

**FEMALE BODY IMAGE PERCEPTIONS: THE CASE OF  
ELITE ATHLETES, HABITUAL EXERCISERS, AND  
INACTIVE INDIVIDUALS.**

**VICTORIA REEVE**

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## **Abstract**

To date, research has been equivocal when comparing the body image perceptions of elite athletes, habitual exercisers, and inactive young females. Understanding body image perceptions of athletes, exercisers and inactive females is significant due to the positive effects having body image satisfaction and dissatisfaction has on an individual's well-being. Thus, the following study aims to: i) to examine critically the body image perceptions of female elite athletes, habitual exercisers, and inactive individuals; ii) to explore comparatively the body image perceptions of female elite athletes, habitual exercisers, and inactive individuals: and iii) to consider the role of elite sport and habitual exercise within the development of body image perceptions in females.

The research aims of this study were addressed through Interpretative Phenomenological Analysis (IPA) via semi-structured interviews. The sample recruited for this study consisted of: I) four elite female athletes; II) four habitual female; and III) four inactive females.

The findings showed that the elite athletes had greater body image satisfaction in comparison to the habitual exercisers and inactive females. It was determined that the sport in which the athlete participated in had an affect on their body image perception. All three groups identified a slim and toned ideal. The athletes identified that their bodies were more muscular than the ideal, however, accepted their bodies as being beneficial to achieving optimal performance. The exercisers and inactive females identified the cultural ideal body image communicated by the Western culture meant a feeling of pressure and expectation to conform to unrealistic ideals.

This study extended the research on body image perceptions of female elite athletes, habitual exercisers, and inactive individuals. From these findings, it seems that participation in sport should to be promoted to inactive individuals. Alongside numerous physiological and psychological health benefits that undertaking sport achieves, these results suggest that participation is likely to lead to more positive body image perceptions, and ultimately body image satisfaction.

## **Declaration**

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in the United Kingdom or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the University.

**Signature:** \_\_\_\_\_

**Typed Name:** Victoria Reeve

**Date:** \_\_\_\_\_

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## Contents

Abstract.....	i
Declaration.....	ii
Acknowledgment .....	iii
Contents.....	iv-vii
CHAPTER ONE: Introduction.....	1-8
What is Body Image?.....	1-2
Prevalence of Body Image Dissatisfaction.....	2-3
Body Image Perception Amongst Differing Population Groups.....	3-6
Rationale of Thesis.....	6-7
Structure of Thesis.....	7-8
CHAPTER TWO: Literature Review.....	9-33
Introduction.....	9
The Nature of the Body.....	9-10
The Evolution of Body Image Ideals.....	10-11
The Construction of Body Image.....	11-18
Biological contributors.....	11-14
Body Mass Index of females.....	11
Female personality characteristics.....	12
Female physical characteristics and appearance.....	12-13
Female sexual orientation.....	13-14
Socio-cultural contributors.....	14-18
Parents.....	14
Peers.....	15
Media.....	15-18
Television.....	16
Magazines.....	16-17
The Internet.....	17-18
Affects of Body Image Satisfaction and Dissatisfaction in Females...18-19	
Body Image Satisfaction and Dissatisfaction in Western Societies.....	19
Affect of Sport, Exercise, and Inactivity on Female Body Image Perceptions.....	19-31
Participation in sport and body image satisfaction.....	20-21
Participation in exercise and body image satisfaction.....	21-24
Participation in sport and body image dissatisfaction.....	24-28

Participation in exercise and body image dissatisfaction.....	28-30
Inactivity and body image dissatisfaction.....	30-31
Summary.....	31-32
Research Questions.....	33
Research Objectives.....	33
CHAPTER THREE: Methodology.....	34-51
Introduction.....	34
Epistemological Perspective.....	34-36
Methodology.....	36-37
Interpretative Phenomenological Analysis.....	37-41
Advantages of IPA in body image research.....	38-39
Limitations of IPA in body image research.....	40-41
Participant Recruitment.....	41-43
Ethical Considerations.....	43-44
Procedure Following Recruitment.....	44-45
Data Collection.....	45-48
Advantages of semi-structured interviews.....	47
Limitations of semi-structured interviews.....	48
Data Analysis.....	48-49
Trustworthiness.....	49-50
Summary.....	50-51
CHAPTER FOUR: Results and Discussion.....	52-91
Introduction.....	52
The Cultural Ideal.....	52-57
Athletes and the cultural ideal.....	52-56
Exercisers and inactive participants and the cultural ideal.....	56-57
Current View of Self.....	58-65
Athlete's current view of self.....	58-60
Exerciser's current view of self.....	60-62
Inactive participant's current view of self.....	62-65
External Influences.....	65-70
Affects of the media on the athlete's body image perceptions.....	65-66
Affects of the media on the exerciser's and inactive participants body image perceptions.....	66-68

Affects of the coach on the athlete’s body image perceptions.....	68-69
Affect of parents on the exerciser’s body image perceptions...	69-70
Self-Presentation.....	70-76
Self-Presentation in the athletes.....	70-72
Self-Presentation in the exercisers.....	72-73
Self-Presentation in inactive participants.....	73-76
Personality Characteristics. ....	76-80
Personality characteristics of the athletes.....	76-77
Personality characteristics of the exercisers.....	77-79
Personality characteristics of the inactive participants.....	79-80
Eating Behaviours.....	80-85
Eating behaviours of the athletes.....	80-81
Eating behaviours of the exercisers.....	82-83
Eating behaviours of the inactive participants.....	83-85
Motives and Barriers to Participation.....	85-89
Athlete’s motive to participate in sport.....	85-87
Exerciser’s motive to participate in exercise.....	87-88
Inactive participant’s barrier to participation in sport or exercise.....	88-90
Summary.....	90-91
CHAPTER FIVE: Conclusion.....	92-100
Introduction.....	92
Explicit Answers to Research Questions.....	92-94
Do body image perceptions differ between female elite athletes, habitual exercisers, and inactive individuals?.....	92-93
Does participation and non-participation in elite sport or habitual exercise have a perceived affect on female body image perceptions.....	93-94
Is there a perceived link between body image satisfaction in females and participation in elite sport or habitual exercise.....	94
Application and Future Direction.....	95-96
Limitations.....	96-97
Reflections.....	97-100

References.....	101-144
Appendix A: Information Sheet.....	145
Appendix B: Consent Form.....	146
Appendix C: Elite Athlete Interview Schedule.....	147-154
Appendix D: Habitual Exerciser Interview Schedule.....	155-162
Appendix E: Inactive Interview Schedule.....	163-170
Appendix F: General Practice Physical Activity Questionnaire.....	171



# CHAPTER ONE

## Introduction

### What is Body Image?

Body image is a multidimensional construct that consists of psychological experiences of embodiment, including perceptions of physical appearance, and attitudes that relate to physical appearance (Cash, 2004; Cash & Pruzinsky, 2004; Hrabosky & Cash, 2007). Body image can be defined as the internal representation of your outer appearance (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). The concept of body image combines all elements of people's mental self-image; including perception, thought, feelings, attitudes, and evaluation of their physical image and the effect of this image on their behaviour (DiGiacchino, Sargent, & Topping, 2001). It is an individual's subjective, mental representation of their physical appearance, which is individual and open to change via social interaction and influence (Grogan, 2008). The development of body image is complex and research establishes that it can be shaped by an individual's mind-set and biology, as well as the influence of peer groups, family, media, and the society and the culture they live in (Pimenta, Sánchez-Villegas, Bes-Rastrollo, López & Martínez-González, 2009).

Body image attitudes comprise of two key factors. The first involves self-evaluation of an individual's looks, including body satisfaction or dissatisfaction. These evaluations are based on the discrepancy between self-perceived and idealised physical attributes (i.e. ideal body image) (Hrabosky & Cash, 2007). The second factor is the investment, or extent of cognitive, behavioural, and emotional importance placed on an individual's appearance. This investment includes the

degree to which an individual's looks are essential in defining their sense of self-worth (Cash, 2004; Cash & Pruzinsky, 2004; Hrabosky & Cash, 2007).

Ideal body image is the expression used to refer to the body size determined by one's cultural group to symbolise beauty or success (Martin, 2010). It can vary between cultural groups, within ethnic groups, and within any other group to which one belongs (Martin, 2010). In contemporary Western cultures, the ideal body image for a female is often articulated as slim and toned, but not too muscular (Cash, 2008). It has become “increasingly orientated around living in an appearance saturated society and that the value individuals place on their appearance is becoming greater and disparate to other aspects of self-concept” (All Party Parliamentary Group (APPG), 2012, p.14). By solely concentrating on appearance, other significant attributes such as intelligence, compassion and determination are seen to be becoming less important. Thus, there is a strong need to promote a diverse self-concept among young people, rather than one based predominantly on appearance (APPG, 2012).

### **Prevalence of Body Image Dissatisfaction**

According to evidence, body image dissatisfaction has increased in the Western female population over the past 25 years (Cash, 2002; Hausenblas & Campbell, 2009). In a recent UK study by Diedrichs, Paraskeva, and New (2011), 79% of the women reported that they would like to lose weight; despite the majority of the women sampled (78.37%) being within the underweight or ‘normal’ weight range. Moreover, 93% of the women identified that they had had negative thoughts about their appearance during the past week (Diedrichs, Paraskeva, & New, 2011). These findings indicate a predominance of body image

concerns, suggesting dissatisfaction is becoming increasingly common and widespread.

The development of a positive body image is vital as it leads to other positive outcomes such as self-confidence and self-esteem. The development of a negative body image is associated with a number of damaging consequences, such as the onset of a range of physical, emotional, and social problems. Individuals with body image dissatisfaction are less likely to value their body, prioritise their health, and are more likely to participate in disordered or destructive behaviours (Hausenblas & Fallon, 2006). Body image dissatisfaction is a key component and predictor of health problems such as depression, obesity, body dysmorphic disorder, and eating disorders such as anorexia nervosa and bulimia nervosa (APA, 2000; Stice, 2002), thus it is vital to assess its antecedents and consequences (Hausenblas & Fallon, 2006). This knowledge may support the development of interventions designed to reduce body-image disturbance.

### **Body Image Perception Amongst Differing Population Groups**

Research (e.g., Choi, 2000; Focht & Hausenblas, 2001) has also suggested there is greater likelihood of specific population groups developing body image dissatisfaction. For example, the occurrence of body image disturbance is higher among females than males (Garner, 1997); in younger compared to older individuals (APA, 2000); among Caucasians rather than ethnic minorities (Altabe, 1998; Smith, Thompson, Raczynski, & Hilner, 1999); and among people with a greater percent of body fat than those with a lower percent body fat (Focht & Hausenblas, 2001). Therefore, being an individual in one of these populations may lead to an increased likelihood of developing body image dissatisfaction.

Although much of the current research suggests it is likely for females to develop body image dissatisfaction, there have been some positive outcomes of research with regards to that of the exercising and sporting populations. Evidence suggests physically active individuals are more likely to have body image satisfaction than those who are inactive (Davis & Cowles, 1991; Fox, 1999; Furnham, Titman, & Sleeman, 1994; Koff & Bauman, 1997). Researchers have found that athletes generally report lower body image concerns compared to non-athletes (Anderson, Zager, Hetzler, Nahikian-Nelms, & Syler, 1996; Fulkerson, Keel, Leon, & Dorr, 1999; Hausenblas & Mack, 1999). Moreover with the current body image ideal for females being slender and toned, partaking in exercise are more likely to achieve this body type. Therefore, it seems likely that active women are more satisfied with their body, as they are closer to the cultural ideal (Cash & Pruzinsky, 2004). It has also been suggested by Hausenblas and Campbell (2009), and Landers and Arent (2001) that this may be because participation in these types of activities is associated with increases in psychological well-being that are related to positive body image (Hausenblas & Campbell, 2009; Landers & Arent, 2001).

However, in contrast, studies also indicate that participating in sporting or recreational physical activities can have a negative effect on an individual's body image. In a sporting context, this may be due to task related factors such as performance advantages, aesthetic necessities and weight requirements, and social related factors, such as pressure from coaches, judges, or teammates to attain an ideal physique (Davis & Cowles, 1989; Rao & Overman, 1986). For example, sports such as gymnastics, figure skating, and diving, are all judged subjectively, and place great importance on a lean physique for successful performance, thus causing athletes to try and achieve this body type by any means (Linder & Caine,

1992; Sherman, Thompson, & Rose, 1996). Additionally, females athletes in non-aesthetic sports, such as body building or rugby, are often reminded that they have a body contrary to the cultural ideal of femininity (Festle, 1996; Halbert, 1997; Heywood, 1998), as the sports they compete in benefit from a muscular body or are traditionally male dominated. This conflict between a female body for sport and one that is socially acceptable, may negatively impact athletes' body image, self-esteem, health, and self-presentation (Johns, 1996; Krane, Michalenok, Waldron, Stiles-Shiple, & Brown, 1998).

In an exercising context, as Western societies place great importance and emphasis on females maintaining and slender and toned physique, therefore, women may be inclined to exercise to conform to these societies ideals. Triggemann and Williamson (2000) suggested that women may exercise to control weight, and tone the body, which are reasons associated with low body satisfaction (Body Image and Health Inc (BIH Inc), 2000; Triggemann & Williamson, 2000). Thus, the motive to exercise that stems from interpersonal or sociocultural pressure to achieve a particular body shape or to lose weight may lead to continued body image dissatisfaction, because there is always more an individual can do to change their body shape (BIH Inc, 2000; Tiggemann & Williamson, 2000; Shilling, 2008). It is often recognised through such mediums as the media and government policy (DoH, 2011) that exercise is a key factor in controlling body weight, and the least amount of exercise an individual should undertake is recommended. However, limited literature has suggested a maximum amount of exercise, which may cause an individual to exercise to extreme levels, thus potentially causing psychological disturbances such as exercise addiction (Adams & Kirkby, 2002). In regards to inactive females, it has been suggested that those who do not complete any exercise are likely to have body image

dissatisfaction due to being potentially being further from the cultural ideal. For example, Pelegrini and Petroski (2009) identified that the majority of sedentary females were dissatisfied with their bodies and appearance, and that most wanted to reduce their body size.

### **Rationale of Thesis**

The theoretical underpinnings of this thesis are facilitated by feminist theory. Feminism, in its broadest sense, is a collection of ideologies aimed at defining, establishing, and defending equal political, economic, and social rights for women (Choi, 2000; Hall, 2002). Sport is an integral part of Western societies culture; however, its use to promote gender equity is occasionally overlooked, as it is not universally perceived as suitable or desirable for females (Larkin, Razack, & Moole, 2007; Scraton, 1992). Participating in sport is sometimes seen as unfeminine and can lead to women having a more masculine, ‘muscular’ body shape (Hall, 2002). Therefore, if a female desires to participate in sporting activities, she must do so in accordance with a number of patriarchal rules, which ensure that she is primarily recognised as a heterosexual female (Choi, 2000). Contributing to a psychology of the physically active female by studying women’s experiences from a feminist and gendered perspective, this thesis aims to understand if participation in sport or exercise had an affect on female perceptions of body image (Choi, 2000).

