codes. The first set was five general codes related to a broad interpretation of the entire data set: involvement, match-up, campaign outcomes, gender, and Paralympians. The second set of three codes was related specifically to endorser type based on endorser's expertise and recognition: athlete endorser, non-athlete endorser and unknown endorser (Table 5.42). Similarities, differences and networks between codes and groups of codes were considered and were summarised into seven significant themes. The themes were: 1) endorser expertise; 2) endorser recognition; 3) endorser-campaign fit; 4) participant involvement in sport and physical activity; 5) campaign outcomes; 6) gender and endorsement; and 7) Paralympians as endorsers. Given the nature of the questions that were posed to focus group participants, several themes aligned with foci of the wider study and that featured as variables in the quantitative phase whereas others emerged more organically.

Table 5.42. Focus Groups Codes - Study 2

A: General Codes				
Involvement	**Match-up**	**Campaign outcomes**	**Gender**	**Paralympians**
Sporty person	Context fit	Participating	Girl, Guy	Inspirational
Personal interest	Gender fit	Catch attention	Female, Male	Encouraging
Personal experience	Expertise fit	Do sport	Stereotype	Can do
Personal perception	Personality fit	Engaging	Story-based	
Personal bias	Audience interest	Gain interest		
Into sport		Inclined		
Sport level				

B: Codes Relating to Endorser Type (based on expertise and recognition)		
Celebrity athlete	**Celebrity non-athlete**	**Unknown endorser**
Reassuring	Noticeable	Engaging
Role model	Reputation	Less trustworthy
Recognisable	Recognisable	Achievable
Reliable	Not relevant	Average Joe
Trustable	Being paid	Can do, Doable
Personal experience	Authoritative	Generic person
Valid	Different	Realistic
	Tempting	Inspiring story

5.4.3.1 Theme 1: Endorser expertise

In expressing positive attitudes towards the celebrity athlete endorser, focus group participants described a celebrity athlete as a "*role model*" [M13, S22 and K21]. One of the participants stated, "*If they're like known in the field, like a hockey player promoting something, they're more role models*" [K21]. Another participant also linked positive attitudes to endorser's expertise stating, "*Someone good at the sport that can show it off, they can entice people to play the sport*" [E22]. Endorser's expertise also affected the degree of trust that participants perceived from an advertisement. One of the focus group participants noted that "*You can trust what he says because he's done it. It's not me coming up and saying, 'I think rugby is this and you should do that, and I've never*

played it and don't watch it all the time'" [S21]. Another participant added that an endorser "*…makes it [campaign advertisement] more valid, I would say*" [A21]. A participant in the second focus group also mentioned that "*… it feels like he knows what he is talking about*" [E22]. The focus group data supports a link between trust and expertise, which augurs well for more positive attitudes towards the advertisement.

5.4.3.2 Theme 2: Endorser recognition

The second theme highlights the positive impact of endorser recognition on participant attitudes and perceptions and reinforces what was found from the experiment. One focus group participant referred to the unknown expert in the research and said, "*If it is a professor of rugby or it's Richie McCaw [former rugby player], because you know Richie McCaw, you're going to trust Richard McCaw*" [E21]. Several participants connected recognition and trust, with one noting that "*You definitely get recognised. You automatically trust them…*" [S21]. One participant spoke about this in the context of product advertisement and indicated that "*…I am more likely to buy something online if it has got a face I recognise because you feel like you trust them*" [T31]. They also explained that trust in the endorser's message was related to a perception that the celebrity would not want to risk their own "*reputation*" [H21, E21, G21 and S21]. One participant explained, "*… if you put a celebrity like a real famous one …, it must be okay, because they don't want to ruin their reputation with a bad product or a bad campaign*" [G21]. In addition, participants made a positive connection between familiarity and the ability to attract and maintain attention: "*I think it could get people to pay attention to the ad, because they might recognise them…*" [S21]. Another participant continued, "*…if it wasn't somebody who you knew, you are more likely to dismiss it*" [A21]. Another indicated that "*They're popular, their faces, it might spark some interest*" [N21].

While the benefit of having a recognised endorser was emphasised, focus group participants noted that a lack of recognisability can be offset by knowledge of their expertise and sporting achievements. One participant referred to the Olympic gold medallist endorser in the questionnaire advertisement and said, "*I think you would be able to trust her [celebrity athlete endorser] even if you didn't know her because it takes a lot of work to be a gold medallist in any sport*" [M21]. Another participant agreed, suggesting that "*… even if you didn't ever see her like she's a gold medallist, if she's a gold medallist you will be like, 'Okay'"* [D21]. Complementing this argument, participants could not associate a celebrity non-athlete with a sport-related campaign [H21, A21, E21 and S21]. One participant explained, "*With that [celebrity non-athlete], the audience then has to question why they have endorsed this? … Did they need it for the money?"* [E21]. Overall, young adults had positive attitudes towards the campaign endorsed by a recognised endorser. Recognisability can enhance trust and attract attention to the advertisement. However, evidence here suggests that it will be more effective if that celebrity has sport-related expertise.

5.4.3.3 Theme 3: Endorser-campaign fit

With the match-up hypothesis central to an understanding of endorsement, participants were prompted to analyse fit between an athlete endorser and the campaign. One participant stated, "*I think someone who has that background of sport would be more effective than someone that doesn't have a background. Like you don't associate her [the celebrity non-athlete] with the sport*" [H21]. For a sport-related campaign, "*…probably someone well known in the sport. Probably like an athlete that is good at the sport*" [N22]. Another one continued, "*If she [the celebrity non-athlete] was promoting rugby … or something specific, it would be so wrong I think*" [E21]. In contrast, if an athlete also endorses a non-sport product or service, focus group participants considered this a mismatch. One participant used an example, indicating

that "*Richie McCaw [former rugby player] doing that housing ad. If it's not relevant then to me, they are just using him because he is famous and I can recognise it and I just think it's stupid!*" [K32].

Participants were more critical about endorser-campaign match in terms of endorser expertise in a sport campaign than a physical activity campaign. They indicated an endorser's primary sport should be matched with a sport specific advertisement:

> *…if you see someone who's reputation, like for example a netball star who has a reputation of being good at netball… that is endorsing something like soccer... It's really misplaced. So that would do nothing to make me want to be interested in soccer because where is their reputation at soccer? [S21].*

Another participant stated:

> *If they're trying to promote some sort of program and lived that lifestyle and it's worked, then that would have a bigger effect than trying to promote basketball and you use Richie McCaw [former rugby player]. I don't really relate to it. I'm not going to be like, 'Richie McCaw, I'll play because Richie McCaw is in a basketball ad' [K33].*

On the other hand, for the physical activity campaign, participants could see potential fit in using an unknown or non-sport celebrity. One participant indicated that, "*I think if you're going to do sports specifically, you probably want the sports person and if you're going to do the physical activity, you probably want just a normal average Joe*" [M21]. Another participant added that "*I feel like you can have a more general celebrity for that one [physical activity campaign], if you are good looking and physically fit*" [S21]. One of the participants explained, "*I think if you used like a*

professional person to promote the sport ... it makes it seem like they're promoting the sport as a professional sport. Whereas, if you have a normal person promoting say rugby, you're promoting it as a way of getting active" [S22]. Another participant did not support using a celebrity athlete for a physical activity promotion, noting that "*… maybe I'll never be like him [a celebrity athlete], and that's his career, that's his job as an athlete*" [G21]. One of the participants mentioned that an athlete's level of expertise is important when endorsing a social marketing campaign in sport. He noted, "*If they look good, I am sort of 'Oh, I want to be like that', but then if they are too perfect, I am sort of 'Oh, I am never going to get there'*" [A31].

The focus group discussions highlighted the principle of the match-up hypothesis. Participants indicated that a celebrity athlete endorser or a professional athlete is well suited for a sport-based campaign. However, a celebrity athlete or professional athlete endorser was considered less of a match for a physical activity campaign.

5.4.3.4 Theme 4: Participant involvement in sport and physical activity

Focus group participants indicated psychological involvement in sport and physical activity affects the degree to which a campaign might capture attention, as well as the likelihood to engage in the target behaviour. One participant stated, "*I think if you are not a sporty person, you wouldn't look at it [campaign advertisement]*" [S21]. Another argued:

> *It depends on the subject because someone who is inclined to do sport will be motivated by someone who is a sporty person and someone who is not inclined to do sports would be motivated by someone who is just your average Joe [M21].*

Participants suggested a social marketing campaign promoting sport to people with low involvement should avoid celebrity professional athlete endorsers. One participant

noted that *"…a start-up campaign for beginners; it might be more effective to have that everyday person [as an endorser]"* [A22]. Another participant added:

> *I think if you have like a sport person promoting sports, it motivates someone to really play it more instead of new players. Whereas, if you had somebody like a celebrity who isn't sporting or just a normal person, that might get people who aren't into sport [E22].*

One of participants suggested that *"… [Professional athlete] put off some other people who are not as built as him. It will kind of intimidate them saying, 'I'm not as good as that guy, he's probably like way ahead of me'"* [M21].

Young adults' interest in sport can also affect their engagement with the endorsed programme. The notion of interest was interpreted to be aligned with psychological involvement. One participant in the focus group stated, "*It's more like a personal interest. In fact you can dispose all of the trust if I'm not into that kind of sport advertised. I would choose something I like*" [T21]. Several participants indicated their interest in specific sports and how they might respond to an endorsed campaign promoting other sports:

> *I think it also depends where you stand on the spectrum type thing. I wouldn't be into aggressive sports like rugby, but if it was something else like netball or something, which I've played in the past, or like darts, I could see myself doing, then you'll be more likely to enjoying it [E21].*

Another participant noted that "*If it was something like say water polo or something which I have done in the past, I would have been more interested in it, whereas if it's something like rugby, I'm not sure…*" [S21]. Another participant went on and stated, "*Using a sports person it would apply to some people and it wouldn't apply to others. If*

you used a soccer player, it would probably motivate you but it wouldn't do much for me" [N21].

Having a high-profile celebrity athlete as an endorser may fit better in a social marketing campaign targeting young adults who are already psychologically involved in sport and physical activity, but it may not be very effective for people who are not involved in sport or physical activity. One of the participants who was involved in a sport indicated that:

> *You see it [advertisement] and they [endorsers] are in perfect shape, but then it does get really controversial because some people are like. 'Oh, well I am not embodying the perfect...what we want to be.' I don't know, but for me, I like it [A31]*

As a whole, the focus group findings highlighted the important role of young adults' interest and their level of involvement in sport or physical activity on the endorsement of a social marketing campaign.

5.4.3.5 Theme 5: Campaign outcomes

It emerged from the focus group discussions, that the focal behaviour (participation in sport and physical activity) may not always be significantly influenced by an endorser. However, an endorser may help to capture attention as well as affect attitude and intention related to the campaign – which are also useful downstream marketing outcomes. One participant indicated, "*I think the face [endorser's photo] gain interest but it does not necessarily sway someone to do what's endorsing. You notice the face; it gains your interest but you're not necessarily more inclined to do it because of the athletes personally*" [E22]. Then another participant continued:

I would agree because personally, I see an endorser and I will be like, 'what are they talking about?' It engages that person straight away but I also don't think it will make him more likely to do sport. It engages him with the topic [S22].

Another participant stated, "*It [endorsed campaign] will catch my attention. That's phase one but phase two, participating in sport, maybe or maybe not*" [N21]. One participant expanded on the ideas related to endorsers facilitating campaign outcomes and stated: "*I think it can [persuade me to do sport], but it depends how it is presented but I think it definitely can*" [D21].

5.4.3.6 Theme 6: Gender and endorsement

One female participant weighed in on the effect of an endorser's gender on participants' attitudes, "*To be honest, I would be biased. I would be more interested in a female as a girl because I know guys are naturally more fit or they can be*" [A22]. Another female in the group agreed and added, "*I will go for a girl more than anything*" [D21]. Although female participants were more inclined to see a female endorser, most male participants indicated a neutral opinion regarding the gender of an endorser [N21, N22 and M21]. One male participant stated that "*I'm either, you could pick a guy or a girl. It doesn't really matter to me*" [N21]. Another male participant noted, "*It doesn't to me make a difference. It might even go like having a female would be more motivational because they go against a stereotype that girls can't do*" [N22]. One of male participants then supported his peer opinion and indicated, "*Yeah, it will be better if having a girl"* [E22]. There were few male participants who indicated their interest in having a male endorser [K21 and S22]. One male participant noted that "*For me male because I would look up to him. I don't think I could look up to a female"* [K21]. Overall, it seemed to emerge that gender can affect participants' perceptions towards the

campaign advertisement and this seemed especially salient for the female participants. The role of gender in endorsement was further investigated in Study 3 of this thesis.

5.4.3.7 Theme 7: Paralympians as endorsers

Although, it emerged from the focus group discussions that a professional athlete can be effective for a sport-based campaign, an endorser who can inspire people such as a Paralympian can fit in a campaign promoting physical activity. The use of athletes with a disability as celebrity endorsers was spontaneously raised by participants in both focus groups. One participant indicated, "*The Paralympian is a really good idea. It's kind of like if he can do it then you can do it*" [H21]. Then, another participant compared a celebrity athlete with an athlete with disability and described: "*… even if I saw Richie McCaw [former rugby player] playing rugby, I would probably be like, 'Not really', but if I saw someone with one leg playing sport I would go, maybe I should go do something about it"* [M21]. Another participant explained, *"…because they go through so much more to be able to do their sport, that can encourage, like you don't really have much of an excuse*" [S21]. Then, they mentioned Marl Inglis, a NZ Paralympian who also was the first double amputee that climbed Mount Everest. One participant indicated, "*If someone like him says 'I can climb the tallest mountain in the world, you should be able to go for a 20-minute run'. That might be quite inspirational*" [N21].

5.5 Discussion

The purpose of this study was to investigate the impact of endorser's expertise and public recognition on attitude, participation intention and perceived endorser-campaign fit related to a social marketing campaign promoting sport and physical activity. The results of the experiment component of the research revealed that attitude, intention and perception of endorser-campaign fit were more positive when the campaign was

endorsed by the celebrity athlete compared to the unknown expert, celebrity non-athlete and unknown non-expert endorser. In addition, themes emerging from the qualitative phase allowed for the explication of results in the quantitative phase. The themes reinforce our emerging understanding of endorser characteristics, expertise and recognition that impact participants' perceptions related to a campaign promoting sport and physical activity. In addition, involvement emerged in the focus groups as an important factor in shaping participants' attitudes towards endorsers of a social marketing campaign in sport and physical activity.

Endorser's expertise was a significant characteristic affecting attitude towards either a sport or physical activity campaign. The quantitative findings suggested that young adults had more positive attitudes and higher intentions to participate in the campaign endorsed by a celebrity with related expertise. This was consistent with the match-up hypothesis, which suggests that an athlete or expert in sport as an endorser should fit better in a sport-related campaign compared to a non-expert endorser (e.g., Till & Busler, 2000). The results were supported in the qualitative phase, as focus group participants emphasised the importance of endorser expertise in a sport and physical activity campaign. It also emerged in the qualitative phase that endorser expertise is associated with more positive attitudes through trust building. Prior research has shown that even an unknown athlete endorsing a sport related brand is more effective than a non-athlete affirming the importance of expertise (Koernig & Boyd, 2009). In the current research, an unknown expert in sport and physical activity was perceived as a better match for the campaign than two endorsers without expertise. Attitudes and intentions related to the campaign with the unknown expert endorser were also higher compared with the celebrity non-athlete and the unknown non-expert endorsers.

Recognition was the other important characteristic of celebrity athlete endorsers that was explored in the current research. The use of a recognisable expert/athlete endorser

can help to build trust and improve attitudes among the target market which was highlighted in both the quantitative and qualitative phases of the study. There was alignment here with previous research that concluded a well-known and familiar face in the advertisement can build some degree of trust in a target group, "*to know me is to trust me*" (Bailey & Cole, 2004, p. 137). A well-known athlete endorsing a sport-related brand significantly increase perceived trust (Koernig & Boyd, 2009), which this can lead to more positive response related to the endorsement. It was revealed that attitude ($p = .03$) and perception of endorser-campaign fit ($p < .01$) for the well-known expert (celebrity athlete) endorser group were significantly higher than for the unknown expert group, but it was not significant for the participation intention variable ($p = .54$). Focus group findings also revealed that a highly recognisable endorser (i.e., a celebrity athlete) would capture young people's attention to a greater degree than an unknown endorser – a finding which supports previous research in non-sport contexts (e.g., S. Biswas et al., 2009; Shuart's 2007 as cited in Hambrick & Mahoney, 2011; Kaikati, 1987). For example, in a study related to health, it was found that consumer attention and perceptions of endorser credibility increases with a well-known endorser (Bhutada & Rollins, 2015). However, the attention given to celebrity endorsers does not necessarily affect participants' intentions and behaviours (S. Biswas et al., 2009). This was consistent with the findings of the quantitate phase of the study which indicated that endorser's recognition was not significantly related to participants' intentions ($p = .13$).

Trustworthiness, as one element of endorser credibility (Ohanian, 1990), has a significant impact on advertisement effectiveness (Amos et al., 2008; Tzoumaka et al., 2016). Participants in the focus groups suggested that using a well-known endorser can increase levels of trust. This was consistent with previous research in which it was found that a well-known athlete endorsing a sport product is linked to increased levels of trust ($p = .04$), positive thoughts ($p < .01$) and liking ($p < .01$) (Koernig & Boyd,

2009). For young adults particularly, a recognisable endorser is often worshiped (Tzoumaka et al, 2014) which can lead to very positive attitudes towards that endorser and the campaign by extension. However, in the current research context, participants indicated that recognition alone was not enough, but rather that characteristic needed to be accompanied by the perception of sport-related expertise.

Involvement is an important construct linked to consumer behaviour in advertising research (e.g., Limbu, Huhmann, & Peterson, 2012; Petty et al., 1983; Rice et al., 2012). Participants' psychological involvement in sport and physical activity was used as a covariate in this study despite our finding in Study 1 that involvement was not significantly related to participants' attitudes towards the advertisement ($p = .086$). Based on previous research and because involvement approached statistical significance in Study 1 as a covariate, it was also controlled in the experiment phase of this study. The study provided evidence that participants' psychological involvement in sport or physical activity has an impact on attitude ($p < .01$) and intention ($p < .01$) in social marketing. In contrast, initial results across the campaign contexts indicated that perception of endorser-campaign fit is not significantly influenced by participants' involvement in sport or physical activity ($p = .12$) and the celebrity athlete endorser was perceived as the better fit for the campaign compared with the other three endorsers regardless of participants' level of involvement.

Analyses of the perception of fit variable considering the two distinct campaigns uncovered that young adults who were highly involved in sport or physical activity perceived an endorser (regardless of their expertise) to fit better in a sport-based campaign than a physical activity campaign. The implication of this is that for campaigns targeted at young adults who are psychologically connected to sport but inactive an endorser could be very effective to elicit change. It was aligned with the findings emerged from focus group discussions that having a celebrity athlete in a

physical activity campaign may "*put off*" young adults who are not physically fit or are not psychologically involved in sport or physical activity. They may compare themselves with the celebrity athlete as they never can reach to that level of competency in sport or perceived the endorsing as part of the celebrity athlete career objectives. Therefore, a less known or unknown expert or a non-expert endorser may be perceived as being more realistic, even though she or he may not capture attention like a celebrity who is well known. For example, "*the Subway Guy*" (i.e., former American spokesperson for Subway restaurants) was noted in focus groups by participants as a person who had an encouraging story of losing significant weight.

5.6 Limitations and Future Research

Two limitations specific to this study should be acknowledged. First, the difference between the sport campaign and physical activity campaign was only captured through a generic depiction of several sports/physical activities, and a slogan (i.e., *"Playing Sport…"* or *"Physical Activity…" "…makes all the difference."*). More information related to both campaigns may have been needed for participants to differentiate the campaigns. Another limitation of this study was the fact that the appropriateness of two profession titles (i.e., "Customer Service Manager" and "Professor of Sport and Exercise Science") for the unknown endorsers were not pre-tested, although the key issue of associating expertise (or not) to those titles were manipulation checked. The titles may not have conveyed sport or physical activity expertise (or the lack thereof) totally accurately.

An important idea that could spawn future research emerged from the focus groups relates to Paralympians and athletes with disabilities as endorsers. The use of athletes with disability as social marketing endorsers in sport and physical activity was discussed in a favourable way by focus group participants. Athlete endorsers with

disabilities can generate similar positives associations with a campaign as those who are able bodied (Möller, Oberhäuser, & von Sikorski, 2010; Von Sikorski, Schierl, Möller, & Oberhäuser, 2012), but our understanding is growing, particularly in specific contexts. On this basis it is recommended that future research – preferably utilising a rigorous experimental design in which causes and effects can be isolated - investigate the use of athletes with disability as celebrity endorsers in the context of sport and physical activity participation.

Chapter 6

STUDY 3

Campaign - endorser - audience fit: An exploration of the gender and career status of athlete endorsers

This chapter aligns with the following paper submitted to Sport Marketing Quarterly: Behnoosh S., Naylor M., & Dickson, G. (under review). An exploration of gender and the career status of athlete endorsers in a social marketing context.

6.1 Introduction

The effect of a two-way match-up between an endorser and a social marketing campaign was explored in Study 2. This study is also based on the match-up hypothesis and aims to generate deeper insights into the endorsement process considering a three-way match-up between campaign, endorser and audience. Although most research has focused on endorser-product match-up, endorser-audience fit is also vital to endorsement effectiveness (e.g., Bailey & Cole, 2004; Freiden, 1984; K. Kim & Cheong, 2011; O'Regan, 2014; Till, 1998). Therefore, the focus of this study was on how one specific characteristic of audience (i.e., gender) in interaction with endorser characteristics (i.e., gender and career status) impacts attitude, intention, and perception of fit related to a campaign promoting sport and physical activity.

Research has shown that the interaction between the gender of an endorser and the gender of audience can significantly influence endorsement effectiveness - specifically when the population of interest is young adults (O'Regan, 2014; Peetz et al., 2004). However, the effect of endorser-audience match-up based on gender has not been tested

in a social marketing framework to this point. This match-up has not been considered carefully in endorsement literature (Bailey & Cole, 2004; Tzoumaka et al., 2016).

The other endorser characteristic explored in this study is career status. Athletes at the peak of their careers have public recognition and can leverage themselves and their career for their endorsement activities (Shilbury, Quick, & Westerbeek, 2003). There are also former athletes who continue as successful endorsers long after retirement from professional sport. The retired tennis player Chris Evert, for example, has been involved in many successful endorsements after retirement (Stone et al., 2003). However, there are limited studies done related to athletes' career status and promotional effectiveness (Walsh & Williams, 2017). In the context of social marketing and non-profit entities it has also been noted that the effectiveness of retired athletes as endorsers is unknown (Babiak et al., 2012). Therefore, the effects related to endorser's gender and the career status of athletes are not well understood and this study fills a gap in the literature.

6.2 Methods

Like Study 1 and Study 2, a mixed methods sequential explanatory design was utilised in Study 3 (see Figure 3.1). In this design, the quantitative phase is prioritised, while the qualitative phase provides further insights to allow for interpretation and explanation of the quantitative phase results (Creswell, 2003; Creswell et al., 2003; Fraenkel & Wallen, 2009). The quantitative phase of the study comprised an experiment containing mock social marketing advertisements embedded in a set of questionnaires. Then, focus group discussions were conducted to explore participants' perceptions and insights regarding the endorser's gender and career status in a social marketing campaign. The overarching question of the Study 3 was: *How do endorser gender and career status affect participants' attitudes, intentions and perception of fit related to a social marketing campaign in sport and physical activity?*

6.3 Quantitative Phase

A hypothetical model was developed to guide this exploration of attitudes, intentions, and perception of fit in terms of gender and career status (Figure 6.1). The effect of independent variables (i.e., endorser gender, endorser career status and participant gender) on dependent variables were tested while controlling for participants' psychological involvement in sport and physical activity. Involvement was included in the model as a covariate because of evidence uncovered in Study 2 supporting its potential effects. Due to the absence of related literature providing a rationale for the directionality of key relationships in this study, female endorsers, former endorsers, and female participants were framed positively, but arbitrarily in the hypotheses.

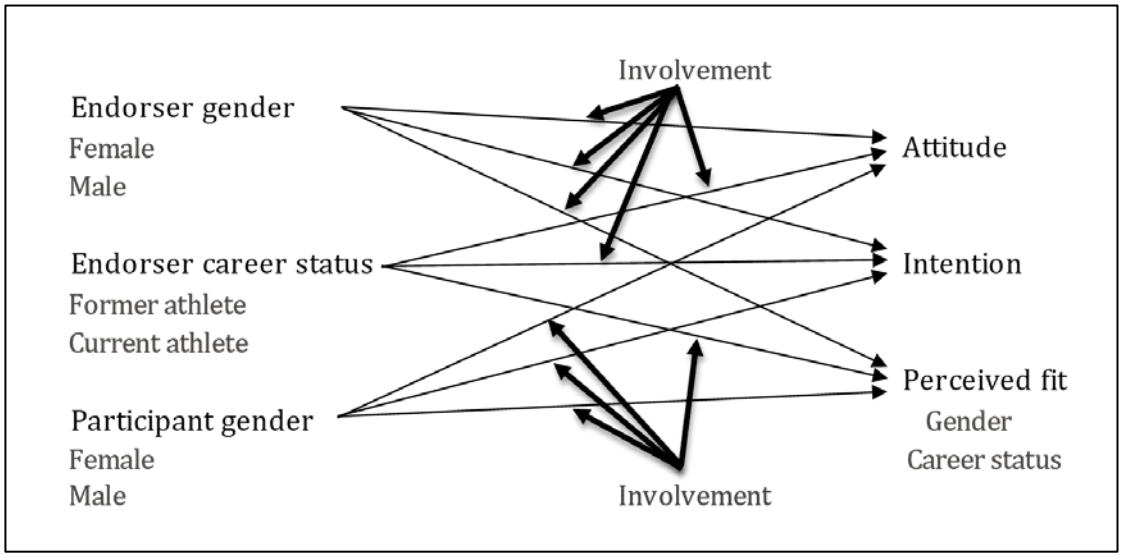


Figure 6.1. Hypothetical endorsement of Study 3

Hypotheses:

H1: Controlling for involvement, *attitude* towards a social marketing campaign promoting sport and physical activity is more positive with a *female* celebrity athlete endorser than a *male* celebrity athlete endorser.

H2: Controlling for involvement, *attitude* towards a social marketing campaign promoting sport and physical activity is more positive with a *former* athlete rather than a *current* athlete as a celebrity endorser.

H3: Controlling for involvement, *female participants* have a more positive *attitude* towards an endorsed social marketing campaign promoting sport and physical activity than *male participants*.

H4: Controlling for involvement, *participation intention* related to a social marketing campaign promoting sport and physical activity is higher with a *female* celebrity athlete endorser than a *male* celebrity athlete endorser.

H5: Controlling for involvement, *participation intention* related to a social marketing campaign promoting sport and physical activity is higher with a *former* athlete rather than a *current* athlete as a celebrity endorser.

H6: Controlling for involvement, *female participants* have higher *participation intention* related to an endorsed social marketing campaign promoting sport and physical activity than *male participants*.

H7: Controlling for involvement, *perception of gender fit* is higher for a social marketing campaign promoting sport and physical activity with a *female* celebrity athlete endorser than a *male* celebrity athlete endorser.

H8: Controlling for involvement, *perception of career status fit* is higher for a social marketing campaign promoting sport and physical activity with a *former* athlete than a *current* athlete as a celebrity endorser.

H9: Controlling for involvement, *perception of endorser-audience gender fit* is higher when the *gender* of the celebrity athlete endorser *matches* the gender of the participant.

H10: Controlling for involvement, *Female participants* have higher *perception of endorser-campaign fit* (in terms of gender and career status) for an endorsed social marketing campaign promoting sport and physical activity than *male participants*.

6.3.1 Procedure

A 2×2×2 factorial design was implemented in this study. The eight conditions were formed based on endorser's gender (female and male), endorser's career status (former and current) and participants' gender (female and male) (Table 6.1).

Table 6.1. Experiment Conditions

Conditions	Endorser's career status	Endorser's gender	Participants' gender
1	Current	Female	Female
2	Current	Female	Male
3	Former	Female	Female
4	Former	Female	Male
5	Current	Male	Female
6	Current	Male	Male
7	Former	Male	Female
8	Former	Male	Male

A mock social marketing advertisement containing a photo of an unknown endorser was utilised. A fictitious social marketing advertisement including an unknown endorser can control for familiarity effects by eliminating the influence of attitudes that participants may bring to the experiment (C. Y. Chen et al., 2012; Till & Busler, 2000). The advertisement layout was identical to that in the Study 2. Two photographs of unknown endorsers (one female, one male) with fictitious names were utilised in this study to avoid confounding independent variables (i.e., career status, and gender) with other characteristics of the endorser such as attractiveness, expertise and trustworthiness. Two popular names were chosen for the endorsers (Sara and Mike),

with an identical surname (Smith). The models used to depict the unknown female and male endorsers were siblings which provided a degree of similarity in terms of facial appearance and further reduced confound potential. Participants were informed of the endorser's athletic career status (i.e., active or retired) with a short description as part of the advertisement design and the gender of each endorser was readily apparent.

The procedure for carrying out this experiment was similar to Study 2. One week before the experiment participant information sheets were handed out to students (Appendix C2). On the day of experiment, participants were randomly assigned to four conditions specified by endorser's gender and endorser's career status (former female athlete, former male athlete, current female athlete, and current male athlete). These four endorser types were depicted in four distinct questionnaires which were distributed to both female and male participants, and this comprised the eight experimental conditions. Participants were informed briefly that they were involved in advertisement evaluation research. After seeing the advertisement on page two of the questionnaire, participants responded to items measuring the constructs of interest. The four mock advertisements embedded in four distinct questionnaires can be viewed in Appendix J. Participants reported their attitudes towards the social marketing campaign, participation intention and perception of fit in terms of gender and career status. Furthermore, participants' psychological involvement in sport and physical activity was measured to explore potential relationships with the outcome variables. Participants spent about 15 minutes completing the questionnaire. After collecting completed questionnaires, a separate form was circulated to participants inviting them to participate in the focus group phase of the study (Appendix E).

6.3.2 Sampling

Through a quota sampling scheme (R. B. Johnson & Christensen, 2008), roughly equal numbers of female and male undergraduate students were conveniently recruited. The sample size needed for this study was calculated using G*Power based on the intention to carry out a two-way ANCOVA test. With an anticipated medium effect size (Cohen's f= 0.25), the recommended statistical power of 0.8, and a standard alpha level of 0.05 (Cohen, 1988) a minimum sample of 237 was calculated. A total of 447 undergraduate students were then recruited across different subject areas. The number of participants recruited for this study was much larger than the calculated minimum to meet the gender quote and to ensure that they fit the age requirement. Ultimately, of 447 returned questionnaires, 392 usable questionnaires were retained for further analysis. Fifty-five questionnaires were discarded due to incomplete responses or a respondent being out of the age bracket (16-24) needed for the study.

6.3.3 Instrumentation

The Study 3 questionnaire consisted of six parts designed to measure involvement in sport and physical activity, attitude, intention and perception of fit. The first part included demographic questions (i.e., year of birth, gender and ethnicity). The second part of the questionnaire was nine adapted seven-point items ranging from strongly agree to strongly disagree measuring respondents' involvement in sport and physical activity on three dimensions (i.e., centrality, symbolic value, and hedonic value), (Beaton et al., 2011). The composite involvement variable was used as a covariate and the scale had good internal consistency (α = .96). Similar to Study 1 and Study 2, the involvement construct was measured first to decrease the impact that the experiment manipulation may have on self-reports of more enduring underlying psychology (Pallant, 2016). The third part of the questionnaire featured items measuring attitude towards the social marketing campaign. Attitude was measured using four seven-point

scaled items with the endpoints of bad/good, unfavourable/ favourable, unpleasant/pleasant and positive/negative from MacKenzie and Lutz (1989); and Till and Busler (2000). The scale had good internal consistency (α = .89). In the next part of questionnaire participation intention was measured using three seven-point semantic differential items with the following endpoints: unlikely/likely, definitely would not/definitely would, improbable/probable, in response to “How likely is it that you would increase your current level of sport and physical activity as a result of this campaign?” The scale was adapted from Yi (1990); and Till and Busler (2000), and had excellent internal consistency (α = .97) in this study.