Body image has received increased academic attention, clinical research and empirical evidence primarily due to the increased prevalence of body image concerns in the female population of Western societies and the negative impact it can have on an individual’s well-being (Cash 2002; Diedrichs, Paraskeva, & New, 2011). However, to date, there has been limited research that has comparatively

explored body image perceptions of elite athletes, habitual exercisers, and inactive young females. The limited research available has produced equivocal findings and has been inconsistent in research design. A comparison of the three groups in this study will provide greater understand of the affects that sport, exercise and inactivity has on an individual. In addition, most body image research on both sporting and exercise populations tend to be connected as one population, however this study intends to analyse each individually and aims to understand the key similarities and differences between them.

Furthermore, understanding body image perceptions of athletes, exercisers and inactive females is important as a negative body image perception can possibly have detrimental effects on an athletes performance, increase an individual's social anxiety, decrease an individual's self-esteem, and result in low subjective well-being (Cash & Pruzinsky, 2004). Therefore, the following study aims to enhance the current literature by investigating body image perceptions in the case of elite athletes, habitual exercisers, and inactive young females. In addition, this research seeks to understand the role of sport and exercise, or leading an inactive lifestyle, on the developments of a young female's body image perceptions. Understanding the body image perceptions of these groups can potentially aid people of responsibility, such as, health professionals, coaches, parents and ultimately the individual themselves, to influence the construction of body image satisfaction or dissatisfaction.

### **Structure of Thesis**

Chapter Two explores the current trends of research on body image perceptions of female elite athletes, habitual exercisers, and inactive individuals. It presents the different perspectives: some suggesting that participation in sport

and exercise has a positive affect on an individual's body image perception, whilst some identify that participation in sport or exercise can lead to negative perceptions of one's body. It also looks into the affects of inactivity on an individual's body image perceptions.

Chapter Three relates to the methodology and methods employed in the semi-structured interview and e-mail interview process. The groups considered for this study were female elite athletes, habitual exercisers, and inactive individuals, each group having four participants. This chapter will highlight the criteria for each group, how participants were recruited, and the structure of the interviews for each group.

The results of the semi-structured and email interviews were presented in Chapter Four. This chapter is divided into the themes that arose as a result of the interviews and the findings are discussed. The nine themes consisted of: the participants views on the cultural ideal, the participants current view of self, the effects of external influences, self-presentation, personality characteristics, the eating behaviours, the motives and barriers to participation.

The final chapter provides conclusions of the research offering a direct response to each of the research questions. Chapter Five also identifies future directions, limitations of the thesis, and a reflective account of the researchers experience.



## **CHAPTER TWO**

### **Literature Review**

#### **Introduction**

This chapter aims to review critically the extant literature, which considers the role that exercise and sport has on body image perceptions. More specifically, it aims to: reflect on the nature of the body; conceptualise body image; consider how the ideal body image has changed over time; explore how body image satisfaction and dissatisfaction is developed; explain the cognitive, emotional and behavioural outcome of body image satisfaction and dissatisfaction; and identify the prevalence of body image satisfaction and dissatisfaction in contemporary Western society's female population. This chapter will then proceed to review current understanding of how participating in exercise or sport, or non-participation, may effect body image perceptions of females.

#### **The Nature of the Body**

The body is an individual's most immediate resource and has been utilised throughout history as a metaphor for society (Shilling, 2008). Our own bodily physical characteristics, our mannerisms, size, shape and movements add to and mold our perceptions and interactions with other people in daily life. One views the world and functions within it, from the vantage point of one's own body, thus embodiment is an essential factor of social interaction (Magdalinski, 2009). Human beings engage in practices associated with grooming and hygiene, as well as forms of bodily maintenance, such as exercise and dietary management (Hancock et al., 2000). These activities help individuals to maintain their bodies, but also assist them in presenting themselves as particular kinds of people, and

creating an identity. The policies of bodily conduct and norms of appearance in common life are socially shaped, have changed over time, and differ from culture to culture (Magdalinski, 2009).

### **The Evolution of Body Image Ideals**

Within Western industrialised cultures there have been many changes as to what is perceived to be an attractive and healthy female body shape (Cash, 2008). For example, from the 17<sup>th</sup> century to early 20th century the most desired body for a female was a voluptuous, well-rounded and full figure (Grogan, 2008). Such fleshiness was a symbol of attractiveness, fertility, prosperity, and wealth (Fallon, 1990). In the 1930's and 1940's body image ideals shifted towards a shapelier and slightly more curvaceous figure with bigger breasts (Grogan, 2008; McMinn, 2000). There was a significant movement towards a slimmer ideal in the late 1950's and into the 1960's, with this physique showing signs of upper class women, wealth, freedom and youthfulness (McMinn, 2000). During the 1960's to 1980's, representation of the female body in the media became more slender, with models in fashion and beauty magazines looking slim, but still a physically fit and toned body (Fallon, 1990). However today, being slender is associated with happiness, success, youthfulness and social acceptability (Greene, 2011). Slenderness represents beauty, character, and personal accomplishment (Grogan, 2008). Juxtaposing the current slender ideal, being overweight generally holds negative characteristics (Bushman & Baumeister, 2009; Greene, 2011; Rothblum, Solovay, & Wann, 2009). If a person is overweight they may appear to demonstrate laziness, lack of control and willpower (Greene, 2011). As such, it is clear that although body image ideals have changed over time, the importance of physical appearance has not changed (Cash, 2002a). The ideal body image has

been portrayed through different mediums, but nevertheless women have felt it necessary to pursue and attain the ideal (Derrene & Beresin, 2006). The ever-changing nature of body image ideals can result in women having to adapt their lifestyle to achieve what is seen as the perfect body.

## **The Construction of Body Image**

### **Biological contributors.**

Biological contributors, such as BMI, personality characteristics, physical characteristics and sexual orientation are all accepted potential factors in the development of body image perception.

### ***Body Mass Index of females.***

Having a greater BMI may result in body image dissatisfaction (Friedman, Reichmann, Costanzo, & Musante, 2002). Body weight and body shape have a genetic basis, and greater body weight is seen as undesirable and unattractive in females. This may result in the association of BMI and the development of a negative perception of body image. Cash and Smolak (2011) suggested that by around the age of six years old individuals become aware of the societal bias against people with a higher BMI. However, overweight individuals are not predetermined to have poor mental health or psychological disorders, it is the influence of Western society's negative attitudes towards higher BMI that are thought to result in individuals developing body image dissatisfaction (Cash & Smolak, 2011; Weaver & Byers, 2006).

### ***Female personality characteristics.***

Findings from several studies (e.g., Martin, Sinden, & Fleming, 2000; Ricciardelli & McCabe, 2001; Smolak & Levine, 2001) have suggested that personality characteristics, which develop during childhood may influence the development of body image disturbances. For example, self-esteem and self-confidence are powerful personality characteristics, thus, if a child, adolescent or adult has a secure sense of self, they are less likely to fall victim to societal assaults on their physical worth and body image (Cash, 2008). Furthermore, personality characteristic such as lower levels of social anxiety and social comparison tendencies show parallel relationships with positive body image perception during childhood (Davison & McCabe, 2006).

Furthermore, perfectionism is the desire to attain idealistic goals without failing (Brouwers & Wiggum, 1993; Slade, Newton, Butler, & Murphy, 1991), and is another personality characteristic that may affect the development of body image. Indeed, many studies suggest a link between perfectionism and body image dissatisfaction and eating disorders (Bastiani, Rao, Weltzin, & Kaye, 1995; Davis, 1997; Evans, 2008; Hewitt, Flett, & Ediger, 1995; Sherry, Vreind, Hewitt, Sherry, & Flett, 2009) because an individual who strives for perfection aims to present oneself to others as exemplary and flawless, thus, potentially causing excessive investment in one's looks (Rudiger, Cash, Roehrig, & Thompson, 2007).

### ***Female physical characteristics and appearance.***

An individual's physical characteristics are important factors in shaping body image perceptions (Cash & Pruzinsky, 2004) as the attractiveness of a

person's physical appearance impacts how that person is perceived and treated by others in society (Cash, 2004). As such, the development of an individual's body image is influenced by "goodness of fit" between self-evaluation of the body, an individual's expectation for the physical self, and the perceived evaluation of others (Lerner & Jovanovic, 1990). In addition, the development of body image perception in females may be influenced by ethnicity. For example, women from African-American descent have norms and values that do not represent or mirror the majority of Western societies norms and values (Roberts, Cash, Feingold, & Johnson, 2006), and so women of white ethnicity report greater body image dissatisfaction than females of Hispanic or black American ethnicity (Wildes, Emery, & Simons, 2001).

### ***Female sexual orientation.***

How an individual develops their body image perception can also depend on the pressures they perceive with regards to their sexual orientation. Research (e.g. Cash, 2004; Morrison, Morrison, & Sager, 2004; Share & Mintz, 2002) that has focused on heterosexual females suggests that the pressure to conform to the slender ideal, especially after childbirth, can lead to the development of a negative body image (Cash, 2004; Charles & Kerr, 1986). However, there is significantly less emphasis on beauty and appearance with women who choose other females as their sexual partners (Seiver, 1994), as this culture does not promote the body image ideals that are often seen in heterosexual culture (Brown, 1987; Morrison et al., 2004; Share & Mintz, 2002).

In regards to sporting participation, a study by Russell (2004) on the transiency of body image satisfaction amongst female rugby players, cricketers, and netballers identified that although participation in sport led to an individual

perceiving their body positively, this effect was temporary. Once the females were placed in a social setting, body image satisfaction decreased. Perceptions of their own bodies altered due to the perceived need to adhere to the socially accepted norms of female heterosexual attractiveness and the fear of being labelled as a lesbian (Russell, 2004).

### **Socio-cultural contributors.**

Socio-cultural contributors such as parents, peers, and the media (i.e. television, magazines, and the internet) are considered to be the principal factors in the development of body image perception.

#### ***Parents.***

Parental roles are significant for the development of their child's body image perceptions, as their behaviours place a degree of importance on appearance, establishing a benchmark to which children compare themselves (McCabe & Ricciardelli, 2001). Parents are in control of their child's clothes, appearance, food and exposure to the media, which can influence a child's body image development (McCabe & Ricciardelli, 2001). For example, parents may encourage children to lose weight or comment on their body fat (Grogan, 2008; Phares, Steinberg, & Thompson, 2004; Thelen & Cormier, 1995). In addition to commenting on a child's weight or appearance, parents remarking on their own appearance can also affect body image development (McCabe & Ricciardelli, 2001). Thus, parents who perceive their own appearance negatively, undertake calorie-controlled diets, or exercise solely for the purpose of losing weight, are likely encourage their children to focus on, or have a negative attitude towards their own body shape (Smolak, 2004).

### ***Peers.***

Research (e.g., Blowers, Loxton, Grady-Flessner, Occhipinti, & Dawe, 2003) suggests that from a young age, a relationship develops between negative peer messages (e.g., negative meaning associated with being overweight), and body image dissatisfaction. Furthermore, being overweight can lead to teasing and bullying at school, which has been correlated positively with body image dissatisfaction in children (Jackson, Grilo, & Masheb, 2000; Stice & Whitenton, 2002). A significant percentage of females talk to peers about weight, body shape, dieting, and often voice their worries and anxieties about being or becoming fat (Gerner & Wilson, 2005; Levine, Smolak, & Hayden, 1994; Paxton, Schutz, Wertheim, & Muir, 1999; Ricciardelli & McCabe, 2001; Stice, Maxfield, & Wells, 2003), providing a powerful learning and consolidation of body criticism that often leads to females in the same friendship groups or cliques, having the same body image concerns, drives for thinness, weight loss strategies and dietary restraints (Gerner & Wilson, 2005; Paxton et al., 1999).

### ***Media.***

The media is the most significant influence on people's perceptions on body image ideals and development of their body own image, especially females (Groesz, Levine, & Mernen, 2002; Thompson & Smolak, 2001). Exposure to images of slender and toned women through avenues such as television, magazines and the Internet, from a young age can affect the development of a young girls body image (Thompson & Smolak, 2001). Each medium utilises different approaches in the portrayal of the ideal, which can encourage women to scrutinise and analyse their own body image.

### *Television.*

Increased exposure to television can lead to the development of negative body image perceptions (Harrison, 2003; McCabe & Ricciardelli, 2001).

Increased exposure for children and adults alike to distorted images on television, such as presentation of the ideal and even the typical woman as petite and slender, and exposure to dieting images, can in turn lead to changes in eating related cognitions and behaviours and body image perception (Harrison, 2000, 2003). Furthermore, Harrison (2003) conducted a study on ideal body proportions, and found that women's exposure to slim female ideal on television predicted the choice of a smaller waist and hips on a figure rating scale. Watching television is a large part of contemporary Western societies, therefore, exposure to body image ideals through this means is somewhat unavoidable.

### *Magazines.*

Females who read magazines are repeatedly presented with women of a slim body shape, which is portrayed as 'normal'. If women reading these magazines have a larger body size than the 'normal' women depicted, then body image concerns may arise (Cash & Smolak, 2011). The amount of time females spend viewing appearance-focused media (such as magazines) is correlated positively with the internalisation of the slender ideal and body image dissatisfaction (Levine & Chapman, 2011). Yamamiya, Cash, Melnyk, Posavac, and Posavac, (2005) suggested that body image dissatisfaction can increase by as little as five minutes exposure to images of the slender-ideal woman, which demonstrates that social comparison to media ideals is a powerful moderator of body image dissatisfaction in women (Yamamiya et al., 2005). Theoretical models that explore comparison processes can assist in explaining how an



individual's body image develops, and how body satisfaction and dissatisfaction can occur through the media. For example, Festinger (1954) (cited in Thompson, 2000) devised the Social Comparison Theory, which states that it is human nature to evaluate and compare themselves to others. This process is often unconscious and outside of volitional control. Therefore, females who compare themselves to fashion models in magazines, often report higher levels of weight concerns post-comparison (Milkie & Peltola, 1999; Tiggemann & Slater, 2003). Furthermore, magazines often include large amounts of advertisements for such markets as diet products, cosmetics and exercise equipment, which in turn creates high standards that celebrates slenderness (Levine & Chapman, 2011). This sometimes unrealistic, unattainable, and unhealthy body image ideal has saturated the media, but still these images are portrayed as the ideal, easily achievable, healthy and normal (Levine & Chapman, 2011).

#### *The Internet.*

Females are involved daily with advertisement displayed across Internet search engines and social networking sites. Furthermore, there is a growing number and increasing popularity of celebrity and fashion websites, diet websites, and pro-eating disorder websites. Although limited research has been conducted, it seems likely that increased exposure to the Internet may have some effect on body image (Levine & Chapman, 2011). A survey conducted by MedicineNet (2005) indicated that more than two-thirds of respondents searched the Internet for 'information on health and ideal weight' and around 40% looked for information on fad diets such as the Atkins and Dukan. Therefore, the promotion of weight-loss strategies and diet aids on many Internet websites may promote unhealthy body image ideals.