To measure perception of fit in terms of gender, participants were asked to rate their agreement with the following statement which was presented on questionnaires featuring the female endorser, "As an endorser for this campaign, I think a female athlete is" on two pairs of descriptors: inappropriate/appropriate and ineffective/ effective, with seven-point semantic differential scale. They also rated their agreement with two statements based on seven-point items ranging from strongly agree to strongly disagree. The statements were: "The campaign and a female athlete endorser go well together” and “The campaign is well matched with a female athlete endorser”. The word ‘female’ was replaced with ‘male’ for questionnaires in which a male endorser was presented.

The final part of the questionnaire assessed endorser-campaign fit based on weather an endorser was presented as a former or current athlete (i.e., career status). To measure the extent an endorser’s athletic career status was perceived to fit to the campaign, a similar scale used for gender was included. Participants who received questionnaires featuring a current athlete, rated their agreement with the statement “As an endorser for this campaign, I think a current athlete is" on two pairs of descriptors, inappropriate/ appropriate and ineffective/effective. Then, they were asked to rate their agreement with

two statements: "The campaign and a current athlete endorser go well together" and "The campaign is well matched with a current athlete endorser". The word 'current' was replaced with 'former' for questionnaire in which a former athlete was presented as the endorser. The perceived fit scale was adapted from Till and Busler (2000) and Fleck et al. (2012). Cronbach's alpha reliability coefficients were .89 and .91 for gender and career status fit respectively.

6.3.4 Results

6.3.4.1 Demographic profile of the sample

Of 392 usable questionnaires, 190 (48.5%) respondents were females and 202 (51.5%) were males. Participants were aged from 17 to 24 years with an average age of 19.77 years across the sample. The majority of the sample was European (37.3%) or Asian (35.2%), with smaller numbers of participants identifying as Pacific people (13.7%), Maori (6.9%), MELAA (5.8%) and other (1.2%) (Table 6.2).

Table 6.2. Ethnic Groups of the Study 3 Participants

Ethnicity	Frequency (n)	Percent (%)
European	161	37.3
Asian	152	35.2
Pacific people	59	13.7
Maori	30	6.9
MELAA**	25	5.8
Other	5	1.2
Total*	432	100.0

* The total sample is larger than 392 as some participants reported more than one ethnic group.
** Middle Eastern, Latin American and African

6.3.4.2 General assumptions

The effect of endorser's gender, endorser's career status and participants' gender on outcome variables (i.e., attitude, participation intention, perceived gender fit, and perceived career status fit) was explored in this study. Taking into consideration

involvement as a covariate, between-group differences were tested using several ANCOVAs. Prior to the tests, the general assumptions of parametric tests including normality and homogeneity of variance were checked for all dependent variables (Pallant, 2016). The normality was checked the data of each group because the independent variables were categorical (Field, 2013).

A Shapiro-Wilk test ($p > .05$); values of skewness and kurtosis; and an inspection of histograms, Q-Q plots and box plots for all eight groups indicated that responses on the attitude variable were normally distributed (Table 6.3 and Table 6.4).

Table 6.3. Test of Normality - Attitude

Endorser	**Participant**	**Shapiro-Wilk**		
		Statistic	**df**	**Sig.**
Current female athlete	Female	.96	47	.14
	Male	.98	51	.56
Former female athlete	Female	.97	48	.33
	Male	.98	54	.70
Current male athlete	Female	.96	48	.08
	Male	.97	49	.38
Former male athlete	Female	.97	47	.40
	Male	.98	48	.46

Table 6.4. Normality - Skewness/Kurtosis Values

Endorser	Participant	Skewness		Kurtosis	
		Statistics	Std. Error	Statistics	Std. Error
Current female athlete	Female	-.39	.35	.14	.68
	Male	.14	.33	-.15	.66
Former female athlete	Female	.10	.34	-.41	.67
	Male	.02	.32	-.30	.64
Current male athlete	Female	.25	.34	-.27	.67
	Male	-.03	.34	-.00	.67
Former male athlete	Female	-.26	.35	-.51	.68
	Male	-.16	.34	-.33	.67

For the intention variable, a Shapiro-Wilk test was significant for all eight groups indicating non-normality (Table 6.5). However, for a large sample size (N = 392) the Shapiro-Wilk test can be significant even when scores are only slightly different from a normal distribution (Field, 2013). Therefore, the values of skewness and kurtosis, in conjunction with a visual inspection of histograms, Q-Q plots were also utilised to check normality (Field, 2013). It was then concluded that the intention variable was approximately normally distributed in all eight groups (Table 6.6).

Table 6.5. Test of Normality - Intention

Endorser	Participant	Shapiro-Wilk		
		Statistic	df	Sig.
Current female athlete	Female	.94	47	.01*
	Male	.91	51	.00*
Former female athlete	Female	.91	48	.00*
	Male	.89	54	.00*
Current male athlete	Female	.93	48	.01*
	Male	.93	49	.01*
Former male athlete	Female	.89	47	.00*
	Male	.93	48	.01*

* Significant at the 0.05 level

Table 6.6. Normality - Skewness/Kurtosis Values

Endorser	Participant	Skewness		Kurtosis	
		Statistics	Std. Error	Statistics	Std. Error
Current female athlete	Female	.58	.35	.21	.68
	Male	.43	.33	-.70	.66
Former female athlete	Female	.61	.34	-.81	.67
	Male	.35	.32	-1.25	.64
Current male athlete	Female	.48	.34	-.54	.67
	Male	.39	.34	-.67	.67
Former male athlete	Female	.55	.35	-.79	.68
	Male	.36	.34	-.27	.67

Next, the distribution of perceived gender fit was examined using a Shapiro-Wilk test (Table 6.7). Non-normality was uncovered in several groups. Therefore, values of skewness and kurtosis were also inspected in conjunction with Q-Q plots, histograms and boxplots (Table 6.8). Eventually, it was concluded that the data in each group was approximately normally distributed for the perceived gender fit variable.

Table 6.7. Test of Normality - Perceived Gender Fit

Endorser	Participant	Shapiro-Wilk		
		Statistic	df	Sig.
Current female athlete	Female	.92	47	.00*
	Male	.93	51	.00*
Former female athlete	Female	.95	48	.03*
	Male	.97	54	.13
Current male athlete	Female	.95	48	.03*
	Male	.93	49	.01*
Former male athlete	Female	.90	47	.00*
	Male	.96	48	.09

* Significant at the 0.05 level

Table 6.8. Normality - Skewness/Kurtosis values

Endorser	Participant	Skewness		Kurtosis	
		Statistics	Std. Error	Statistics	Std. Error
Current female athlete	Female	.59	.35	-.64	.68
	Male	.37	.33	-.06	.66
Former female athlete	Female	.29	.34	-.85	.67
	Male	.20	.32	-.08	.64
Current male athlete	Female	.15	.34	-.08	.67
	Male	.34	.34	.05	.67
Former male athlete	Female	.01	.34	.26	.67
	Male	.01	.34	.26	.67

Finally, normality was checked for the perceived career status fit data. Several significant *p*-values were found through Shapiro-Wilk (Table 6.9). However, taking into consideration skewness and kurtosis, Q-Q plots, histograms and boxplots, it was concluded that the perceived career status fit data in all eight groups were approximately normally distributed (Table 6.10).

Table 6.9. Test of Normality - Perceived Career Status Fit

Endorser	Participant	Shapiro-Wilk		
		Statistic	df	Sig.
Current female athlete	Female	.95	47	.06
	Male	.96	51	.10
Former female athlete	Female	.98	48	.48
	Male	.95	54	.04*
Current male athlete	Female	.93	48	.01*
	Male	.95	49	.03*
Former male athlete	Female	.97	47	.37
	Male	.95	48	.05

* Significant at the 0.05 level

Table 6.10. Normality - Skewness/Kurtosis Values

Endorser	Participant	Skewness		Kurtosis	
		Statistics	Std. Error	Statistics	Std. Error
Current female athlete	Female	.22	.35	-.47	.68
	Male	.14	.33	-.55	.66
Former female athlete	Female	-.15	.34	-.47	.67
	Male	-.00	.32	-.94	.64
Current male athlete	Female	.30	.34	.40	.67
	Male	-.46	.34	.40	.67
Former male athlete	Female	-.25	.35	-.43	.68
	Male	-.22	.34	.19	.67

Having established normality for the variables, the next assumption to check was homogeneity of variance. Homogeneity of variance was explored for all four outcome variables using Levene's tests. Equal variances for attitude (F (7,384) = .91 p = .47), participation intention (F (7,384) = .88 p = .52), gender fit (F (7,384) = 1.99 p = .05), and career status fit (F (7,384) = .62 p = .74) were uncovered which supports the assumption of homogeneity of variance (Table 6.11).

Table 6.11. Levene's Tests

	F	df1	df2	Sig.
Attitude	.91	7	384	.50
Participation intention	.88	7	384	.52
Gender fit	1.99	7	384	.05
Career status fit	.62	7	384	.74

Next, ANCOVAs on the four dependent variables (i.e., attitude, participation intention, perceived gender fit and perceived career status fit) were carried out. A two-way between-subjects ANCOVA was performed to compare mean differences among groups, while controlling for involvement. The specific assumptions of ANCOVA,

linearity and homogeneity of regression slopes were also checked ahead of each variable analysis (Pallant, 2016).

6.3.4.3 Attitude towards the campaign

An inspection of the scatter plot, along with a test for deviation from linearity (F (52) = 1.19 p = .18) suggested that the assumption of a linear relationship between attitude and involvement had been met (Table 6.12). The assumption of homogeneity of regression slopes was also checked through both the scatter plot and the General Linear Model (GLM) interaction term between involvement and independent variables (D'Alonzo, 2004; Norusis, 2008; Pallant, 2016). Although the scatter plot showed some interactions between the covariate and the experimental manipulation, the p-values of the ANOVA interaction term in GLM suggested support for the homogeneity of regression slopes assumption for all independent variables: endorser's gender (F (1, 384) = .04, p = .84), endorser's career status (F (1, 384) = .13, p = .72), and participants' gender (F (1, 384) = .12, p = .73) (Table 6.13). A GLM p-value of over 0.10 indicates that the existing interactions in the scatter plot are not a significant problem in the analysis and ANCOVA remains robust in the model (D'Alonzo, 2004).

Table 6.12. Deviation from Linearity - Attitude

		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	**(Combined)**	111.62	53	2.11	1.43	.03
	Linearity	20.09	1	20.09	13.61	.00
	Deviation from Linearity	91.52	52	1.76	1.19	.18
Within Groups		499.11	338	1.48		
Total		610.73	391			

Table 6.13. Treatment-Covariate Interactions

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	23.83*	7	3.40	2.23	.03
Intercept	542.41	1	542.41	354.89	.00
Endorser Gender * Involvement	.06	1	.06	.04	.84
Endorser Career Status * Involvement	.20	1	.20	.13	.72
Participants Gender * Involvement	.20	1	.20	.12	.73
Error	586.90	384	1.53		
Total	7716.75	392			
Corrected Total	610.73	391			

* R Squared = .039 (Adjusted R Squared = .021)

Group Differences (ANCOVA)

After testing the assumptions, groups were compared using a two-way between-subjects ANCOVA. For male participants, descriptive statistics revealed that those in the group with the male former athlete as an endorser had the highest attitude mean score (*M* = 4.61, *SD* = 1.21), while the group with the male current athlete had the lowest mean score (*M* = 4.20, *SD* = 1.40). Likewise, for female participants it was the gender matched, former female athlete endorser group had the highest attitude mean score (*M* = 4.49, *SD* = 1.09), and the group with the female current athlete indicated the lowest mean score (*M* = 3.88, *SD* = 1.21) (Table 6.14). For both males and females, the descriptive attitude differences were quite small.

Table 6.14. Mean Scores for Attitude

Participants gender	Endorser career status	Endorser gender	N	Mean	Std. Deviation
Male	**Current athlete**	Male	49	4.20	1.40
		Female	51	4.25	1.24
	Former athlete	Male	48	4.61	1.21
		Female	54	4.23	1.24
Female	**Current athlete**	Male	48	4.36	1.12
		Female	47	3.88	1.21
	Former athlete	Male	47	4.03	1.38
		Female	48	4.49	1.09

After controlling for participants' psychological involvement in sport and physical activity, ANCOVA revealed that what appeared to be small descriptive differences on attitudes were statistically insignificant among the eight groups (F (7,383) = 1.48 p = .17, η^2 = .03). However, involvement was found to be a significant covariate of the relationship in which participant attitudes towards the campaign were influenced by their psychological involvement in sport and physical activity (F (1,383) = 11.45 p < .01, η^2 = .03) (Table 6.15).

Table 6.15. ANCOVA for Eight Groups - Attitude

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	35.70*	8	4.46	2.97	.00	.06
Intercept	557.50	1	557.50	371.33	.00	.49
Involvement	17.19	1	17.19	11.45	.00	.03
Groups	15.61	7	2.23	1.48	.17	.03
Error	575.02	383	1.50			
Total	7716.75	392				
Corrected Total	610.73	391				

R Squared = .058 (Adjusted R Squared = .039)

The separate effect of independent variables (i.e., endorser's gender, endorser's career status and participants' gender), and the interactions between variables were also

explored using ANCOVA. It was revealed that endorser's gender (F (1,383) = .44 p = .51, η^2 < .01), endorser's career status (F (1,383) = 1.74 p = .19, η^2 < .01), and participants' gender (F (1,383) = .14 p = .71, η^2 < .01) did not significantly affect participants' attitudes towards the social marketing campaign in sport and physical activity. These results provided evidence refuting H1, H2, and H3. In addition, two-way interactions between the independent variables were insignificant. However, the three-way interaction between independent variables was significant (F (1,383) = 7.03 p = .01, η^2 = .02). Furthermore, participants psychological involvement in sport and physical activity as a covariate remained significant in the model (F (1,383) = 11.45 p < .01, η^2 = .03) (Table 6.16).

As the results showed a significant interaction between endorser's gender, endorser's career status and participants' gender, scatter plots were examined (Figure 6.2 and Figure 6.3). This revealed that when there is a match between endorser's gender and participants' gender, attitude towards the social marketing campaign endorsed by the former athlete is higher than for the campaign endorsed by the current athlete.

Table 6.16 . Group Differences - Attitude

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	35.70*	8	4.46	2.97	.00	.06
Intercept	557.50	1	557.50	371.33	.00	.49
Involvement	17.19	1	17.19	11.45	.00	.03
Endorser Gender (1)	.66	1	.66	.44	.51	.00
Endorser Career Status (2)	2.62	1	2.62	1.74	.19	.01
Participants Gender (3)	.20	1	.20	.14	.71	.00
(1)*(2)	1.09	1	1.09	.73	.39	.00
(1)*(3)	.79	1	.79	.53	.47	.00
(2)*(3)	.08	1	.08	.054	.82	.00
(1)*(2)*(3)	10.56	1	10.56	7.03	.01	.02
Error	575.02	383	1.50			
Total	7716.75	392				
Corrected Total	610.73	391				

* R Squared = .058 (Adjusted R Squared = .039)

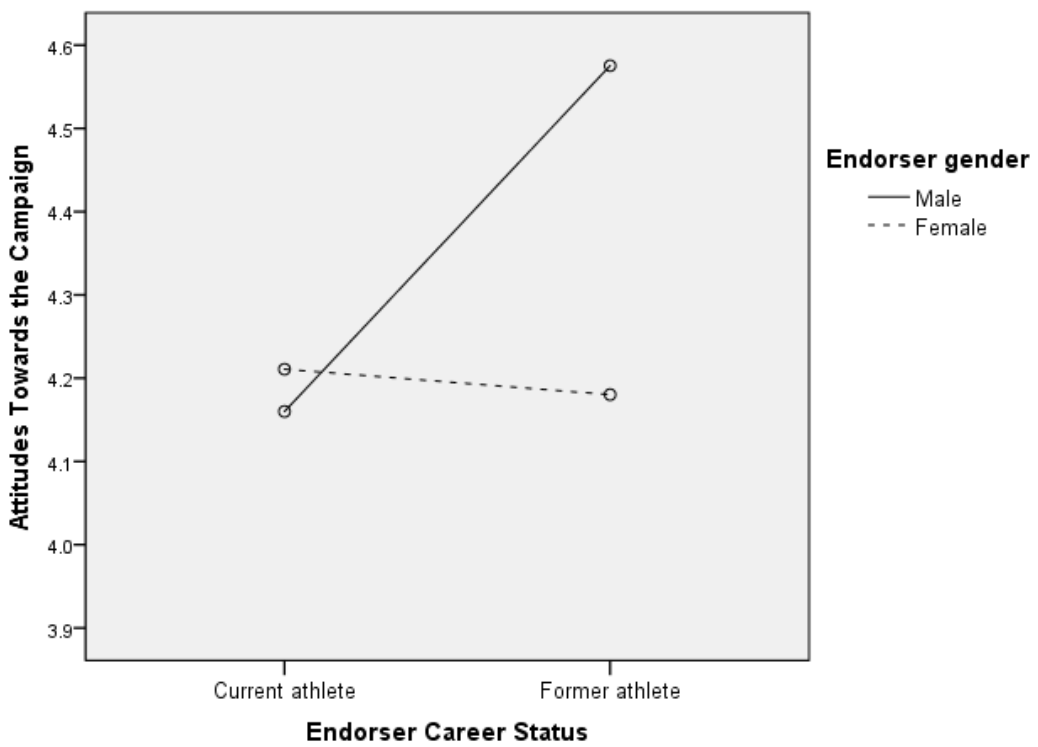


Figure 6.2. The interaction between gender and career status on male participants attitudes

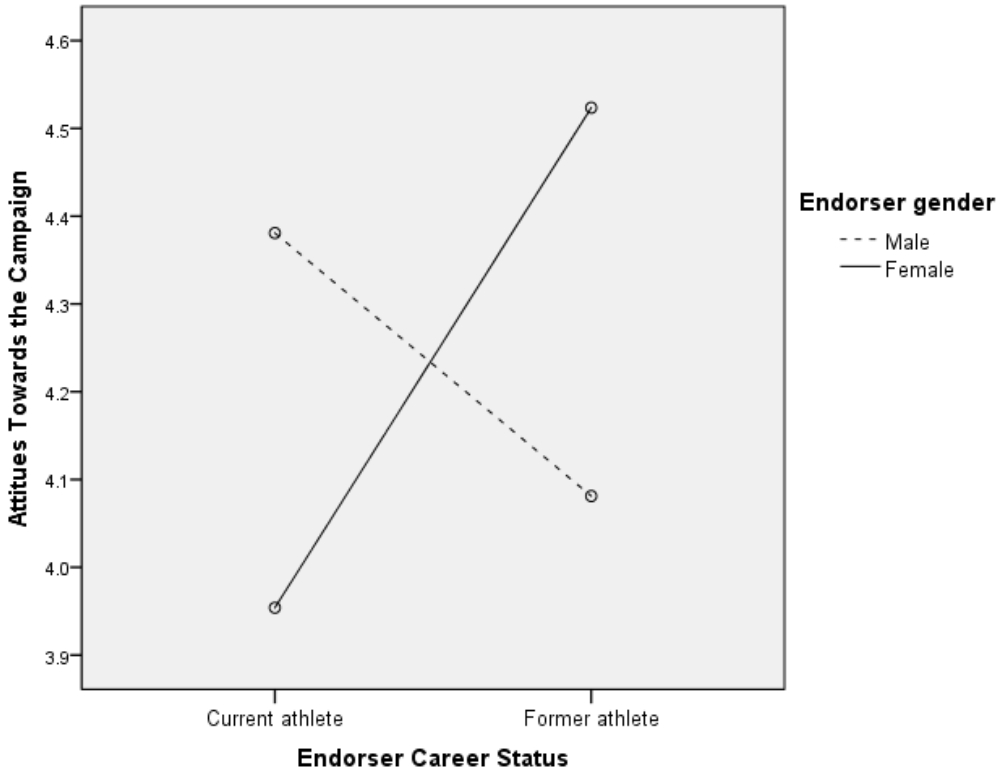


Figure 6.3. The interaction between gender and career status on female participants attitudes

The mean attitude scores after controlling for the effect of involvement were calculated for in all groups. It was found that male participants had the highest adjusted mean on attitudes towards the campaign endorsed by the male former athlete (adj *M* = 4.57, *SE* = .18, 95% CI [4.23, 4.92]), while the lowest attitude mean score for males was for the campaign endorsed by the male current athlete (adj *M* = 4.16, *SE* = .18, 95% CI [3.81, 4.50]). For female participants, the group with the female former athlete as an endorser had the highest adjusted mean (adj *M* = 4.52, *SE* = .18, 95% CI [4.17, 4.87]), whereas the group with the female current athlete had the lowest adjusted mean among all the other groups (adj *M* = 3.95, *SE* = .18, 95% CI [3.60, 4.31]). (Table 6.17).

Table 6.17. Adjusted Means for Attitude

Participants gender	Endorser career status	Endorser gender	N	Adj. Mean*	Std. Error	95% CI	
						Lower Bound	Upper Bound
Male	Current athlete	Male	49	4.16	.18	3.81	4.50
		Female	51	4.21	.17	3.87	4.55
	Former athlete	Male	48	4.57	.18	4.23	4.92
		Female	54	4.18	.17	3.85	4.51
Female	Current athlete	Male	48	4.38	.18	4.03	4.73
		Female	47	3.95	.18	3.60	4.31
	Former athlete	Male	47	4.08	.18	3.73	4.43
		Female	48	4.52	.18	4.17	4.87

*Covariates appearing in the model are evaluated at the following values: Involvement = 4.412415.

6.3.4.4 Participation intention

Prior to testing group differences on the intention variable, assumptions for ANCOVA were checked. Both a visual inspection of the scatter plot, and deviation from linearity test (Table 6.18) revealed support for the linearity assumption between the intention variable and involvement (F (52) = .73 p = .91). Overall, campaign-related intention increased when participants were highly involved in sport and physical activity. Evidence from an inspection of the scatter plot and p-values of the ANOVA interaction term in a GLM for three independent variables revealed support for the homogeneity of regression slopes assumption (F (1, 384) = .14, p = .71; F (1, 384) = .07 p = .78; F (1, 384) = .08, p = .78) (Table 6.19).

Table 6.18. Deviation from Linearity - Intention

		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	**(Combined)**	149.17	53	2.81	1.07	.36
	Linearity	48.67	1	48.67	18.46	.00
	Deviation from Linearity	100.49	52	1.93	.73	.91
Within Groups		891.27	338	2.64		
Total		1040.44	391			

Table 6.19. Treatment-Covariate Interactions

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	49.89*	7	7.13	2.76	.01
Intercept	165.68	1	165.68	64.23	.00
Endorser Gender * Involvement	.36	1	.36	.14	.71
Endorser Career Status * Involvement	.19	1	.19	.07	.78
Participants Gender * Involvement	.20	1	.20	.08	.78
Error	990.55	384	2.58		
Total	4624.66	392			
Corrected Total	1040.44	391			

* R Squared = .048 (Adjusted R Squared = .031)

Group Differences (ANCOVA)

After testing the assumptions, a two-way between subjects ANCOVA was conducted to compare groups. Descriptively, it was evident that male participant who viewed the advertisement with the male former athlete had the highest intention mean score (*M* = 3.30, *SD* = 1.63), while the group with the female former athlete had the lowest men score (*M* = 2.86, *SD* = 1.64). On the other hand, female participants who viewed the advertisement endorsed by the female former athlete had the highest participation intention mean score (*M* = 3.17, *SD* = 1.76), whereas the group with the male former athlete had the lowest mean score (*M* = 2.74, *SD* = 1.62) (Table 6.20).

Table 6.20. Mean Scores for Participation Intention

Participants gender	Endorser career status	Endorser gender	N	Mean	Std. Deviation
Male	**Current athlete**	Male	49	2.92	1.53
		Female	51	3.28	1.89
	Former athlete	Male	48	3.30	1.63
		Female	54	2.86	1.64
Female	**Current athlete**	Male	48	2.99	1.54
		Female	47	2.91	1.36
	Former athlete	Male	47	2.74	1.62
		Female	48	3.17	1.76

An ANCOVA comparing the eight groups revealed that there was no significant difference among groups on participation intention after controlling for the effect of involvement (F (7,383) = .71 p = .67, η^2 = .01). However, it was found that participants' involvement in sport and physical activity had a significant effect on participation intention related to the social marketing campaign (F (1,383) = 18.30 p < .01, η^2 = .05) (Table 6.21). Next, the separate effects of the independent variables and their interactions with each other were explored. The ANCOVA results showed that the independent variables (i.e., endorser's gender, endorser's career status, and participants' gender) had no significant effects on participants' intentions related to the social marketing campaign, which was evidence to reject H4, H5, and H6 respectively. In addition, the two-way interactions (F (1,383) = .47 p = .49, η^2 < .01; F (1,383) = .61 p = .44, η^2 < .01; F (1,383) = .00 p = .97, η^2 < .00), and three-way interaction (F (1,383) = 3.57 p = .06, η^2 = .01) among independent variables were insignificant. The covariate, psychological involvement in sport and physical activity, did remain significant F (1,383) = 18.30 p < .01, η^2 = .05 (Table 6.22).

Table 6.21. ANCOVA for Eight Groups - Participation Intention

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	61.34*	8	7.67	3.00	.00	.06
Intercept	171.39	1	171.39	67.04	.00	.15
Involvement	46.77	1	46.77	18.30	.00	.05
Groups	12.66	7	1.81	.71	.67	.01
Error	979.11	383	2.56			
Total	4624.66	392				
Corrected Total	1040.44	391				

* R Squared = .059 (Adjusted R Squared = .039)

Table 6.22. Group Differences - Participation Intention

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	61.34*	8	7.67	3.00	.00	.06
Intercept	171.39	1	171.39	67.04	.00	.15
Involvement	46.77	1	46.77	18.30	.00	.05
Endorser Gender (1)	.53	1	.53	.21	.65	.00
Endorser Career Status (2)	.02	1	.02	.01	.93	.00
Participants Gender (3)	.00	1	.00	.00	.99	.00
(1)*(2)	1.19	1	1.19	.47	.49	.01
(1)*(3)	1.56	1	1.56	.61	.44	.02
(2)*(3)	.00	1	.00	.00	.97	.00
(1)*(2)*(3)	9.12	1	9.12	3.57	.06	.01
Error	979.11	383	2.56			
Total	4624.66	392				
Corrected Total	1040.44	391				

* R Squared = .059 (Adjusted R Squared = .039)

The adjusted means in all groups were calculated after considering the effect of participants' involvement in sport and physical activity (Table 6.23). Male participants in the group with the campaign advertisement endorsed by the male former athlete had the highest adjusted mean (adj *M* = 3.25, *SE* = .23, 95% CI [2.79, 3.70]), while the campaign endorsed by the female former athlete had the lowest adjusted mean (adj *M* =

2.78, *SE* = .22, 95% CI [2.35, 3.21]). For female participants, intention was higher for those in the campaign endorsed by the female former athlete (adj *M* = 3.22, *SE* = .23, 95% CI [2.77, 3.67]), while those in the campaign endorsed by the male former athlete reported the lowest adjusted mean (adj *M* = 2.83, *SE* = .23, 95% CI [2.37, 3.29]).

Table 6.23. Adjusted Means for Participation Intention

Participants gender	Endorser career status	Endorser gender	N	Adj. Mean*	Std. Error	95% CI	
						Lower Bound	Upper Bound
Male	Current athlete	Male	49	2.85	.23	2.40	3.30
		Female	51	3.22	.22	2.77	3.66
	Former athlete	Male	48	3.25	.23	2.79	3.70
		Female	54	2.78	.22	2.35	3.21
Female	Current athlete	Male	48	3.03	.23	2.57	3.48
		Female	47	3.03	.23	2.57	3.50
	Former athlete	Male	47	2.83	.23	2.37	3.29
		Female	48	3.22	.23	2.77	3.67

* Covariates appearing in the model are evaluated at the following values: Involvement = 4.412415.

6.3.4.5 Perceived gender fit

ANCOVA assumptions (i.e., linearity and homogeneity of regression slopes) were checked at the outset of the perceived gender fit data analysis. An inspection of the scatter plot and a test for deviation from linearity suggested a linear relationship between the perceived gender fit variable and involvement (F (52) = 1.35 p = .06) (Table 6.24). Evidence emerged supporting the homogeneity of regression slops assumption both from the scatter plot and the interaction term of the GLM for all three independent variables, F (1, 384) = .46, p = .50; F (1, 384) = .03, p = .86; F (1, 384) = 1.67, p = .20 (Table 6.25).

Table 6.24. Deviation from Linearity - Perceived Gender Fit

		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	**(Combined)**	91.60	53	1.73	1.56	.01
	Linearity	13.80	1	13.80	12.49	.00
	Deviation from Linearity	77.80	52	1.50	1.35	.06
Within Groups		373.43	338	1.10		
Total		465.03	391			

Table 6.25. Treatment-Covariate Interactions

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	54.77*	7	7.82	7.32	.00
Intercept	668.92	1	668.92	626.10	.00
Endorser Gender * Involvement	.49	1	.49	.46	.50
Endorser Career Status * Involvement	.03	1	.03	.03	.86
Participants Gender * Involvement	1.78	1	1.78	1.67	.20
Error	410.26	384	1.07		
Total	8695.94	392			
Corrected Total	465.03	391			

* R Squared = .118 (Adjusted R Squared = .102)

Group Differences (ANCOVA)

Satisfied that assumptions had been met, a two-way between-subjects ANCOVA was conducted to compare the eight groups on the dependent variable. Descriptive findings indicated that both male and female participants had a higher perception of gender match when the campaign was endorsed by the female former athlete ($M_{Male\ participants}$ = 4.84, *SD* = 1.04; $M_{\text{Female participants}}$ = 5.06, *SD* = 1.05). In contrast, female participants had the lowest mean score for perception of gender fit in the group with the male former athlete (*M* = 3.90, *SD* = .70). Male participants' perception of fit was lowest for those in the group featuring the male current athlete (*M* = 4.47, *SD* = 1.01)

(Table 6.26). ANCOVA revealed that there was a significant difference among the eight groups on perception of gender fit after controlling for the effect of participants' psychological involvement in sport and physical activity (F (7,383) = 7.04, $p < .01$, $\eta^2 = .11$). In addition, involvement had a significant effect on participants perception of fit in terms of gender (F (1,383) = 11.53 $p < .01$, $\eta^2 = .03$), (Table 6.27).

Table 6.26. Mean Scores for Perceived Gender Fit

Participants gender	Endorser career status	Endorser gender	N	Mean	Std. Deviation
Male	**Current athlete**	Male	49	4.47	1.01
		Female	51	4.80	1.13
	Former athlete	Male	48	4.59	1.18
		Female	54	4.84	1.04
Female	**Current athlete**	Male	48	4.10	.97
		Female	47	4.83	1.11
	Former athlete	Male	47	3.90	.70
		Female	48	5.06	1.05

Table 6.27. ANCOVA for Eight Groups - Perceived Gender Fit

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	65.23*	8	8.15	7.81	.00	.14
Intercept	692.44	1	692.44	663.34	.00	.63
Involvement	12.03	1	12.03	11.53	.00	.03
Groups	51.42	7	7.35	7.04	.00	.11
Error	399.81	383	1.04			
Total	8695.94	392				
Corrected Total	465.03	391				

* R Squared = .140 (Adjusted R Squared = .122)

Next, another ANCOVA was performed to explore the separate effects of the independent variables and their interactions with each other. Results indicated that the gender of the endorser had a significant effect on participants' perception of endorser-campaign fit (F (1,383) = 36.15 $p < .01$, $\eta^2 = .08$), although the effect was modest. The

female endorser had a higher adjusted mean score compared with the male endorser in terms of participants' perception of fit for a social marketing campaign (Adj $M_{Female\ endorser}$ = 4.89, *SE* = .07, 95% CI [4.74, 5.03]; Adj $M_{Male\ endorser}$ = 4.27, *SE* = .07, 95% CI [4.12, 4.41]) (Table 6.29). This provided evidence in support of H7. Furthermore, it was found that participants' gender did not significantly affect participants perception of endorser-campaign fit in terms of gender (F (1,383) = 1.52 p = .22, $\eta^2 < .01$), which was evidence to reject H10 (Table 6.28).

Table 6.28. Group Differences - Perceived Gender Fit

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	65.23*	8	8.15	7.81	.00	.14
Intercept	692.44	1	692.44	663.34	.00	.63
Involvement	12.03	1	12.03	11.53	.00	.03
Endorser Gender (1)	37.74	1	37.74	36.15	.00	.09
Endorser Career Status (2)	.19	1	.19	.18	.67	.00
Participants Gender (3)	1.59	1	1.59	1.52	.22	.00
(1)*(2)	.43	1	.43	.41	.52	.00
(1)*(3)	10.97	1	10.97	10.51	.00	.03
(2)*(3)	.13	1	.13	.12	.73	.00
(1)*(2)*(3)	1.37	1	1.37	1.32	.25	.00
Error	399.81	383	1.04			
Total	8695.94	392				
Corrected Total	465.03	391				

* R Squared = .059 (Adjusted R Squared = .039)

Table 6.29. Adjusted Means for Endorser's Gender Groups - Perceived Gender Fit

Endorser gender	Adj. Mean*	Std. Error	95% CI	
			Lower Bound	Upper Bound
Male	4.27	.07	4.12	4.41
Female	4.89	.07	4.74	5.03

*Covariates appearing in the model are evaluated at the following values: Involvement = 4.412415.

The two-way and three-way interactions between independent variables were insignificant, except for the two-way interaction between endorser's gender and participants' gender which was significant with a small effect size (F (1,383) = 10.51 p < .01, η^2 = .02), (Table 6.28). It was revealed that when the gender of the participant matched the gender of the endorser, the perception of fit increased for female participants (Adj M_{Match} = 4.99, SE = .11, 95% CI [4.78, 5.20]) while, the reverse was true for males (Adj $M_{Mismatch}$ = 4.78, SE = .10, 95% CI [4.59, 4.98]), (Table 6.30). These results partially supported H9 of this study. The scatter plot of the interaction between endorser's gender and participants' gender showed that both female and male participants perceived a female athlete endorser as a better match for the sport and physical activity campaign (Figure 6.4).

Table 6.30. Adjusted Means - Gender Interaction

Participants gender	**Endorser gender**	**Adj. Mean***	**Std. Error**	**95% CI**	
				Lower Bound	**Upper Bound**
Male	**Male**	4.50	.10	4.29	4.70
	Female	4.78	.10	4.59	4.98
Female	**Male**	4.03	.10	3.83	4.24
	Female	4.99	.11	4.78	5.20

* Covariates appearing in the model are evaluated at the following values: Involvement = 4.412415.

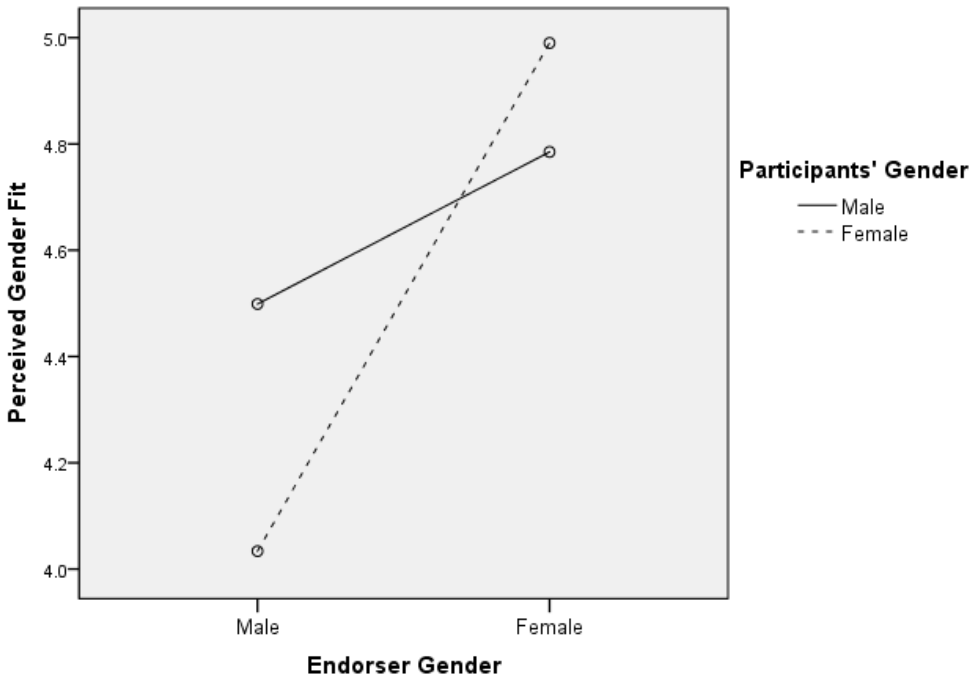


Figure 6.4. Endorser-participant gender interaction

The adjusted means for all groups after considering the effect of participants' involvement in sport and physical activity, are presented in Table 6.31. Female participants had the highest perception of endorser-campaign gender fit for the campaign endorsed by the female former athlete (adj *M* = 5.09, *SE* = .15, 95% CI [4.80, 5.38]). While, they perceived the male former athlete as a poorer fit with the campaign in terms of gender (adj *M* = 3.94, *SE* = .15, 95% CI [3.65, 4.24]). Male participants had the highest perception of fit for the campaign endorsed by the female former athlete (adj *M* = 4.80, *SE* = .14, 95% CI [4.52, 5.07]), while the lowest perception of fit for male participants was the campaign endorsed by the male current athlete (adj *M* = 4.43, *SE* = .15, 95% CI [4.14, 4.72]).

Table 6.31. Adjusted Means for Perceived Gender Fit

Participants gender	Endorser career status	Endorser gender	N	Adj. Mean*	Std. Error	95% CI	
						Lower Bound	Upper Bound
Male	Current athlete	Male	49	4.43	.15	4.14	4.72
		Female	51	4.77	.14	4.49	5.05
	Former athlete	Male	48	4.56	.15	4.27	4.86
		Female	54	4.80	.14	4.52	5.07
Female	Current athlete	Male	48	4.12	.15	3.83	4.41
		Female	47	4.89	.15	4.60	5.19
	Former athlete	Male	47	3.94	.15	3.65	4.24
		Female	48	5.09	.15	4.80	5.38

* Covariates appearing in the model are evaluated at the following values: Involvement = 4.412415.

6.3.4.6 Perceived career status fit

ANCOVA assumptions for the fourth and final dependant variable (perceived career status fit) were also checked. Evidence supporting the linearity assumption was generated through an inspection of the scatter plot and deviation from linearity test (F (52) = 1.34 p = .07) (Table 6.32). The homogeneity of regression slopes assumption was also explored for any interaction between the three independent variables and involvement. The homogeneity of regression slopes assumption was supported for the interaction between endorser's gender with involvement (F (1, 384) = .39, p = .53); and participants' gender with involvement (F (1, 384) = .31, p = .58). However, the assumption was not met for the interaction between endorser's career status with involvement (F (1, 384) = 3.95, p = .048), (Table 6.33). Due to the heterogeneity of regression slopes for the career status variable ($p < .05$), an alternative procedure to ANCOVA - picked-point analysis, was used to compare the former and current athlete groups at different level of covariate. ANCOVA remained robust to compare other groups split based on endorser's gender and participants' gender.

Table 6.32. Deviation from Linearity - Perceived Career Status

		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	**(Combined)**	105.72	53	1.99	1.62	.01
	Linearity	19.91	1	19.91	16.21	.00
	Deviation from Linearity	85.81	52	1.65	1.34	.07
Within Groups		415.21	338	1.23		
Total		520.93	391			

Table 6.33. Treatment-Covariate Interactions

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	35.42*	7	5.06	4.00	.00
Intercept	759.37	1	759.37	600.59	.00
Endorser Gender * Involvement	.49	1	.49	.39	.53
Endorser Career Status * Involvement	4.99	1	4.99	3.95	.048
Participants Gender * Involvement	.39	1	.39	.31	.58
Error	485.52	384	1.26		
Total	10308.44	392			
Corrected Total	520.93	391			

* R Squared = .068 (Adjusted R Squared = .051)

Group Differences (ANCOVA)

A two-way between-subjects ANCOVA was performed to compare four groups featuring the endorser's gender and participants' gender combinations. Descriptively, perception of career status fit was higher for the groups with a female endorser for both female participants (*M* = 5.14, *SD* = 1.00), and male participants (*M* = 5.14, *SD* = 1.13) (Table 6.34).

Table 6.34. Mean Scores for Perceived Career Status Fit

Participants' gender	Endorser gender	N	Mean	Std. Deviation
Male	**Male**	97	4.87	1.27
	Female	105	5.14	1.13
Female	**Male**	95	4.82	1.17
	Female	95	5.14	1.00

ANCOVA revealed that participants' psychological involvement in sport and physical activity significantly impacted perception of endorser-campaign fit in terms of endorser's career status (F (1,387) = 16.17, $p < .01$, $\eta^2 = .04$). Furthermore, endorser's gender was found to be significant on participants' perception of endorser career status fit (F (1,387) = 6.91, $p = .01$, $\eta^2 = .02$) (Table 6.35). The female endorser was perceived to fit in the campaign better in terms of their career status compared to the male endorser (Adj $M_{Female\ endorser}$ = 5.14, SE = .08, 95% CI [4.99, 5.30]; Adj $M_{Male\ endorser}$ = 4.84, SE = .08, 95% CI [4.68, 5.00]). No significant effect was found on perceived career status fit between female and male participants (F (1,387) = .30, $p = .59$, $\eta^2 < .01$), which was further evidence to reject H10. The interaction between endorser's gender with participants' gender was also insignificant in terms of perception of career status fit (F (1,387) = .10, $p = .76$, $\eta^2 < .01$) (Table 6.35).

The adjusted means for all four groups after considering the effect of participants' involvement in sport and physical activity were calculated (Table 6.36). Female participants reported the highest mean score when the campaign was endorsed by the female athlete either former or current (adj M = 5.19, SE = .12, 95% CI [4.96, 5.42]). Likewise, male participants had the highest mean score on career status fit for the campaign endorsed by either the current or former female athlete endorser (adj M = 5.10, SE = .11, 95% CI [4.88, 5.31]).

Table 6.35. Group Differences Based on Gender - Perceived Career Status Fit

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	29.06*	4	7.26	5.72	.00	.06
Intercept	787.89	1	787.89	619.90	.00	.62
Involvement	20.55	1	20.55	16.17	.00	.04
Endorser Gender (1)	8.78	1	8.78	6.91	.01	.02
Participants Gender (2)	.37	1	.37	.29	.59	.00
(1)*(2)	.12	1	.12	.09	.76	.00
Error	491.87	387	1.27			
Total	10308.44	392				
Corrected Total	520.93	391				

* R Squared = .056 (Adjusted R Squared = .046)

Table 6.36. Adjusted Means for Perceived Career Status Fit

Participants gender	Endorser gender	N	Adj. Mean*	Std. Error	95% CI	
					Lower Bound	Upper Bound
Male	**Male**	97	4.83	.11	4.60	5.06
	Female	105	5.10	.11	4.88	5.31
Female	**Male**	95	4.86	.12	4.63	5.09
	Female	95	5.19	.12	4.96	5.42

*Covariates appearing in the model are evaluated at the following values: Involvement = 4.412415.

Group Differences (Picked-Point Analysis)

This section is a report on the analysis of the effect of endorser career status (i.e., former and current) on participants perceived career status fit. Picked-point analysis was used to compare groups while controlling for participants' involvement in sport and physical activity. This analysis was utilised due to the heterogeneity of regression slopes (i.e., a violation of ANCOVA assumption) in which there was an interaction between groups varying in endorser's career status (Figure 6.5). The analysis is based on three levels of participants' psychological involvement so that current and former groups can be compared in these three levels. As can be seen in the career status-involvement

scatterplot (Figure 6.5), participants with moderate involvement in sport and physical activity had almost identical perceptions of fit in terms of endorser career status, while participants who were highly involved in sport and physical activity perceived the former athlete as a better fit for the campaign than the current athlete. The reverse was true for participants with lower involvement in sport and physical activity for whom perceptions of endorser-campaign fit was higher towards the current athlete rather than former athlete.

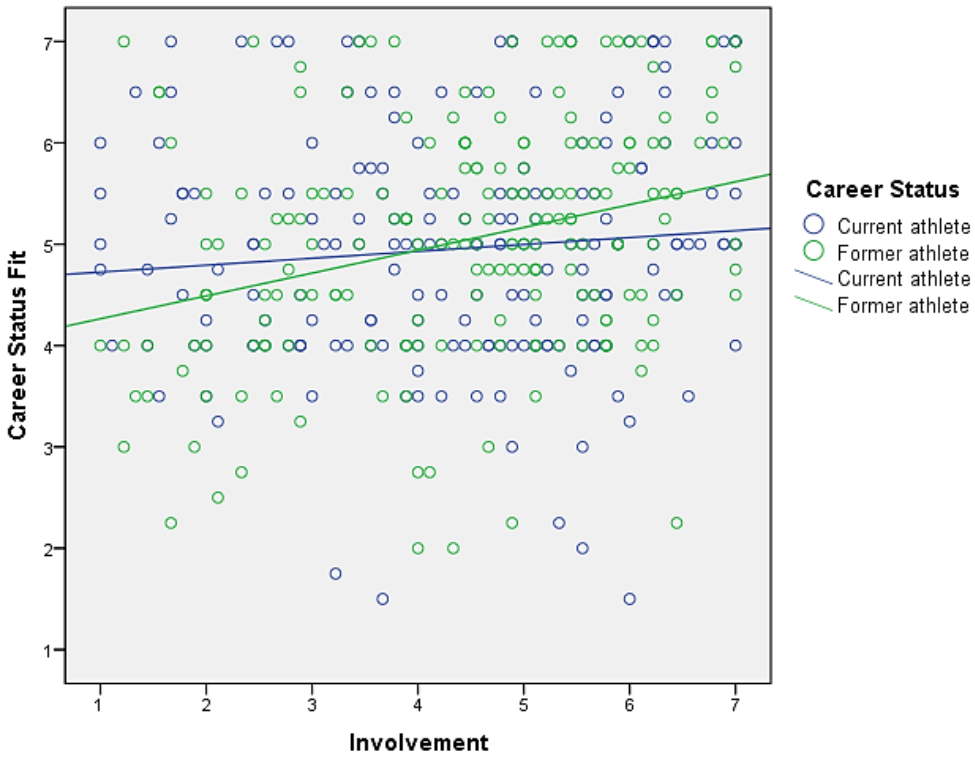


Figure 6.5. Career status and involvement scatter plot

To explore significant differences between groups at three disparate levels of involvement (i.e., the covariate), three points were chosen based on a procedure outlined by Huitema (2011). The first picked point (PP1) was one standard deviation below the respondents' mean score which represented a low level of involvement (PP1 = 2.85). The second point was the mean score (PP2 = 4.41) which represented a moderate level of involvement in sport and physical activity. Finally, the third point (PP3) was one

standard deviation above the mean to represent participants with a high level of involvement in sport and physical activity (PP3 = 5.97) (Table 6.37).

Table 6.37. Involvement Construct

	N	Mean	Std. Deviation	Minimum	Maximum
Involvement	392	4.41	1.56	1	7

After identifying the three picked points, a dummy variable (D) was created to specify the two athletic career statuses (i.e., current and former) and new variables were computed to facilitate the analysis. The procedure of calculating new variables was identical with the picked-point analysis in Study 2. Each picked point was subtracted from an individual's involvement score (Centered PP). Then, each of those scores were multiplied with the dummy variable (D*Centered PP). Eventually, three variables, (i.e., D, Centered PP, and D*Centered PP) were used in multiple regression to compare participants' perception of endorser-campaign fit in terms of endorser career status at each picked point. The regression equation was significant for the model (R^2 = .05, F (3, 388) = 6.88, p < .01) in which independent variables explained a significant amount of the variance in the value of perceived fit (Table 6.38 and Table 6.39).

Table 6.38. Model Summery - Career Status Fit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.22	.05	.04	1.13

Table 6.39. ANOVA Test - Career Status Fit

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.32	3	8.77	6.88	.00
	Residual	494.62	388	1.27		
	Total	520.93	391			

The results of multiple regressions indicated that the career status of an athlete endorser was not a significant predictor of campaign-endorser fit at low levels of involvement in sport and physical activity, (β = -.17, *t* (388) = -1.05, *p* = .29). Similarly, at PP2 (moderate level of involvement in sport and physical activity) career status was not a significant predictor of perceived fit, (β = .07, *t* (388) = .66, *p* = .51). However, it was found that at higher levels of involvement in sport and physical activity (PP3), endorser's career status was a significant predictor in the model (β = .32, *t* (388) = 1.98, *p* = .048) (Table 6.40). In addition, it was revealed that perceived fit at PP3 was higher for the former athlete than the current athlete, (β = .32, *SE* = .16). However, the reverse was true for PP1 (low involvement in sport and physical activity), as perceived fit for the current athlete endorser was higher than the former athlete endorser (β = -.17, *SE* = .16). At PP2 (moderate involvement in sport and physical activity) participant perception of fit was almost equivalent between former and current athletes (β = .07, *SE* = .11) (Table 6.40). These results provided partial support for H8.

Overall, perception of campaign-endorser fit was significantly predicted by the career status of an athlete endorser but only at higher levels of psychological involvement in sport and physical activity. In the other words, those who were highly involved in sport and physical activity perceived a former athlete to be a better fit for a social marketing campaign as an endorser than a current athlete.

Table 6.40. Multiple Regressions in Three Picked Points

	Coefficients	**Std. Error Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
					Lower Bound	**Upper Bound**
PP1	-.17	.16	-1.05	.29	-.49	.15
PP2	.07	.11	.66	.51	-.15	.30
PP3	.32	.16	1.98	.048	.00	.64

6.4 Qualitative Phase

This phase of the study was a qualitative investigation of the effect of athlete endorsers' gender and career status on both female and male audience's perceptions. In line with the sequential explanatory design of the study, the purpose of this phase was to explicate the results from the quantitative phase.

6.4.1 Procedure

The process for recruiting participants was similar to the qualitative phases of Study 1 and Study 2. Respondents in the two focus groups had previously participated in the quantitative phase of the study. This reflects a sequential nested sampling approach. A total of 80 participants expressed an interest in the focus group discussions. Eventually, two focus groups consisting of six and eight participants were conducted. An equal number of females and males participated in the focus group discussions. Prior to starting the focus group discussion, information sheets (Appendix C3) and consent forms (Appendix D) were handed out to participants. Several open-ended questions were generated through consideration of relevant literature. The key question of this phase of the study was: *How do young adults perceive campaign-endorser-audience fit based on the career status and gender of endorsers in a social marketing campaign promoting sport and physical activity?*

The sub-questions were:

- Which endorser would you choose for a campaign promoting sport and physical activity? A current athlete or a former athlete?
  - How does a former athlete differ from a current athlete?
  - Would you respond to such a campaign?
- Is the gender of an endorser relevant to you?
  - Which gender would you prefer to see in an advertisement?

- Why is that? Is it because of your own gender?
- Does gender affect your perception of a campaign?
- To what extent do you think the gender of an endorser affects participating in sport and physical activity?
- Do you think there should be a fit between the gender of endorser and the gender of campaign's target audience?

6.4.2 Data analysis

Thematic analysis (Braun & Clarke, 2006) was used in this phase of Study 3. Similar to previous studies, focus group discussions were first transcribed, read and re-read. Then NVivo was used to systematically code, theme, and analyse the data (Andreasen, 1994). Coding was achieved through identifying repetition, similarities and differences in the transcriptions. Next, codes were clustered into similar groups. Themes were then generated and analysed by considering networks between codes and groups of codes. The process of generating themes from discussions was identical to the qualitative phases of Study 1 and 2. To maintain anonymity, focus group participants were identified using only their first initial and a number.

6.4.3 Results

The initial codes from the focus group data were categorised into five groups (i.e., female/male endorser, general codes related to gender, former athlete, current athlete and ethnicity). These five code groups then formed three set of codes: Codes relating to endorser's gender; codes relating to endorser's career status; and codes relating to ethnicity (Table 6.41). Themes were then generated from the sets of codes. The themes in this study were: 1) endorser gender; 2) endorser career status; and 3) ethnicity. Given the nature of the questions that were posed to focus group participants, the first two

themes aligned with two of the foci of the wider study and that featured as variables in the quantitative phase. Whereas, the ethnicity theme emerged more organically.

Table 6.41. Focus Groups Codes - Study 3

A: Codes Relating to Endorser Gender	
Female /Male endorser	**General**
Underrepresented	Unisex sport
Sexualised	Sharing gender
Appealing	Transgender
Female sport	Fit, Relatable
Male sport	Role model
	Different body
B: Codes Relating to Endorser Career Status	
Former athlete	**Current athlete**
Legend	New athlete
Trustable	Younger
Knowledgeable	Aspiring
Experienced	Fresh
Powerful	Recognition
Safe	Career stage
Older	Media coverage
Popular, Famous, Familiar	
Role model	
C: Codes Relating to Ethnicity	
Relatable	
Diversity	
White people	
Pacific Islander, Arabic, Fijian, Asian	

Theme 1: Endorser gender

Focus group participants discussed gender and how it impacted their perception of an endorser for sport and physical activity promotion. Almost all female participants agreed that a female endorser in a social marketing campaign would be more influential

than a male endorser. One of them indicated that "*I feel like females are already underrepresented so that whenever I see females getting a little bit of limelight I am like, Hell yeah*" [A32]. Another female participant agreed and stated that her interest in participating in sport would be enhanced if the campaign was endorsed by a female. She said:

> *I totally agree, if I see a woman play a sport, any sport, I am way more likely to go play it than if a male... because then I am just going to be like. 'That's just another male on another billboard.' and then I don't want to play [P31].*

Several participants, despite their support for using female endorsers, indicated an interest in seeing both female and male endorsers in the campaign. One of them stated, "*Probably female or just use both. It's not really a problem for most people*" [T32]. The other female attendee responded that:

> *I am a little more aware now, as a child it may have had more of an effect on me seeing a girl, it might have encouraged me to do some more because obviously I can relate, sharing a gender. But again, I feel like they could benefit from using both male and female as opposed to just selecting one, even transgender [R31].*

One of female participant disagreed about having a female endorser due to the way practitioners present them in the advertisement. She stated, "*They make it too sexual with women and it makes it awkward. Deliberately sexualised!*" [S31]. Several female participants supported her statement and noted a need to focus on a woman's athletic abilities [T31, P31 and K32]. One of them indicated, "*The ads should actually fit the task. It's just knowing these days that things get glamorised and sexualised just to sell, because sex sells*" [T31]. One of female participants suggested, "*It puts you off. You*

can't compete with Barbie, and they advertise Barbie" [K32]. Participants cited the example of the Egyptian women's beach volleyball team with hijab at the Rio Olympics as a sign of change that women are no longer accepting being sexualised in sport. However, one of the female participants who was involved in sport noted:

> *It doesn't affect me at all, looking at those advertisements, I already know that they are fake and all that stuff. It doesn't impact my self-esteem. I still want to go and do some exercise, I still want to do what I want to do…I still enjoy it. So, maybe I look at them more as the athlete and I know what they can do physically and I like them because of that, because I have seen them as really awesome players [A31].*

Male participants shared their thoughts regarding sexualised female endorsers. One of them stated that "*I think the purpose of the advertisement may be lost, [but] if it gets their [people's] attention that's good enough*" [A33]. Male participants in the focus group were neutral regarding endorser gender in a social marketing campaign [K33, T32 and A33]. Several participants conveyed their positive attitudes towards an expert endorser regardless of the gender [R31, K33 and A33]. One of them noted that:

> *I think it would depend on who has achieved the most. I wouldn't base it on their gender, I would base it on their accomplishments. So, if you have a more accomplished female than male, then it would be her, but if it was the other way around you would pick a male [R31].*

Another participant stated:

> *The most prevalent one, opposed to gender, is that they [athlete endorsers] follow what they do; what they're trying to promote. I think that is way more important than gender. I don't think people*

> *care if it's a guy or a girl if they're trying to promote fitness, and they're trying to promote this technique saying that they've done that at one point [K33].*

A few male participants indicated their interest in seeing a male endorser in the campaign [M32 and K31]. One of them stated, "*I'd say a guy, I can relate more. I can't take a girl as a role model.*" [M32]. Another male participant narrowed it down to only the sport he plays and indicated that "*I'm into rowing, I would go for the guy because I can look up to them. If it's a girl I don't know when I'm going to reach her level because of different bodies*" [A33].

Focus group participants also related the gender of an endorser to the type of sport that is being promoted [A33]. One of male participants stated that "*It depends on the sport. You aren't going to use a guy to promote netball or girls for rugby*" [J31]. Another participant said,

> *Netball is kind of known as a female sport compared to rugby that is known as a male sport. Obviously, guys can play netball and the other way around, but it would be more appealing to more girls to play netball because a girl is endorsing it [S31].*

As participants discussed the type of sport and endorser appropriateness, most male participants indicated that a female endorser is a better match for non-sport specific campaigns promoting sport and physical activity [K33, A33, T32, and M31]. Furthermore, it was mentioned by participants that a female endorser can be more effective in promoting sport sand physical activities in which both genders have a rich tradition of participation [M31, K33 and J31]. One male participants referred to tennis as a unisex sport and indicated, "*For tennis, me personally, I think women are more effective.*" [M31]. Participants also connected the gender of the endorser to their own

gender. One of the focus group participants noted that "*It depends on who [female or male] you are trying to draw into the sport*" [S31].

Taken together, focus group participants indicated that female athlete endorsers may be more influential in a generic, non-sport specific campaign for sport and physical activity. Moreover, it emerged that the focus should be more on a female endorser's athletic abilities rather than feminine sexuality in a social marketing campaign.

Theme 2: Endorser career status

When prompted, focus group participants discussed an endorser's career status in the context of a campaign promoting sport and physical activity participation. Some expressed no preference on former or current athletes endorsing a campaign promoting sport and physical activity [J31 and M31]. One focus group participant stated that, "*I don't mind who's coming [former or current] because I just want to do some exercise*" [J31]. Another participant suggested, "*It doesn't matter as long as they have the look of an athlete… and they can still perform physically then it is fine*" [M31].

However, there were number of participants who felt a former athlete fit better in a social marketing campaign [M32, T31, P31, K32 and A33]. One of them explained, "*I think it's the fact that he's [a Former athlete] an example of what it [sport] can lead to. He has shown by doing it when he was younger and he's a role model that people can follow*" [M32]. Another one noted, "*I think you should take the former. Because the former athlete, they have done it and they have set the standard*" [A33]. Some participants linked career status of former athletes to popularity, pointing out: "*…for campaign I choose the former athlete because they are more famous and more popular rather than new athletes"* [T31]. Another participant also suggested that former athlete as endorsers are likely to be more popular. He stated:

> *I think former is better because using football for example, you've got Leonel Messi and Cristiano Ronaldo, if you go for current, many people like Messi, so when they see the advertisement they're not going to like it if Ronaldo is in it. But if you choose former, for example Paulo, he's a legend and everyone likes him. For current athlete, one group is going to like him, but then another group isn't [M32].*

Focus group participants also indicated that a former athlete is more trustworthy. One participants stated that "*You would probably trust the former more because if they have been around for a while, you have sort of grown up with them being there, and so they're familiar and sort of safe*" [K32]. Another participant noted, "*I reckon with the former, more experienced people, they don't endorse many products so you are more likely to listen or to pay attention*" [P31].

Some participants linked the career status of athlete endorsers to campaign context. They made an argument that a physical activity campaign endorsement is more effective when the athlete has current relevance [A32, T32 and K33]. One of them explained:

> *…because you want to be like them. Even though the older one has already done it, you don't want to be like them because they are not doing it anymore so it's not like a current one when you aspire to be like them [A32].*

On the other hand, for a campaign promoting sport, some participants preferred a former athlete [K33 and M31]. One of them stated that "*Someone that is really well known, like a legend, like you said, Michael Jordan. Just a legend in some particular sport. There is always one in each sport*" [K33].

Involvement in sport and physical activity also affected participants' opinions about endorsers. One of participant indicated that "*It depends on how invested you are in the sport as well*" [S31]. One of the participants who was highly involved in sport supported the idea of having a former athlete in the campaign and said:

> *For me being in the outdoors [sport] using names like Edmund Hillary or Graeme Dingle [former athletes], because of what they did in the past holds more, to maybe people that are currently doing it. I think they are more powerful than Joe Blog who's a climber right now [A31].*

Another participant suggested that:

> *If you are not thinking too much about it I feel like I would naturally pick someone current because I would be like 'Oh look at them, they are doing that.' But if I thought more about it I would probably want to take the advice of someone who has had a lot more experience and they would have more influence. That would have more of an impact on me than someone who has just come in and is current [P31].*

Another participant who was involved in sport mentioned that endorser expertise is more significant than their career status and noted, "*I would like to see more that they can play well*" [A33].

Focus group participants also differentiated social marketing from commercial marketing and supported the use of former athletes as spokespeople for a social marketing campaign. One participant stated, "*They [former athlete] would have more knowledge and things like that. So if you are joining a campaign or a team then a former athlete would be better, but for buying a product would definitely be a current [athlete]*" [R31]. Another participant agreed and suggested that current athletes may fit

better for advertising sport products, "*You would rather buy clothes that an athlete has so, you would kind of want to buy the new clothes endorsed by the current athlete, rather than former*" [K32]. One of participants indicated:

> *…with current athletes it's sort of new, fresh, people who have just won gold medals at say Rio. That's fresh, it's now, so you feel like wearing those sneakers. 'Oh they must have just come out because they have only just won a gold medal' [S31].*

Taken together, these results suggest that although both former and current athletes can be convincing in a social marketing campaign, former athletes were perceived to be more knowledgeable, trustworthy and could be portrayed as role models for young adults. This was specifically the case for a sport-based campaign rather than a physical activity campaign. Furthermore, factors like participants' involvement in sport may affect young adults' perceptions regarding the carer status of endorsers in a social marketing campaign promoting sport and physical activity.

Theme 3: Ethnicity

Ethnicity was raised by focus group participants as having the potential to impact endorsement of a social marketing campaign in sport and physical activity. One of the participants stated, "*That [ethnicity]'s going to effect it [endorsement] a lot*" [J31]. Several participants related endorser's ethnicity to their own ethnicity [K31, K33, T32 and A33]. One of them indicated that:

> *I am Pacific Islander. Because there are a lot of Pacific Island athletes, especially in rugby, I think that was more influential than if we like have Richie McCaw [a NZ European] ....I know Richie McCaw is iconic and stuff like that, but you relate more to it*

[endorsement by a Pacific endorser] and then you want to go play that sport [K31].

Another participant supported the statement, suggesting the use of endorsers from different ethnic groups because of New Zealand's cultural diversity:

There are quite a lot of white people on TV [as endorsers], if you are looking in New Zealand at all diversity...We are starting to see more Maori on TV but it would be good to see some other ethnicities because it's definitely lacking [S31].

Another person with different ethnicity stated that "*I'm Arabic, so if it is an Arabic person I'm more interested, but if it's not it's going to be fine too*" [M32]. As participants discussed endorser-audience ethnicity fit, it was evident that involvement in sport and physical activity is also relevant. For those participants who were already engaged in sport, endorser experience and expertise seemed to outweigh endorser ethnicity. One of them indicated that:

I do play rugby, and I'm from an island. A Fijian, as I'm keen, I still look up on him [Waisale Serevi, a Fijian rugby player] and Richie McCaw [NZ European rugby player], because they have the records to set, so for us to become like one of them [rugby players]. To reach the level [A33].

He continued "*The experience is the biggest factor here. It trumps gender and ethnicity, so for me experience is what matters the most*" [A33]. Focus group participants also pointed out that ethnic stereotypes in sport can impact the endorsement process [A33 and T32]. One participant suggested that:

It depends on which sport it is. Let's say something like table tennis. Then I would tend to say that Asians are well known for playing table tennis. Asians aren't well known to be really big when looking at sports like rugby. Though, there are some exceptions, so if you use them for rugby then I don't think it would be very effective compared to others [T32].

In summary, focus group findings indicated that endorser ethnicity may have an impact on endorsement effectiveness. This seems to be the case specifically for those who are less involved in sport and physical activity, a target group for whom the ethnicity of endorsers should be carefully considered. Matching the ethnicity of an endorser with the audience may be imperative in that case.