The media as a whole play a large, and often negative, role in shaping an individual's idea about their physique (ACOG, 2009). The physical images presented by the media, in programming and advertisement, can be unhealthy and difficult, and sometimes impossible, for some females to achieve (ACOG, 2009). This portrayal can lead to females thinking that their own body is unattractive or not accepted in contemporary Western societies, and that their worth is based on their physical appearance. Increasing numbers of women risk their health to imitate the ideal images presented by the media, causing a detrimental affect on well-being and self-esteem (ACOG, 2009).

### **Affect of Body Image Satisfaction and Dissatisfaction in Females**

If an individual has body image satisfaction they are likely to have high self-esteem, a positive self-concept, and high self-confidence (Cash, 2002a; Furnham & Greaves, 1994; Mintz & Betz, 1986). High self-esteem in turn has been associated with a range of positive qualities including well being, life satisfaction, and social adjustment (Biddle, Fox, & Boutcher, 2000; Cash, 2002a). Likewise, if an individual has body image dissatisfaction, they are likely to suffer from low self-esteem and low self-confidence (Cash, 2004), and other psychological implications, such as depression (Noles, Cash, & Winstead, 1985; Stice, Cameron, Killen, & Taylor, 2000), social anxiety (Cash & Fleming, 2002), poor self-esteem (Mellor, Fuller-Tyszkiewicz, McCabe, & Ricciardelli, 2001) and low subjective well being (Ganem, Heel, & Morera, 2009). There is a concern that a negative body image perception is a key driving force behind disordered eating patterns and eating disorders (Martin, Buskist, & Carlson, 2009), such as anorexia nervosa and bulimia nervosa (Grogan, Conner, & Smithson, 2006; Stice, 2002),

and can affect one's physical relationship with their partner, and one's feelings of sexual attractiveness (Meston & Buss, 2010).

### **Body Image Satisfaction and Dissatisfaction in Western Societies**

Many studies (e.g., Bindra, Fairclough, & Westcombe, 1993; Cash, 2002b; Cash & Henry, 1995; Cash, Winstead, & Janda, 1986; Garner, 1997; Grogan, 2008; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999; Wardle, Grabe, & Hyde, 2006) have suggested that the prevalence of body image dissatisfaction in Western countries has increased over 25 years. More recently, Diedrichs et al. (2011) conducted a survey on body image perceptions amongst 320 university women within the UK. The majority of women identified wanting to lose weight and change their body shape. Furthermore, 30% of women would trade at least one year of their life to achieve their ideal body weight or shape. Similar, 26% of the women would sacrifice at least one of the following things to achieve the perfect body: £5000 from their annual salary, a promotion at work, achieving a first class honours degree, spending time with their partner, family, or friends, or would sacrifice their health. 39% of the university women also reported that if money were not a concern, they would have cosmetic surgery to alter their appearance; of the 39% who said they would have cosmetic surgery, 76% (of the 39%) desired multiple surgical procedures.

### **Affect of Sport, Exercise, and Inactivity on Female Body Image Perceptions**

Participation of any type of exercise, be it competitive or non-competitive, can have a positive effect on body image perceptions (Andersen, 2005; Hausenblas & Fallon, 2006). Regular exercise has been linked with both physiological and psychological benefits, and thus it is intuitively acceptable to

consider that involvement in exercise will lead to a positive body image and body satisfaction (Andersen, 2005; Cash & Smolak, 2011; Ginis, Eng, Arbour, Hartman, & Phillips, 2005; Hausenblas & Fallon, 2006; Rossi & Zoccolotti, 1979). Moreover, as the current female ideal body image is to be slender and toned, individuals who exercise or play sport are more likely to be closer this body type (Cash & Smolak, 2011). There are several explanations for how participation in sport and exercise, can have a primarily positive, but at times, negative effect on female body image perceptions.

### **Participation in sport and body image satisfaction.**

There are suggestions why an individual who participates in sport tends to have body image satisfaction. Athletes undertake activities that will increase muscle tone and decrease body fat, which is likely to lead to a physique that is closer to the cultural ideal (Blum, Johnson, & Rodgers, 2010; Furnham, Titman, & Sleeman, 1994; Hausenblas & Symons-Downs, 2001; Miller & Levy, 2005). For athletes, being overweight can limit speed, agility and increased rate of fatigue; therefore, a slender physique is like to achieve optimal performance (Cash, 2008; Cash & Pruzinsky, 2004). Brownell (1991) also suggested that because most athletes have training and nutritional experts on hand to aid them with their muscle tone and dietary intake, which potentially makes them more slender and ultimately resulting in a positive body image.

Competing in sport is also likely to have many psychological benefits, which can lead to an individual having a positive body image perception (Buckworth & Dishman, 2001; Campbell & Hausenblas, 2009; Davis, 2004). Participating in sport can develop strong psychological characteristics, such as high self-esteem, high self-confidence, decreased physique anxiety, and decreased

mood disturbance, and provide a sense of mastery and control (Choi, 2000; Plante & Rodin, 1990), which in turn can relate to a positive body image (Smolak, Murnen, & Ruble, 2000). For instance, Li (1996) examined the body image perceptions of female dancers, athletes, exercisers, and non-exercisers. The participants were compared on various self-perception variables including self-esteem, physical-self perception, body image, and movement concept. Results showed that the dancers, athletes and exercisers, had greater body image satisfaction levels than the inactive participants.

Around 15-20% of high-performance female athletes have regularly engaged in clinically significant weight-loss methods (Davis & Strachan, 2001). Weight concerns in the general population are often correlated with poor body image, although the correlation between these two factors is not always found in female athletes. In a meta-analysis by Smolak, Murnen, and Ruble (2000), results concluded that although female athletes tended to report high drive for thinness, they fared substantially better than inactive age-matched women in the general population in terms of body satisfaction. In addition, Stewert, Benson, Michanikou, Tsiota, and Karli (2003) suggested by that athletes have enhanced sensory-motor coordination compared to inactive individuals, which has been linked to increased ability to perceive body dimensions accurately. Thus, the athlete is better equipped to judge accurately their actual body shape, and have body image satisfaction (Michanikou, et al., 2003).

### **Participation in exercise and body image satisfaction.**

Participation in regular exercise is also thought to have positive effects both physiologically and psychologically (Fox, 1999; Landers & Arent, 2001, Tiggemann & Williamson, 2000). Participation in exercise can regulate body

weight and have physiological benefits such as reduced resting heart rate, increase bone width and density, and a reduced risk of heart disease (Burton, Stokes, & Hall, 2004). Psychological benefits of exercise include increased self-esteem and self-confidence, decreased anxiety and depression, stress reduction, and mood enhancement (Bosscher, 1993; Fox, 1999; Grogan et al., 2006; Landers & Arent, 2001; Martinsen & Morgan, 1997; Sonstroem, 1997; Stein & Motta, 1992; Tiggemann & Williamson, 2000)

Improvements in body image satisfaction among females have been demonstrated through various exercise methods, such as walking (Palmer, 1995), strength training (Maxwell & Tucker, 1992; Tucker & Mortell, 1993; Williams & Cash, 2001) and aerobic exercise (Caruso & Gill, 1992). Bartlewski, Van Raalte, and Brewer (1996) also found that increased body image satisfaction and decreased physique anxiety were found in females participants who undertook aerobics classes, because the females who participated in the aerobics class felt slimmer and positive about their body after completing exercise (Bartlewski et al., 1996). Furnham, et al., (1994) also found that people who regularly exercise rate themselves as more attractive, confident, healthy, and popular, and have significantly higher body satisfaction than inactive females. LePage and Crowther (2010) undertook a study on the effects of exercise on body satisfaction by studying 33 undergraduate females with high trait body dissatisfaction and 28 with low trait body dissatisfaction, who all exercised at least three times weekly. Trait body dissatisfaction was investigated as a moderator of the effects of exercise as well as different motivations for exercise. Results signified all participants experienced lower state body dissatisfaction and positive affect post-exercise.

There are also moderators of the relationship between body image satisfaction and exercise participation. Hausenblas and Fallon (2006), Reel et al. (2007), and Campbell and Hausenblas (2009) recently conducted meta-analyses investigating the influence of exercise on body image, as well as moderators (including study design, gender, age, and amount and type of exercise) of this relationship. The authors concluded that overall regular exercisers had more positive body image perceptions than inactive participants. However, they also found that gender was a significant moderator to body image satisfaction. For both experimental-control and single study designs, they found larger effects of exercise on body image for women compared to men (Hausenblas & Fallon, 2006). In addition, age was found to be a moderator of body image satisfaction, Hausenblas and Fallon (2006) found greater effect sizes for adolescents compared to college-aged students, adults, and older adults in experimental versus control, and single group designs, whereas correlational studies showed significantly smaller effects for adolescents more than any of the other groups. Reel et al. (2007) investigated just older adults versus all other age groups, and found that exercise had a smaller positive effect on older adults body image perception. However, Campbell and Hausenblas (2009) found that exercise had a greater positive effect on adults and older adults body image perceptions. These results suggest that exercise improves body image regardless of age, although the older an individual is, the greater positive effect it is likely to have. For older females, a smaller effect size may be a reflection of their body image being linked to their body's functioning and physical capabilities, and not to appearance-oriented factors, which is often the case in younger age categories (Hallinan & Schuler, 1993; Ransdell, Wells, Manore, Swan, & Corbin, 1998).

Besides participant characteristics, features of the exercise itself were also

found to moderate body image satisfaction. One factor that was consistently found to be a moderator of body image satisfaction was intensity of exercise.

Specifically, low intensity exercise programmes showed significantly smaller effect sizes than strenuous or moderate intensity levels (Hausenblas & Fallon, 2006). Thus, the more vigorous and energetic an exercise regime is, the more likely the individual is to develop body image satisfaction (Hausenblas & Fallon, 2006). Similarly, Reel et al. (2007) found strenuous activities to be associated with greater body image satisfaction levels, than moderate intensity activities. Finally, Martin and Lichtenberger (2004) concluded that resistance training had a stronger influence on body image than other types of exercise, such as aerobic activity.

### **Participation in sport and body image dissatisfaction.**

Contradictory to the belief that participation in sport leads to body image satisfaction (Campbell & Hausenblas, 2009; Davis, 2004; Li, 1996), it has been suggested that involvement in sport can lead to body image dissatisfaction (Lim, Omar-Fauzee, & Rosli, 2011). For female athletes, there are pressures from external influences, such as societal pressures, coaches, and achieving optimal performance, which may be the source of a negative body image perception. For athletes, it has been suggested that the pressure of being an athlete can also lead to body image concerns and the potential of body image dissatisfaction (Lim, Omar-Fauzee, & Rosli, 2011). For example, there is an expectation and pressure for athletes to achieve a slender body, because having too heavy a body weight can hinder agility and speed (Cash, 2008; Cash & Pruzinsky, 2004; Grogan, 2008). Furthermore, pressure from coaches, managers, and teammates in sporting environments to lose weight or maintain the ideal physique can also lead to the



development of body image dissatisfaction in athletes (Hausenblas & Symmons-Downs, 2001).

For an athlete, the type of sport they participate in may also have an effect on body satisfaction levels. Sports that rely on aesthetic quality for a good performance outcome may result in some athletes with low body image satisfaction (Abbott & Barbor, 2011; Huddy, Nieman, & Johnson, 1993; Saint-Phard, Van Dorsten, Marx, & York, 1999; Slater & Tiggemann, 2011). For athletes in aesthetic sports, the desire to be leaner to improve sports performance scores may also be a significant predictor for disordered eating, and potential body image concerns (Krentz & Warschburger, 2011). For example, sports such as ballet (Brooks-Gunn, Burrow, & Warren, 1988; Pierce & Daleng, 1998; Radell, Adame, & Cole, 2008; Wilmerding, McKinnon, Mermier, 2005) gymnastics (De Bruin, Oudejans, & Bakker, 2007; Harris & Greco, 1992; Salbach, Klinkowski, Pfeiffer, Lehmkuhl, & Korte, 2007) and ice-skating (Ziegler, Chor, Nelson, Larson, & Drewnowski, 1998; Ziegler, Kannan, Jonnalagadda, Krishnakumar, Taksali, & Nelson, 2005) are likely to promote slimness by rewarding aesthetic quality with optimal performance, which has been associated with increased levels of body image dissatisfaction. De Bruin, et al. (2007) examined the relationship between dieting behaviour and body image in female aesthetic athletes and results showed that elite gymnasts dieted more often than controls to achieve an aesthetically pleasing physique. Furthermore, Pollatou, Bakali and Theodorakis, (2010) studied body image perceptions of professional and amateur dancers, and results showed that the dancers had significant body area dissatisfaction compared to amateurs.

Moreover, sports where an athlete must be a certain weight to compete can often lead to body image dissatisfaction. Smolak et al. (2000) reported elite athletes who participated in sports where there are weight restriction categories, for example boxing, were at increased risk of eating disorders and body dissatisfaction, due to weight loss by unhealthy means. It has also been suggested that female athletes involved in equestrian events, where weight restrictions are present, are prone to body image dissatisfaction and disordered eating patterns (Torres-McGehee, Monsma, Gay, Minton, & Mady, 2011). In addition, sports where leanness is beneficial but not a requirement for competition, may lead to athletes with a negative body image perception. Research by Swami, Steadman, and Tovée (2009) examined sports, which demanded athletes to be lean. They assessed 42 female track and field athletes, 47 female taekwondo athletes and 44 female non-athletes. The participants completed self-report measures of body size, satisfaction and media influence. The results showed that track and field athletes had the lowest body satisfaction scores, suggesting that women participating in leanness-promoting sports experience greater body dissatisfaction, compared to non-athletes. Davies and Cowles (1989) also examined the body image perceptions of 190 female athlete (those with a thin body build (TB) and those in a sport which requires a normal build), and non-athletes. Results identified that the athletes who require a thin build were at higher risk of body image disturbances due to the weight requirements and the potential performance advantages of having a thin build. The TB group also showed greater weight concerns, more body dissatisfaction and more abnormal diet patterns compared to the normal build athletes and non-athletes.

It has also been indicated that athletes had higher levels of perfectionism compared to non-athletes, which can lead to body image dissatisfaction (Krane et

al., 2001). Links have been identified between perfectionism and risk factors for developing eating disorders (Gotwals, Dunn, & Wayment, 2003; Hausenblas & Carron, 1999). For example, Wilmore (1996) concluded that athletes high in perfectionism had a higher drive for thinness compared to than athletes low in perfectionism. In addition, Krane et al. (2001) compared athletes with non-athletes and found that athletes had higher levels of perfectionism compared to non-athletes. Perfectionism is a personality trait characterised by striving for flawlessness and setting excessively high standards for performance, accompanied by tendencies toward overly critical evaluations of one's behavior (Flett & Hewitt, 2002). In sports, some researchers see perfectionism as an adaptive trait that helps to achieve elite performance (Gould, Dieffenbach, & Moffett, 2002), however, could cause an athlete to become over-critical of their body.

There can be gender role conflict for female athletes competing in male dominated sports, as there are additional external pressures that may make them feel pressure to conform to the social norms of a feminine physique, this may lead to body image dissatisfaction (Choi, 2000). That is, female athletes often try and make a balance between a feminine-looking body and a masculine-looking body (Choi, 2000). Frequently, 'feminine-looking' female athletes are considered as being attractive and sexually desirable, however, if a female athlete has a masculine looking physique, this is seen as negative, unattractive, unacceptable and often abnormal (Choi, 2000). Additionally, athletes who do not look feminine often automatically get labelled as lesbians (Krane, 1997; Russell, 2004), thus, potentially leading to body dissatisfaction with some going out of their way to be more feminine. Furthermore, enhancement of femininity can often be a requirement enforced on athletes by coaches or administrators. For example, the Ladies Professional Golf Association employed an image consultant to aid golfers

with hairstyles, make-up and clothing in order to show an appropriate, feminine image (Festle, 1996).

### **Participation in exercise and body image dissatisfaction.**

Contrary to the idea that exercise results in body image satisfaction amongst females (LePage & Crowther, 2010; Tiggemann & Williamson, 2000), it has often been suggested that regular exercisers may feel social pressures that can also lead to body image dissatisfaction (Cash & Smolak, 2011). As Western societies place great importance and emphasis on females maintaining and slender and toned physique, women may be inclined to exercise to conform to these societies ideals. Consequently, a female exerciser's motive to exercise may determine the development of body image dissatisfaction (De Bruin, Woertman, Bakker, & Oudejans, 2009). Motives to exercise can vary; for example, some women feel driven to exercise by a desire to maintain a fit and healthy body, and where health benefits are the sole reason for participating in physical activity. This can lead to body image satisfaction (De Bruin et al., 2009). For other women, exercising is a social activity, whereby they can meet with friends and exercise together, which can also lead to enhanced mood and body image satisfaction (Cash & Smolak, 2011). However, many women are driven to exercise by the desire to lose weight, and the hope that exercise will enhance their appearance. Paradoxically, this motive can result in body image dissatisfaction (Davis, 2004). LePage and Crowther (2010) suggested that although it has been identified that exercise can improve body image perceptions, if an individual exercises for appearance or weight-related motives this can result in body image dissatisfaction. Thus, although exercise has can have a positive effect on body dissatisfaction and affect for high frequency exercisers, their exercise motivations

impact these effects. The work of Hubbard, Gray and Parker (1998) found that the women who's motive to exercise was appearance related and to burn off the food that day they had consumed that day, expressed greater investment in their appearance and greater feelings of physical unattractiveness, even though there was no significant difference between the groups in actual body size. Therefore, a motive to exercise that stems from interpersonal or sociocultural pressure to achieve a particular body shape or lose weight, in turn may lead to body dissatisfaction because of the somewhat unrealistic nature of the individual's goals.

Furthermore, Western societies are consumed by beauty and appearance, therefore, in addition to dietary aids and cosmetic surgery, exercise has also become a product in the highly commercialized beauty culture (Choi, 2000). This arose in the early twentieth century when there was an increasing acceptance that exercise was a desirable health behaviour. Exercise is frequently represented as a beauty activity in the guise of health behaviour. As such, health and slenderness have become synonymous, with exercise being a way to achieve this physique (Choi, 2000). Exercise is often portrayed misleadingly, instead of encouraging exercise as a means to improving physical and psychological health, it is promoted as a way to lose weight, improve muscle tone and appearance. This disingenuous promotion can lead individuals to exercise for reasons that encourage the individual to become consumed with achieving the perfect body, rather than a healthy one. Duncan (1994) found that instead of reporting resting heart rate, lowering of cholesterol levels and blood pressure as benefits of exercise; most women reported weight loss, increase in bust size, and decrease in waist size. Therefore, the cultural pressure and obsession with beauty and

appearance, can lead female's to exercise simply to enhance their beauty, which can ultimately lead to body image dissatisfaction (Choi, 2000).

The type of exercise employed can also heighten the pressures placed on female exercise participants. The atmosphere in aerobic exercise classes emphasises development of the ideal feminine body. Women in these classes describe wanting to develop thin, toned bodies, yet also wanting to avoid becoming too muscular (Maguire & Mansfield, 1998; Markula, 1995). Thus, the focus on attaining an ideal physical appearance is highlighted through the types of exercises employed (Markula, 1995), and through participants' perception that their appearance is being judged by other class members (Frederick & Shaw, 1995). This generates a rivalry among some women in exercise classes concerning their body shape and size, and fitness level (Maguire & Mansfield, 1998).

### **Inactivity and body image dissatisfaction.**

Limited literature has been completed on the affects of inactivity in females on body image perceptions. Although its restricted quantity, research has been identified that women who do not complete any physical activity are likely to have negative body image satisfaction. For example, Pelegri and Petroski (2009) conducted an analysis on the prevalence of a sedentary lifestyle, overweight and body image dissatisfaction among 399 adolescent females. The proportion of the sedentary female participants dissatisfied with their body was 61.8%. The results showed that of the sedentary female participants, 48.4% wanted to reduce their body silhouettes. Moreover, unhealthy BMI was associated with body image dissatisfaction, but only among the sedentary female participants, with overweight sedentary female participants exhibited 11 times greater chances of body image dissatisfaction, than those with healthy BMI. It has

also been identified that sedentary behaviour and inactivity, such as no structured sport or exercise, is likely to result in decreased physical and global self-worth (Goldfield et al., 2007).

## **Summary**

Connections can be made between athletes, exercisers, and inactive females and their body image perceptions. There are connections that are ubiquitous between athletes and exercisers with regards to body image satisfaction. Research has suggested that both athletes and exercisers are likely to have a more positive body image compared to inactive females due to having a physique that is close to the cultural ideal. Furthermore, it has been proposed that both athletes and exercisers tend to have significant psychological benefits such as increased self-confidence, decreased social anxiety and increased body image satisfaction due to being more active.

Although there may be links in the literature between the three groups in terms of body image perceptions, there are also features that are a manifestation of lifestyle behaviours. For example, in regards to athletes, some sports rely on aesthetic quality for a good performance, some sports are bound to weight restrictions, and some compete in male dominated sports, all of these stresses can lead to body image dissatisfaction. However, none of these characteristics can be applied to exercisers. Nonetheless, exercisers also have unique pressures that may not apply to athletes. For example, female exercisers may feel pressure to exercise for appearance or weight reduction reasons, which can ultimately lead to body image dissatisfaction.

To date, there has been limited research completed on comparative body

image perceptions of athletes, exercisers, and inactive young females. The research that has been completed has produced equivocal findings and has been inconsistent in research design. For example, it has been suggested that athletes and exercisers have a more positive body image perception in comparison to that of inactive females. However, contrary to these findings, it has also suggested that competing in sport or undertaking exercise can lead to body image dissatisfaction. The sources of a negative body image perception in these females have been linked to pressures from external influences, such as societal pressures, coaches, achieving optimal performance, and achieving the ideal body. Therefore, understanding body image perceptions of athletes, exercisers and inactive females is important for a negative body image perception can have detrimental effects on an athlete's performance, increase an individuals social anxiety, decrease an individuals self-esteem, and result in low subjective well-being. Additionally, much of the extant literature adopts a quantitative research design, however, qualitative research on this topic adds a different dimension; therefore using a qualitative methodology is advantageous because it allows the researcher to gain a deep and detailed understanding of the participant's perspectives. Psychologists have recognised the importance of understanding an individuals experiences of, perceptions of and interpretation of their bodily experiences and the meaning that they give to them. It is beneficial to explore the participant's subjective experiences in depth and understand the participant's accounts of the process by which they make sense of their experiences. Thus, the following study aims to fill this gap in the literature by investigating body image perceptions in the case of elite athletes, habitual exercisers, and inactive young females. In addition, this research seeks to understand the role of sport and exercise, or leading an inactive lifestyle, on the developments of a female's body image perceptions.



## **Research Questions**

- Do body image perceptions differ between female elite athletes, habitual exercisers and inactive individuals?
- Does participation and non-participation in elite sport or habitual exercise have a perceived affect on female body image perceptions?
- Is there a perceived link between body image satisfaction in females and participation in elite sport or habitual exercise?

## **Research Objectives**

- To examine critically the body image perceptions of female elite athletes, habitual exercisers, and inactive individuals.
- To explore comparatively the body image perceptions of female elite athletes, habitual exercisers, and inactive individuals.
- To consider the role of elite sport and habitual exercise within the development of body image perceptions in females.

## **CHAPTER THREE**

### **Methodology**

#### **Introduction**

This chapter identifies and critiques the constructivist epistemological perspective and the qualitative methodology that was followed in this study. It will identify the reasoning for the chosen methodology and why this approach was beneficial to the study. It will then define the participants in terms of recruitment, and the nature of the sampling in terms of gender, age, and location, and consider why these factors were chosen. Trustworthiness and ethical issues are also identified in this chapter, including the measures taken to ensure participants were not at risk. This chapter will explain and critique the procedures that were undertaken, and how the data were collected and analysed.

#### **Epistemological Perspective**

Epistemology is the study of knowledge and justified belief (Creswell, 2009). It is the branch of philosophy that considers the origin, nature, methods, and limits of human knowledge (Carr, 2006; Fumerton, 2006). It has also been considered as knowledge generation and the knowledge that is valued and trusted (Creswell, 2009). Epistemology distinguishes between true adequate knowledge, and false inadequate knowledge (Audi, 2010; Nooteboom, 2006). Sarantakos (2005) described a researcher's epistemological position is to underlie the methodology, which guides the research, in terms of the type of data collected and how it is interpreted.

Positivism and constructivism are two epistemological perspectives. Positivism has been the predominant philosophical view of the natural sciences, and a main epistemological perspective in body image research (Robson, 2011). Positivists believe objective knowledge, or facts, can be gained from direct experience or observation, and are the only knowledge available to science (Robson, 2011). This perspective concentrates on theory or hypothesis testing through the process of deduction, and normally as a result of a classic laboratory design, which aims to gain knowledge on universal casual laws (Creswell, 2009). Differing, constructivists believe reality and truth are socially constructed, and to understand any phenomenon one must ascertain what it means to the individual; thus, the construction of that meaning is dependent on the individual's relationship with that phenomenon (Audi, 2010; Robson, 2011). The construction of meaning is dependent on the individual's social context. Thus, constructivists examine individual differences and similarities within each situation (Robson, 2011).

Positivism searches for universal laws and involves finding empirical consistencies where two or more things appear together or in a sequence, thus, cause is established through demonstrating such empirical consistencies (Robson, 2011). Knowledge comes only from scientific endeavour, and represents verifiable and factual information (Hinchey, 2010). Creswell (2009) underlines that a positivist would suggest that feelings and emotions have no place in research, whereas it is data, evidence, and the rational considerations based on the evidence and data that shape our knowledge. In contrast, the process of deduction does not occur in constructivism, rather, theories are developed from data through induction. Constructivists develop research that focuses on knowledge that is assembled by people in interaction with others, how they think and feel, and how

this interaction has effects on given circumstances, in this case the participant's body image perceptions (Audi, 2010; Horn, 2008). Crotty (1998) highlights that constructivism incorporates the concept that all individuals have their own unique way of constructing meaning.

Positivists believe that behaviours can be observed and numerically and objectively measured and analysed. Therefore, a positivist epistemology would not give the researcher in this study the opportunity to gain an in-depth understanding of the participant's body image perceptions, or to holistically consider the effect of sport and exercise on the development of body image perceptions on these female groups. Thus, for the purpose of the current study, the researcher adopted a constructivist epistemological stance to gain an understanding of the body image perceptions of female elite athletes, habitual exercisers and inactive females. A constructivist epistemological stance was taken for it seeks to understand experiences as it is lived, felt and undergone by the people in the social situations (Schwandt, 2007). A constructivist epistemology was utilised as this study attempted to construct concepts and themes to make sense of the individual's body image perception and the affects of elite sport and habitual exercise on this perception (Schwandt, 2007).

## **Methodology**

Silverman (2010) affirms that a methodology defines how to go about exploring a phenomenon. Crotty (1998) described methodology as "the strategy, plan of action, process or design lying behind the choice and use of methods to the desired outcome" (p.3). The epistemological stance of the research design for this study was underpinned by constructivism, thus, informing a qualitative approach. Body image research has been dominated by quantitative studies (e.g.

Didie, Kuniega-Pietrzak, & Phillips, 2010; Foland, Kniffin, Foley, & Bailey, 2010; Hormes, Lytle, Gross, Ahmed, Troxel, & Schmitz, 2008; Sperry, Thompson, Sarwer, & Cash, 2009), which has led to extensive statistical research. Nonetheless, the research objectives for this study were to examine critically the body image perceptions of the participants, compare the body image perceptions of elite athletes, habitual exercisers, and inactive females, and consider the role of elite sport and habitual exercise within the development of body image perceptions. To achieve these objectives it was advantageous for the present study to adopt a qualitative approach, which involved a detailed account of the participants' perceptions. Furthermore, this study has undertaken a qualitative approach in order to complement the extant literature and to gain an in-depth and detailed view of the participants' perspectives of their body image. Body image is a personal subject and so a qualitative research process can enable a more sensitive method of data collection that is respectful of the participants' thoughts and feelings (Newell, 2000).

### **Interpretative Phenomenological Analysis**

The aims of this study were addressed through Interpretative Phenomenological Analysis (IPA). IPA is an approach to qualitative research that has received increased interest and popularity in the past decade (Smith, Flowers, & Larkin, 2009). This methodology has its origins in psychology and recognises that the main role of the researcher is to understand the experiences of the participants (Smith & Osborn, 2008). The purpose of an IPA study is to determine how an individual make sense of their personal and social world, the meaning of these experiences, states or events, and the importance these hold for that person (Smith & Osborn, 2008). Thus, the present study aimed to consider the role of

elite sport and habitual exercise within the development of body image perceptions. This qualitative approach did not seek to find one single answer or truth, but aimed to learn about the individual's experience of their body image (Pringle, Drummond, McLafferty, & Hendry, 2011). Finley and Ballinger (2006) defined IPA as "a variant of phenomenology that aims to explore individuals' perceptions and experiences. Taking an idiographic approach, the focus is on the individuals' cognitive, linguistic, affective and physical being" (p. 260).

IPA research involves a two-stage interpretation process whereby the researcher attempts to interpret how the participants make sense of their experience. It is possible to take different interpretative stances and IPA combines the use of both an empathetic and questioning hermeneutic (Smith & Osborn, 2008). It is this double hermeneutic process that separates this methodology from other phenomenological approaches (Smith, 2010). This process involves the researcher interpreting the participants interpretation of their body image perceptions. Furthermore, IPA is a strongly idiographic approach concerned with detailed analysis of the case either as an end in itself, or before moving to similarly detailed analyses of other cases. This study considered the participants as experts in the effects of elite sport, habitual exercise, and inactive lifestyle on body image perceptions.