6.5 Discussion

The purpose of this study was to explore the impact of endorser's gender, endorser's career status and participants' gender on attitude, participation intention, perceived endorser-campaign fit and endorser-audience fit related to a social marketing campaign promoting sport and physical activity. The results of the experiment phase of the study suggested that endorser's gender, career status, and participants' gender had no significant effect on attitude and intention related to the social marketing campaign. However, it was revealed that the gender of an endorser significantly influenced participants' perceptions of gender fit, and perceptions of career status fit. Either a current or former female athlete was perceived as a better fit for endorsing a social marketing campaign than a male endorser. Furthermore, the career status of an endorser significantly impacted perception of career status fit, but only for participants who were highly involved in sport and physical activity. The qualitative phase of the study supported the quantitative findings since participants expressed their support for both

male and female endorsers. However, focus group participants had a stronger perception of fit for a female endorser of a social marketing campaign. In addition, the suitability of former athletes in a sport-based campaign specifically when targeting those psychologically involved in sport and physical activity was raised in the focus groups. What follows is a more detailed discussion of important aspects of this study.

6.5.1 Audience gender

Characteristics of the audience for endorsement must be carefully considered and in the case of the current research, the gender of participants was included as an independent variable in the experiment. Female and male participants' attitudes and intentions were similar related to campaigns endorsed by celebrity athletes. In the body of endorsement research, evidence is mixed about audience gender in a young adult context, although very little research has explicitly explored this phenomenon.

The finding in the current research that audience gender is not a significant factor aligned with the work of Dix et al. (2010), who concluded that the gender of consumers (17 to 25 years old) is not a major indicator of attitude and behavioural intention related to products endorsed by a celebrity athlete. Buksa and Mitsis (2011) also found that the gender of young adults that comprise an endorsement audience does not play a critical role in subsequent positive word of mouth behaviours. However, other related studies suggested that either men (O'Regan, 2014; Peetz et al., 2004; Shuart, 2007b) or women (A. J. Bush, Martin, & Bush, 2004) respond more favourably to endorsement. Another research, although not explicitly in the context of endorsement, indicated that young female consumers generally have a more positive attitude towards cause-related marketing than males (Cui, Trent, Sullivan, & Matiru, 2003). In those studies, gender effects might be due to the fact that one gender or another were generally more familiar with the endorsers (Peetz et al., 2004) and/or were more involved with the endorsed

subject. Furthermore, audience response to celebrity endorsement could have been affected by socio-economic status as it was found that only high socio-economic status women are likely to be influenced by celebrity endorsements (Premeaux, 2009).

The results of the current research do not bring absolute clarity to what is known about the role of gender among young adult endorsement audiences. The body of research exploring the impact of the gender of young adult audience members on endorsement remains inconclusive, which was consistent with what has been noted recently (O'Regan, 2014).

6.5.2 Endorser gender

In addition to audience gender, the gender of endorsers was also explored in the current study for its potential effects on social marketing endorsement. It was revealed that an athlete endorser's gender does not significantly impact campaign-related attitude and intention. Findings were consistent with the research of Freiden (1984) and Bailey and Cole (2004) indicating that the gender of an endorser does not significantly affect consumers' attitudes towards a product advertisement. It was also found from the work of Bailey and Cole (2004) that a consumer's purchase intention is not influenced by the gender of an athlete endorser. However, in their work some differences between female and male athlete endorsers were reported based on audience familiarity with the celebrity athletes. The authors suggested that differences between female and male athlete endorsers might be moderated by audience familiarity with the endorser, as well as audience gender. Familiarity or recognition of endorsers in Study 2, had a significant effect on attitudes and perceptions of endorser-campaign fit although its effect was small. The interaction between an endorser's gender and an audience member's gender was investigated as part of the current research. Results of the experiment component of the study revealed that the interaction between endorser and audience gender has no

significant effect on attitude and intention. These findings were consistent with the work of Bhutada and Rollins (2015) on endorsement of health-related advertisements. The authors indicated that the gender of an endorser and an audience member do not significantly impact advertisement effectiveness and that female and male consumers have similar attitudes towards the advertisement regardless of the gender of the endorser. Furthermore, it was found that consumers' intention to seek advice does not significantly vary based on the endorser's gender which was also consistent with the results of this study.

In contrast with findings suggesting in this research, other endorsement research reported an interaction between an endorser's gender and audience gender in some cases. One study found that male consumers have higher intentions to buy a product endorsed by a male athlete (Peetz et al., 2004). However, the authors found that female consumers, may or may not be influenced by a female endorser. In another study, it was found that females are more likely to buy products endorsed by female athletes (Women's Sports Foundation, as cited in V. D. Bush, Bush, Clark, & Bush, 2005).

Mixed findings from studies related to endorsers' gender and its interaction with the gender of the audience, highlight that perhaps message recipients pay more attention to the advertised product or service than the gender of an endorser in the advertisement. A generic sport and physical activity campaign does not necessarily need to be targeted at one gender or the other. Therefore, gender consideration for selecting endorsers may not always be necessary. Focus group participants also expressed their support for a social marketing campaign endorsed by both female and male athletes. They indicated that a campaign can "*benefit from using both male and female*" endorsers [R31]. However, if the focus of the campaign is on promotion of a specific sport dominated by one gender, the gender of endorser should be considered. In this case a gender match would be more

effective. This was mentioned in the focus group discussion as one of the participants noted: "*You aren't going to use a guy to promote netball or girls for rugby*" [J31].

6.5.3 Female endorser- campaign fit

Although the gender of endorsers and audience was not a significant predictor of attitude and intention in this research, perceived endorser-campaign fit in terms of gender ($p < .01$) and career status ($p = .01$) were significantly higher for the campaign endorsed by the female athlete than the male athlete. That is, male and female participants perceived a female athlete endorser as a better match for a social marketing campaign promoting sport and physical activity. Although the effect of gender on participants' perception of endorser-campaign fit was found to be significant, the effect size was modest which means the gender of an endorser should be considered a subtle influence that may not necessarily, in and of itself, lead to a behavioural change. Female participants in the focus groups suggested that despite their respect for both female and male endorsers, they would support and pay more attention to a campaign endorsed by a female endorser. Most male participants, on the other hand, were either neutral regarding the gender of campaign endorser or were interested in the appearance of a female endorser in the campaign.

It should be noted that more positive perceptions of fit for the female athlete endorser in this research might be due in part to the lack of participants' familiarity with the endorsers. An endorser's familiarity/recognition can significantly impact the endorsement process (e.g., D. Biswas et al., 2006 , and Study 2). The two athlete endorsers who were presented in the mock advertisements of the experiment phase of this study were fictitious and unknown to participants. Research has found that unfamiliar female endorsers may be more effective than familiar female endorsers, while the reverse is true for male endorsers (Bailey & Cole, 2004).

Unfamiliarity with the endorsers can mitigate the transfer of endorser's qualities to the advertisement/endorsed product (McCracken, 1989), while the physical appearance of the endorser in the advertisement becomes paramount. Although the attractiveness of the female endorser in printed advertisements of this study was not manipulated by the researcher to boost endorser's attractiveness, she might be perceived as a better fit for the campaign due to this attribute compared to the male. One of the male focus group participants mentioned the attractiveness of female endorsers, indicating that "*[with an attractive endorser] I think the purpose of the advertisement may be lost, [but] if it gets their [people's] attention that's good enough*" [A33]. Female and males perceived differently endorser-campaign fit for a female endorser. Females' perceptions of fit for the female athlete endorser may have been driven by supportive feelings towards someone of their gender. Male participants, on the other hand, may have focused more on femininity and physical attractiveness of the female athlete endorsers. However, male participants also reported feelings of admiration in regard to the athleticism of the female endorsers.

Endorsement research has shown that the attractiveness attribute of an endorser (either female or male) is imperative and this notion also emerged from the Study 1 focus group. Insights into the degree to which social marketers should emphasise female athlete attractiveness specifically emerged from Study 3. Focus group participants expressed that when a female endorser's attractiveness is highlighted in an advertisement, it is interpreted as a deliberate, and perhaps transparent tactic. Related research helps with interpretation of this important finding.

A sexualised female endorser can be viewed negatively by some consumers (Antil, Burton, & Robinson, 2012) and even cause harm. A message that suggests that an endorsers' physical appearance is more important than competence, can cause destructive psychological impact, specifically on young female audience members

(Daniels & LaVoi, 2013), which is not aligned with social marketers' mandate to facilitate prosocial behaviour. The sexualisation of a female athlete endorser reduces perceptions of athletic competence which may in turn reduce endorsement effectiveness (Nezlek, Krohn, Wilson, & Maruskin, 2015). Furthermore, highlighting the physical appearance of female endorsers negatively affects participants' willingness to play sport or be physically active because they compare themselves with an endorser whose image is not attainable. In addition, female endorsers often do not want to be sexualised in promotional material but instead wish to earn respect based on athletic performance (Fink et al., 2014; Kane, LaVoi, & Fink, 2013). Perhaps most importantly, research has shown that promotional material conveying female athlete expertise and competence rather than sexuality is more effective (Antil et al., 2012; Fink et al., 2004).

Taken together, the results of this research and the extant research interpreted collectively suggest that female athlete endorsers should be conveyed in a way that their attractiveness is evident, but not oversexualised. Evidence is building now that portraying female athletes in this way may create the best endorser fit for both female and male audiences in a social marketing context.

6.5.4 Career status

The findings of this study also revealed that endorser's career status does not significantly affect participants' attitudes (p = .19) and intentions (p = .93) related to the social marketing campaign in sport and physical activity. However, it does impact the other important outcome measured in this study - perception of endorser-campaign fit – but only for participants who are highly involved in sport and physical activity (p = .048). In this case, a former athlete as a celebrity endorser can be more effective than a current athlete. Studies related to athlete endorsers' status in their career (i.e., active or retired) are scant, but former athletes are featuring in advertisements more often

compared to current athletes in part because former athletes as endorsers can reduce the risk of anti-social behaviours associated with current and possibly younger athletes (Stone et al., 2003).

The results of the quantitative phase of Study 3 were mostly supported by findings from the qualitative phase regarding the career status of endorsers and young people's related preferences. Although some focus group participants indicated similar feelings towards current and former athletes as endorsers, they explained that a former athlete may fit better in the social marketing setting. They related former athletes to a good "*example of what it [sport] can lead to*", *being a* "*role model*" "*popular*", "*legend*", and "*experienced*". Evidence exists that athlete role models and sport heroes resonate with young adults (e.g., Buksa & Mitsis, 2011; Dix et al., 2010; Shuart, 2007b). Therefore, by positioning former athletes as role models, social marketing campaigns for young adults may be more effective.

Furthermore, focus group participants perceived former athletes as more trustworthy than current athletes for endorsing a social marketing campaign targeting young adults. An endorser's trustworthiness is one of the most important attributes that can influence endorsement effectiveness (e.g., S. M. Chen & Huddleston, 2009; Y. Kim & Na, 2007; Tzoumaka et al., 2016). It had also been suggested that trustworthiness of an endorser is strongly correlated with likability (Friedman, Santeramo, & Traina, 1978). So, social marketers should carefully consider a theme of trustworthiness in campaigns featuring former athletes as endorsers and ensure they select endorsers that are well liked among the target market.

6.5.5 Involvement

Participants' psychological involvement in sport and physical activity was measured as a covariate in the experiment phase of this study and found to be

significant for all dependent variables (i.e., attitude, participation intention, perceived gender fit, and perceived career status fit). The role of involvement in perceptions of endorsement also came through from focus group discussions where one of participants indicated, "*It depends on how invested you are in the sport as well*" [S31]. This was consistent with previous research on the significant role of consumers' involvement on attitude and intention and subsequently behaviour change (e.g., Petty et al., 1983; Rice et al., 2012). Consumers who are highly involved with the product/service category respond more favourably and have a stronger intention related to the endorsed product/service (Bhutada, Menon, Deshpande, & Perri III, 2012).

In addition to the broad importance of exploring psychological involvement to build an understanding of endorsement, it emerged from focus group discussions that involvement affects participant perceptions regarding endorser's gender and career status specifically. In this study, focus group participants who were highly involved in sport and physical activity generally seemed to be influenced more by endorser expertise than endorser gender, but findings were contradictory to some extent. Other individuals indicated that they would be more inspired by an endorser of their own gender because they can compare their sport abilities with the athlete and look up to him/her. Another nuance of the underlying psychology of those with a higher level of involvement in sport was that the athletic ability of an endorser seemed more important than the way they are portrayed in the advertisement - and this was specifically evident for female endorsers.

In terms of an athlete's career status, evidence from the quantitative phase of the research indicated that perceived career status fit is higher for a former athlete when target groups are highly involved in sport and physical activity (p = .048). Similar to what was found in the quantitative phase, it was conveyed in the qualitative phase that those with higher level of involvement in sport, could perceive a former athlete as a

better fit for the social marketing campaign. They indicated that former athletes are more experienced, "*powerful*" and expert in sport and physical activity.

6.6 Limitations and Future Research

Several limitations specific to this study are worth noting. First, all of the endorsers in the quantitative phase of the study were unknown to participates, so a lack of recognition could affect the results because an unknown endorser can be perceived as less trustworthy (Bailey & Cole, 2004). Also, it is more difficult for a message receiver to transfer meaning from an unknown endorser. Therefore, more research is needed including both well known and unknown endorsers which would control the influence of endorser recognition.

The influence of athlete career status (i.e., current or former) is still not clear from this study and its role may overlap with the age of an athlete endorser. Furthermore, the age at which an athlete retires differs across various sports. For example, Mary Hanna, an equestrian athlete, was 61 and still competing at the 2016 Rio Olympics and Phil Mickelson is still competing actively in professional golf at the age of 47. In contrast, in sports like American football or swimming athletes commonly retire in their early 30s or even sooner. Therefore, focus group participants' perceptions related to career status may differ based on how they associate it with age and the sport in which they were considering current versus former athletes as endorsers. In the quantitative phase of this research both current and former endorsers were relatively young which may have also impacted perceptions of fit. Research participants might not have associated retirement with the younger looking athlete endorsers presented in this study. Future research leading to a more accurate understanding of this important endorser characteristic would be very useful.

As noted by those participating in the focus group, an endorser's ethnicity may impact endorsement effectiveness. Focus group participants seemed to prefer the campaign endorsed by an athlete with the same ethnicity as their own. However, participants who were involved in sport suggested they would be more affected by the competence or expertise of an endorser and their experiences than simply sharing the same ethnicity. On this basis, it is suggested that future research investigate the role of ethnicity on attitude and intention of potential participants of social marketing campaign. The results of this research suggest that controlling for participants' involvement in sport and physical activity in future research about the ethnicity of endorsers is vital

Moreover, future research can replicate this study by separating the sport and physical activity contexts. Although campaign context was not a significant factor of participants' attitudes and intentions in the Study 2 experiment, focus group participants alluded to the fact that it may be important. It was suggested that a former athlete seems more knowledgeable and experienced as a role model and fits better in a sport-based social marketing campaign than a physical activity campaign.

Chapter 7

DISCUSSION AND CONCLUSION

This chapter is a general discussion of all three studies. The arguments build on the discussions presented at the conclusion of each individual study. The chapter also outlines limitations of the research and recommendations for future research.

7.1 General Discussion

This thesis was an investigation of the role of endorsement in social marketing campaigns promoting sport and physical activity. After evidence was generated in Study 1 that the presence of an endorser in this type of campaign was helpful, the focus shifted to endorser and audience characteristics in Study 2 and Study 3 of this research. The match-up hypothesis was central in the research, specifically among the campaign, endorser, and audience. Variables of interest included campaign context, audience gender as well as the gender, recognition, expertise and career status of an endorser in this context (Figure 7.1).

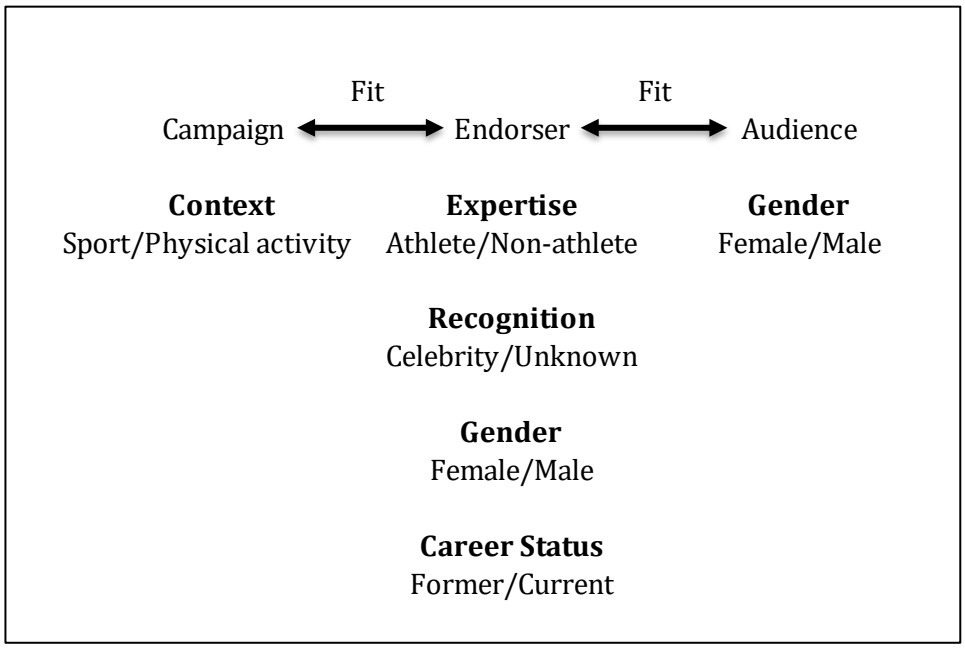


Figure 7.1. Campaign-endorser-audience match-up

Study 1 of the thesis was an exploration of the effectiveness of an endorser in a social marketing campaign promoting sport and physical activity. The key finding of Study 1 was that participants had more positive attitudes towards a campaign that was systematically paired with an endorser than those with no endorser-campaign pairing. Focus group findings supported the use of endorsers in social marketing campaigns. It was found that an endorser could influence participants' motivation, facilitate activity commencement, draw attention to a campaign and build trust.

Study 2 was an investigation of endorser's expertise and recognition on participants' attitudes, intentions and perceived campaign-endorser fit for both sport and physical activity campaigns. A key finding of this study was that attitude, intention and perception of fit were more positive when the social marketing campaign was endorsed by the celebrity athlete endorser rather than the unknown expert, celebrity non-athlete or unknown non-expert. Endorser's expertise and recognition were significant predictors of attitude change and perception of fit, while expertise was only a significant predictor of participation intention.

It was also found that attitude and participation intention related to two specific campaign contexts (i.e., sport and physical activity campaigns) were not significantly different. However, perception of fit for a sport-based campaign was significantly higher than a physical activity campaign for participants who were highly involved in sport or physical activity. Focus group findings revealed that both expertise and recognisability are important endorser characteristics, both of which can increase perceived trust. However, this was more the case in the sport campaign context than the physical activity context.

Study 3 of the thesis was an exploration of the impact of endorser and audience gender as well as endorser's career status on participants' attitudes, intentions and

perception of fit related to a social marketing campaign in sport and physical activity. The results indicate that gender and career status have no significant effect on attitude and intention. However, the gender of an endorser significantly influenced participants' perception of endorser-campaign fit. A female athlete was perceived as the better fit in terms of gender and career status for the social marketing campaign. A former athlete was also perceived as a better match for the campaign by those who were highly psychologically involved in sport and physical activity. Focus group findings indicated support for selecting a female former athlete to endorse a social marketing campaign. However, focus group participants suggested that the athletic ability of female endorsers rather than female sexuality should be highlighted in advertisements. Furthermore, an endorser's expertise and experience were perceived as more important characteristics than gender and career status, specifically for those who were already psychologically involved in sport and physical activity.

7.1.1 Young adults, social marketing and endorsement

Considered collectively, these studies provide evidence that the initial decision to utilise an endorser and subsequent decisions on what *type* of endorser to utilise will impact the effectiveness of a social marketing campaign promoting sport and physical activity to young adults. Put simply, evidence emerged here that young adults can be convinced to participate in sport and physical activity programmes through a social marketing campaign endorsed by an athlete, which was consistent with prior literature. The work of Hillsdon et al. (2001), for example, found that young adults were receptive to a social marketing campaign related to physical activity. Although endorsements did not feature in this research, there is consistency insofar as young adults in their study also responded favourably to a social marketing campaign.

Gen Y have a different communication style that social marketers need to consider carefully when designing campaigns (Brace-Govan, 2013). This research project illuminated some aspects of how young adults are persuaded and how their attitudes change through celebrity endorsement. In all three studies, focus group participants mentioned that an appropriate endorser in a social marketing campaign promoting sport and physical activity would be perceived as a role model which is important. This finding is in line with the work of Allender et al. (2006) who found that not having a realistic role model is one of the barriers to sport and physical activity participation. It has also been suggested that young adults perceive athletes and sport heroes as role models who they can look up to and model their behaviours after (Buksa & Mitsis, 2011; Shuart, 2007b). Ultimately, young adults can be more easily convinced to act if the product or service is associated with an athlete role model (Dix et al., 2010) and endorsement has the potential to create this scenario.

Despite the evidence that young adults have positive attitudes towards athlete endorsements in commercial contexts (e.g., Bakewell & Mitchell, 2003; Buksa & Mitsis, 2011; Cianfrone & Zhang, 2006; Dix et al., 2010; Shuart, 2007b), athlete endorsements are likely to be interpreted differently in social marketing settings. Selection of an endorser/role model for a social marketing campaign is likely to be more difficult than commercial marketing because social marketing campaigns seek sustainable shifts in behaviour (Kotler et al., 2002) which may be perceived as more significant than the decision to purchase a product or service. Focus group participants differentiated between endorsements in a commercial marketing setting and a social marketing setting. Although a celebrity athlete can be a powerful endorser in both settings, participants noted that that former athletes would be a better match for a social marketing campaign than current athletes. Former athletes have more experience and knowledge to act as a role model in this context while current athletes would be a better

fit endorsing products reflecting new trends in shifting more transitory commercial environments. This finding is quite helpful for practitioners because it is straightforward and actionable. There is the added benefit that the behaviours and lifestyle of retired athletes tends to be more stable than their active athlete counterparts, which reduces risk.

7.1.2 Expertise

Across all three studies, participants' attitudes and intentions related to a campaign endorsed by a celebrity athlete endorser were positive. Participants expressed their preference for an endorser with relevant expertise, leading to the conclusion that the aforementioned positivity was linked to the perception of endorser expertise. Among all factors that emerged during focus groups, expertise featured prominently and consistently. This was in line with previous research indicating that young adults are less likely to trust celebrity endorsers who have no relevant expertise and are more inclined to an endorser that is informed (O'Regan, 2014). Among all endorser characteristics covered in the relevant literature, expertise is positioned as a central cue in the persuasion and attitude change process (Homer & Kahle, 1990), while other characteristics are mostly considered peripheral cues to persuasion (Petty & Cacioppo, 1986a; Petty et al., 1983).

Complementing the insights that emerged from three focus groups, findings from the experimental phase of Study 2 revealed the significant role of expertise in the endorsement process of social marketing. An endorser's expertise was a significant predictor of attitude, intention and perception of fit related to a social marketing campaign in sport and physical activity. Findings were consistent with the tenets of match-up hypothesis in which an endorser's expertise needs to be matched with the endorsed product/service for more effective results (e.g., Koernig & Boyd, 2009; Till &

Busler, 2000). Digging deeper about the subtleties of how expertise is perceived as part of the endorsement process, evidence emerged of an association between psychological involvement and expertise. For those participants who were highly involved in sport or physical activity, an endorser's expertise was more appealing than other factors (i.e., recognition, gender, career status, and ethnicity). This could be because those who are more involved with the subject undertake more cognitive processing related to an area in which they are psychologically invested and have some familiarity. It is concluded therefore that the importance of endorser expertise carries through from other settings into sport and that it is a particularly important consideration for those markets of individuals who are highly psychologically involved.

7.1.3 Interaction of factors

Considered collectively, this research found that the impacts of endorser characteristics (e.g., expertise, recognition, gender and career status) on participants' attitudes, intentions and their perception of fit are not always linear. In other words, the impact of each variable on attitude, intention and perceived fit may be affected by the presence of the other variables. Articulating the interactions between these factors is necessary to understand endorsement effectiveness. For example, in Study 3, participants' attitudes towards the campaign were not significantly different in terms of endorser' gender, participants' gender and endorser's career status, but the interactions between these three factors were significant. This exemplifies the challenging process of matching an endorser to a social marketing campaign (Brace-Govan, 2013).

All these factors and their interactions should be carefully considered when selecting an endorser for a social marketing campaign targeted at young adults to increase their participation in sport and physical activity. For example, a social marketing practitioner should avoid selecting an endorser based simply on career status

or gender, but would be wise to consider how those factors might interact with others. Reflecting on how a male former athlete serving as an endorser of a physical activity campaign would potentially be received by the female portion of a young adult audience is the depth of analysis required to ensure campaign effectiveness.

7.1.4 Involvement

Involvement proved to be an important factor in understanding endorsement across all three studies. According to the ELM and HSM tenets, involvement plays a significant role in attitude change (e.g., Chaiken, 1980; Petty et al., 1983), so the results pertaining to the construct in this thesis are unsurprising. The qualitative and quantitative findings of Study 1 and 2 provide some insight into the role of involvement in the endorsement process. When participants' psychological level of involvement in sport and physical activity is high, an athlete endorser specifically in a sport-based campaign compared to physical activity campaign can be more effective. It can be concluded that participants' level of psychological connection to the focal behaviour of a social marketing campaign can impact perceptions of the endorser's expertise. This was consistent with the findings of Limbu et al. (2012) who found a significant interaction between involvement and the expertise of an endorser related to the endorsed product. The linkage between involvement and expertise was also reflected in both the quantitative and qualitative components of Study 3. Participants who had higher levels of involvement in sport indicated that a former athlete is more likely to fit in a social marketing campaign. They associated the former endorsers with a higher level of expertise, knowledge and role modelling attributes.

7.1.5 Gender

Insights about the role of gender in the endorsement process emerged from all three studies. In the Study 1 focus group, female participants indicated their preference

towards the campaign endorsed by a woman because they share the same gender. In Study 2 and 3, the gender issue was also raised in focus groups discussions. Female participants expressed their preference for a campaign endorsed by female athletes. The results were consistent with other research indicating that female consumers are more likely to buy products endorsed by a female endorser (Women's Sports Foundation, as cited in V. D. Bush et al., 2005). The preferences expressed in those focus groups contrasted with the quantitative results of Study 3. These results indicated that an endorser's gender does not significantly affect attitude and participation intention related to a social marketing campaign in sport and physical activity.

Male participants in this research were either neutral or had a positive attitude towards the female endorsers. This is in contrast with the work of Peetz et al. (2004) on product endorsement. The authors found that male consumers are more likely to be influenced by male athlete endorsers. However, their work did not control participants' involvement, which may have compromised the findings. Considering participants' involvement in sport, the current research revealed that male participants who were involved in a traditionally male sport (e.g., rugby) preferred a male endorser as a role model in the campaign because they can look up to the person and compare themselves with him.

As a result of the expanding media coverage of female sports in some countries, there is a growing number of female athletes acquiring celebrity status. Although the results related to gender across the three studies are somewhat equivocal, female athletes with higher profile are growing in number and their potential to become effective endorsers cannot be ignored. It is important for social marketers to explore the nuances of any target market and conclude whether a female endorser will be an asset. Evidence from this thesis suggests that incorporating female endorsers into social marketing campaigns is well worth considering.

7.1.6 Endorser career status

Evidence emerged from the Study 1 and 3 focus groups that young adults may be more inclined towards former athlete endorsers. This was the first time that career status had been explored empirically in a sport/social marketing context. In Study 1, participants indicated their preference for an older, former athlete as an endorser for a campaign targeting young adults. In Study 3, participants specified that in terms of product marketing a current athlete may be more powerful, while in social marketing a former athlete would be more effective for young adults. Building on a point made earlier, a current athlete can transfer a sense of freshness, trendiness, and fashion to an audience which can be appealing to consumers in fast moving commercial settings. On the other hand, campaigns with former athletes can highlight not only athletic ability, but also experience.

Former athletes who stay relevant and in the public eye are rare (Miciak & Shanklin, 1994), but they often make very good endorsers. Jack Nicklaus, Michael Jordan and David Beckham are good examples of former athletes with still very active endorsement portfolios. In this study, focus group participants indicated that a former athlete who is considered *"a legend in some particular sport"* [K33], would be most effective as an endorser of a sport-based social marketing campaign. However, the selection of a former endorser should be carefully considered based on not only their expertise but also lifestyle after retirement. Some former athletes like O.J. Simpson were initially very effective endorsers after retirement but are no longer suitable due to events long after their athletic career was over. Overall, it is advisable for social marketing practitioners in sport and physical activity settings to seriously consider former athletes as endorsers.

7.2 Conclusion

There are many nuances to the use of endorsers in social marketing settings. Previous research contended that "the context of social marketing is different to commercial marketing and that this difference has a bearing on the relationship and interactional style needed for role model to connect meaningfully with Gen Y" (Brace-Govan, 2013, p. 123). The three studies in this thesis provided evidence that athlete endorsers can increase the effectiveness of social marketing campaigns in sport and physical activity participation targeted at young adults. Young adults, including university students, are an ideal target group for a campaign advertisement endorsed by celebrity athletes because they have a tendency to be influenced by messages from celebrity sources (Amos et al., 2008).

Despite the insignificant effect of an endorser's gender on participants' attitudes and intentions in the quantitative phase of Study 3, gender can impact the transfer of meaning in an endorsement process under some conditions. This is especially the case for young adults (e.g., Peetz et al., 2004). Considering all three studies collectively, evidence emerged that a female endorser is a good fit for a broad (and generic) sport or physical activity campaign. This may also be true for sports with widespread participation across both genders. However, for campaigns targeting sports dominated by one gender (e.g., netball for women), a gender match between endorser and audience would be more effective. Although conventional wisdom had suggested that gender may not impact attitude or intention because athlete endorsers of both genders are held in "equally high regard" (Peetz et al., 2004, p. 149), endorser-audience gender fit in some sport contexts may be appropriate for young adult markets.

In terms of athletes' career status, evidence emerged in this thesis that a former athlete could be an effective endorser for a social marketing campaign promoting sport

and physical activity. Former athletes with a positive personal and professional disposition espouse trustworthiness, and should serve as role models because their almost “legendary” status and experience can be used to facilitate behaviour change among young adults.

Overall, marketing strategies including celebrity athlete endorsement are capable of increasing awareness and ultimately increasing rates of participation in sport and physical activity among young people. The selection of an endorser who fits into a campaign and has the potential to influence audience behaviour towards a more active lifestyle is challenging and multidimensional. Considering the various factors examined in this thesis (i.e., expertise, recognition, gender, career status, and campaign context) and the results, perhaps the most compelling implication is that a former female athlete is likely a suitable endorser for a broad campaign promoting sport and physical activity. This finding should be of interest to those working in sport organisations around the world.

7.3 Research Limitations

In addition to the limitations presented in each study, there are several limitations worth pointing out that relate to the thesis as a whole. Although all of the university students who participated in this research were young adult, students only partially represent the wider young adult population of those age 16 to 24 years old. This should be considered in when generalising the significant relationships among variables to the wider young adult population.

Research had found that student-sample responses are slightly more homogeneous that non-student samples (Peterson, 2001), and students tend to have larger celebrity source effects than non-students (Amos et al., 2008). Again, this suggests that the overall impact of the study should be tempered somewhat. In addition, previous studies

have not reported effect size, so the researcher was left with no standard from which to interpret the meaningfulness of a ‘medium’ effect in this study. As this body of research develops and more effect sizes are reported, it may be that the effects reported in this foundational research are quite significant.

With the large numbers of variables that influence human behaviour, artificiality in experimental design facilitates more precise predictions by providing less complex conditions (Webster & Kervin, 1971). Furthermore, artificiality helps to identify consistencies that do not necessarily occur under real conditions, but actually may exist (Henshel, 1980). The controlled nature and design elements of the three experiments in this thesis created, in effect, ‘deliberate limitations’. For example, the slide show and classical conditioning procedure in Study 1 are not real-world representations. In Study 2 and 3, mock advertisements were developed by the researcher and also did not necessarily accurately reflect the real world. Although experimental manipulations are often artificial, they likely influenced the findings and therefore any generalisation of the results should be done with this limitation in mind. A related limitation of this research is the fact that this study was conducted only at one university in New Zealand’s largest city, meaning that results should not be haphazardly generalised to all of New Zealand’s university students, let alone young people.