#### **Advantages of IPA in body image research.**

As a methodology, IPA promotes many of the principles of 'good practice' that symbolise quality markers in qualitative research (Elliott, Fischer, & Rennie, 1999; Smith, 2004). When studying body image perceptions it is capable of answering the most in-depth and detailed questions regarding an individual's experience, thus IPA was deemed to be the most relevant for the present study

(Shaw, 2001). An individual's body image perception is not a subject that is easily quantifiable; each participant's experience is unique to them. Therefore, using a qualitative methodology was important because it enabled the participants to discuss their body image perspectives openly with the researcher. Health psychologists have recognised the importance of understanding an individual's experiences, perceptions and interpretation of their bodily experiences and the meaning that they give to them (e.g. Leventhal, Nerenz, & Steele, 1984).

Additionally, IPA is inductive and can expose unanticipated phenomena during the data collection (Shaw, 2001; Smith, 2004). IPA does not start with a set of predetermined hypotheses to confirm or reject, thus, this methodology is flexible, unrestricted and open-ended, which allows the researcher and participant to ask and discuss aspects of their experiences that were unexpected (Shaw, 2001). Therefore, IPA had the potential to discover constructs of body image that have not previously been established or developed. Instead of intending to agree or disagree with a hypothesis, IPA can investigate body image perceptions from a new viewpoint by learning from those who were experiencing it. Furthermore, IPA is a methodology that is data driven, rather than theory driven and is ultimately person-centred, which is beneficial in the case of this study as the perception of one's body image is often a sensitive topic and one that is unique to each individual (Shaw, 2001). This methodology is dependent on the participant and them co-operating and articulating their experience. It is the participants' voice that is central to the development of the theory and the understanding of body image perceptions (Smith, 2010). It allows for the participant to voice their opinions without being encouraged by the predetermined notion or theories that the researcher presents to them, and it allows the researcher to start with an open mind and to let the research to find its own path (Shaw, 2001).

### **Limitations of IPA in body image research.**

Although there are many advantages to adopting IPA, limitations also exist. One of the main issues is the length of time it takes to analyse the data in the depth required (Pringle et al., 2011). It is considered a lengthy and detailed process that requires a significant amount of time and dedication from the researcher. Furthermore, completing good IPA research requires the researcher to develop complex skills, such as interviewing, analysing, interpreting, and writing. Smith (2010) acknowledges that at different stages of the research process, the researcher will have different degrees of fluency, expertise and adeptness at these skills. He also recognises that it is the degree of proficiency in these skills that will influence the quality of the research being conducted. Therefore, if the researcher is lacking in any of these skill areas, this has the potential to jeopardise the trustworthiness and credibility of the research (Pringle et al., 2011).

For the present study, the researcher had previous experience in conducting qualitative studies, and also completed a pilot study for each participant group, thus, developing the necessary skills discussed by Smith (2004). Furthermore, the ability of participants to communicate the rich texture of their experience is a question that has been often asked of IPA. Critics of IPA have argued that there is an assumption amongst researchers that the participant's language reflects the reality of their lived experience (Langdridge & Hagger-Johnson, 2009). Individuals may struggle to use language in a way that conveys the intricacies and degrees of their experience (Willig, 2001). Moreover, when discussing a topic as sensitive in nature as body image perceptions, participants may have greater difficulty in expressing their experience and opinions. Smith and Osborn (2008) accept that people often struggle to express what they are



thinking and feeling, yet argue their emotional state should be interpreted by the researcher, by analysing what they say and by asking critical question.

Furthermore, for the present study, the researcher ensured that there was a friendly and comfortable atmosphere to provide the best environment for the participants to discuss effortlessly about their body image perceptions. The researcher also aimed to create a rapport with the participants to ensure fluent conversation between researcher and participant, in order to gain the best data from the interview. A potential limitation when utilising IPA is the issue of the researcher interpreting the participant's voice efficiently. The researcher ensured this was completed effectively by getting the participant to confirm and clarify their views throughout the interview process.

### **Participant Recruitment**

When recruiting participants, IPA advocates the purposive sampling of small, relatively homogeneous groups (Smith, 2010). Body image perceptions may vary across the lifespan (e.g. Cash et al., 1986), and therefore an age range of 18–25 years was selected in order to maintain homogeneity within the sample. Purposive sampling focuses on selecting information-rich participants that will illuminate the questions under study (Patton, 2002). A strict inclusion criterion was adhered to when recruiting the participants for this study. Before recruitment was confirmed, the potential participants were given an information sheet (see Appendix A).

The female athletes selected were elite, highly competitive and performing at least regional level, consistently for a minimum of three years. This three-year bracket was chosen to ensure that athletes were competent at regional level. The researcher had access to elite females which matched this description, through

University of Gloucestershire sporting contacts. The female exercisers were habitual exercisers, for whom exercise was an essential part of their weekly routine. The General Practice Physical Activity Questionnaire (GPPAQ) (see Appendix F) (DoH, 2006) was utilised to determine the amount of physical activity the participant undertakes. This screening questionnaire provided a simple, 4-level Physical Activity Index (PAI) categorising participants as: Active, Moderately Active, Moderately Inactive, and Inactive. The researcher determined that the participant must reach the 'Active' level on the PAI to be part of the habitual exercisers participant group. Additionally, they had to have been habitual exercisers for at least three years. The researcher has access to female habitual exercisers, which matched this description through University of Gloucestershire contacts. For the inactive female participants, they had not completed any structured sport or exercise for at least twelve months. This was also determined using the GAPPQ (DoH, 2006). Participants had to have reached the 'Inactive' level on the PAI to be part of the inactive participant group. The researcher had access to inactive females, which matched this description through personal contacts. Additionally, there was a maximum BMI of 30 for all participants, which ensured focus was on the impact of sport and exercise on body image, rather than the impact of body weight on body image perceptions.

The sample recruited for this study consisted of:

- I. Elite female athletes (n=4) (i.e. those who train in a particular sport competitively for four hours (or more) per week, performing at least regional level, for three years minimum), aged between 18-25.
- II. Habitual female exercisers (n=4) (i.e. those who have reached the threshold of recommended exercise – activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more – for example 30 minutes on at least 5 days a week (DoH, 2011)), aged between 18-25. Habitual can be defined as “designating an action or state that lasts for or is repeated over an extended duration” (Corbin & Lindsey, 2006).
- III. Inactive females (n=4) (i.e. those who have not completed any structured exercise in the last twelve months), aged between 18-25.

### **Ethical Considerations**

Approval from the UDRC was gained and University of Gloucestershire ethical procedures (UoG, 2011), BASES (2006) and BPS (2009) code of conduct were followed. In order to address ethical considerations, before beginning the interview, the participants were given an information sheet, the researcher was introduced, and a full overview of the study was given (Silverman, 2000; Van den Hoonaard, 2002). The main researcher obtained voluntary informed consent at the time of the interview. The participants were informed that if at any point they did not feel comfortable then it was possible to stop the interview immediately (Silverman, 2000; Van den Hoonaard, 2002). Furthermore, if the researcher felt that a participant showed any sign of psychological distress, showed signs of an

unidentified eating disorder or clinically low body dissatisfaction, they were also withdrawn from the study.

Additionally, the contact details of a BASES sport and exercise psychologist (the first supervisor of the present study) were given to all the participants, if they wished to discuss any issues raised during the study. It was also confirmed to the participant that after the interview that data collected would be kept anonymous and confidential and for the researcher's use only (Silverman, 2000). Anonymity and confidentiality was upheld by not recording participant's names and only which group the participant was in. Moreover, all records from the interviews were kept on a password-protected computer that was only accessible to the researcher. It was important to minimise the risk to the participants (e.g. stigmatisation or invasion of privacy) and to maximise the potential benefits of the study to the research community participants (Coughlin & Kalodner, 2006), therefore it was vital that all ethical considerations were taken into account.

### **Procedure Following Recruitment**

Once recruited, the participants were given a verbal explanation about the study at hand and the protocol was clarified. The participants were free to ask any questions or queries they may have had about the study or anything related. Once the participant agreed to take part in the study, they were asked to meet in a ground floor room at the University of Gloucestershire at a time that was convenient for both researcher and participant. They were informed that if at any point throughout the process they felt uncomfortable or uneasy they were able to terminate the interview. They were also advised that if they wished to withdraw after the interview was complete, they could contact the researcher who would

remove their data from the study. In advance of commencing the interview the participant was asked to sign a consent form (see Appendix B). Approval for this study was sought from the University Research Degrees Committee (UDRC), and the British Association of Sport and Exercise Sciences (BASES) (2006) and the British Psychological Society (BPS) (2009) guidelines to ethical procedures were adhered to. In addition to the interview, the researcher made summary notes immediately after each interview. These notes consisted of reflecting on the atmosphere of the interview, the researcher's perception of the participants' body language, and keeping records of aspects that were unidentifiable through transcripts, such as body language and ambiance. This was used to aid the researcher give her reflection of the participants' responses during the analysis process. Furthermore, the researcher kept self-reflective notes throughout the research project.

### **Data Collection**

IPA research aims to understand how participants perceive and make sense of the phenomenon under study. It is possible to collect data suitable for IPA analysis in a number of ways. However, an cyclical process is key to IPA in order to gain saturation, thus, the most effective way to collect data for an IPA study is through semi-structured interviews followed by secondary interviews (Smith, 2010). This form of interviewing allows the researcher and participant to engage in a discussion whereby the open-style questions are adapted as a result of the participants' responses and the researcher is able to probe any interesting and important areas that may arise throughout the interview (Smith, 2010). For the present study the researcher had a set of questions on an interview schedule to guide the interview, rather than dictate it. The interview schedule consisted of

open questions under the subheadings: Demographic Details, Appearance, Media, Health, Diet, Fitness, and Body Weight. These questions were based on the current literature and the areas the researcher felt worthy of exploring.

Furthermore, the elite athletes, habitual exercisers, and inactive females had a different interview schedule with some questions relating specifically to their group (for the interview schedules of the athletes, exercisers and inactive individuals, see appendices C, D and E). The researcher tried to enter into the psychological and social world of the participant by asking questions specific to their own perspective as the conversation took place, in order to achieve a greater understanding of participants' personal interpretation (Smith, 2010). The interviews were intended to be comprehensive and in-depth, therefore an adequate number questions were developed (Drever, 1995; Gubrium & Holstein, 2002; Smith, Flowers, & Larkin, 2009). The semi-structured interview questions were utilised as a guideline, and the participant was free to pursue and discuss avenues of interest (Gardner & Moore, 2006). The questions encouraged the participant to speak about their body image perceptions with as little prompting from the interviewer as possible (Smith, 2010). Once the researcher had conducted the semi-structured interviews questions, secondary electronic mail interviews were conducted. The interview questions for the secondary interviews were a result of the reflective process undertaken by the researcher following the semi-structured interviews. Upon reflection, the researcher recognised areas that warranted further questioning to ensure saturation and questioned any ambiguity from the semi-structured interview.

The interviews took place in an atmosphere that made the participant feel comfortable and at ease, therefore, it was likely to encourage an accurate account and thorough outlook of the participants' experiences (Hersen, 2006). The aim of

the interviews in the present study was to understand the body image perceptions of the elite athletes, habitual exercisers, and inactive female participants.

Additionally, the interviews aimed to compare the body image perceptions of these three groups, by asking open questions to allow a comparison between the groups. Furthermore, the interview questions aimed to discover the role of exercise or sport in the development of body image perceptions of the three groups.

### **Advantages of semi-structured interviews.**

There are many benefits that warrant the use of semi-structured interviews in qualitative research. Firstly, they allow the researcher to make sense of the participant's experiences and cognitive-emotional processes (Van Hoorn, Komlosi, Suchar, & Samelson, 2000). Secondly, this process gains understanding from the participant's point of view rather than generalise. Semi-structured interviews also allows for more specific, in-depth information to be gathered, more so than that of questionnaires or surveys. This method allows for less constrained and more detailed information to be obtained. Semi-structured interviews also enables a relationship to be built, and encourages a two-way communication with the researcher and participant (Borrini-Feyerabend & Buchan, 1997). This is beneficial to the present study as it allows for the participant to express freely their opinions and perceptions. It also enables the researcher to include questions that may not have been considered before, and that may have arisen as the interview commenced.

### **Limitations of semi-structured interviews.**

While there are many advantages to a semi-structured interview, the limitations have also been considered and addressed. Some practice and experience is needed on behalf of the researcher to gather adequate information and to use this tool appropriately. However, the researcher has previously undertaken interviews of this nature, therefore had some experience of interviewing, and recognised how to ensure the participants were comfortable and able to articulate their feelings. A pilot study was also conducted for each sample group to ensure the researcher was comfortable with the interview schedule and process.

### **Data Analysis**

When analysing data in an IPA study, meaning is central, and the aim of the researcher during the analysis process is to try to understand the content and complexity of those meanings rather than measure their frequency (Smith, 2010). This involves the researcher participating in an active and interpretative relationship with the transcript. The aim of the researcher was to understand the participants' personal perceptions of their body. However, this is dependent on the researcher's own personal conceptions, which were essential to make sense of those participants' personal perceptions of their body, through the process of interpretive activity (Smith, 2010). Therefore, a double hermeneutic was involved, whereby the researcher tried to interpret, of the participants' interpretations of their experiences.

Firstly, the transcript was read a number of times, with annotations being made around significant aspects of participant discussion. Theoretical sensitivities



(i.e. the current research literature, the researcher's personal experiences) informed the interpretation and analytical process (Glaser, 1978). The transformation of initial notes were turned into themes throughout the text (Smith, 2008). The themes were then listed, and the researcher then looked for connections between them. Global themes were coded in line with the body image literature (e.g., body image satisfaction/ dissatisfaction, cultural ideal, self-presentation). A comparison process also took place across the transcripts to look for any links between the texts. The next stage involved a more analytical or theoretical ordering, where the researcher attempted to understand and interpret the connection between the themes. Some themes clustered together, while others were a super-ordinate notion (Smith, 2008). As clustering themes emerged, the transcript was checked again to ensure they matched the words of the participant. This process was completed for each participant. Patterns were then established cross case, and then documented in a master table of themes from each group (elite athletes/ habitual exercisers/ inactive). The themes were then ordered as to which captured most strongly the participant's concerns (Smith, 2008). The researcher then reviewed and audited the themes to ensure they are a true representation of the original transcript. The themes from the master table were transformed into a narrative account (Smith, 2008).

### **Trustworthiness**

In this study, trustworthiness was established by developing questions in the interview schedule that were based on the current literature. Before the interviews commenced, a pilot study was completed for each group, which allowed the researcher to confirm and validate the content and the sequence of

questions and to also become familiar with the communication patterns of participants.

## **Summary**

To conclude, the current study was developed under a constructivist epistemology, as it is the belief that knowledge is not discovered but is constructed from understandings of the social world and interactions between human beings and their environment (Denzin & Lincoln, 2005). The aims of this study were addressed qualitatively through IPA. The purpose of this IPA study was to distinguish how the three participant groups made sense of their personal and social world in regards to their body image perceptions, the meaning of these experiences, states or events, and the importance these held to the participants (Smith & Osborn, 2008). IPA supports the purposive sampling of small, relatively homogeneous groups (Smith, 2010). Furthermore, as body image perceptions can vary across the lifespan, as established by Cash et al. (1986), an age range of 18–25 years was selected in order to maintain homogeneity within the sample. Participants were recruited using a strict inclusion criterion.

It has been suggested that the most effective way to collect data for an IPA study is through semi-structured interviews followed by secondary interviews to ensure saturation (Smith, 2010). Approval from the UDRC was gained before proceeding, and the University of Gloucestershire ethical procedures (UoG, 2011), BASES (2006) and BPS (2009) code of conduct were followed. During data analysis meaning was central, and the aim of the researcher was to interpret and understand the participants' body image perceptions, and the effect elite sport or habitual exercise may have of their perceptions. However, this was dependent on the researchers own personal conceptions, which were essential in making

sense of the participants' personal perceptions of their body, through the process of interpretive activity (Smith, 2010). The next chapter will discuss the results gained from the present study on body image perceptions of elite athletes, habitual exercisers, and inactive females.

## **CHAPTER FOUR**

### **Results and Discussion**

#### **Introduction**

This chapter presents the results and discusses critically the findings of the study on female body image perceptions of the athletes, exercisers and inactive individuals. This chapter is divided in nine sections and will present and interpret the participants views on the cultural body image ideal, the participants current view of self, the effects of external influences on body image perception, self-presentation, personality characteristics of the participants, eating behaviours, and finally the motives and barriers to participation.

To date, there has been limited research that has conducted a comparative exploration of body image perceptions of athletes, exercisers, and inactive young females. The research that has been completed thus far has produced ambiguous findings and has been inconsistent in research design. Understanding body image perceptions of athletes, exercisers and inactive females is important as a negative body image perception can have detrimental effects on an athletes performance, increase an individuals social anxiety, decrease an individuals self-esteem, and result in low subjective well-being (Cash & Pruzinsky, 2004).

#### **The Cultural Ideal**

##### **Athletes and the cultural ideal.**

The cultural ideal body image in Western societies is one that is feminine, yet physically fit, slender, and toned, but not too muscular (Bordo, 1993; Martin, 2010). Every participant across all three groups identified this as the known

cultural ideal, yet it was how this ideal influenced their own personal body image perception that differed.

Most of female athletes interviewed articulated the ideal as slim and toned, however identified that their physiques were more muscular than the ideal. Furthermore, although expressing that others could view their physique as too muscular, the athletes accepted being muscular and suggested it in terms of aiding them in achieving optimal performances. For example, Sophie expressed:

*... when you play sport you get the muscles and you get toned. I think if I didn't play sport, my legs would be a lot less chunky than they are. It doesn't bother me, because I know my legs are muscly because I play sport, and because its muscle. I don't care, I play sport, it's expected.*

The extant literature explains that female athletes often try to strike a balance between a feminine-looking physique and a body that is functional and can achieve optimal performance (Choi, 2000). For a female athlete, a functional body often results in a muscular body. Nevertheless, if a female athlete is too muscular, this can lead to body image dissatisfaction (Choi, 2000; Krane, 2001). Participating in activities such as sport is sometimes seen as unfeminine and can lead to women having a more masculine body shape (Choi, 2000). Thus, if a female participates in sports she is often expected to conform to patriarchal rules, which maintain that she is predominantly recognised as a heterosexual female (Choi, 2000). However, this was not the case with the female athletes in the present study as although they identified increased muscularity as a consequence of their sport, they all articulated acceptance of their body and a degree of satisfaction. It was found that most of the female athletes had a functional orientation towards their bodies and interpreted them as tools for successful

performance (Loland, 1999). Given the physical demands of participating in sports such as netball and hockey, there was an acceptance of the impact that this may have on an athlete's body. For example, the body has a function while participating in sport and therefore 'looks' a certain way. It is important to understand the mechanism or process through which a female athlete may go in order to accept their body. It could be argued that the athletes had a greater satisfaction and accepted their body type because their peers/teammates had a similar body type. Additionally, participants felt that they were expected to have a more muscular body to compete in a sport efficiently. It was therefore part of their identity as an athlete and there is a process by which they came to understand and accept it.

Respondents also identified that an acceptance on one's body was more likely to be achieved if an individual played a team sport. It may be suggested that being part of a team offers a 'support network' for the individual (Rosenfeld, Richman, & Hardy, 1989), and having other female athletes with similar athletic physiques and who all face the same social stigmas may make it easier to accept that increased muscularity is an inevitable consequence of participating in sport. Being part of a team can bring increased confidence and self-assurance (Rees & Freeman, 2009). Thus, it seems logical that being part of a team can lead to greater confidence in one's body. Acceptance of one's body involves embracing the body as it is, understanding and acknowledging potential blemishes that may not fit the cultural ideal, yet still being happy with one's body. Some studies (e.g., Brownell, 1991) have shown that body acceptance promotes body image satisfaction, encourages individuals to participate in exercise for health reasons and to eat a balanced diet. Mindful-acceptance suggests that acceptance is a learnt state of mind that can be developed and trained (Lutkenhouse, Gardner, & Moore,

2010; Wolanin, 2005). Achieving mindful-acceptance can result in positive outcomes such as decreased anxiety and increased well-being, and it seems in this study's case, body image satisfaction (Forsyth & Eifert, 2008; Gardner & Moore, 2004; Kee & Wang, 2008). Having a muscular, but not too muscular, body such as the athletes in this study is accepted and often desired in Western societies, thus providing reason for the athlete's mindful-acceptance. However, further conducting research on the mindful-acceptance of a muscular physique, and the effect of a muscular body in female athletes would give a greater understanding of this topic. Furthermore, Sophie identified that a muscular body was '*expected*' in female athletes, thus suggesting different norms and expectations from female athletes regarding their physiques. It has been suggested that in Western societies, female athletes are expected to be fit and lean to be competitive in their sport (Manore, 1999), consequently providing a possible explanation as to why the majority of athlete participants thought a muscular body is expected.

Furthermore, Emma identified being labelled a lesbian and suggested that playing a more masculine sport (hockey) meant being automatically labelled. For example:

*They always say hockey girls are all lesbians (laugh)... Just because I don't wear loads of make up and spend hours in the mirror doesn't make me a lesbian... we've got a bit of muscle on us, which is said to look masculine. People automatically think that we're manly or lesbians.*

It appeared that Emma was unconcerned by the opinions of others and also further discussed how her peer group had the same opinion with regards to being labelled a lesbian. For example, "*My friends are just like me. They have the same*

*attitudes as me. I don't think I could be friends with some bimbo that only cares about what she looks like".*

It has previously been suggested that homophobic stereotyping and labelling can lead to body image dissatisfaction or an increased desire to look feminine (Krane & Kauer, 2007). However, this was not the case in the present study. This may be because attitudes in Western societies seem to have shifted and being labelled a lesbian or masculine is not necessarily deemed as negative. Indeed, it has been suggested that both women and men now respect the role of female athletes, and society does not perceive female athletes as unfeminine (Dumitrescu, 2006; Royce, Gebelt, & Duff, 2003). Another factor may be that there is a growing resistance to the values of femininity, as a result of sportswomen challenging the "traditional" gender stereotypes (Choi, 2000; Wilde, 2006). A wider definition allows for greater opportunity for women to provide their own definitions of "womanhood" and "femininity" (Choi, 2000). Additionally, an increased presence of females in sports deemed as masculine helps overcome the male-oriented and given stereotypes, thus giving girls and women the courage to participate in a broader range of sports (Choi, 2000; Kehily, 2008; Wilde, 2006).

### **Exercisers and inactive participants and the cultural ideal.**

The exercisers and inactive participants identified the cultural ideal as slender and toned. Yet, differentiating from the athletes, the majority of exercisers and inactive individuals suggested trying but failing to replicate the cultural ideal. They expressed a feeling of pressure to conform to the cultural ideal, and it being unrealistic and somewhat unachievable. For example, exerciser Ellie articulated:



*It makes me feel really bad about my body and myself. I will never be size zero.. I can be skinny but I will never be tiny, like the women they show. So knowing I will never reach the ideal makes me upset, but it motivates me to try and achieve the perfect slim body. That's all I want.*

Furthermore, inactive participant Anna suggested:

*Well I do look at people with that figure (the ideal) and wish I had a figure like that... I don't think it's realistic for women to not have any fat on them whatsoever. Obviously it looks nice, and I would love to look like that, but I think its harder to get a figure like that than they make out it is.*

It was observable that the exercisers and inactive participants both felt pressure to conform to the cultural ideal body image and they accepted that slender was their ideal body. Exercising participants used exercise in an attempt to achieve this ideal, with these participants using routines that were rigid and strict, indicating obsessive traits (Emmelkamp & van Oppen, 2002). It has been suggested that obsessive behaviours are linked to issues such as low self-esteem and disordered eating behaviours (Cassin & von Ranson, 2005; Chisuwa & O'Dea, 2010; Molloy & Herzberger, 1998) and body image dissatisfaction (Leone, Sedory, Gray, 2005; Olivardia, 2007), which was the case in this study. The inactive participants tried excessive dieting methods in order to achieve the ideal, however this was unsuccessful.

## **Current View of Self**

### **Athlete's current view of self.**

The majority of female athletes interviewed had a positive body image perception. They identified feeling happy and confident with their body, were more satisfied with their bodies and evaluated their physical appearance, health and fitness positively. For example, Emma suggested, *“Yeah I’m happy (with my body) I know I’m in proportion. I don’t have much fat, so although my weight is heavy-ish, a lot of it’s muscle”*. Hannah also suggested, *“Yeah I would say that they think I’m a good-looking person. Without sounding really big headed”*. She continued, *“I’m happy with my body. I work hard and I know I’m in good shape”*.

These findings support the widely documented research suggesting participation in sport leads to greater body image satisfaction (Blum et al., 2010; Davis, 2004; Miller & Levy, 2005; Tiggemann & Williamson, 2000). The athletes interviewed had a slender and toned body, which is close to the cultural ideal body image, and may be the reason for their satisfaction. The athlete participants suggested their culturally ideal body has been achieved through participation in sport and eating a balanced diet, all of which are also associated with improved well-being and feelings of happiness and content (Shepard & Raats, 2006).

Furthermore, some of the athletes interviewed suggested that their body reflected what is expected from Western societies. For example, Sophie identified:

*Well my body isn't airbrushed for a start so it will never look perfect like the images you see in the media. But I think I have a decent body. I've worked hard to get it into shape and be fit and toned. If you're size 8 to 10 that's desirable I think. So I guess I have a body that is considered in the 'ideal' category.*

There is often an expectation placed on individuals in Western societies from external influences such as the media to attain the ideal body. However, the athletes in the present study had attained this ideal, and often displayed a sense of achievement at doing so, therefore, this could be the reason the majority of the athlete participants felt satisfied with their bodies. Research has suggested that because athletes undertake activities that will increase muscle tone and decrease body fat, their body will be closer to the physique that Western societies identifies as normal or ideal; therefore they are likely to be satisfied (Blum, Johnson, & Rodgers, 2010; Hausenblas & Symons-Downs, 2001; Miller & Levy, 2005).

Opposing that, one female athlete (Kelly) suggested that her level of body image satisfaction was only moderate. However, her sport (dance) places high expectations for achieving the ideal physique and she articulated her ideal body to be *'very very slim but have muscle definition'*, which appeared to affect her body image perceptions. For example, *"Although I know I'm not fat, sometimes, it (the dance industry) puts elements of doubt in your head"*. Kelly also articulated that an individual with the ideal physique gets rewarded with increased work and is also accepted amongst her peers:

*If you attain this physique you seem to get more professional work... You also do not look out of place at auditions, along side the other dancers... If you did not have this physique, you feel self-consciousness when you audition with the dancers that do have the perfect physique. So you have more about confidence in yourself... You need to look like a dancer (slim, fit and healthy).*

This outcome is supported by the evidence base, which suggests that competing in a sport where aesthetic quality contributes to an optimal performance places additional pressure on athletes to have an ideal physique (Abbott & Barbor, 2011; Slater & Tiggemann, 2011). Dancers are required and expected to be strong, their movements are expected to be technical and artistically gracious, and they are expected to complete every performance perfectly. This sport is judged on aesthetic qualities, in which subjective judgments are made to assess performances, and thus demanding lower body weight. Additionally, professional work is reliant on adhering to the ideal physique, which again can add pressure on the individual (Andrist, 2003; Stice, Nemeroff, & Shaw, 1996; Zoletic & Duraković-Belko, 2009). Combined, this seems to have led to body image concerns and over-analysis of one's own physique (Zoletic & Duraković-Belko, 2009).

### **Exerciser's current view of self.**

All of female exerciser interviewed suggested having body image dissatisfaction or feeling dissatisfied on occasions. They identified feeling unhappy, self-conscious and dissatisfied with their bodies, and a desire for the reduction of body size. For example, Liz proposed:

*I'm just not happy with stuff and there's always something I can improve. I'm conscious of feeling fat and stuff, and there's times I think where did that gut come from, and it just makes me feel terrible. If I catch myself in the mirror and my top shows I've got a bit of a belly...that's horrendous for me.*

Ellie also identified, *"I wouldn't say very happy with it (her body). Just because I could lose some weight, a bit of flab...I think I'm a bit overweight. So I don't think very happy at the moment"*.

The effect of exercise on an individual's body image perception has thus far produced differing findings, with some suggesting that regular exercisers are likely to have body image satisfaction (Miller & Levy, 2005) possibly due to being closer to the cultural ideal, and for the psychological benefits exercise brings. However, this was not the case in the present study. This study's findings support literature (e.g., Davis, 2004; Hubbard, Gray, & Parker, 1998; LePage & Crowther, 2010), which suggested that women who exercise may still be dissatisfied with their body because their motive to exercise is to alter their appearance. LePage and Crowther (2010) and Vartanian, Wharton, and Green (2012) argue those with poor body image satisfaction are attracted to exercise, but despite physical changes in their appearance, remain negative with regards to their body. The majority of the exercisers interviewed suggested body weight change as reason for their preoccupation with the ideal body. For example, Vicky acknowledged that after becoming a mother her body image satisfaction lowered, Ellie identified that after becoming injured and gaining weight, she became dissatisfied with her body, and Kate also suggested previously being overweight and sedentary as to reasons why she is dissatisfied with her body. Despite identifying body weight as the reason for body image dissatisfaction, all the

exercising participants were close to the cultural ideal, being slim, toned, size 8 to 10 females, which may suggest body image distortion (BID). BID is a condition by which an individual is unable to see herself accurately in the mirror and perceives features and body size as distorted (Furnham, Badmin & Sneade, 2002). BID can often predict the onset of unsafe weight loss behaviours among non-overweight females (Lietchy, 2010). Excessive exercise or unhealthy exercise routines where the motive is to change the body is also associated with BID (Lietchy, 2010). BID may be caused because of a necessary desire to achieve the ideal body. Zoletic and Durakovic-Belko (2009) identified that the pursuit of a perfect physique can lead to BID because individuals are often aiming to achieve an unrealistic goal.