Attitude and participation intention were measured as dependent variables in the quantitative component of each study. Although these constructs are important determinants of behaviour (Ajzen, 1985, 2005; Fishbein & Ajzen, 2011; Norman & Smith, 1995), they do not represent participants’ actual behaviour related to a campaign promoting sport and physical activity. The primary focus of social marketers is to encourage people to adapt a desired prosocial behaviour, so although intentions are important, this represents an important limitation of the wider thesis.

There are a wide range of sport and physical activities available in society. However, the fictitious social marketing advertisement embedded in the questionnaires had a generic depiction of sport and physical activity without specifying any particular sport. Therefore, research participants' responses to the campaign advertisement might have been more prominent if a meaningful/relevant sport or activity to them had been depicted.

Focus group participants in all three studies were different in terms of gender, ethnicity and socioeconomic status. Although having a diverse group of people can help generate a range of opinions, it may also influence the direction and consequently the interpretation of the discussion. It has been suggested that with a diverse group of people the total number of focus groups should increase to reach saturation (Morgan, 1996, 1997). In line with this reality, two focus groups were conducted as part of each study.

7.4 Future Research

Several ideas emerged during the conception of this thesis as well as its implementation and the analysis of data that are worth noting for future research. In this research, both fictitious and real celebrity athletes were presented having a high degree of expertise in sport (i.e., Olympic gold medal). Furthermore, it was mentioned by focus group participants that an endorser's level of related expertise can be significant especially for a campaign promoting physical activity. One of participants noted that "*If they look good, I am sort of 'Oh, I want to be like that', but then if they are too perfect, I am sort of 'Oh, I am never going to get there'*" [A31]. It would be beneficial to investigate at what level of sport performance an athlete can effectively be portrayed as an expert endorser for either sport or physical activity.

In this research, endorsers were presented as positive role models (e.g., successful athletes) in contrast to negative role models (i.e., those who have experienced misfortune but bounced back) (Lockwood et al., 2002). Future research could explore the effect of a negative versus a positive role model as an endorser of social marketing campaign promoting sport and physical activity. There are many examples of endorsers serving as a positive role model in sport and physical activity, but there are also examples of people who were overweight or unhealthy and undertake a healthy life style by increasing their level of physical activity and sport. Although the healthy lifestyles of celebrity endorsers can facilitate behaviour change in a target group, a narrative around an endorser's misfortune could be educational and therefore effective (Casais & Proença, 2012). A negative role model could potentially be an effective endorser within a social marketing campaign. Therefore, it is suggested that the use of this type of endorser in a generic physical activity campaign, specifically for people with a lower involvement in sport and physical activity, be explored in future research to assess potential impact on the three outcome variables measured in this study or better yet on actual behaviour change.

A message sender in the endorsement process can be presented within one of four modes: implicit ("I use this product"), explicit ("I endorse this product"), imperative ("You should use this product") and co-present (endorse appears with product) (McCracken, 1989). In this research a co-present mode was used in the fictitious advertisements. In future research, more focus on message framing would be helpful to capture the explicit effect of endorsers in a social marketing campaign promoting sport and physical activity. For example, the results of the thesis suggest that a former athlete may fit better in the sport-based campaign or when participants are already highly involved in a sport. In this case an imperative or co-present mode may be more effective because the endorser is popular and experienced. However, with participants who have

a lower level of involvement in sport/physical activity or for a generic physical activity campaign, the use of unknown endorsers within an implicit mode may be beneficial. In addition, the promotion platform (e.g., TV advertisement, social media, poster, etc.) can impact the effectiveness of endorsement modes. Therefore, it is suggested that the suitability of various endorsement modes should be considered and explored in a sport and physical activity social marketing context.

The positive effect of having several endorsers for a single product has emerged in previous studies (Hsu & McDonald, 2002). The potential effectiveness of using several endorsers in a social marketing campaign promoting sport and physical activity was put forth by focus group participants of this research. Specifically, the use of multiple endorsers for participants with a lower level of involvement can produce a supposition that "more is better" (Rice et al., 2012, p. 250). Therefore, it is recommended that future research investigate the effect of multiple athlete endorsers on a social marketing campaign specifically for individuals who are less involved in sport and physical activity.

The concept of the unknown and expert endorser was incorporated in this research design for the first time in a sport-based social marketing context. There is still a lot to learn about the potential effectiveness of this type of endorsement and it may not necessarily have to be a human being that is depicted as an "unknown" endorser. The use of animated endorsers can remove the risk of negative publicity related to celebrity and non-celebrity endorsers and/or multiple endorsement by a celebrity. Although this research had used celebrity and non-celebrity endorsers, future research can investigate the effect an animated endorser compared to other types of endorser in non-profit settings.

The effectiveness of celebrity athlete endorsement as part of a social marketing campaign could be examined through different promotion methods such as television commercials or social media. The fictitious printed advertisements that were used served their purpose for this initial exploration of the phenomenon, but social media and television are ubiquitous and represent vary popular means through which young people connect to the things they care about.

Future research can extend this study by exploring participants with lower levels of sport and physical activity participation. These participants might include people with diabetes, working mothers and people of low socioeconomic status. It would be very worthwhile to learn more about how these populations interpret trustworthiness, expertise and the other variables explored in this thesis. In addition, the current research was conducted in one country at one university, future research can also replicate this work in alternative settings to improve generalisability and the ecological validity of the study.

This research explored the effects of an endorser on young adults' attitudes, intentions, and perceptions of endorser-campaign fit related to a generic social marketing campaign in sport and/or physical activity. Future research can explore the role of athlete endorsers within a sport-specific campaign. Those working in sport development roles within sporting organisations around the world would likely benefit from these insights.

References

References

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, 7*(3), 332-355.

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. B. J. Kuhl (Ed.), *Action-control: From cognition to behavior* (pp. 11-39): Heidelberg: Springer.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.

Ajzen, I. (2005). *Attitudes, personality and behavior* (2 ed.). New York: Open University Press.

Allen, C. T., & Janiszewski, C. A. (1989). Assessing the role of contingency awareness in attitudinal conditioning with implications for advertising research. *Journal of Marketing Research, 26*(1), 30-43.

Allender, S., Cowburn, G., & Foster, C. (2006). Understanding participation in sport and physical activity among children and adults: A review of qualitative studies. *Health Education Research, 21*(6), 826-835.

Amos, C., Holmes, G., & Strutton, D. (2008). Exploring the relationship between celebrity endorser effects and advertising effectiveness: A quantitative synthesis of effect size. *International Journal of Advertising, 27*(2), 209-234.

Andreasen, A. R. (1994). Social marketing: Its definition and domain. *Journal of Public Policy & Marketing, 13*(1), 108-114.

Andreasen, A. R. (1995). *Marketing social change: Changing behavior to promote health, social development, and the environment*. San Francisco, CA: Josses-Bass.

Andreasen, A. R. (2002). Marketing social marketing in the social change marketplace. *Journal of Public Policy & Marketing, 21*(1), 3-13.

Andreasen, A. R. (2006). *Social marketing in the 21st century*: Sage.

Antil, J., Burton, R., & Robinson, M. (2012). Exploring the challenges facing female athletes as endorsers. *Journal of Brand Strategy, 1*(3), 292-307.

Arai, A., Ko, Y. J., & Ross, S. (2014). Branding athletes: Exploration and conceptualization of athlete brand image. *Sport Management Review, 17*(2), 97-106.

Armitage, C. J., & Christian, J. (2003). From attitudes to behaviour: Basic and applied research on the theory of planned behaviour. *Current Psychology, 22*(3), 187-195.

Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology, 40*(4), 471-499.

Atkin, C., & Block, M. (1983). Effectiveness of celebrity endorsers. *Journal of Advertising Research, 23*(1), 57-61.

Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. *Qualitative Research, 1*(3), 385-405.

Babiak, K., Mills, B., Tainsky, S., & Juravich, M. (2012). An investigation into professional athlete philanthropy: Why charity is part of the game. *Journal of Sport Management, 26*(2), 159-176.

Bailey, A. A., & Cole, C. A. (2004). The effects of multiple product endorsements by celebrities on consumer attitudes and intentions: An extension. In L. R. Kahle & C. Riley (Eds.), *Sports marketing and the psychology of marketing communication* (pp. 133-157). Mahwah, NJ: Erlbaum.

Baker, M. J., & Churchill Jr, G. A. (1977). The impact of physically attractive models on advertising evaluations. *Journal of Marketing Research, 14*(4), 538-555.

Baker, W., Hutchinson, J. W., Moore, D., & Nedungadi, P. (1986). Brand familiarity and advertising: Effects on the evoked set and brand preference. *Advances in consumer research, 13*(1), 637-642.

Bakewell, C., & Mitchell, V. W. (2003). Generation Y female consumer decision-making styles. *International Journal of Retail & Distribution Management, 31*(2), 95-106.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Banister, E. N., & Cocker, H. L. (2014). A cultural exploration of consumers' interactions and relationships with celebrities. *Journal of Marketing Management, 30*(1-2), 1-29.

Barnes, P. M., & Schoenborn, C. A. (2003). *Physical activity among adults: United States, 2000*. Hyattsville, Maryland: National Center for Health Statistics. Retrieved from http://studipextern.uni-trier.de/webe4704/AboutTheUSA/usa/etexts/sport/physactivity.pdf

Basil, M. D., & Brown, W. J. (1997). Marketing AIDS prevention: The differential impact hypothesis versus identification effects. *Journal of Consumer Psychology, 6*(4), 389-411.

Bauman, A., McLean, G., Hurdle, D., Walker, S., Boyd, J., van Aalst, I., & Carr, H. (2003). Evaluation of the national ‘Push Play’campaign in New Zealand: Creating population awareness of physical activity. *Journal of the New Zealand Medical Association, 116*(1179), 1-11.

Beaton, A. A., & Funk, D. C. (2008). An evaluation of theoretical frameworks for studying physically active leisure. *Leisure Sciences, 30*(1), 53-70.

Beaton, A. A., Funk, D. C., Ridinger, L., & Jordan, J. (2011). Sport involvement: A conceptual and empirical analysis. *Sport Management Review, 14*(2), 126-140.

Beckwith, N. E., & Lehmann, D. R. (1975). The importance of halo effects in multi-attribute attitude models. *Journal of Marketing Research, 12*(3), 265-275.

Bell, B., & Blakey, P. (2010). Do boys and girls go out to play? Women's football and social marketing at Euro 2005. *International Journal of Sport Management and Marketing, 7*(3), 156-172.

Bennett, G., Henson, R., & Zhang, J. (2002). Action sports sponsorship recognition. *Sport Marketing Quarterly, 11*(3), 174-185.

Berry, T. R., & Shields, C. (2014). Source attribution and credibility of health and appearance exercise advertisements: Relationship with implicit and explicit attitudes and intentions. *Journal of Health Psychology, 19*(2), 242-252.

Berry, T. R., Spence, J. C., Plotnikoff, R. C., Bauman, A., McCargar, L., Witcher, C., . . . Stolp, S. (2009). A mixed methods evaluation of televised health promotion advertisements targeted at older adults. *Evaluation and Program Planning, 32*(3), 278-288.

Bhutada, N. S., Menon, A. M., Deshpande, A. D., & Perri III, M. (2012). Impact of celebrity pitch in direct-to-consumer advertising of prescription drugs. *Health Marketing Quarterly, 29*(1), 35-48.

Bhutada, N. S., & Rollins, B. L. (2015). Disease-specific direct-to-consumer advertising of pharmaceuticals: An examination of endorser type and gender effects on consumers' attitudes and behaviors. *Research in Social and Administrative Pharmacy, 11*(6), 891-900.

Billson, J. M. (1989). [Review of the book *Focus groups: A practical guide for applied research*, by Richard A. Krueger]. *Clinical Sociology Review, 7*(1), 232-235. Retrieved from http://digitalcommons.wayne.edu/csr

Biswas, D., Biswas, A., & Das, N. (2006). The differential effects of celebrity and expert endorsements on consumer risk perceptions. *Journal of Advertising, 35*(2), 17-31.

Biswas, S., Hussain, M., & O'Donnell, K. (2009). Celebrity endorsements in advertisements and consumer perceptions: A cross-cultural study. *Journal of Global Marketing, 22*(2), 121-137.

Bland, J. M., & Altman, D. G. (1996). Statistics notes: Transformations, means, and confidence intervals. *British Medical Journal, 312*(7038), 1079.

Boon, S. D., & Lomore, C. D. (2001). Admirer-celebrity relationships among young adults. *Human Communication Research, 27*(3), 432-465.

Borzekowski, D. L., Guan, Y., Smith, K. C., Erby, L. H., & Roter, D. L. (2013). The Angelina effect: Immediate reach, grasp, and impact of going public. *Genetics in Medicine, 16*(7), 516-521.

Bower, A. B., & Landreth, S. (2001). Is beauty best? Highly versus normally attractive models in advertising. *Journal of Advertising, 30*(1), 1-12.

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, CA: Sage Publications.

Brace-Govan, J. (2013). More diversity than celebrity: A typology of role model interaction. *Journal of Social Marketing, 3*(2), 111-126.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Bridges Sally , Doyle Melanie, Fuller Elizabeth, Knott Craig, Mindell Jennifer, Moody Alison, . . . Rachel, W. (2013). *Health survey for England 2012: Health, social care and lifestyles*. London: Health and Social Care Information Centre. Retrieved from http://content.digital.nhs.uk/catalogue/PUB13218/HSE2012-Sum-bklet.pdf

Brooks, C., & Harris, K. (1998). Celebrity athlete endorsement: An overview of the key theoretical issues. *Sport Marketing Quarterly, 7*(2), 34-44.

Buksa, I., & Mitsis, A. (2011). Generation Y's athlete role model perceptions on PWOM behaviour. *Young Consumers, 12*(4), 337-347.

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.

Bush, V. D., Bush, A. J., Clark, P., & Bush, R. P. (2005). Girl power and word-of-mouth behavior in the flourishing sports market. *Journal of Consumer Marketing, 22*(5), 257-264.

Calder, B. J., Phillips, L. W., & Tybout, A. M. (1981). Designing research for application. *Journal of Consumer Research, 8*(2), 197-207.

Carlson, B. D., & Donavan, D. T. (2008). Concerning the effect of athlete endorsements on brand and team-related intentions. *Sport Marketing Quarterly, 17*(3), 154-162.

Casais, B., & Proença, J. F. (2012). Inhibitions and implications associated with celebrity participation in health-related social marketing: An exploratory research focused on HIV prevention in portugal. *Health Marketing Quarterly, 29*(3), 206-222.

Casey, M. K., Allen, M., Emmers-Sommer, T., Sahlstein, E., Degooyer, D., Winters, A. M., . . . Dun, T. (2003). When a celebrity contracts a disease: The example of Earvin "Magic" Johnson's announcement that he was HIV positive. *Journal of Health Communication, 8*(3), 249-265.

Caspersen, C. J., Pereira, M. A., & Curran, K. M. (2000). Changes in physical activity patterns in the United States, by sex and cross-sectional age. *Medicine and Science in Sports and Exercise, 32*(9), 1601-1609.

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), 126-131.

Chaiken, S. (1979). Communicator physical attractiveness and persuasion. *Journal of Personality and Social Psychology, 37*(8), 1387-1397.

Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology, 39*(5), 752-766.

Chaiken, S. (1987). The heuristic model of persuasion. In M. P. Zanna, J. M. Olson, & C. P. Herman (Eds.), *Social influence: The ontario symposium* (Vol. 5, pp. 3-39). Hillsdale, NJ: Lawrence Erlbaum Associates.

Chaiken, S., Liberman, A., & Eagly, A. H. (1989). Heuristic and systematic information processing within and beyond the persuasion context. In J. S. Uleman & J. A. Bargh (Eds.), *Unintended thought* (pp. 212-252). New York: Guilford Press.

Chaiken, S., & Trope, Y. (1999). *Dual-process theories in social psychology*. New York: Guilford Press.

Charbonneau, J., & Garland, R. (2005). Talent, looks or brains? New Zealand advertising practitioners' views on celebrity and athlete endorsers. *Marketing Bulletin, 16*(3), 1-10.

Charbonneau, J., & Garland, R. (2006). The use of celebrity athletes as endorsers: Views of the New Zealand general public. *International Journal of Sports Marketing & Sponsorship, 7*(4), 31-38.

Chen, A. C. H., Chang, R. Y. H., Besherat, A., & Baack, D. W. (2013). Who benefits from multiple brand celebrity endorsements? An experimental investigation. *Psychology and Marketing, 30*(10), 850-860.

Chen, C. Y., Lin, Y. H., & Hsiao, C. L. (2012). Celebrity endorsement for sporting events using classical conditioning. *International Journal of Sports Marketing and Sponsorship, 13*(3), 209-219.

Chen, S. M., & Huddleston, P. (2009). A comparison of four strategies to promote fair trade products. *International Journal of Retail and Distribution Management, 37*(4), 336-345.

Cheng, H., Kotler, P., & Lee, N. (2011). *Social marketing for public health: Global trends and success stories*: Jones & Bartlett Learning.

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.

Choi, S. M., & Rifon, N. J. (2012). It is a match: The impact of congruence between celebrity image and consumer ideal self on endorsement effectiveness. *Psychology and Marketing, 29*(9), 639-650.

Cianfrone, B. A., & Zhang, J. J. (2006). Differential effects of television commercials, athlete endorsements, and venue signage during a televised action sports event. *Journal of Sport Management, 20*(3), 322-344.

Coalter, F. (2007). *A wider social role for sport: Who's keeping the score?* London: Routledge.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2 ed.). New York: Academic Press.
Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155.
Cook, T. D., Campbell, D. T., & Day, A. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Boston: Houghton Mifflin.
Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2 ed.). Thousand Oaks, CA: Sage.
Creswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research*. Los Angeles: Sage Publications.
Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 209-240). Thousand Oaks, CA: Sage.
Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, Calif.: Sage Publications.
Cugelman, B. (2010). *Online social marketing: Website factors in behavioural change* (PhD thesis). University of Wolverhampton.
Cui, Y., Trent, E. S., Sullivan, P. M., & Matiru, G. N. (2003). Cause-related marketing: How generation Y responds. *International Journal of Retail & Distribution Management, 31*(6), 310-320.
Cunningham, G. B., Fink, J. S., & Kenix, L. J. (2008). Choosing an endorser for a women's sporting event: The interaction of attractiveness and expertise. *Sex Roles, 58*(5-6), 371-378.
D'Alonzo, K. T. (2004). The Johnson-Neyman procedure as an alternative to ANCOVA. *Western Journal of Nursing Research, 26*(7), 804-812.
Daniels, E., & LaVoi, N. (2013). Athletics as solution and problem: Sports participation for girls and the sexualization of female athletes. In E. Zurbriggen & T. Roberts (Eds.), *The sexualization of girls and girlhood: Causes, consequences and resistance* (pp. 63-83). New York: Oxford University Press.
De Lisle, J. (2011). The benefits and challenges of mixing methods and methodologies: Lessons learnt from implementing qualitatively led mixed methods research designs in Trinidad and Tobago.
Dix, S. (2009). *Sport celebrity influence on young adult consumers*. presented at the meeting of the ANZMAC 2009, Melbourne, Australia. Retrieved from http://www.duplication.net.au/ANZMAC09/papers/ANZMAC2009-344.pdf
Dix, S., Phau, I., & Pougnet, S. (2010). "Bend it like Beckham": the influence of sports celebrities on young adult consumers. *Young Consumers, 11*(1), 36-46.
Doane, D. P., & Seward, L. E. (2011). Measuring skewness: a forgotten statistic. *Journal of Statistics Education, 19*(2), 1-18.
Domjan, M. (2005). Pavlovian conditioning: A functional perspective. *Annual Review of Psychology, 56*(1), 179-206.
Donovan, R. J., & Henley, N. (2003). *Social marketing: Principles and practice*. Melbourne: IP communications.
Dyson, A., & Turco, D. (1998). The state of celebrity endorsement in sport. *Cyber-Journal of Sport Marketing, 2*(1), 9–21.
Edwards, A., & Skinner, J. (2009). *Qualitative research in sport management*. Oxford, UK: Elsevier.
Efron, B., & Tibshirani, R. J. (1993). *An introduction to the bootstrap*. New York: Chapman & Hall.
Eisend, M. (2006). Source credibility dimensions in marketing communication: A generalized solution. *Journal of Empirical Generalizations in Marketing, 10*(2), 1-33.

Erdogan, B. Z. (1999). Celebrity endorsement: A literature review. *Journal of marketing management, 15*(4), 291-314.

Erdogan, B. Z., Baker, M. J., & Tagg, S. (2001). Selecting celebrity endorsers: The practitioner's perspective. *Journal of Advertising Research, 41*(3), 39-48.

Evans, D., Barwell, J., Eccles, D. M., Collins, A., Izatt, L., Jacobs, C., . . . Harrison, R. (2014). The Angelina Jolie effect: How high celebrity profile can have a major impact on provision of cancer related services. *Breast Cancer Research, 16*(5), 442.

Evans, W. D., & McCormack, L. (2008). Applying social marketing in health care: Communicating evidence to change consumer behavior. *Medical Decision Making*.

Ewens, W., & Lashuk, M. (1989). Role model identification and activity preferences of Australian youth. *ACHPER National Journal, 125*, 18-20.

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*(2), 175-191.

Field, A. (2013). *Discovering statistics using IBM SPSS Statistics (and sex and drugs and rock 'n' roll)* (4 ed.). Los Angeles: Sage publications.

Fink, J. S., Cunningham, G., & Kenix, L. J. (2004). Utilizing athletes as endorsers to sell women's sport: Attractiveness versus expertise. *Journal of Sport Management, 18*(4), 350-367.

Fink, J. S., Kane, M. J., & LaVoi, N. M. (2014). The Freedom to Choose: Elite Female Athletes' Preferred Representations Within Endorsement Opportunities. *Journal of Sport Management, 28*(2), 207-219.

Fink, J. S., Parker, H. M., Cunningham, G. B., & Cuneen, J. (2012). Female athlete endorsers: Determinants of effectiveness. *Sport Management Review, 15*(1), 13-22.

Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach*. New York: Psychology Press.

Fleck, N., Korchia, M., & Le Roy, I. (2012). Celebrities in advertising: Looking for congruence or likability? *Psychology and Marketing, 29*(9), 651-662.

Fraenkel, J. R., & Wallen, N. E. (2009). *How to design and evaluate research in education* (7 ed.). New York: McGraw-Hill

Freiden, J. B. (1984). Advertising spokesperson effects: An examination of endorser type and gender on two audiences. *Journal of Advertising Research, 24*(5), 33-41.

Friedman, H. H., & Friedman, L. (1979). Endorser effectiveness by product type. *Journal of Advertising Research, 19*(5), 63-71.

Friedman, H. H., Santeramo, M. J., & Traina, A. (1978). Correlates of trustworthiness for celebrities. *Journal of the Academy of Marketing Science, 6*(4), 291-299.

Funk, D. (2008). *Consumer behaviour in sport and events: Marketing action*. Oxford: Butterworth-Heinemann.

Garland, R., Charbonneau, J., & Hercus, A. (2006 December). *Celebrity athlete endorsement: What drives choice?* Paper presented at the meeting of the Australia New Zealand Marketing Academy Conference (ANZMAC), Brisbane, Australia. Retrieved from http://www.anzmac.org/conference_archive/2006/documents/Garland_Ron.pdf

Garland, R., & Ferkins, L. (2003, December). *Evaluating New Zealand sports stars as celebrity endorsers: Intriguing results*. presented at the meeting of the Australia New Zealand Marketing Academy Conference (ANZMAC): A celebrations of Ehrenberg and Bass : marketing discoveries, knowledge and contribution, conference proceedings, Adelaide, Australia. Retrieved from

http://dro.deakin.edu.au/eserv/DU:30020954/ferkins-evaluatingnewzealand-2003.pdf
Gawronski, B., & Creighton, L. A. (2013). Dual-process theories. In D. E. Carlston (Ed.), *The Oxford handbook of social cognition* (pp. 282-312). New York: Oxford University Press.
Gill, K., & Overdorf, V. (1994). Incentives for exercise in younger and older women. *Journal of Sport Behavior, 17*(2), 87-97.
Goldsmith, R. E., Lafferty, B. A., & Newell, S. J. (2000). The impact of corporate credibility and celebrity credibility on consumer reaction to advertisements and brands. *Journal of Advertising, 29*(3), 43-54.
Gordon, R., McDermott, L., Stead, M., & Angus, K. (2006). The effectiveness of social marketing interventions for health improvement: What's the evidence? *Public Health, 120*(12), 1133-1139.
Gorn, G. J. (1982). The effects of music in advertising on choice behavior: A classical conditioning approach. *The Journal of Marketing, 46*(1), 94-101.
Grant, B. M., & Giddings, L. S. (2002). Making sense of methodologies: A paradigm framework for the novice researcher. *Contemporary Nurse, 13*(1), 10-28.
Gravetter, F. J., & Forzano, L.-A. B. (2012). *Research methods for the behavioral sciences* (4 ed.). Belmont, CA: Wadsworth.
Greene, J. C., & Caracelli, V. J. (1997). *Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms*. San Francisco: Jossey-Bass Publishers.
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.
Harris, J. A. (2006). Elemental representations of stimuli in associative learning. *Psychological Review, 113*(3), 584-605.
Hassmén, P., Koivula, N., & Uutela, A. (2000). Physical exercise and psychological well-being: A population study in finland. *Preventive Medicine, 30*(1), 17-25.
Havitz, M. E., & Dimanche, F. (1990). Propositions for testing the involvement construct in recreational and tourism contexts. *Leisure Sciences, 12*(2), 179-195.
Henshel, R. L. (1980). The purposes of laboratory experimentation and the virtues of deliberate artificiality. *Journal of Experimental Social Psychology, 16*(5), 466-478.
Hillsdon, M., Cavill, N., Nanchahal, K., Diamond, A., & White, I. (2001). National level promotion of physical activity: results from England's ACTIVE for LIFE campaign. *Journal of Epidemiology and Community Health, 55*(10), 755-761.
Hoek, J., & Jones, S. C. (2011). Regulation, public health and social marketing: A behaviour change trinity. *Journal of Social Marketing, 1*(1), 32-44.
Homer, P. M., & Kahle, L. R. (1990). Source expertise, time of source identification, and involvement in persuasion: An elaborative processing perspective. *Journal of Advertising, 19*(1), 30-39.
Horton, D., & Richard Wohl, R. (1956). Mass communication and para-social interaction: Observations on intimacy at a distance. *Psychiatry, 19*(3), 215-229.
Hotz, R. L. (2005, 27 February). Searching for the Why of Buy, p. A1. Retrieved from http://www.latimes.com/news/la-sci-brain27feb27-story.html
Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion; psychological studies of opinion change*. New Haven, CT: Yale University Press.
Hovland, C. I., & Weiss, W. (1951). The influence of source credibility on communication effectiveness. *The Public Opinion Quarterly, 15*(4), 635-650.

Hsu, C. K., & McDonald, D. (2002). An examination on multiple celebrity endorsers in advertising. *Journal of Product & Brand Management, 11*(1), 19-29.

Huhman, M., Potter, L. D., Wong, F. L., Banspach, S. W., Duke, J. C., & Heitzler, C. D. (2005). Effects of a mass media campaign to increase physical activity among children: Year-1 results of the VERB campaign. *Pediatrics, 116*(2), e277-e284.

Huitema, B. (2011). *The analysis of covariance and alternatives: Statistical methods for experiments, quasi-experiments, and single-case studies* (2 ed.). Hoboken: Wiley.

Hung, K. (2014). Why celebrity sells: A dual entertainment path model of brand endorsement. *Journal of Advertising, 43*(2), 155-166.

Ilicic, J., & Webster, C. M. (2011). Effects of multiple endorsements and consumer-celebrity attachment on attitude and purchase intention. *Australasian Marketing Journal, 19*(4), 230-237.

Inoue, Y., & Kent, A. (2012). Investigating the role of corporate credibility in corporate social marketing: A case study of environmental initiatives by professional sport organizations. *Sport Management Review, 15*(3), 330-344.

Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods, 18*(1), 3-20.

Jackson, D. J., & Darrow, T. I. (2005). The influence of celebrity endorsements on young adults' political opinions. *The Harvard international journal of press/politics, 10*(3), 80-98.

Jain, V., Roy, S., Daswani, A., & Sudha, M. (2010). How celebrities are used in Indian television commercials. *Vikalpa, 35*(4), 45-52.

Johnson, B. K., & Whitehead, J. C. (2000). Value of public goods from sports stadiums: The CVM approach. *Contemporary Economic Policy, 18*(1), 48-58.

Johnson, R. B., & Christensen, L. B. (2008). *Educational research: Quantitative, qualitative, and mixed approaches* (3 ed.): Sage Publications.

Jones, C. R., Olson, M. A., & Fazio, R. H. (2010). Evaluative conditioning: The "How" question. *Advances in Experimental Social Psychology, 43*, 205-255.

Kahle, L. R., & Homer, P. M. (1985). Physical attractiveness of the celebrity endorser: A social adaptation perspective. *Journal of Consumer Research, 11*(4), 954-961.

Kaikati, J. G. (1987). Celebrity advertising: A review and synthesis. *International Journal of Advertising, 6*(2), 93-105.

Kamins, M. A. (1989). Celebrity and noncelebrity advertising in a two-sided context. *Journal of Advertising Research, 29*(3), 34-42.

Kamins, M. A. (1990). An investigation into the "match-up" hypothesis in celebrity advertising: When beauty may be only skin deep. *Journal of Advertising, 19*(1), 4-13.

Kamins, M. A., & Gupta, K. (1994). Congruence between spokesperson and product type: A matchup hypothesis perspective. *Psychology & Marketing, 11*(6), 569-586.

Kane, M. J., LaVoi, N. M., & Fink, J. S. (2013). Exploring elite female athletes' interpretations of sport media images: A window into the construction of social identity and "selling sex" in women's sports. *Communication & Sport, 1*(3), 269-298.

Kang, G.-D., & James, J. (2007). Revisiting the concept of a societal orientation: conceptualization and delineation. *Journal of Business Ethics, 73*(3), 301-318.

Keel, A., & Nataraajan, R. (2012). Celebrity Endorsements and Beyond: New avenues for celebrity branding. *Psychology and Marketing, 29*(9), 690-703.

Kelman, H. C. (1961). Processes of opinion change. *The Public Opinion Quarterly, 25*(1), 57-78.

Kim, J., Allen, C. T., & Kardes, F. R. (1996). An investigation of the mediational mechanisms underlying attitudinal conditioning. *Journal of Marketing Research, 33*(3), 318-328.

Kim, K., & Cheong, Y. (2011). The effects of athlete-endorsed advertising: The moderating role of the athlete-audience ethnicity match. *Journal of Sport Management, 25*(2), 143-155.

Kim, M. S., & Hunter, J. E. (1993). Relationships among attitudes, behavioral intentions, and behavior: A meta-analysis of past research, part 2. *Communication Research, 20*(3), 331-364.

Kim, Y., & Na, J. H. (2007). Effects of celebrity athlete endorsement on attitude towards the product: The role of credibility, attractiveness and the concept of congruence. *International Journal of Sports Marketing and Sponsorship, 8*(4), 310-320.

Kitzinger, J. (1994). The methodology of focus groups: The importance of interaction between research participants. *Sociology of Health and Illness, 16*(1), 103-121.

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), 25-37.

Kolt, G. S., Schofield, G. M., Schofield, L., McLachlan, C., Svendsen, C. A., & Mackay, L. M. (2006). *Best practice review of sport and physical activity interventions for young people aged 13-18 years - Report to Sport and Recreation New Zealand, Volum 1*. Auckland: Auckland University of Technology. Retrieved from http://live.isitesoftware.co.nz/sportWaitakere/documents/Best%20Practice%20Review%20(13-18%20Years)%20-%20Volume%201.pdf

Kotler, P. (1982). *Marketing for nonprofit organizations* (2 ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.

Kotler, P., & Andreasen, A. R. (1991). *Strategic marketing for nonprofit organizations* (4 ed.). Englewood Cliffs, NJ: Prentice Hall, Inc.

Kotler, P., & Armstrong, G. (2012). *Principles of marketing* (14 ed.): Pearson Education.

Kotler, P., Chandler, P. C., Brown, L., & Adam, S. (1984). *Marketing: Australia and New Zealand* (3 ed.). Sydney: Prentice-Hall.