#### **Inactive participant's current view of self.**

Similarly to the exercisers, the majority of inactive females also expressed body image dissatisfaction, which ranged from extreme dissatisfaction to slight dissatisfaction. For example, Anna suggested:

*I'd say unhappy (with her appearance). Just because I know what I used to be and what I am now is different. It does get me down from time to time, I beat myself up thinking I've let myself go... Because I know I've put on weight and I know I need to lose it because it's not healthy or attractive being overweight.*

Furthermore, Leanne also identified, "*Dissatisfied (about her body image)...Because I feel fat...Because I don't know, I can feel it on my body, I can feel fat on my body*".

These findings also support present literature, which suggests that females who do not undertake any exercise are likely to have a negative body image

perception (Grogan, 2008; Hausenblas & Fallon, 2006; Pelgrini & Petroski, 2009). The majority of the inactive participants had a BMI of over 28, which is categorised as clinically obese (Beebe & Myers, 2010), and so having a negative body image may be a reflection of their physiques not being close the current ideal. Some of the participants indicated a reason why they felt dissatisfied with their body is because they previously had a body close to the cultural ideal. The change in body weight has triggered unhappiness and dissatisfaction with their body image. For example, Anna suggested:

*I just feel I've let myself go recently. Probably the last 9 months to a year has been a downwards spiral. I think I could do with losing a bit of weight. And I usually go out with the best of intentions at the beginning of the week, but usually I've caved by the time Friday is here.*

This finding is supported by the literature that suggests body weight gain can cause body image dissatisfaction (Neumark-Sztainer, Paxton, Hannan, Haines, & Story, 2006; Tiggemann, 2005). Furthermore, it seems that a change in body weight has been brought about by unhealthy eating behaviours. There is evidence that perceived pressure to be slim, slim-ideal internalisation and elevated body mass increases the risk for subsequent body image dissatisfaction (Stice & Shaw, 2002). There is also consistent support for the claim that body dissatisfaction is a risk factor for eating disturbances and that this relation is controlled by increases in dieting behaviours (Stice & Shaw, 2002). An increase in calorie consumption, due to external factors such as stress, without participating in exercise could lead to weight gain, which can ultimately result in body image dissatisfaction.

The current study indicates that the majority of inactive participants within this study have body image dissatisfaction however, one participant (Louise) suggested that she had body image satisfaction despite not undertaking any exercise. She articulated:

*I think I've got an overall positive body image, I know my body has changed, but I still don't feel depressed or really really upset about how it's changed, I think if I made the effort it would go back to how it used to be.*

She continues, *"I've got an active job as well. It's not like I sit down and eat all day"*.

This participant demonstrates control, and suggests that she could change her body if she wanted to. In comparison, feeling a lack of control and feeling helpless in terms of changing one's body is often associated with the obese and body image dissatisfaction (Garner, Garfinkel, Stancer, Moldofsky, 1976; Shoneye, Johnson, Steptoe, Wardle, 2011; Stutzer, 2007), therefore it seems reasonable to suggest that if one feels in control of their body and weight this could lead to increased body image satisfaction, which seemed to be absent in the other inactive participants. Furthermore, as this participant feels her occupation is physically active, there is no innate need to exercise. In addition, this participant was a nurse, and therefore may have been more concerned with health rather than appearance. In accordance to some research, for example Grogan (2006), this participant prioritised health rather than body image perceptions, which has led to increased body image satisfaction. However, the effect of one's occupation and understanding of physical health on their body image perception has had little research and thus should be explored further. Additionally, it is acknowledged that this participant was close to the current body image ideal, therefore might not



feel the pressures that are placed on inactive individuals who are not close to the current ideal.

## **External Influences**

### **Affects of the media on athlete's body image perceptions.**

External influences, such as the media, family and peers, were identified by the athletes, exercisers, and inactive individuals as having an effect on body image perceptions. Across all three groups the majority considered the media as having a profound effect on the cultural ideal body and often on their own body image perceptions. The athletes suggested frustration at the ideal body image by the media, and its association with success. For example, Hannah identified:

*...even though I'm quite head strong and it annoys me seeing how much they show really thin women as having an amazing body... Like not long ago I saw in a magazine someone slate Adele for being overweight. And it really annoyed me because I thought like they don't care about how much of an amazing singer she is and what a successful career she has, they only care about how she looks. Like success to me is achieving something in my life and being good at it. Not just how skinny I am or how toned my abs are.*

The athletes interviewed in this study identified frustration at the ideal being associated in the media with success and achievement. The media often suggest that to feel satisfied about one's body, women must look good. Furthermore, the media suggest that achieving the ideal body results in other life success (Krane, 2001). However, the athletic participants in this study reject with this notion of success, potentially because athletes often define success and achievement with winning and being talented at a particular skill (Ghaye, Lee,

Shaw & Chesterfield, 2009; Gill & Dzewaltowski, 1988). The athletes interviewed interpreted the images they see in the media as untenable or unworthy of interest, and that success in terms of talent should be highlighted. Furthermore, the athletes showed little sign of comparing themselves to the images they see in the media, thus, low social comparison tendencies have been associated with positive body image perception (Davison & McCabe, 2006).

### **Affects of the media on the exerciser's and inactive participant's body image perceptions.**

The exercisers and inactive participants interviewed identified the media as having a negative effect on their own body image perceptions. The exercisers and inactive individuals commented often that the media places expectations and pressure on females to achieve the ideal body. Furthermore, these two groups often socially compared themselves to the images they saw in the media. For example, Ellie suggested:

*... in the media, there's no room for bigger girls... They are all super slim and pretty...they kind of set what's normal...and if you're not like that your abnormal. If you're bigger then it makes me feel really bad... It's plastered everywhere, and if you don't look like it you're seen as substandard...It makes me think, 'I just go to the gym every day', it makes me think, 'I go to the gym every day but I don't look like that' ... I think it's a misrepresentation of the truth. But it still makes me feel like I want to be slimmer...That's how it makes me feel.*

Additionally, Liz suggested:

*... there's lots of pictures all the time of these skinny celebrities ...And you start to look at these pictures and it makes me feel so out of shape really... It just makes me feel really bad and insecure about myself. It makes me want to work harder to look like them. Even though in the back of my head I know it's unachievable really, well unless I starved myself.*

Furthermore, Louise expressed:

*... If you read magazine's and you see stuff like Coleen Rooney, she was in a magazine in a bikini and they were saying 'is she pregnant?' and I was thinking to myself, well I have that, so what do they think about me? Do I look pregnant too? It makes me paranoid. Like she's a normal looking girl and they make her out to be this obese person, so I think well if they think that about her what do they think about me.*

It has been suggested that social practices in Western cultures perpetuate the tendency for women to monitor and observe their body shape and participate in self-blame when they do not attain the ideal body (Duncan, 1994). The media identify that to "take care of yourself" is equated with being healthy, but mainly being beautiful (i.e., having an ideal body shape). Thus, as identified earlier, the majority of exercisers and inactive participants were dissatisfied with their body image, therefore appeared to engage in self-blaming behaviours, which can lead to body image dissatisfaction. Furthermore, Liz suggested the ideal was unachievable but nevertheless tried to accomplish it, thus, the exposure to slim-ideal women featured in the media may be primarily responsible for setting a standard that most women internalise but few can meet (Anderson & DiDomenico, 1992). Sherry, Vreind, Hewitt, Sherry and Flett, (2009) offers a novel view of the connection between perfectionism and BID, and suggest that

rather than striving to achieve a perfect body, individuals with BID are characterised by a strong desire to avoid appearing imperfect to others. This suggests a possible explanation as to why the exercisers try to achieve the unachievable culturally ideal body, to avoid criticism or others evaluating their appearance. In addition, it is notable that the exercisers and inactive individuals interviewed often engaged in social comparison behaviours. Social comparison refers to the cognitive judgments that people make about their own attributes compared to others. The comparisons are fundamental to self-evaluations and depend less on objective situations than on how an individual judges the self in relation to others on a particular attribute (Wood, 1989). The findings from the present study are relevant to Festinger's social comparison theory (Festinger, 1954), which suggests that when people make upward comparisons, and compare themselves with others whom they see as higher is social status, the result can be decreased self-regard (Collins, 1996). Therefore, the slim-ideal physiques in the portrayed by media appears to be largely responsible for the high levels of body dissatisfaction in these participants (Hargreaves & Tiggemann, 2003; Krayer, Ingledew, Iphofen, 2008).

#### **Affects of the coach on the athlete's body image perceptions.**

In addition one of the athlete participants identified her coaches as having an influence of her body image perception. Kelly suggested that her coach often made her conscious of her body image and had an effect on how she viewed her body. For example, Kelly identified:

*Yeah I think from a young age in dancing, although when you're younger it's never said to you blatantly like it can be when you're older, it's the norm not to be fat. Overweight girls in ballet never got on. As you get older though, it's just said to you 'you need to lose weight for this' 'you need to be more toned or stronger in this place'. There's no beating around the bush... Well it's just like part of me now. It's my subconscious, you know.*

It has been suggested that individuals participating in sports, such as dancing, can feel pressure from external influences, such as their coaches, to attain the ideal physique (Lim, Omar-Fauzee, & Rosli, 2011). The coach is an influential figure in an athlete's life, and negative practices or attitudes concerning body image can have a powerful impact on the athlete's own behaviors or attitudes (Biesecker & Martz, 1999; Griffin & Harris, 1996; Harris & Foltz, 1999; Thompson, 1987; Thompson & Sherman, 1993). Thus, the pressure from her coaches to achieving an aesthetically pleasing body may be a potential reason as to why this athlete was the only athlete to have occasional body image concerns. The other athletes in the present study did not identify their coaches as a source of pressure to achieve the ideal physique, potentially because none of these athletes participated in sports where the aesthetic presentation of the athlete resulted in a superior performance.

#### **Affects of parents on the exerciser's body image perceptions.**

The exerciser participants also identified their parents as sources of their body image concerns. For instance, Kate suggested:

*My mum is a bit of a health freak. She's always been thin, and I'm a bit bigger than her, and even though I know I'm a normal size now, sometimes it is a bit weird, like I sometimes think I'm not normal being a size 10 and I should be an 6-8 like her, but then I think have a reality check and think to myself I know I'm not weird or abnormal.*

In addition, Ellie identified, *“Well my parents are always pretty blunt so that keeps me realistic about how I look and stuff. That's why I wouldn't wear stuff that doesn't fit or suit my body”*.

Females concerns about their body image can often stem from their parents, and often more predominantly the mother (Grogan, 2008; Ricciardelli & McCabe, 2001). For example, parents who comment on their own appearance can affect the body image development of their child (Ricciardelli & McCabe, 2001). Parents may view their own appearance negatively, and undertake unhealthy behaviours solely for the purpose of losing weight, which can incite their children to focus on, or have a negative attitude towards their own body shape (Smolak, 2004). Furthermore, parents who comment on body weight or appearance can influence their child's body image perception (Grogan, 2008; Huang, Donohue, Becerra, & Ronghui, 2009; Phares, Steinberg, & Thompson, 2004; Thelen & Cormier, 1995).

## **Self-Presentation**

### **Self-presentation in the athletes.**

Self-presentation is the process by which an individual aims to control and monitor how they are perceived and evaluated by others (Schlenker & Leary, 1982; Leary, 1992; Leary & Kowalski, 1990). One type of self-presentation

concern is social physique anxiety (Hart, Leary & Rejeski, 1989). This occurs when individuals are concerned that other people are evaluating their physiques or bodies negatively. In the present study, the female athletes demonstrated low self-presentation concerns in the majority of cases. Aside from the dancer, all the athletes suggested being unaffected by others perceptions of their body. For example, Emma identified, “... *I just don't let that kind of thing bother me. They are entitled to their opinion and that's fine... I just don't care what people think about how I look*”.

Additionally, Sophie suggested:

*If I don't care why should I care what other people think. I mean I could understand if one day I came in and I look 20 stone, if people turned round and said 'what's happened' I would think I would need to do something about it. But I don't think any change isn't noticeable, so I don't care.*

Researchers such as Leary (1992) and Krane (2001) have identified that female athletes often demonstrated low self-presentational concerns. For some athletes, it may feel that others are evaluating their physique, and often their physique may lead to an optimal performance, and this was the case with the dancing participant in this study. However, the majority of the athletes had low self-presentation concerns, unlike much of the current research to date. This may be due to them having a culturally ideal body, therefore feeling no anxiety as to what others perceive. It seemed as though the athletes often disregarded or rejected the slim model, not being deterred by social ideals. Additionally, these participants undertook sports where their physiques were not scrutinised or judged. Furthermore, it could be that participating in sport provides a mechanism that allows these athletes to reject or resist presentational concerns.

Additionally, the majority of athletes also associated ‘having confidence’ with their apathetic view’s on other people opinions about their appearance. Through interpretation it appeared that the athletes recognised others would evaluate them positively. For example, Sophie described:

*I think because I am a confident person I don't particularly care about other people's opinions. I know who I am and what I think of my body. Everyone is entitled to their own opinion... I don't particularly care if they like how I look or they don't. It's up to them.*

Low self-presentational concerns have been related to social and bodily self-confidence (Laghi, Pallini, D'Alessio, & Baiocco, 2011). Thus, being a confident individual may be the reason the athlete’s had low self-presentational concerns. Further research needs to be conducted into self-presentation and confidence and its effect on an athlete’s body image perception.

### **Self-presentation in the exercisers.**

In contrast, the majority of exerciser participants reported high self-presentation concerns and anxiety about their physique. For example, when deliberating other people’s perceptions of her appearance, Liz articulated:

*It affects my whole confidence... If I heard that someone had said something bad about me, or they said something to me that I was unsure of how to take it, that would completely knock me sideways. You know that would really affect me...I am quite insecure, because I have these things underlying.*

Furthermore, Ellie suggested:



*If they said something negative it would make me feel really bad. I'd go really quiet and I wouldn't know what to say. It would really get to me though and I would think about it the rest the day. I would analyse what they said.*

The findings in the present study are supported by literature that suggests women who exercise can display higher self-presentation concerns (Gammage, Hall, Ginis, 2004; Hausenblas, Brewer, & Van Raalte, 2004; Leary, 1992).

Women can engage in exercise to acquire the ideal female body suggesting self-presentation concerns as a possible motive for exercise (Leary, 1992).

Additionally, Ellie identified a lack of self-confidence, *“Just like I wont get into a swimming costume or anything. It's an accumulation of feelings. It makes me self-conscious, and lack in confidence”*.

The exercisers also suggested lacking in self-confidence alongside their high self-presentational concerns. Adolescents with interpersonal problems can be concerned about others as sources of disapproval and the self as lacking in skills to forge connections and avoid rejection (Jackson, 2007). A poor body image may hinder an individual's development of interpersonal skills and positive relations with others (Ricciardelli & McCabe, 2003).