Kotler, P., & Lee, N. R. (2008). *Social marketing: Influencing behaviors for good* (3 ed.). Los Angeles, CA: Sage Publications.

Kotler, P., Roberto, N., & Lee, N. R. (2002). *Social marketing: Improving the quality of life* (2 ed.). Thousand Oaks, CA: Sage Publications.

Kotler, P., & Zaltman, G. (1971). Social marketing: an approach to planned social change. *The Journal of Marketing, 35*(3), 3-12.

Krugman, H. E. (1965). The impact of television advertising: Learning without involvement. *Public Opinion Quarterly, 29*(3), 349-356.

Kyle, G. T., & Mowen, A. J. (2005). An examination of the leisure involvement-agency commitment relationship. *Journal of Leisure Research, 37*(3), 342-363.

La Ferle, C., & Choi, S. M. (2005). The importance of perceived endorser credibility in South Korean advertising. *Journal of current issues & research in advertising, 27*(2), 67-81.

Lafferty, B. A., & Goldsmith, R. E. (1999). Corporate credibility's role in consumers' attitudes and purchase intentions when a high versus a low credibility endorser is used in the ad. *Journal of Business Research, 44*(2), 109-116.

Lafferty, B. A., Goldsmith, R. E., & Newell, S. J. (2002). The dual credibility model: The influence of corporate and endorser credibility on attitudes and purchase intentions. *Journal of Marketing Theory and Practice, 10*(3), 1-12.

Laureus Sport for Good Foundation. (2008). *KICK im Boxring*. Retrieved October 28, 2014, from http://www.laureus.com/projects/europe/kick-im-boxring

Lee, J., & Ferreira, M. (2011). Cause-related marketing: The role of team identification in consumer choice of team licensed products. *Sport Marketing Quarterly, 20*(3), 157-169.

Lee, Y., & Koo, J. (2015). Athlete endorsement, attitudes, and purchase intention: The interaction effect between athlete endorser-product congruence and endorser credibility. *Journal of Sport Management, 29*(4), 523-538.

Limbu, Y. B., Huhmann, B. A., & Peterson, R. T. (2012). An examination of humor and endorser effects on consumers' responses to direct-to-consumer advertising: The moderating role of product involvement. *International Journal of Pharmaceutical and Healthcare Marketing, 6*(1), 23-38.

Liu, M. T., & Brock, J. L. (2011). Selecting a female athlete endorser in China: The effect of attractiveness, match-up, and consumer gender difference. *European Journal of Marketing, 45*(7/8), 1214-1235.

Lockwood, P., Jordan, C. H., & Kunda, Z. (2002). Motivation by positive or negative role models: Regulatory focus determines who will best inspire us. *Journal of Personality and Social Psychology, 83*(4), 854-864.

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), 91-103.

Low, S.-F., & Lim, S.-W. (2012). Impacts of celebrity endorser on Malaysian young consumers: An empirical study in the sports industry. *SEGi Review, 5*(1), 95-114.

MacDonald, L., Cairns, G., Angus, K., & Stead, M. (2012). *Evidence review: Social marketing for the prevention and control of communicable disease*. Stockholm: European Centre for Disease Prevention and Control. Retrieved from https://ecdc.europa.eu/sites/portal/files/media/en/publications/Publications/Social-marketing-prevention-control-of-communicable-disease.pdf

MacKenzie, S. B., & Lutz, R. J. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *Journal of Marketing, 53*(2), 48-65.

Malhotra, N. K. (2010). *Marketing research: An applied orientation* (6 ed.). New Jersey: Prentice Hall, Pearson.

Malik, G., & Guptha, A. (2014). Impact of celebrity endorsements and brand mascots on consumer buying behavior. *Journal of Global Marketing, 27*(2), 128-143.

Martin, B. A. S., Wentzel, D., & Tomczak, T. (2008). Effects of susceptibility to normative influence and type of testimonial on attitudes toward print advertising. *Journal of Advertising, 37*(1), 39-43.

Martin, J. H. (1996). Is the athlete's sport important when picking an athlete to endorse a nonsport product? *Journal of Consumer Marketing, 13*(6), 28-43.

McCracken, G. (1989). Who is the celebrity endorser? Cultural foundations of the endorsement process. *Journal of Consumer Research, 16*(3), 310-321.

McGuire, W. J. (1985). Attitudes and attitude change. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (3 ed., Vol. 2, pp. 233-346). New York: Newbery Award Records.

McSweeney, F. K., & Bierley, C. (1984). Recent developments in classical conditioning. *Journal of Consumer Research, 11*(2), 619-631.

Miciak, A. R., & Shanklin, W. L. (1994). Choosing celebrity endorsers. *Marketing Management, 3*(3), 50-59.

Miles, L. (2007). Physical activity and health. *Nutrition Bulletin, 32*(4), 314-363.

Miller, F. M., & Allen, C. T. (2012). How does celebrity meaning transfer? Investigating the process of meaning transfer with celebrity affiliates and mature brands. *Journal of Consumer Psychology, 22*(3), 443-452.

Miller, G. R., & Baseheart, J. (1969). Source trustworthiness, opinionated statements, and response to persuasive communication. *36*(1), 1-7.

Ministry of Health. (2007). *Healthy eating – healthy action oranga kai – oranga pumau: Progress on implementing the HEHA strategy 2007*. Wellington: Ministry of Health. Retrieved from http://www.moh.govt.nz/notebook/nbbooks.nsf/0/c66025a2705dcf6ccc2572ca00080a58/$FILE/heha-progress-implementation-strategy-2007-v2.pdf

Ministry of Health. (2013). *Health loss in New Zealand: A report from the New Zealand Burden of Diseases, Injuries and Risk Factors Study, 2006–2016*. Wellington: Ministry of Health. Retrieved from http://thehub.superu.govt.nz/sites/default/files/41073_health-loss-in-new-zealand-final_0.pdf

Ministry of Health. (2014). *Annual update of key results 2013/14: New Zealand health survey*. Wellington: Ministry of Health. Retrieved from http://www.health.govt.nz/system/files/documents/publications/annual-update-key-results-nzhs-2013-14-dec14-v2.pdf

Ministry of Health. (2016). *Annual update of key results 2015/16: New Zealand health survey*. Wellington: Ministry of Health. Retrieved from http://www.health.govt.nz/system/files/documents/publications/annual-update-key-results-2015-16-nzhs-dec16-v2.pdf

Misra, S., & Beatty, S. E. (1990). Celebrity spokesperson and brand congruence: An assessment of recall and affect. *Journal of Business Research, 21*(2), 159-173.

Mitchell, M., & Jolley, J. (2013). *Research design explained* (8 ed.): Wadsworth, Cengage Learning.

Mizerski, D., Mizerski, K., & Sadler, O. (2002). A field experiment comparing the effectiveness of “ambush” and cause related ad appeals for social marketing causes. *Journal of Nonprofit & Public Sector Marketing, 9*(4), 25-45.

Möller, C., Oberhäuser, K. P., & von Sikorski, C. (2010). Media Immersion and Disability: Perception and Effects of Sports Endorsers with Disability in Advertising. In M. Dontschewa & A. Künz (Eds.), *Eintauchen in Medien* (pp. 113-119). Berlin, Germany: Pabst Science Publishers.

Money, R. B., Shimp, T. A., & Sakano, T. (2006). Celebrity endorsements in Japan and the United States: Is negative information all that harmful? *Journal of Advertising Research, 46*(1), 113-123.

Moreland, R. L., & Zajonc, R. B. (1982). Exposure effects in person perception: Familiarity, similarity, and attraction. *Journal of Experimental Social Psychology, 18*(5), 395-415.

Morgan, D. L. (1996). Focus groups. *Annual Review of Sociology, 22*, 129-152.

Morgan, D. L. (1997). *Focus groups as qualitative research* (Vol. 16): Sage.

Morris, Z. S., & Clarkson, P. J. (2009). Does social marketing provide a framework for changing healthcare practice? *Health Policy, 91*(2), 135-141.

Morton, L. P. (2002). Targeting generation Y. *Public Relations Quarterly, 47*(2), 46.

Muda, M., Musa, R., Mohamed, R. N., & Borhan, H. (2014). Celebrity entrepreneur endorsement and advertising effectiveness. *Procedia - Social and Behavioral Sciences, 130*, 11-20.

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.

Murphy, N. M., & Bauman, A. (2007). Mass sporting and physical activity events: Are they "bread and circuses" or public health interventions to increase population levels of physical activity? *Journal of Physical Activity and Health, 4*(2), 193-202.

National Consumer Council. (2006). *It's our health! Realising the potential of effective social marketing*. London: National Social Marketing Centre. Retrieved from http://www.thensmc.com/file/244/download?token=S74a2YN9.

Newman, I., & Benz, C. R. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum*. Carbondale: Southern Illinois University Press.

Newton, J. D., Ewing, M. T., & Finch, C. F. (2013). Social marketing: Why injury prevention needs to adopt this behaviour change approach. *British Journal of Sports Medicine, 47*(11), 665-667.

Nezlek, J. B., Krohn, W., Wilson, D., & Maruskin, L. (2015). Gender differences in reactions to the sexualization of athletes. *The Journal of social psychology, 155*(1), 1-11.

Nord, W. R., & Peter, J. P. (1980). A behavior modification perspective on marketing. *Journal of Marketing, 44*(2), 36-47.

Norman, P., & Smith, L. (1995). The theory of planned behaviour and exercise: An investigation into the role of prior behaviour, behavioural intentions and attitude variability. *European Journal of Social Psychology, 25*(4), 403-415.

Norusis, M. (2008). *SPSS 17.0 advanced statistical procedures companion*. Upper Saddle River, N.J.: Prentice Hall.

O'Regan, V. R. (2014). The celebrity influence: Do people really care what they think? *Celebrity Studies, 5*(4), 469-483.

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, 31*(1), 46-54.

Olivier, J., Johnson, W. D., & Marshall, G. D. (2008). The logarithmic transformation and the geometric mean in reporting experimental IgE results: What are they and when and why to use them? *Annals of Allergy, Asthma & Immunology, 100*(4), 333-337.

Onwuegbuzie, A. J., & Collins, K. M. (2007). A typology of mixed methods sampling designs in social science research. *Qualitative Report, 12*(2), 281-316.

Onwuegbuzie, A. J., & Leech, N. L. (2004). Enhancing the interpretation of "significant" findings: The role of mixed methods research. *The Qualitative Report, 9*(4), 770-792.

Onwuegbuzie, A. J., & Leech, N. L. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *International Journal of Social Research Methodology, 8*(5), 375-387.

Pallant, J. (2016). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS* (6 ed.). Sydney, Australia: Allen & Unwin.

Park, C. W., & Lessig, V. P. (1981). Familiarity and its impact on consumer decision biases and heuristics. *Journal of Consumer Research, 8*(2), 223-230.

Patzer, G. L. (1983). Source credibility as a function of communicator physical attractiveness. *Journal of Business Research, 11*(2), 229-241.

Pavlov, I. P. (1902). *The work of the digestive glands.* (W. H. Thompson, Trans.). London: C. Griffin.

Pavlov, I. P. (1928). *Lectures on conditioned reflexes* (W. H. Gantt, Trans.). New York: Liveright.

Peetz, T. B., Parks, J. B., & Spencer, N. E. (2004). Sport heroes as sport product endorsers: The role of gender in the transfer of meaning process for selected undergraduate students. *Sport Marketing Quarterly, 13*(3), 141-150.

Penedo, F. J., & Dahn, J. R. (2005). Exercise and well-being: a review of mental and physical health benefits associated with physical activity. *Current Opinion in Psychiatry, 18*(2), 189-193.

Peterson, R. A. (2001). On the use of college students in social science research: Insights from a second-order meta-analysis. *Journal of Consumer Research, 28*(3), 450-461.

Petty, R. E., & Cacioppo, J. T. (1981). Issue involvement as a moderator of the effects on attitude of advertising content and context. *Advances in Consumer Research, 8*(1), 20-24.

Petty, R. E., & Cacioppo, J. T. (1986a). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.

Petty, R. E., & Cacioppo, J. T. (1986b). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 19, pp. 123-205). San Diego: CA: Academic Press.

Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research, 10*(2), 135-146.

Petty, R. E., Wegener, D. T., & Fabrigar, L. R. (1997). Attitudes and attitude change. *Annual Review of Psychology, 48*(1), 609-647.

Petty, R. E., Wheeler, S. C., & Tormala, Z. L. (2003). Persuasion and attitude change. In T. M. I. B. Weiner, & M. J. Lerner (Ed.), *Handbook of psychology: Personality and social psychology* (2 ed., Vol. 5, pp. 369–389). Hoboken, NJ: John Wiley & Sons.

Prastatia, S. L. (2014). *The effect of celebrity endorsement towards purchase intention with attitude towards advertisement as mediation*. Universitas Muhammadiyah Surakarta, Indonesia. Retrieved from http://eprints.ums.ac.id/36810/17/Artikel%20Publikasi.pdf

Premeaux, S. R. (2009). The attitudes of middle class versus upper class male and female consumers regarding the effectiveness of celebrity endorsers. *Journal of Promotion Management, 15*(1-2), 2-21.

Razali, N. M., & Wah, Y. B. (2011). Power comparisons of shapiro-wilk, kolmogorov-smirnov, lilliefors and anderson-darling tests. *Journal of Statistical Modeling and Analytics, 2*(1), 21-33.

Reger, B., Cooper, L., Booth-Butterfield, S., Smith, H., Bauman, A., Wootan, M., . . . Greer, F. (2002). Wheeling Walks: A community campaign using paid media to encourage walking among sedentary older adults. *Preventive Medicine, 35*(3), 285-292.

Rice, D. H., Kelting, K., & Lutz, R. J. (2012). Multiple endorsers and multiple endorsements: The influence of message repetition, source congruence and involvement on brand attitudes. *Journal of Consumer Psychology, 22*(2), 249-259.

Roozen, I. (2008, January). *The relative effectiveness of celebrity endorsement for beauty, high-and low involvement product print advertisements*. presented at the meeting of the 7th International Congress Marketing Trends, Venetia, Italy. Retrieved from http://www.marketing-trends-congress.com/archives/2008/Materiali/Paper/Fr/Roozen.pdf

Roy, D. P. (2011). Impact of congruence in cause marketing campaigns for professional sport organisations. *International Journal of Sport Management and Marketing, 10*(1), 21-34.

Roy, S., Jain, V., & Rana, P. (2013). The moderating role of consumer personality and source credibility in celebrity endorsements. *Asia-Pacific Journal of Business Administration, 5*(1), 72-88.

Rudd, A., & Johnson, R. B. (2010). A call for more mixed methods in sport management research. *Sport Management Review, 13*(1), 14-24.

Rush, E., Graham, D., McLennan, S., & Latimer, K. (2011). *An evaluation of nutrition and physical activity in Waikato primary schools (Project Energize: June 2008 to June 2011)* New Zealand: Sport Waikato / AUT University. Retrieved from http://www.sportwaikato.org.nz/files/PE%20June%2008%20to%20June%2011%20final%20exec%20summary.pdf

Russell, C. J., & Dean, M. A. (2000). To log or not to log: Bootstrap as an alternative to the parametric estimation of moderation effects in the presence of skewed dependent variables. *Organizational Research Methods, 3*(2), 166-185.

Sam, M. (2011). New Zealand. In M. Nicholson, R. Hoye, & B. Houlihan (Eds.), *Participation on sport: International policy perspectives* (pp. 238-254). Abingdon, Oxon: Routledge.

Sato, S., Ko, Y. J., Kaplanidou, K., & Connaughton, D. P. (2016). Consumers' comparative evaluative judgment of athlete endorsers. *Journal of Sport Management, 30*(5), 553-565.

Sawyer, A. G. (1975). Demand artifacts in laboratory experiments in consumer research. *Journal of Consumer Research, 1*(4), 20-30.

Shank, M. D. (2009). *Sports marketing: A strategic perspective* (4 ed.). New Jersey: Pearson Prentice Hall.

Shapiro, S. S., & Wilk, M. B. (1965). An analysis of variance test for normality (complete samples). *Biometrika, 52*(3/4), 591-611.

Sheeran, P., & Taylor, S. (1999). Predicting intentions to use condoms: A meta-analysis and comparison of the theories of reasoned action and planned behavior. *Journal of Applied Social Psychology, 29*(8), 1624-1675.

Sheeran, P., Trafimow, D., Finlay, K. A., & Norman, P. (2002). Evidence that the type of person affects the strength of the perceived behavioural control-intention relationship. *British Journal of Social Psychology, 41*(2), 253-270.

Sherif, M., & Cantril, H. (1947). *The psychology of ego-involvements: Social attitudes and identifications*. New York: John Wiley & Sons, Inc.

Shilbury, D., Quick, S., & Westerbeek, H. (2003). *Strategic sport marketing*: Allen & Unwin.

Shimp, T. A. (1991). Neo-Pavlovian conditioning and its implications for consumer theory and research. In T. S. Robertson & H. H. Kassarjian (Eds.), *Handbook of Consumer Behavior* (pp. 162-187). Englewood Cliffs, NJ: Prentice Hall.

Shimp, T. A. (2010). *Integrated Marketing Communication in Advertising and Promotion* (8 ed.). Mason, OH, United States: South-Western/Cengage Learning.

Shimp, T. A., Stuart, E. W., & Engle, R. W. (1991). A program of classical conditioning experiments testing variations in the conditioned stimulus and context. *Journal of Consumer Research, 18*(1), 1-12.

Shuart, J. (2007a). *Endorser source credibility: Redefining spokesperson influence through development of the celebrity-hero matrix*. presented at the meeting of the Sport Marketing Association: Sport Marketing in the New Millennium, Fitness Information Technology. Retrieved from http://digitalcommons.sacredheart.edu/cgi/viewcontent.cgi?article=1226&context=wcob_fac

Shuart, J. (2007b). Heroes in sport: assessing celebrity endorser effectiveness. *Intrnational Journal of Sports Marketing and Sponsorship, 8*(2), 11-25.

Sigall, H., & Mills, J. (1998). Measures of independent variables and mediators are useful in social psychology experiments: But are they necessary? *Personality and Social Psychology Review, 2*(3), 218-226.

Silvera, D. H., & Austad, B. (2004). Factors predicting the effectiveness of celebrity endorsement advertisements. *European Journal of Marketing, 38*(11/12), 1509-1526.

Simmers, C. S., Damron-Martinez, D., & Haytko, D. L. (2009). Examining the effectiveness of athlete celebrity endorser characteristics and product brand type: The endorser expertise continuum. *Journal of Sport Administration & Supervision, 1*(1), 52-64.

Smith, M. F. (2010). *Research methods in sport*. Exeter: Learning Matters Ltd.

Snyder, M., & Rothbart, M. (1971). Communicator attractiveness and opinion change. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 3*(4), 377-387.

Sport New Zealand. (2012). *Statement of intent 2012-2015*. Wellington: Sport New Zealand. Retrieved from http://www.sportnz.org.nz/Documents/Publications/Statement%20of%20Intent/Statement%20of%20Intent%202012%20-%202015.pdf.

Sport New Zealand. (2013a). *Sport and recreation participation trends 1997-2007*. Wellington: Sport New Zealand. Retrieved from http://www.sportnz.org.nz/assets/uploads/attachments/managing-sport/research/sport-and-active-recreation-in-the-lives-of-new-zealand-adults.pdf

Sport New Zealand. (2013b). *Statement of intent 2013-2016*. Wellington: Sport New Zealand. Retrieved from http://www.sportnz.org.nz/assets/Uploads/attachments/About-us/Statement-of-Intent-2013-2016.pdf

Sport New Zealand. (2014). *Statement of intent 1 July 2014- 30 June 2020*. Wellington: Sport New Zealand. Retrieved from http://www.sportnz.org.nz/assets/Uploads/attachments/About-us/Statement-of-Intent-2014-2020.pdf

Sport New Zealand. (2015). *Sport and active recreation in the lives of New Zealand adults: 2013/14 active New Zealand survey*. Wellington: Sport New Zealand. Retrieved from http://sportnz.org.nz/assets/uploads/attachments/managing-sport/research/sport-and-active-recreation-in-the-lives-of-new-zealand-adults.pdf

Spry, A., Pappu, R., & Cornwell, T. B. (2011). Celebrity endorsement, brand credibility and brand equity. *European Journal of Marketing, 45*(6), 882-909.

Staats, A. W., & Staats, C. K. (1958). Attitudes established by classical conditioning. *The Journal of Abnormal and Social Psychology, 57*(1), 37-40.

Statistics New Zealand. (2014). *Major ethnic groups in New Zealand*. Retrieved from www.stats.govt.nz/~/media/Statistics/Census/2013%20Census/profile-and-summary-reports/infographic-culture-identity/culture-identity-infographic-poster.pdf

Stead, M., Gordon, R., Angus, K., & McDermott, L. (2007). A systematic review of social marketing effectiveness. *Health Education, 107*(2), 126-191.

Stevens, J. A., Lathrop, A. H., & Bradish, C. L. (2003). Who is your hero? Implications for athlete endorsement strategies. *Sport Marketing Quarterly, 12*(2), 103-110.

Stoltenberg, C. D., Leach, M. M., & Bratt, A. (1989). The elaboration likelihood model and psychotherapeutic persuasion. *Journal of Cognitive Psychotherapy, 3*(3), 181-199.

Stone, G., Joseph, M., & Jones, M. (2003). An exploratory study on the use of sports celebrities in advertising: A content analysis. *Sport Marketing Quarterly, 12*(2), 94-102.

Stuart, E. W., Shimp, T. A., & Engle, R. W. (1987). Classical conditioning of consumer attitudes: Four experiments in an advertising context. *Journal of Consumer Research, 14*(3), 334-349.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5 ed.). Boston: Pearson/Allyn & Bacon.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Tousand Oaks, CA: Sage.

Teddlie, C., & Yu, F. (2007). Mixed methods sampling a typology with examples. *Journal of Mixed Methods Research, 1*(1), 77-100.

Thomson, M. (2006). Human brands: Investigating antecedents to consumers' strong attachments to celebrities. *Journal of Marketing, 70*(3), 104-119.

Thwaites, D., Lowe, B., Monkhouse, L. L., & Barnes, B. R. (2012). The impact of negative publicity on celebrity ad endorsements. *Psychology and Marketing, 29*(9), 663-673.

Till, B. D. (1998). Using celebrity endorsers effectively: Lessons from associative learning. *Journal of Product & Brand Management, 7*(5), 400-409.

Till, B. D., & Busler, M. (1998). Matching products with endorsers: Attractiveness versus expertise. *Journal of Consumer Marketing, 15*(6), 576-586.

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.

Till, B. D., & Priluck, R. L. (2000). Stimulus generalization in classical conditioning: An initial investigation and extension. *Psychology & Marketing, 17*(1), 55-72.

Till, B. D., & Shimp, T. A. (1998). Endorsers in advertising: The case of negative celebrity information. *Journal of Advertising, 27*(1), 67-82.

Till, B. D., Stanley, S. M., & Priluck, R. (2008). Classical conditioning and celebrity endorsers: An examination of belongingness and resistance to extinction. *Psychology & Marketing, 25*(2), 179-196.

Tom, G., Clark, R., Elmer, L., Grech, E., Masetti Jr, J., & Sandhar, H. (1992). The use of created versus celebrity spokespersons in advertisements. *Journal of Consumer Marketing, 9*(4), 45-51.

Townsend, N., Wickramasinghe, K., Williams, J., Bhatnagar, P., & Rayner, M. (2015). *Physical activity statistics 2015*. London: British Heart Foundation. Retrieved from https://www.bhf.org.uk/publications/statistics/physical-activity-statistics-2015

Tripp, C., Jensen, T. D., & Carlson, L. (1994). The effects of multiple product endorsements by celebrities on consumers' attitudes and intentions. *Journal of Consumer Research, 20*(4), 535-547.

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.

Van der Veen, R. (2008). Analysis of the implementation of celebrity endorsement as a destination marketing instrument. *Journal of Travel and Tourism Marketing, 24*(2-3), 213-222.

Van der Veen, R., & Song, H. (2014). Impact of the perceived image of celebrity endorsers on tourists' intentions to visit. *Journal of Travel Research, 53*(2), 211-224.

Van der Waldt, D., Van Loggerenberg, M., & Wehmeyer, L. (2009). Celebrity endorsements versus created spokespersons in advertising: A survey among

students. *South African Journal of Economic and Management Sciences, 12*(1), 100-114.
Van Norel, N. D., Kommers, P. A. M., Van Hoof, J. J., & Verhoeven, J. W. M. (2014). Damaged corporate reputation: Can celebrity Tweets repair it? *Computers in Human Behavior, 36*(0), 308-315.
Veer, E., Becirovic, I., & Martin, B. A. S. (2010). If Kate voted Conservative, would you?: The role of celebrity endorsements in political party advertising. *European Journal of Marketing, 44*(3-4), 436-450.
Vehmas, H. (2012). [Review of the book *Participation in sport: International policy perspectives*, by M. Nicholson, R. Hoye R., & B. Houlihan (Eds.)]. *European Journal for Sport and Society, 9*(4), 311-314. Retrieved from http://www.tandfonline.com/ress
Vella, S. A., Cliff, D. P., Magee, C. A., & Okely, A. D. (2014). Sports participation and parent-reported health-related quality of life in children: Longitudinal associations. *The Journal of Pediatrics, 164* (6), 1469-1474.
Veltri, F., Kuzman, A., Stotlar, D., Viswanathan, R., & Miller, J. (2003). Athlete-endorsers: Do they affect young consumer purchasing decisions. *International Journal of Sport Management, 4*(2), 145-160.
Von Sikorski, C., Schierl, T., Möller, C., & Oberhäuser, K. P. (2012). Visual news framing and effects on recipients' attitudes toward athletes with physical disabilities. *International Journal of Sport Communication, 5*(1), 69-86.
Walsh, P., & Williams, A. (2017). To extend or not extend a human brand: An analysis of perceived fit and attitudes towards athlete brand extensions. *Journal of Sport Management, 31*(1), 44-60.
Watson, J. B., & Watson, R. R. (1921). Studies in infant psychology. *Scientific Monthly, 13*(6), 493-515.
Webster, M., & Kervin, J. B. (1971). Artificiality in experimental sociology. *Canadian Review of Sociology/Revue canadienne de sociologie, 8*(4), 263-272.
Weinreich, N. K. (2011). *Hands-on social marketing: A step-by-step guide to designing change for good*. Los Angeles: Sage Publications.
Wen, C. P., Wai, J. P. M., Tsai, M. K., Yang, Y. C., Cheng, T. Y. D., Lee, M.-C., . . . Wu, X. (2011). Minimum amount of physical activity for reduced mortality and extended life expectancy: a prospective cohort study. *The Lancet, 378*(9798), 1244-1253.
White, D. W., Goddard, L., & Wilbur, N. (2009). The effects of negative information transference in the celebrity endorsement relationship. *International Journal of Retail and Distribution Management, 37*(4), 322-335.
Whitehead, J. L., Jr. (1968). Factors of source credibility. *Quarterly Journal of Speech, 54*(1), 59-63.
Wilmot, E. G., Edwardson, C. L., Achana, F. A., Davies, M. J., Gorely, T., Gray, L. J., . . . Biddle, S. J. (2012). Sedentary time in adults and the association with diabetes, cardiovascular disease and death: systematic review and meta-analysis. *Diabetologia, 55*(11), 2895-2905.
Wolin, L. D. (2003). Gender issues in advertising: An oversight synthesis of research 1970–2002. *Journal of Advertising Research, 43*(1), 111-129.
World Health Organization. (2000). *Obesity: Preventing and managing the global epidemic*. Geneva: World Health Organization.
Xing, X., & Chalip, L. (2006). Effects of hosting a sport event on destination brand: A test of co-branding and match-up models. *Sport Management Review, 9*(1), 49-78.
Yannopoulos, P. (2012). Celebrity advertising: Literature review and propositions. *World Review of Business Research, 2*(4), 24-36.

Yi, Y. (1990). Cognitive and affective priming effects of the context for print advertisements. *Journal of Advertising, 19*(2), 40-48.

Zaichkowsky, J. L. (1994). The personal involvement inventory: Reduction, revision, and application to advertising. *Journal of Advertising, 23*(4), 59-70.

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.

Appendices

Appendix A – List of Abbreviations

Abbreviation	Full name
ANCOVA	Analysis of Covariance
ANOVA	Analysis of Variance
AUT	Auckland University of Technology
ANZMAC	Australian and New Zealand Marketing Academy Conference
CR	Conditioned Stimulus
CRM	Cause-Related Marketing
CS	Conditioned Stimulus
ELM	Elaboration Likelihood Model
GDP	Gross Domestic Product
Gen Y	Generation Y
GLM	General Linear Model
HPA	Health Promotion Agency
HSC	Health Sponsorship Council
HSM	Heuristic-Systematic Model
NSO	National Sport Organisation
NZ	New Zealand
NZHS	New Zealand Health Survey
PA	Physical Activity
RST	Regional Sport Trust
SMAANZ	Sport Management Association of Australia and New Zealand
Sport NZ	Sport New Zealand
UR	Unconditioned Response
US	Unconditioned Stimulus

Appendix B – Ethics Approval

AUTEC
SECRETARIAT

18 June 2015

Michael Naylor
Faculty of Health and Environmental Sciences

Dear Michael

Ethics Application: **15/201 Celebrity athlete endorsement and social marketing: Promoting participation in sport and physical activity.**

Thank you for submitting your application for ethical review. I am pleased to advise that the Auckland University of Technology Ethics Committee (AUTEC) approved your ethics application at their meeting on 15 June 2015, subject to the following conditions:

1. Inclusion of advice with respect to the ethnic groups eligible for the focus groups in the Information Sheet;
2. Provision of evidence of consultation with respect to the cultural appropriateness of research practices.

Please provide me with a response to the points raised in these conditions, indicating either how you have satisfied these points or proposing an alternative approach. AUTEC also requires copies of any altered documents, such as Information Sheets, surveys etc. You are not required to resubmit the application form again. Any changes to responses in the form required by the committee in their conditions may be included in a supporting memorandum.

Please note that the Committee is always willing to discuss with applicants the points that have been made. There may be information that has not been made available to the Committee, or aspects of the research may not have been fully understood.

Once your response is received and confirmed as satisfying the Committee's points, you will be notified of the full approval of your ethics application. Full approval is not effective until all the conditions have been met. Data collection may not commence until full approval has been confirmed. If these conditions are not met within six months, your application may be closed and a new application will be required if you wish to continue with this research.

To enable us to provide you with efficient service, we ask that you use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

I look forward to hearing from you,

Yours sincerely

Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Shima Behnoosh shima.behnoosh@aut.ac.nz

Auckland University of Technology Ethics Committee
WA505F Level 5 WA Building City Campus
Private Bag 92006 Auckland 1142 Ph: +64-9-921-9999 ext 8316 email ethics@aut.ac.nz

Appendix C – Participant Information Sheet

C1: Quantitative Phase of Study 1

Participant Information Sheet

AUT UNIVERSITY
TE WĀNANGA ARONUI O TAMAKI MAKAU RAU

Date Information Sheet Produced:

01 Jun 2015

Project Title

Social marketing for promoting participation in sport and physical activity

An Invitation

Hello, my name is Shima Behnoosh. I am a PhD student in Sport and Recreation at Auckland University of Technology (AUT). I am inviting you to participate in a research project on social marketing for promoting sport and physical activity.

What is the purpose of this research?

The purpose of the research is to better understand how to promote physical activity and sport participation through social marketing programmes.

This research will allow me to complete a PhD, present my research at conferences and publish in academic and professional journals.

The research will enable organisations to be more effective in their programmes for promoting sport and physical activity.

How was I identified and why am I being invited to participate in this research?

You have been invited to participate in this research because you are studying at Auckland University of Technology and a potential participant of social marketing programmes for promoting sport and physical activity.

What will happen in this research?

You will watch a short slide show of different images and advertisements. I will then ask you to complete a questionnaire.

What are the discomforts and risks?

There is no obvious risks or discomforts directly associated to this research study. There are no right or wrong answers.

How will these discomforts and risks be alleviated?

Your involvement is voluntary, and you may withdraw at any stage of the data collection.

What are the benefits?

The ultimate goal of this project is to increase participation in sport and physical activity among New Zealanders, especially young adults.

How will my privacy be protected?

No identifying data will be collected and your privacy will be fully protected.

1

What are the costs of participating in this research?

The only cost involved in participating in this research is that of your time. This time commitment required will be approximately 15 minutes.

What opportunity do I have to consider this invitation?

You are requested to consider and response to this invitation within the next week.

How do I agree to participate in this research?

At next week's class, we will conduct the survey. Simply remain after class.

Will I receive feedback on the results of this research?

Yes. It is anticipated that a summary of the findings will be available within 12 months of completion of the project and copies of this will be made available on website [http://www.sprinz.aut.ac.nz].

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Michael Naylor, Michael.naylor@aut.ac.nz, 921-9999 ext 6627.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, ethics@aut.ac.nz , 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

Shima Behnoosh, shima.behnoosh@aut.ac.nz, 921-9999 ext 9673

Project Supervisor Contact Details:

Michael Naylor, michael.naylor@aut.ac.nz, 921-9999 ext 6627.

Approved by the Auckland University of Technology Ethics Committee on 30 June 2015, AUTEC Reference number 15 /201.

C2: Quantitative Phases of Study 2, Study 3, and Pre-test

Participant Information Sheet

AUT UNIVERSITY
TE WĀNANGA ARONUI O TAMAKI MAKAU RAU

Date Information Sheet Produced:

01 Jun 2015

Project Title

Celebrity athlete endorsement and social marketing: Promoting participation in sport and physical activity

An Invitation

Hello, my name is Shima Behnoosh. I am a PhD student in Sport and Recreation at Auckland University of Technology (AUT). I am inviting you to participate in a research project which explores the effects of celebrity athlete endorsers on social marketing programmes for promoting sport and physical activity.

What is the purpose of this research?

The purpose of the research is to better understand how to promote physical activity and sport participation through social marketing programmes which use celebrity athlete endorsement.

This research will allow me to complete a PhD, present my research at conferences and publish in academic and professional journals.

The research will enable organisations to be more effective in their programmes for promoting sport and physical activity.

How was I identified and why am I being invited to participate in this research?

You have been invited to participate in this research because you are studying at Auckland University of Technology and a potential participant of social marketing programmes for promoting sport and physical activity.

What will happen in this research?

You will be asked to complete a questionnaire for approximately 15 minutes.

What are the discomforts and risks?

There is no obvious risks or discomforts directly associated to this research study. There are no right or wrong answers.

How will these discomforts and risks be alleviated?

Your involvement is voluntary, and you may withdraw at any stage of the data collection.

What are the benefits?

The ultimate goal of this project is to increase participation in sport and physical activity among New Zealanders, especially young adults.

How will my privacy be protected?

No identifying data will be collected and your privacy will be fully protected.

What are the costs of participating in this research?

The only cost involved in participating in this research is your time. This time commitment required will be approximately 15 minutes.

What opportunity do I have to consider this invitation?

You are requested to consider to this invitation within the next week.

How do I agree to participate in this research?

At next week's class, we will conduct the survey.

Will I receive feedback on the results of this research?

Yes. It is anticipated that a summary of the findings will be available within 12 months of completion of the project and copies of this will be made available on website [http://www.sprinz.aut.ac.nz].

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Michael Naylor, Michael.naylor@aut.ac.nz, 921-9999 ext 6627.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, ethics@aut.ac.nz , 921 9999 ext 6038.

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Researcher Contact Details:

Shima Behnoosh, shima.behnoosh@aut.ac.nz, 921-9999 ext 9673

Project Supervisor Contact Details:

Michael Naylor, michael.naylor@aut.ac.nz, 921-9999 ext 6627.

Approved by the Auckland University of Technology Ethics Committee on 30 June 2015, AUTEC Reference number 15 /201.

C3: Qualitative phases of Study 1, Study 2, and Study 3

Participant Information Sheet

AUT UNIVERSITY
TE WĀNANGA ARONUI O TAMAKI MAKAU RAU

Date Information Sheet Produced:

01 Jun 2015

Project Title

Celebrity athlete endorsement and social marketing: Promoting participation in sport and physical activity

An Invitation

Hello, my name is Shima Behnoosh. I am a PhD student in Sport and Recreation at Auckland University of Technology (AUT). I am inviting you to participate in a research project which explores the effects of celebrity athlete endorsers on social marketing programmes for promoting sport and physical activity.

What is the purpose of this research?

The purpose of the research is to better understand the ability of celebrity athletes to promote physical activity and sport participation through social marketing programmes.

This research will allow me to complete a PhD, present my research at conferences and publish in academic and professional journals.

The research will enable organisations to be more effective in their programmes for promoting sport and physical activity.

How was I identified and why am I being invited to participate in this research?

All ethnic groups were invited to contribute in this research and previously, you indicated an interest in participating in this phase of the research.

What will happen in this research?

You will participate in a group conversation about celebrity athletes, physical activity and sport participation. I will guide this conversation with a few questions.

What are the discomforts and risks?

There is no obvious risks or discomforts directly associated to this research study. You may feel uncomfortable about expressing your opinion in front of others. It is possible that someone in the group will express an opinion different from your own. There are no right or wrong answers.

How will these discomforts and risks be alleviated?

Your involvement is voluntary, and you may withdraw at any stage of the data collection and analysis process. I will provide 'ground rules' for all participants to ensure that everyone behaves appropriately.

What are the benefits?

The ultimate goal of this project is to increase participation in sport and physical activity among New Zealanders, especially young adults.

How will my privacy be protected?

I will not refer to you by name in any of my publications. Other participants in the focus group will know your identity.

What are the costs of participating in this research?

The only cost involved in participating in this research is that of your time. This time commitment required will be approximately 60 minutes.

What opportunity do I have to consider this invitation?

You have one week to consider and response to this invitation.

How do I agree to participate in this research?

By accepting to come to focus group session and completing consent form.

Will I receive feedback on the results of this research?

Yes. It is anticipated that a summary of the findings will be available within 12 months of completion of the project and copies of this will be sent to you.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Michael Naylor, Michael.naylor@aut.ac.nz, 921-9999 ext 6627.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, ethics@aut.ac.nz , 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

Shima Behnoosh, shima.behnoosh@aut.ac.nz, 921-9999 ext 9673

Project Supervisor Contact Details:

Michael Naylor, michael.naylor@aut.ac.nz, 921-9999 ext 6627.

Approved by the Auckland University of Technology Ethics Committee on 30 June 2015, AUTEC Reference number 15 /201.

Appendix D – Consent Form

Consent Form

Focus group

Project title: Celebrity athlete endorsement and social marketing: promoting participation in sport and physical activity

Project Supervisor: Michael Naylor

Researcher: Shima Behnoosh

- O I have read and understood the information provided about this research project in the Information Sheet dated 01 Jun 2015.
- O I have had an opportunity to ask questions and to have them answered.
- O I understand that identity of my fellow participants and our discussions in the focus group is confidential to the group and I agree to keep this information confidential.
- O I understand that notes will be taken during the focus group and that it will also be audio-taped and transcribed.
- O I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- O If I withdraw, I understand that while it may not be possible to destroy all records of the focus group discussion of which I was part, the relevant information about myself including tapes and transcripts, or parts thereof, will not be used.
- O I agree to take part in this research.
- O I wish to receive a copy of the report from the research (please tick one): YesO NoO

Participant's signature: .....

Participant's name: .....

Participant's Contact Details (if appropriate):

.....

.....

.....

.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 30 June 2015, AUTEC Reference number 15/201.

Note: The Participant should retain a copy of this form.

This version was last edited on 8 November 2013

Appendix E – Follow-up Focus Group

A follow up focus group

The aim of this research project is to evaluate the effects of an endorser in a campaign for promoting sport and physical activity. To further work towards this goal, there will be focus group(s) discussion happening in upcoming weeks **WITH FREE FOOD!!!** It might be a nice break from your studying!

If you are willing to attend please provide your contact details below. The researcher (Shima Behnoosh) will contact you to confirm date and location.

Name: .....

Email address: .....

Mobile number: .....

Feedback

It is anticipated that a summary of the findings will be available within 12 months of completion of the project. If you are interested to receive a copy of results please complete your contact details.

Name: .....

Email address: .....

"Thank you"

Appendix F – Pre-test Questionnaire

Page 1.

Questionnaire - Your Perceptions of Endorsers

Year of birth: **Gender** (Circle your response): Male Female

Ethnicity (Circle your response): Maori European Asian

Pacific people MELAA (Middle Eastern, Latin American, African)

1. Please rate the extent that you agree or disagree with the following statements. (Circle your response)

	Strongly Disagree						**Strongly Agree**
I find a lot of my life organized around sport.	1	2	3	4	5	6	7
Sport plays a central role in my life.	1	2	3	4	5	6	7
I enjoy discussing sport with others (e.g., friends, family and co-workers).	1	2	3	4	5	6	7
Sport says a lot about who I am.	1	2	3	4	5	6	7
Sport tells something about me.	1	2	3	4	5	6	7
Sport gives others a glimpse of the type of person I am.	1	2	3	4	5	6	7
Sport is fun.	1	2	3	4	5	6	7
Sport is one of the most satisfying things that I do.	1	2	3	4	5	6	7
I really enjoy playing sport.	1	2	3	4	5	6	7

1

2. How would you describe the advertisement above? (Please circle the appropriate number)

Bad	1	2	3	4	5	6	7	Good
Low quality	1	2	3	4	5	6	7	High quality
Dislike very much	1	2	3	4	5	6	7	Like very much
Inferior	1	2	3	4	5	6	7	Superior
Unattractive	1	2	3	4	5	6	7	Attractive
Unpleasant	1	2	3	4	5	6	7	Pleasant
Boring	1	2	3	4	5	6	7	Interesting

3. What is your overall feeling about the advertisement?

Unfavourable	1	2	3	4	5	6	7	Favourable

2

Page 3.

4. Endorser Recognition

1

Do you recognise this person?

☐ Yes
☐ No

Write this person's profession if you know it:

……

6

Do you recognise this person?

☐ Yes
☐ No

Write this person's profession if you know it:

……

2

Do you recognise this person?

☐ Yes
☐ No

Write this person's profession if you know it:

……

7

Do you recognise this person?

☐ Yes
☐ No

Write this person's profession if you know it:

……

3

Do you recognise this person?

☐ Yes
☐ No

Write this person's profession if you know it:

……

8

Do you recognise this person?

☐ Yes
☐ No

Write this person's profession if you know it:

……

4

Do you recognise this person?

☐ Yes
☐ No

Write this person's profession if you know it:

……

9

Do you recognise this person?

☐ Yes
☐ No

Write this person's profession if you know it:

……

5

Do you recognise this person?

☐ Yes
☐ No

Write this person's profession if you know it:

……

10

Do you recognise this person?

☐ Yes
☐ No

Write this person's profession if you know it:

……

3

5. Please circle the number which you feel best describes each endorser on below adjective

Unattractive ↔ **Attractive**

	1	2	3	4	5	6	7	8	9
	1	2	3	4	5	6	7	8	9
	1	2	3	4	5	6	7	8	9
	1	2	3	4	5	6	7	8	9
	1	2	3	4	5	6	7	8	9
	1	2	3	4	5	6	7	8	9
	1	2	3	4	5	6	7	8	9
	1	2	3	4	5	6	7	8	9
	1	2	3	4	5	6	7	8	9
	1	2	3	4	5	6	7	8	9

Unattractive ↔ **Attractive**

Page 5.

Circle one number for each person

Not-Classy ⟷ **Classy**

1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9

Not-Classy ⟷ **Classy**

5

Page 6.

Circle one number for each person

Ugly **Beautiful**

1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9

Ugly **Beautiful**

6

Page 7.

Circle one number for each person

Plain ↔ **Elegant**

1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9

Plain ↔ **Elegant**

7

Page 8.

Circle one number for each person

Not-sexy ⟷ **Sexy**

1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9

Not-sexy ⟷ **Sexy**

8

Page 9.

Circle one number for each person

Undependable ↔ Dependable

1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9

Undependable ↔ Dependable

9

Page 10.

Circle one number for each person

Dishonest ↔ **Honest**

1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9

Dishonest ↔ **Honest**

10

Page 11.

Circle one number for each person

Unreliable ⟷ **Reliable**

1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9

Unreliable ⟷ **Reliable**

11

Page 12.

Circle one number for each person

Insincere ⟷ **Sincere**

1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9

Insincere ⟷ **Sincere**

12

Page 13.

Circle one number for each person

Untrustworthy ⟷ **Trustworthy**

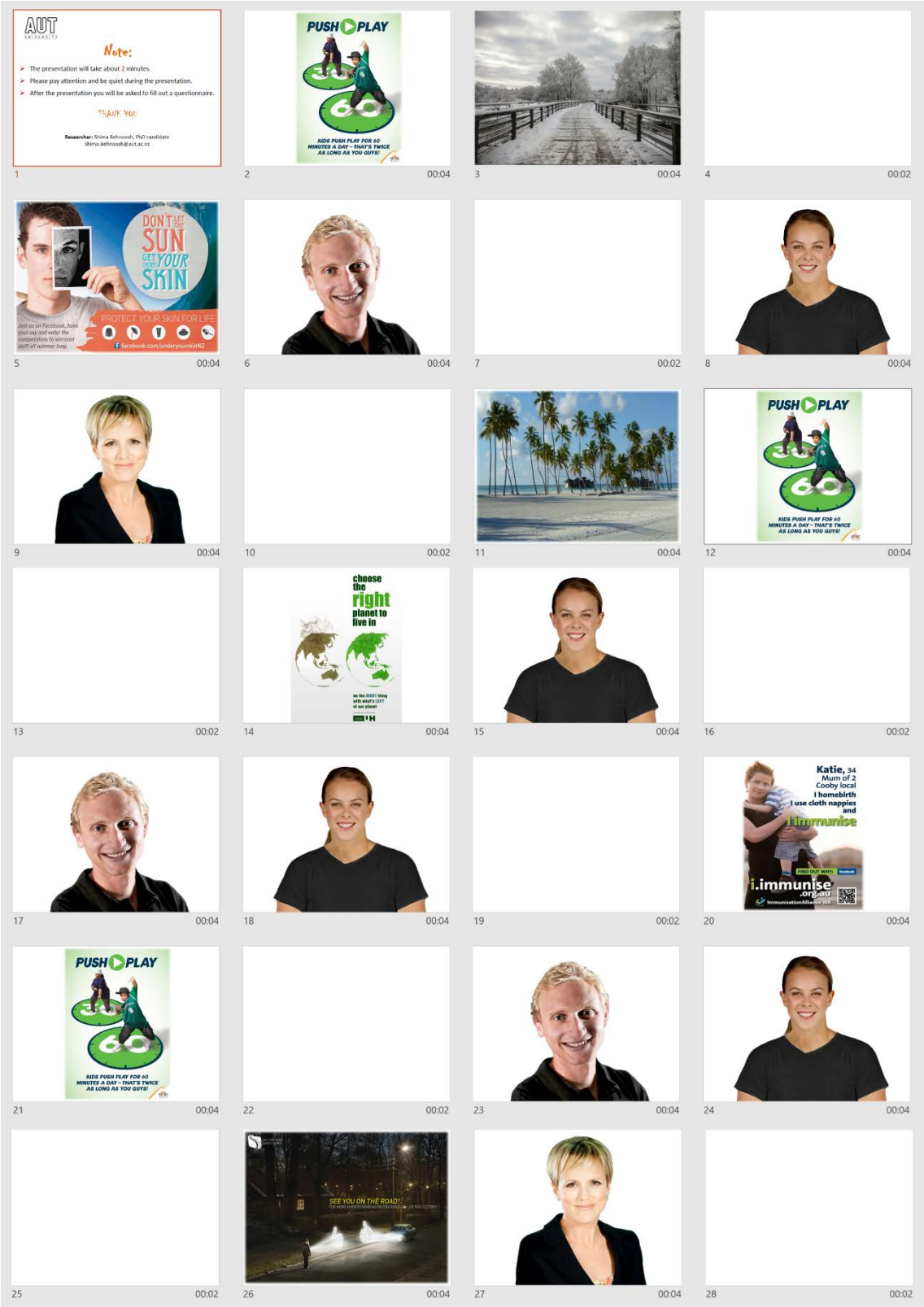
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9

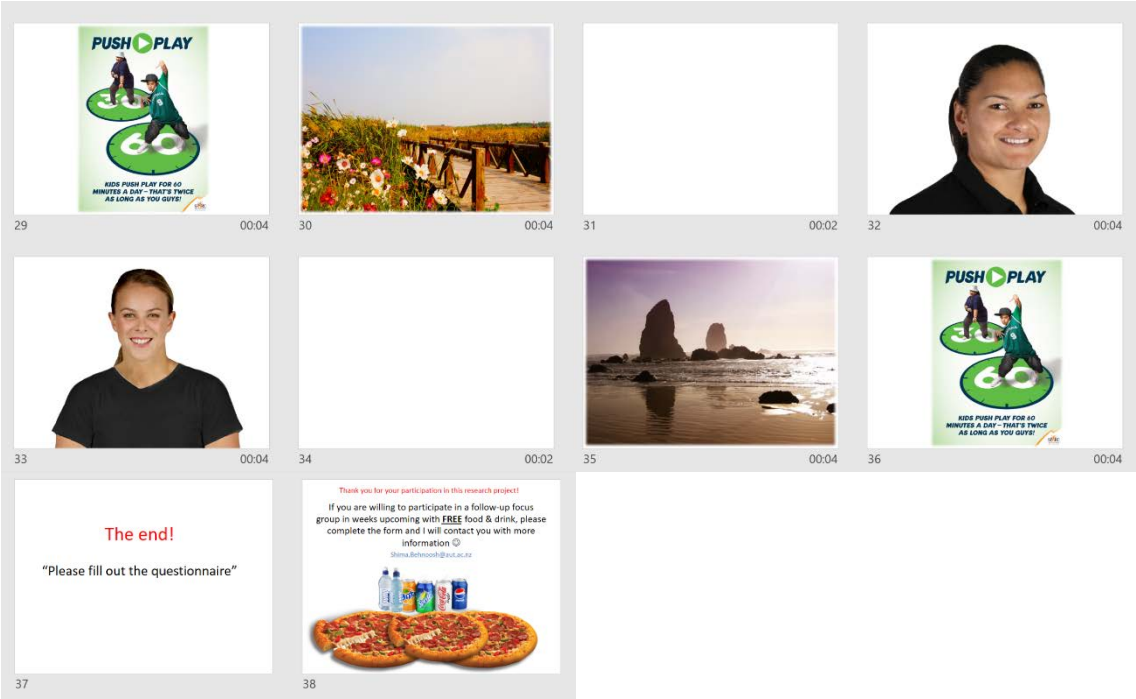
Untrustworthy ⟷ **Trustworthy**

13

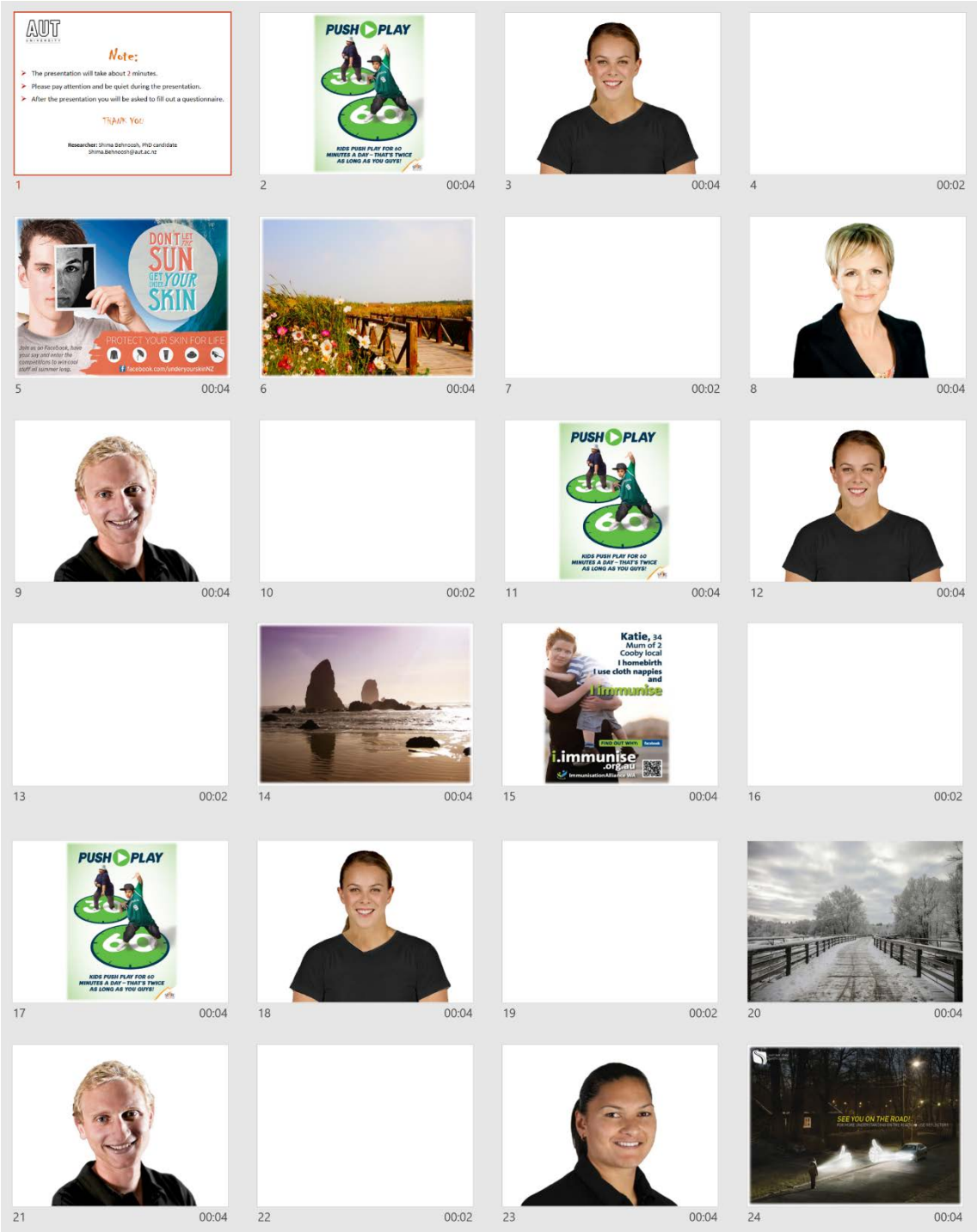
Appendix G – Study 1 Slide Show

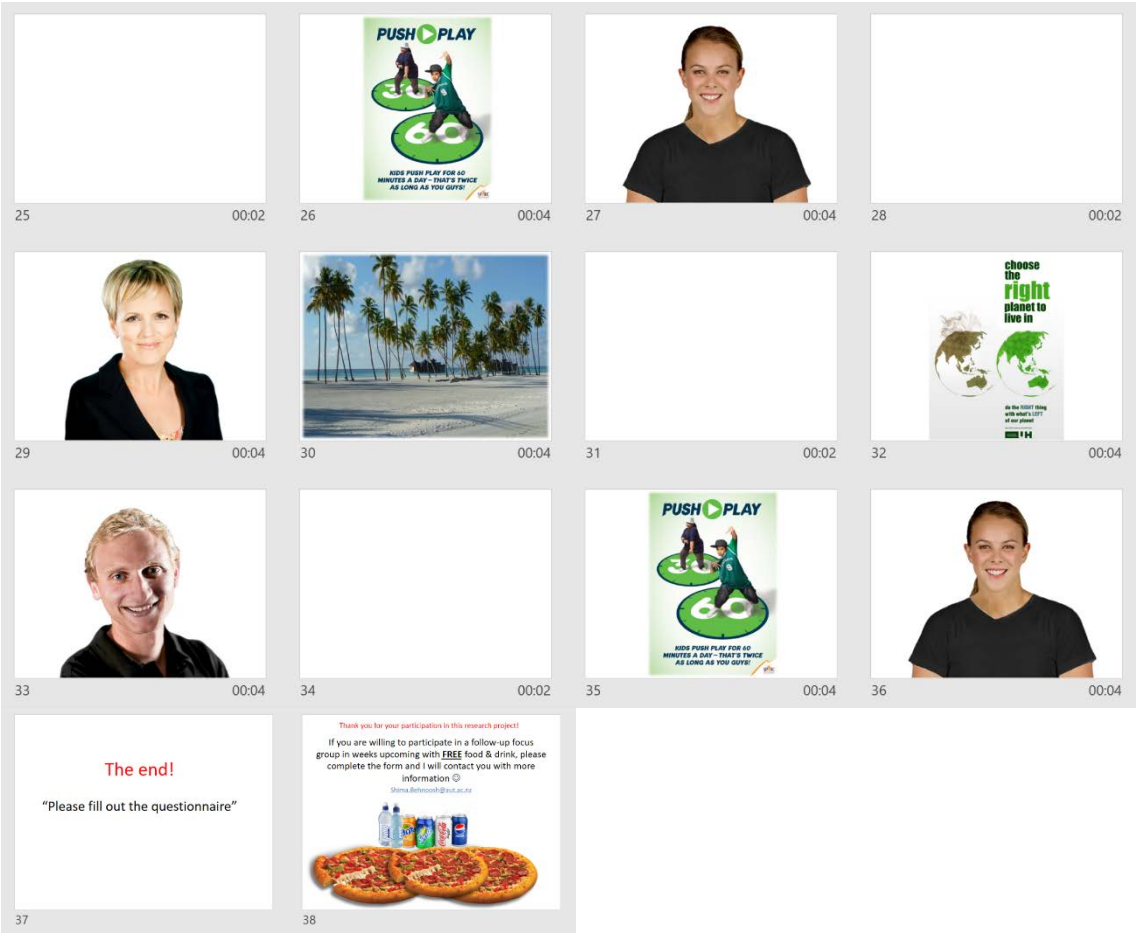
G1: Control Group Slide Show




PUSH PLAY
KIDS PUSH PLAY FOR 60 MINUTES A DAY – THAT'S TWICE AS LONG AS YOU GUYS!
29 00:04
30 00:04
31 00:02
32 00:04
33 00:04
34 00:02
35 00:04
PUSH PLAY
KIDS PUSH PLAY FOR 60 MINUTES A DAY – THAT'S TWICE AS LONG AS YOU GUYS!
36 00:04
The end!
"Please fill out the questionnaire"
37
Thank you for your participation in this research project!
If you are willing to participate in a follow-up focus group in weeks upcoming with FREE food & drink, please complete the form and I will contact you with more information ☺
Shima.Behnoosh@aut.ac.nz
38

G2: Treatment Group Slide Show




25 00:02
26 00:04
PUSH PLAY
KIDS PUSH PLAY FOR 60 MINUTES A DAY – THAT'S TWICE AS LONG AS YOU GUYS!
27 00:04
28 00:02
29 00:04
30 00:04
31 00:02
32 00:04
choose the right planet to live in
33 00:04
34 00:02
35 00:04
PUSH PLAY
KIDS PUSH PLAY FOR 60 MINUTES A DAY – THAT'S TWICE AS LONG AS YOU GUYS!
36 00:04
The end!
"Please fill out the questionnaire"
37
Thank you for your participation in this research project!
If you are willing to participate in a follow-up focus group in weeks upcoming with FREE food & drink, please complete the form and I will contact you with more information
38

Appendix H – Study 1 Questionnaire

Page 1.

Questionnaire – Advertising

Year of birth: **Gender** (Circle your response): Male Female

Ethnicity (Circle your response): Maori European Asian

Pacific People MELAA (Middle Eastern, Latin American, African)

1. Please rate the extent that you agree or disagree with the following statements. (Circle your response)

	Strongly Disagree						**Strongly Agree**
I find a lot of my life organized around sport.	1	2	3	4	5	6	7
Sport plays a central role in my life.	1	2	3	4	5	6	7
I enjoy discussing sport with others (e.g., friends, family and co-workers).	1	2	3	4	5	6	7
Sport says a lot about who I am.	1	2	3	4	5	6	7
Sport tells something about me.	1	2	3	4	5	6	7
Sport gives others a glimpse of the type of person I am.	1	2	3	4	5	6	7
Sport is fun.	1	2	3	4	5	6	7
Sport is one of the most satisfying things that I do.	1	2	3	4	5	6	7
I really enjoy playing sport.	1	2	3	4	5	6	7

1

Page 2.

2. How would you describe the advertisement above? (Please circle the appropriate number)

Bad	1	2	3	4	5	6	7	Good
Low quality	1	2	3	4	5	6	7	High quality
Dislike very much	1	2	3	4	5	6	7	Like very much
Inferior	1	2	3	4	5	6	7	Superior
Unattractive	1	2	3	4	5	6	7	Attractive
Unpleasant	1	2	3	4	5	6	7	Pleasant
Boring	1	2	3	4	5	6	7	Interesting

3. What is your overall feeling about the advertisement?

Unfavourable	1	2	3	4	5	6	7	Favourable

2

Page 3.

4. Based on what you saw in the slide show, which person was associated with the advertisement on the previous page (pg. 2)? (Indicate your response with an X in the box)

☐ 

☐ 

☐ 

☐ 

☐ No one

3

Appendix I – Study 2 Questionnaire

Page 1.

Questionnaire – Advertising

Year of birth: **Gender** (Circle your response): Male Female

Ethnicity (Circle your response): Maori European Asian

Pacific people MELAA (Middle Eastern, Latin American, African) Other .....

1. Please rate the extent that you agree or disagree with the following statements.

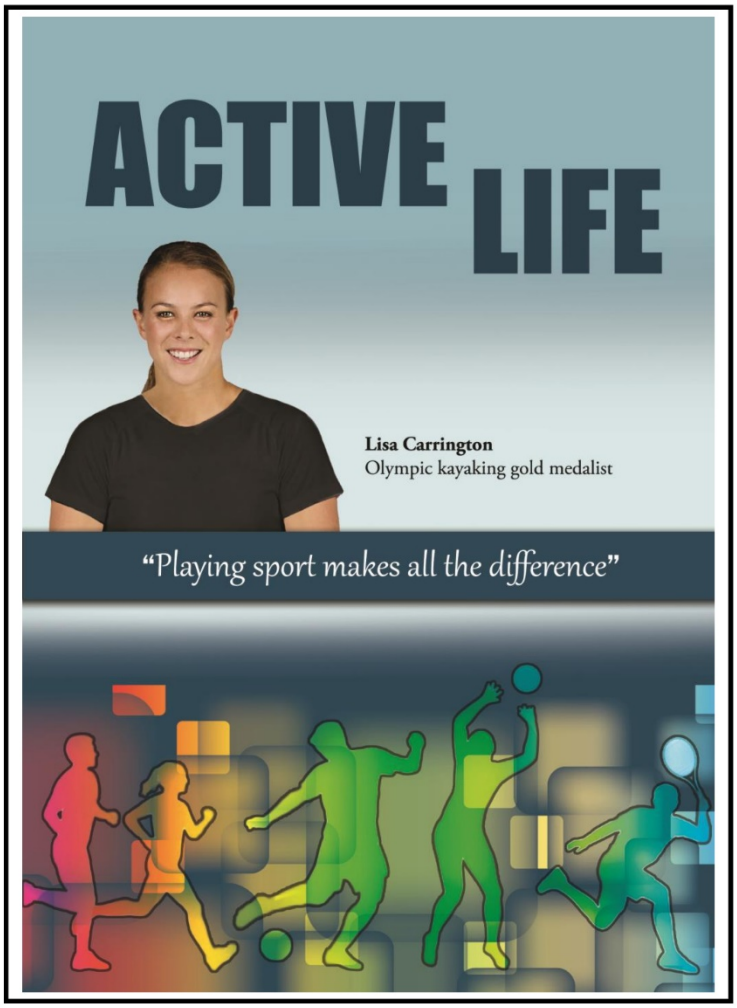
(Circle your response)

	Strongly Disagree						**Strongly Agree**
I find a lot of my life organized around physical activity.	1	2	3	4	5	6	7
Physical activity plays a central role in my life.	1	2	3	4	5	6	7
I enjoy discussing physical activity with others (e.g., friends, family and co-workers).	1	2	3	4	5	6	7
Physical activity says a lot about who I am.	1	2	3	4	5	6	7
Physical activity tells something about me.	1	2	3	4	5	6	7
Physical activity gives others a glimpse of the type of person I am.	1	2	3	4	5	6	7
Physical activity is fun.	1	2	3	4	5	6	7
Physical activity is one of the most satisfying things that I do.	1	2	3	4	5	6	7
I really enjoy being physically active.	1	2	3	4	5	6	7

1

Page 2. (of version 1)

Please examine the advertisement below. It is part of a campaign, endorsed by Lisa Carrington, to promote sport participation.



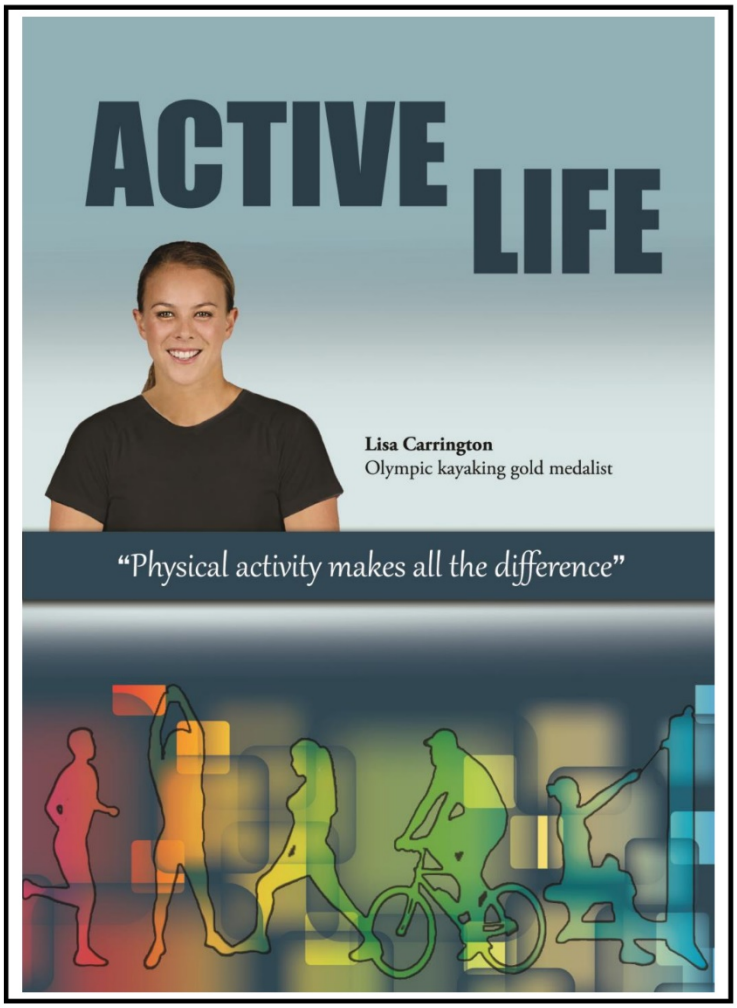
2. How would you describe the campaign? (Please circle the appropriate number)

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

Page 2. (of version 2)

Please examine the advertisement below. It is part of a campaign, endorsed by Lisa Carrington, to promote physical activity.



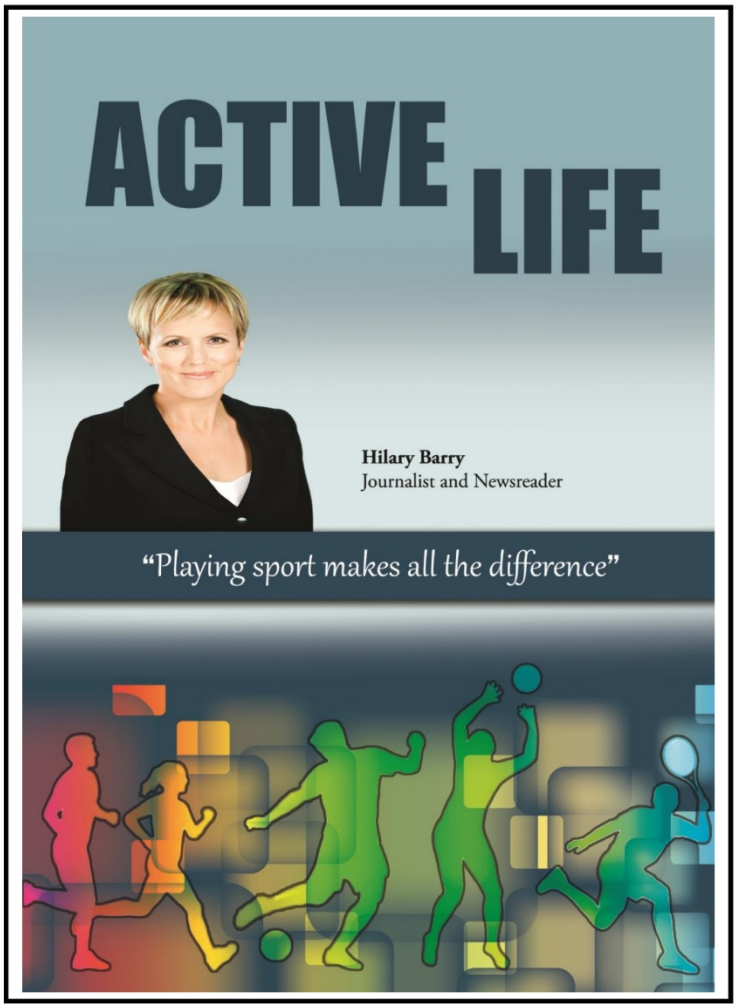
2. How would you describe the campaign? (Please circle the appropriate number)

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

Page 2. (of version 3)

Please examine the advertisement below. It is part of a campaign, endorsed by Hilary Barry, to promote sport participation.



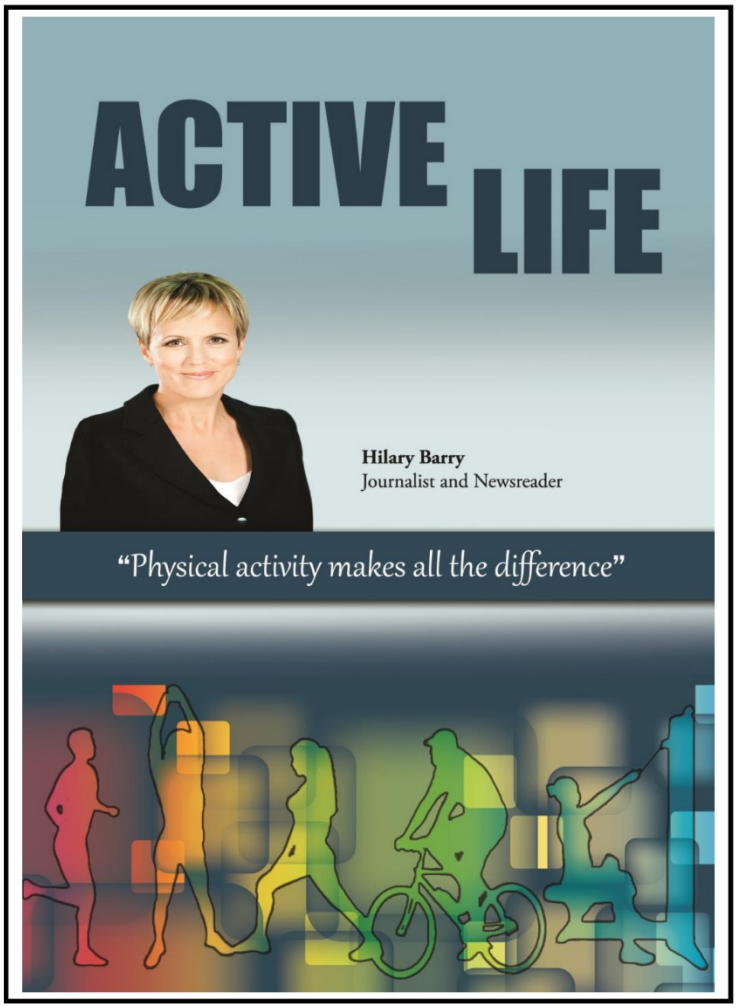
2. How would you describe the campaign? (Please circle the appropriate number)

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

Page 2. (of version 4)

Please examine the advertisement below. It is part of a campaign, endorsed by Hilary Barry, to promote physical activity.



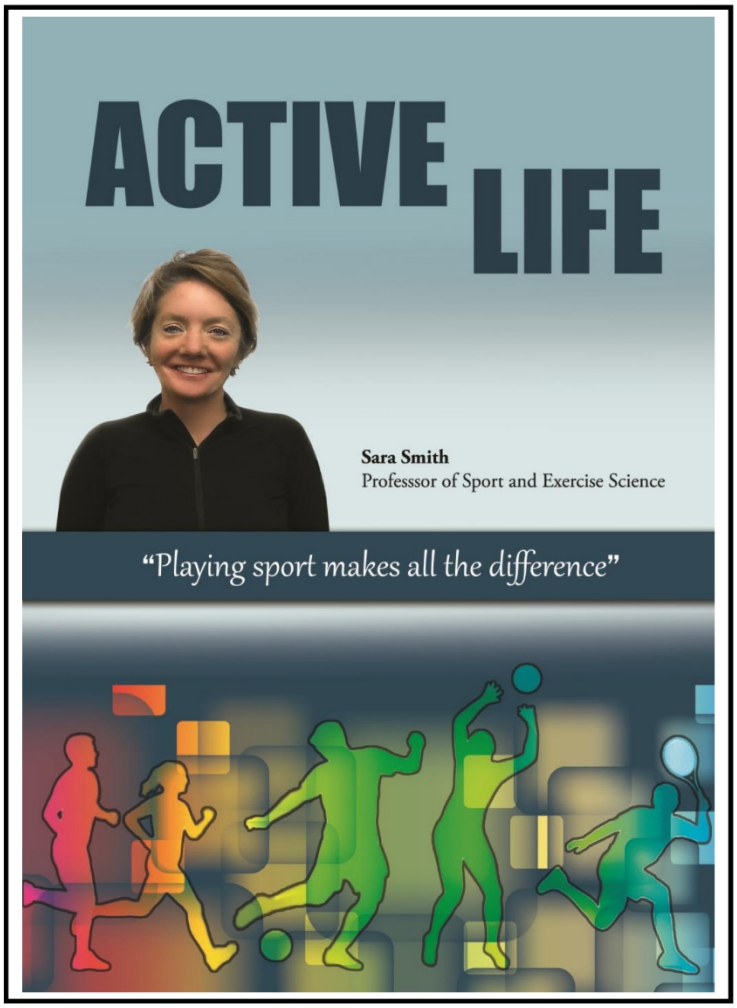
2. How would you describe the campaign? (Please circle the appropriate number)

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

Page 2. (of version 5)

Please examine the advertisement below. It is part of a campaign, endorsed by Sara Smith, to promote sport participation.



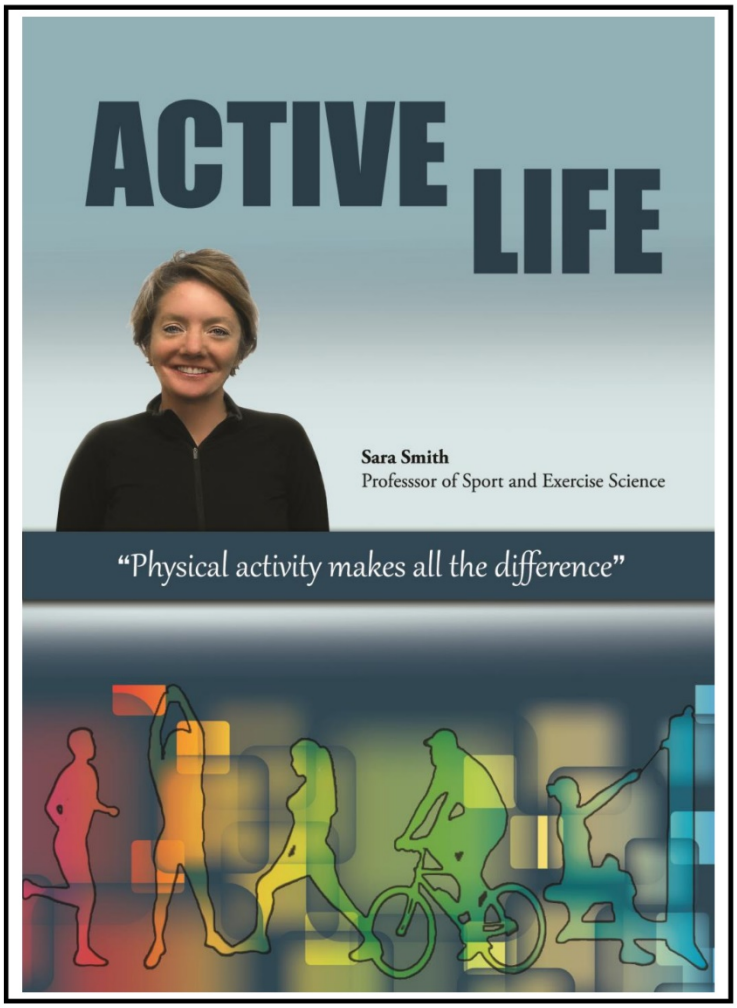
2. How would you describe the campaign? (Please circle the appropriate number)

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

Page 2. (of version 6)

Please examine the advertisement below. It is part of a campaign, endorsed by Sara Smith, to promote physical activity.



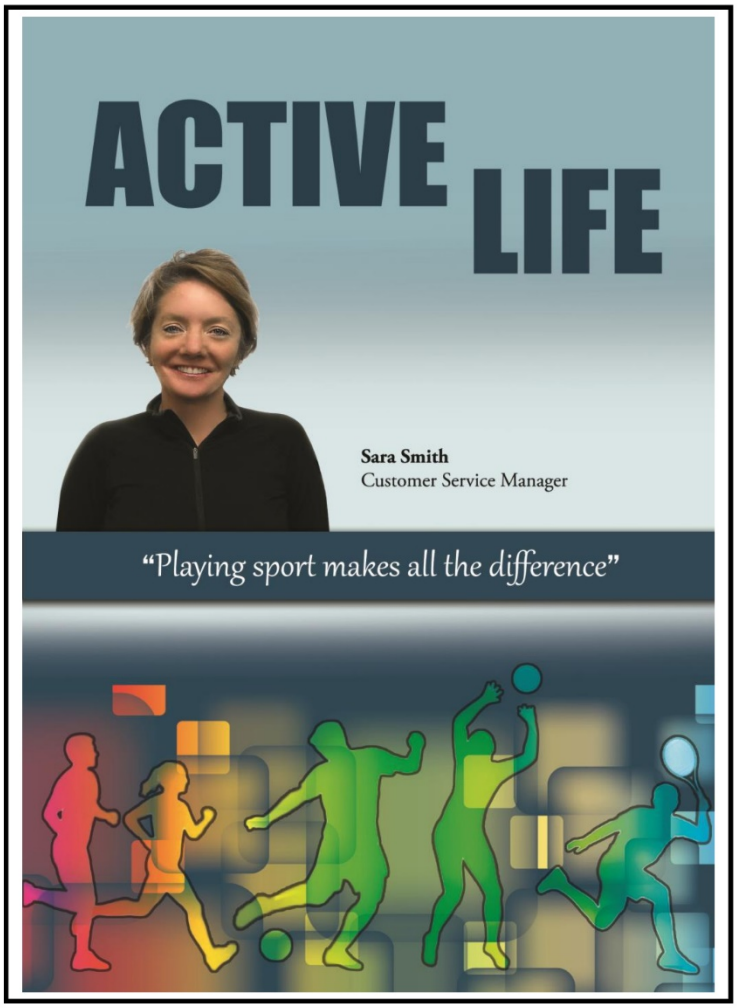
2. How would you describe the campaign? (Please circle the appropriate number)

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

Page 2. (of version 7)

Please examine the advertisement below. It is part of a campaign, endorsed by Sara Smith, to promote sport participation.



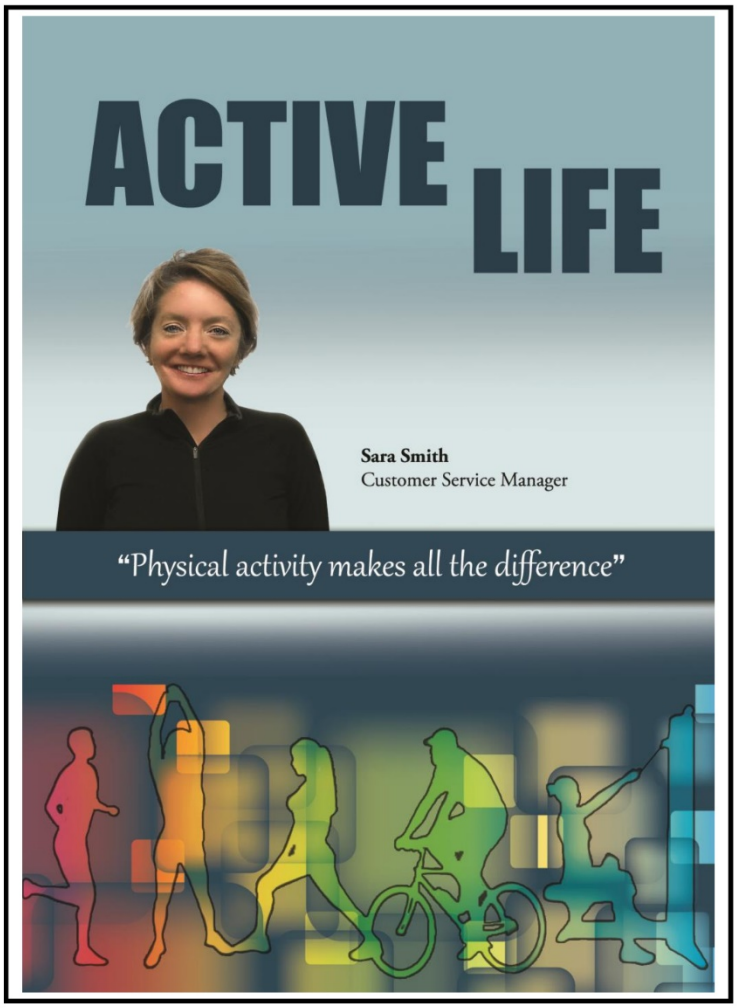
2. How would you describe the campaign? (Please circle the appropriate number)

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

Page 2. (of version 8)

Please examine the advertisement below. It is part of a campaign, endorsed by Sara Smith, to promote physical activity.



2. How would you describe the campaign? (Please circle the appropriate number)

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

Page 3.

3. As an endorser for the campaign, I think Sara Smith is:
(Circle your response)

inappropriate	1	2	3	4	5	6	7	appropriate
ineffective	1	2	3	4	5	6	7	effective

4. Please rate the extent that you agree or disagree with the following statements.
(Circle your response)

	Strongly Disagree						Strongly Agree
The campaign and Sara Smith go well together.	1	2	3	4	5	6	7
The campaign is well matched with Sara Smith.	1	2	3	4	5	6	7

5. How likely is it that you would increase your current level of sport participation as a result of this campaign? (Circle your response)

Unlikely	1	2	3	4	5	6	7	Likely
Definitely would not	1	2	3	4	5	6	7	Definitely would
Improbable	1	2	3	4	5	6	7	Probable

6. How familiar are you with the endorser, Sara Smith? (Circle your response)

Extremely unfamiliar	1	2	3	4	5	6	7	Extremely familiar

7. How would you describe Sara Smith in terms of sport? (Circle your response)

Not an expert	1	2	3	4	5	6	7	Expert
Inexperienced	1	2	3	4	5	6	7	Experienced
Unknowledgable	1	2	3	4	5	6	7	Knowledgable
Unqualified	1	2	3	4	5	6	7	Qualified
Unskilled	1	2	3	4	5	6	7	Skilled

3

Appendix J – Study 3 Questionnaire

Page 1.

Questionnaire – Advertising

Year of birth: **Gender** (Circle your response): Male Female

Ethnicity (Circle your response): Maori European Asian

Pacific people MELAA (Middle Eastern, Latin American, African) Other .....

1. Please rate the extent that you agree or disagree with the following statements.

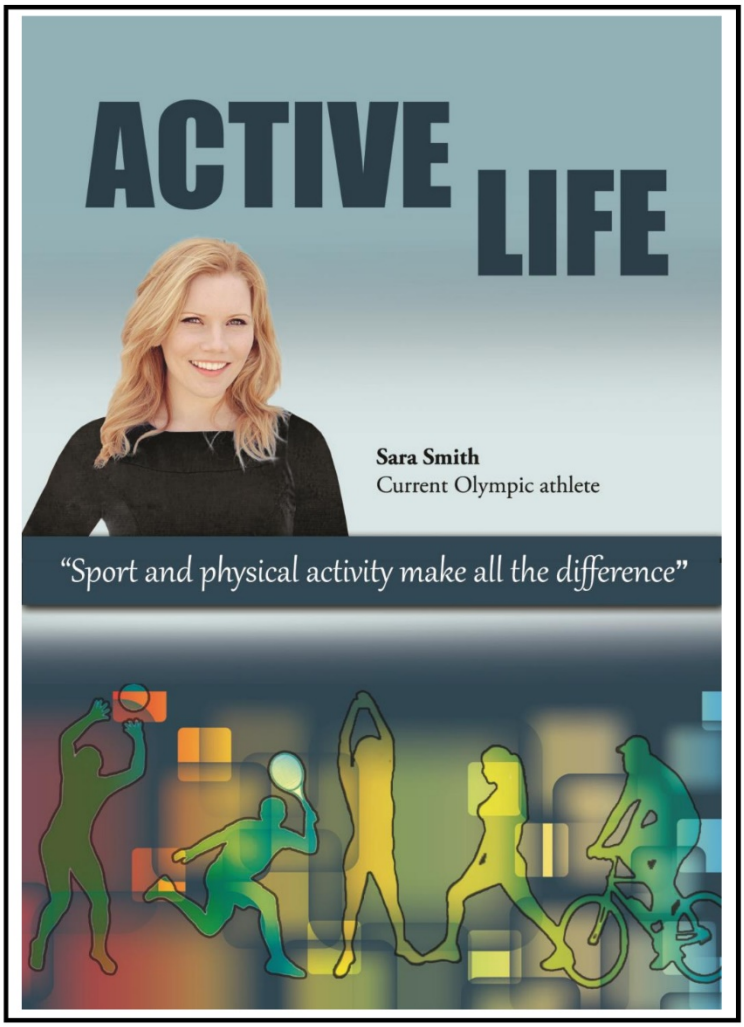
(Circle your response)

	Strongly Disagree						**Strongly Agree**
I find a lot of my life organized around sport and physical activity.	1	2	3	4	5	6	7
Sport and physical activity play a central role in my life.	1	2	3	4	5	6	7
I enjoy discussing sport and physical activity with others (e.g., friends, family and co-workers).	1	2	3	4	5	6	7
Sport and physical activity say a lot about who I am.	1	2	3	4	5	6	7
Sport and physical activity tell something about me.	1	2	3	4	5	6	7
Sport and physical activity give others a glimpse of the type of person I am.	1	2	3	4	5	6	7
Sport and physical activity are fun.	1	2	3	4	5	6	7
Sport and physical activity are among the most satisfying things that I do.	1	2	3	4	5	6	7
I really enjoy playing sport and being physically active.	1	2	3	4	5	6	7

1

Page 2. (of version 1)

Please examine the advertisement below.
It is part of a campaign, endorsed by Sara Smith, to promote sport and physical activity.



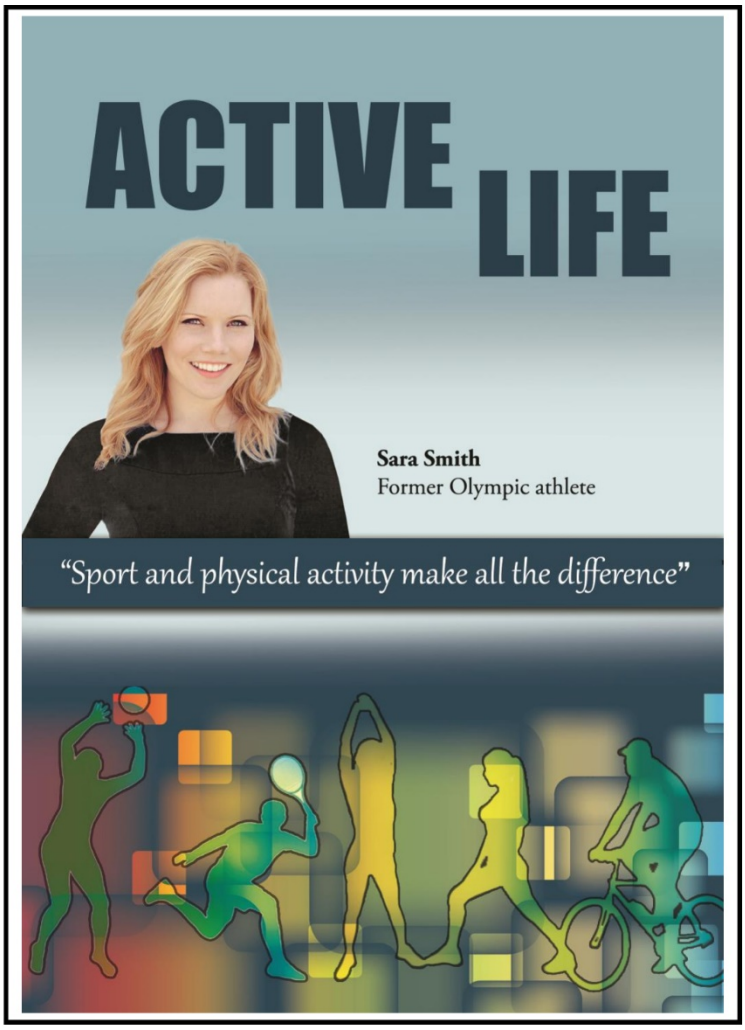
2. How would you describe the campaign? (Please circle the appropriate number

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

Page 2. (of version 2)

Please examine the advertisement below.
It is part of a campaign, endorsed by Sara Smith, to promote sport and physical activity.

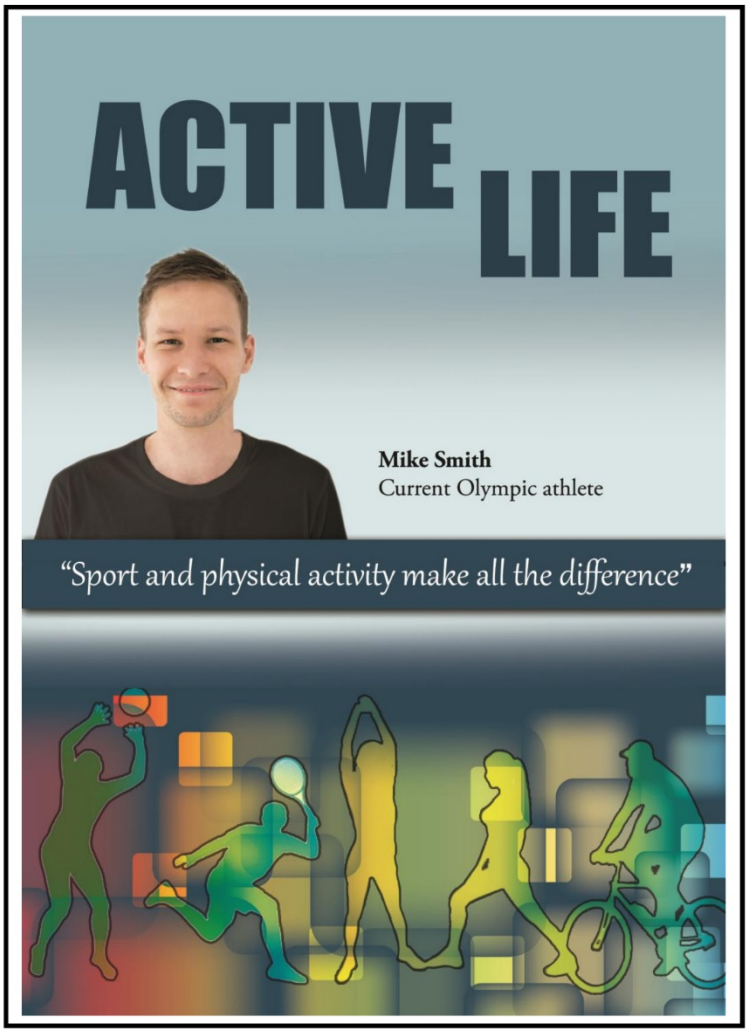


2. How would you describe the campaign? (Please circle the appropriate number

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

Please examine the advertisement below.
It is part of a campaign, endorsed by Mike Smith, to promote sport and physical activity.

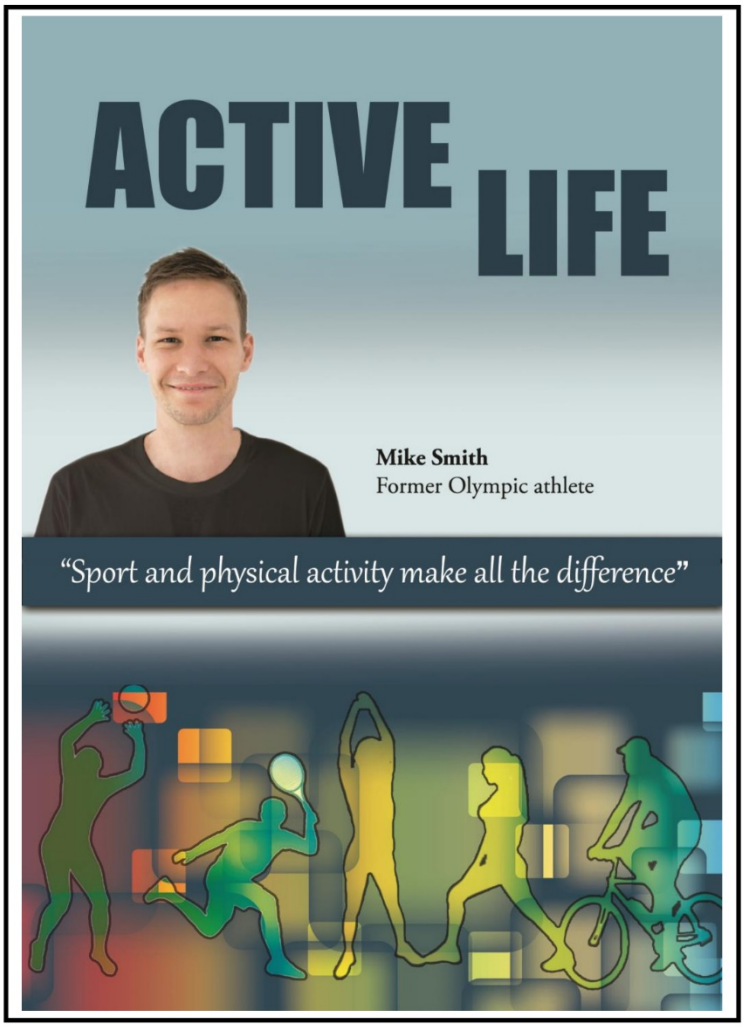


2. How would you describe the campaign? (Please circle the appropriate number

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

Please examine the advertisement below.
It is part of a campaign, endorsed by Mike Smith, to promote sport and physical activity.



2. How would you describe the campaign? (Please circle the appropriate number

Bad	1	2	3	4	5	6	7	Good
Unfavourable	1	2	3	4	5	6	7	Favourable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Negative	1	2	3	4	5	6	7	Positive

2

3. How likely is it that you would increase your current level of sport and physical activity as a result of this campaign? (Circle your response)

Unlikely	1	2	3	4	5	6	7	Likely
Definitely would not	1	2	3	4	5	6	7	Definitely would
Improbable	1	2	3	4	5	6	7	Probable

4. Please consider the gender of the endorser as you respond to these questions.

A. As an endorser for this campaign, I think a male athlete is: (Circle your response)

inappropriate	1	2	3	4	5	6	7	appropriate
ineffective	1	2	3	4	5	6	7	effective

B. Rate the extent that you agree or disagree with the following statements.
(Circle your response)

	Strongly Disagree						Strongly Agree
This campaign and a male athlete endorser go well together.	1	2	3	4	5	6	7
This campaign is well matched with a male athlete endorser.	1	2	3	4	5	6	7

5. Please consider the career status of the endorser as you respond to these questions.

A. As an endorser for this campaign, I think a current athlete is: (Circle your response)

inappropriate	1	2	3	4	5	6	7	appropriate
ineffective	1	2	3	4	5	6	7	effective

B. Rate the extent that you agree or disagree with the following statements.
(Circle your response)

	Strongly Disagree						Strongly Agree
This campaign and a current athlete endorser go well together.	1	2	3	4	5	6	7
This campaign is well matched with a current athlete endorser.	1	2	3	4	5	6	7