### **Self-presentation in the inactive participants.**

Similarly, the present research found that the inactive participants also displayed high self-presentational concerns and anxiety about their physique. They reported feeling self-conscious of other people's perceptions of their body, wanting to fit in amongst their peers, and thought that people would see them as fat or overweight. As did the exercisers, the inactive participants interviewed also identified lacking in self-confidence. When discussing other people's opinions,

Laura expressed, *“I just don’t want people to think I’m some fat lazy bitch. I know that sounds blunt but that is what I think. I don’t want people to think badly about me”*.

Furthermore, Anna suggested:

*I have put on weight for a start. I’ve got flabby bits that I get really paranoid about it and stuff. I don’t really have much confidence in myself or how I look, at all. I get worried about what others are thinking and stuff, it makes you paranoid when you’re overweight I think. Like people are talking about you.*

This finding is supported by current literature (Focht & Hausenblas, 2004; Martin, Siden, & Fleming, 2000), which suggests that women who are inactive have high self-presentational concerns and anxiety about their physiques. For example, Culos-Reed, Brawley, Martin, and Leary (2002) found that people who exercised two or less times a week had greater self-presentation concerns. Culos-Reed et al. (2002) also suggested greater self-presentational concerns and greater public self-consciousness were associated with being a less frequent exerciser because of anxiety about others perceptions. Furthermore, sedentary behaviours can also induce psychological problems such as depression, and lower self-esteem and self-confidence (Katzmarzyk, Church, Craig, & Bouchard, 2009). These self-presentational concerns may inhibit females from wanting to participate in exercise, therefore could be the reason why the inactive participants in this study lack in the positive psychological benefits exercise brings (Buckworth & Dishman, 2001; Campbell & Hausenblas, 2009; Davis, 2004; LePage & Crowther, 2010; Tiggemann & Williamson, 2000). Moreover, the majority of the inactive individuals had a BMI of 28 or more, thus, being classed as overweight, they are likely to feel the societal pressure of not having a socially acceptable

physique. Further research needs to be conducted to understand the effect of activity and inactivity on self-presentation.

Moreover, the exercisers and inactive individuals displayed self-presentational behaviour by suggesting trying to manage their appearance to fit in with their peers. They discussed feeling envious of their peers' slim physiques, made social comparison to their peers' physiques, and displayed self-presentation concerns. For example, Vicky suggested:

*My friends are really thin and don't do anything to get that way which sometimes makes me want to exercise more to look like them... I just think that since having a baby it's really hard to get back into shape and two of my friends that have had babies literally went back to being stick thin within two weeks and it's taken me ages to even get back to how I was before, let alone get really toned.*

Furthermore, Ellie identified:

*I have a lot of really skinny pretty friends so I think that can make me feel bad because sometimes I feel I don't fit in with that look. So I'm constantly trying to achieve what they look like.*

Leanne also argued, *"I don't think they do anything specifically to make me feel like that, but I think in any group of friends you have people of different shapes and sizes and you do compare yourself to that"*.

It was evident that the exercisers and inactive females in this study felt self-presentational concerns, tried to manage others impressions, and aimed to conform to their peers appearance, in order to feel accepted amongst their compeers and that they fit in (Blowers, Loxton, Grady-Flessner, Occhipinti, &

Dawe, 2003). A female's peer group can provide her with emotional security, which would enable her to share their opinions and problems. However, peers can also place pressure on an individual to conform to society's expectations and the peer groups standard (Small, 2001). If a woman behaves differently than her peers, she may feel ostracized, worry about others opinions, or even fear bullying (Small, 2001). Additionally, Ridolfi, Myers, Crowther and Ciesla (2011) suggested peer comparisons were associated with greater body image checking and feelings of guilt. Additionally, feelings of self-consciousness amongst a group have been identified as being a catalyst to increased self-presentational concerns (Vartanian, 2009). Females are frequently exposed to slim others through their interactions with peers, but limited research has examined the effects of exposure to slim peers on body image dissatisfaction. Therefore, more research on this area could aid identification of peer influences on body image perceptions.

## **Personality Characteristics**

### **Personality characteristics of the athletes.**

The majority of the athletes seemed to be emotionally stable, and all of them discussed being competitive, passionate, committed, having self-esteem and self-confidence. For example, Hannah argued:

*I'm quite a confident person anyway, but I don't think that's a result of having a good body. Like I'm a happy and content person... I'm a really competitive person too so I've got to do something that I can win at. I get like satisfaction out of winning, but also the motivation that if you lose you've got to improve then beat them next time.*

Additionally, Emma identified:

*I'm good at hockey so I go and I keep pushing myself. I've got a good group of friends there too. Hockey satisfies my competitive side, so it feels good to be part of a good team and a good club, and knowing I'm part of a team who is winning and beating other really good teams.*

As identified from the interviews with the athletes, self-esteem and self-confidence are influential personality characteristics, thus, if an individual has a secure sense of self, and does not feel self-conscious they are likely to have body image satisfaction (Cash, 2008; Davison & McCabe, 2006). Research has also indicated that if the personality traits of emotional stability are present in a person, they are less likely to be dissatisfied with their body and have a negative self-image (Cruickshank, 2006).

#### **Personality characteristics of the exercisers.**

The personality characteristics of high self-consciousness, hyper-competitiveness, and perfection were also interpreted from the exercisers interviews. For example, Liz suggested:

*That's difficult because I am competitive. I suppose now I'm more competitive with myself... it makes you driven I think (participating in exercise), I'm hyper-competitive...I think in my mind, I know I want to be thinner and I know I want to be a certain weight and stuff. And it's weird sometimes because I think I've been doing extra running and stuff then I'll get on the scales and be disappointed, so I think 'god I need to be better.. there's a reason that I get up and run every morning, when it's icy.. when I really don't want to, because I'm worried about being fat. If anybody said anything it really does knock me for six, I can really go inside myself and be quite quiet for a few days and stuff, I hate it.*

Kate also articulated:

*I don't know I just do. It makes me feel good. Like I've achieved something. It's weird but like one-step closer to my perfect body. I just think having the perfect body will make everything in your life seem better. Even if I lost half a stone, I would still want to lose more.*

Some individuals are more susceptible to negative body image than others. People's individual qualities and personality traits can also contribute to body image dissatisfaction. Some of these contributing factors include, an individual who always desires perfection, an individual who is highly impressionable, and an individual who tends to compare themselves to others (Schutz, Paxton, & Wertheim, 2002; Wertheim, Paxton, & Blaney, 2009). Additionally, the majority of the exercisers identified being excessively competitive with themselves, and striving to achieve perfection. These two personality characteristics have been associated with exercise addiction (Adams & Kirkby, 2002). Exercise addiction has also been strongly linked to body image dissatisfaction (Davis, 2000; Grogan, 2008; Hausenblas & Fallon, 2006; Liechty, 2010), as appeared to be the case for the majority of the exerciser participants in the present study.

Furthermore, the findings in this study support the current literature, that a perfectionist personality characteristic has been associated with excessive focus on self-presentational concerns (Flett & Hewitt, 2005). The exercisers had a high concern for the impression they make on others, and when they are in social situations, they seek to portray themselves as positively as possible, thus their desire to seek perfection comes into play. A desire for perfection and self-presentational concerns can contribute to health problems, including a quest for bodily perfection and eating disorders (Flett & Hewitt, 2005). Further research

should be conducted on the effect of a perfectionist personality characteristics and body image perceptions. Additionally, it was evident that appearance preoccupation occurred amongst the exerciser participants in social situations, which has stemmed from an individual having high self-consciousness and an expectation to be scrutinised by others (Rosen, Reiter, & Orosan, 1995).

### **Personality characteristics of the inactive participants.**

Many of the inactive females in this study indicated they were insecure, have low self-confidence, were inclined to hold the ideals set by societal constructs in high regard, and often displayed a lack of control. For example, Leanne repeatedly discussed dieting as a way to try and control her body weight. However, her proposal that her dieting was repetitive and recurrent, suggests another form of ensuring control. Irrational and illogical behaviours were also identified, for example, *“They want to be healthy, but I just want to be thin, and I don’t care how I get there. I’ll do outrageous diets that I know are bad for me but I don’t care”*.

She continued, *“I’ve done practically every diet there is, I’ve done Atkins, I’ve done The Cambridge Diet, I’ve done Slimfast, I’ve done Weight Watchers, I’ve done Slimming World”*.

Laura identified, *“I think I would have more confidence in myself if I exercised. I know that’s a big thing for me, my confidence. I do doubt myself a lot and think that I’m ugly and fat and stuff”*.

Body image dissatisfaction and eating disturbances have been associated with an irrational personality type, as displayed by some of the inactive participants (Heatherton & Baumeister, 1991; Rosen, Reiter, & Orosan, 1995). It

has also been suggested that an individual with low self-esteem, lack feelings of self worth based on perceived physical appearance, and feelings of insecurity, are likely to have body image dissatisfaction (Ackard & Peterson, 2001).

## **Eating Behaviours**

### **Eating behaviours of the athletes.**

It became apparent that eating behaviours played an important role in the athlete's lives. The athletes generally had a positive relationship with food, where they enjoyed eating healthy food, but did not restrict any particular food types. In addition, the majority of the athletes suggested that food was a fuel for the body to enable them to perform optimally in their chosen sport. However, they did identify they would avoid consumption of certain food before a game as it often made them feel they could not perform at their best. For example, Hannah identified:

*It's important so that I have enough energy to do the activities that I like to do. Instead of resulting in like energy drinks and stuff, I like to maintain it myself rather than consuming bad things like that... So that I can have the energy to play to my fullest and succeed. Like winning is so important to me, so if eating healthy will make winning more likely then that's a must...If I eat something that I know will give me enough energy but not make me bloated and slow then my performance will be better.*

Additionally, Emma also suggested:



*I've always eaten healthy really...Even when I was at uni and everyone was eating crap cheap food like pasta and toast and stuff like that all the time, I would still try my best to cook food and stuff. It's just important isn't it? I think it's fuelling you body. If you put crap in then your body will work like crap.*

She continued:

*Like I said what I put into my body will affect how I play. I know because if I've been out for a meal or something bad for someone's birthday the night before a game I always feel slow...Like I said, if I eat a good meal the night before I feel really good and full of energy. If I don't, well I just feel really bad, slow and stuff.*

The present findings are in agreement with some of the extant literature, which suggests that athletes find it important to eat a healthy diet to support their body and to enable optimal performance (Carmichael, Rutberg, & Zawadzki, 2004; Wilmore, Costill, & Kenney, 2008). However, unlike the other participant groups the athletes did not consider their eating behaviours as having an effect on how they felt about their body image. It is often reported that athletes are under pressure to attain a slim and toned physique in which restrictive dieting is often utilised (Davis, 1992; Lanham-New, Stear, Shirreffs, & Collins, 2011; Sundgot-Borden & Garthe, 2011). However, this was not the case for the athletes in the present study. This may be because the athletes were comfortable and confident with their body weight and already consumed a healthy diet, for the sole purpose of achieving peak performance. In the case of the dancer, she appeared to enjoy adopting a healthy and balanced diet, despite displaying body image concerns at times. Therefore the athletes may feel no reason to restrict certain food types or groups.

### **Eating behaviours of the exercisers.**

For the exercisers, dieting and restrictive eating behaviours became evident throughout the interviews. It was apparent that the majority of the exercising females in this study had an unhealthy and somewhat negative relationship with food. They often articulated controlling certain food types, and in some cases discussed disliking food entirely. For the majority of the exercisers, eating induced a complicated mix of emotion, such as feelings of guilt and worry, not particularly related to nutritional needs. The majority of this group also articulated a relationship between exercise and food. For example, Liz suggested:

*If I think I'm eating too much I'll worry. So sometimes I feel really guilty if I've been out for a meal. Or if I haven't had time to do exercise that day and I unexpectedly go out for lunch or something I will get up the next day and make sure I have time to get the exercise in.... If I eat unhealthy food I feel really bad.*

She continued:

*I'm not a big food person. Food irritates me if I'm being honest. I don't like to cook. I'm not creative with cooking. I could eat the same thing every day just for convenience. I eat because I have to eat.*

Ellie also identified eating as:

*It's another way to lose weight and maintain the body you want. If you ate bad food all the time you would just put on weight and that is definitely what I don't want to happen to me. That's why I'm really conscious of what I eat most of the time... Sometimes I can be a bit more lenient on myself if I know I've exercised hard... But if I don't think I deserve it I won't.*

For the exerciser participants in this study, exercise had a dual purpose. Constant exercise made the participants feel as though they were closer to the slim and toned ideal body image. Furthermore, exercising led these participants to give themselves permission to eat foods they would normally avoid. However, exercise was also utilised as a punishment for lack of self- discipline, or what they described as poor eating (Krane, Waldron, Michalenok, & Stiles-Shipley, 2001). For instance, Liz suggested it was compulsory to exercise after eating foods she deemed as unhealthy. It was observed that there was a constant need to balance their eating behaviours and exercise behaviours, suggesting body image as a temporary state, which can change from moment to moment (Krane, 2001). It was often reported in the interviews how magazines often published fad diets, which suggested “get a bikini body in 6 weeks”. The pressures from the media and other external influences may be the reason the exercising participants felt it necessary to undertake unhealthy eating behaviours. Additionally, it was understood that the exercisers were desperate to attain the cultural ideal body image, and were willing to behave irrationally and unhealthily to achieve the perfect body. It was observable that the reason behind the eating behaviours of the exerciser participants was to avoid lose weight and to enhance appearance.

### **Eating behaviours of the inactive participants.**

With the inactive participants it was apparent that they also had an unhealthy and negative relationship with food. Although still negative, this relationship seemed different to the exercising participants, as they all expressed understanding the benefits of healthy eating behaviours, yet all failed to adhere to them. All the inactive participants identified using fad diets in an attempt to lose body weight, however, this method often failed to achieve the results they desired.

Some of the participants also articulated that dieting was a quicker, more time-effective way to lose body weight in comparison to undertaking exercise. For example, Leanne suggested:

*Looking good to me is thin, not thin, you know slim. Not eating, well not not eating, but dieting. (Exercise) it is a part of it, but it is a slow part of looking good... But for me to feel good about myself it's the quickest method is the best method, and that's dieting... Well if I'm feeling really fat I will crash diet. I won't see a banana as a good source of energy; I'll see it as too many calories or too many points. And I'm not looking at it as a healthy thing; I'm looking at it as how to lose weight.*

Laura also suggested, *"I've tried to control calories. That kind of just fizzled out though. I don't even know how or why that stopped"*.

It has been suggested that young women often use dieting in attempt to achieve a culturally ideal body (Grogan, 2008; O'Dea, 2003; Pawlak, Malinauskas, & Rivera, 2009). It was apparent from the interviews with the inactive females that they felt that dieting was often the time-efficient way to lose weight. They understood the substantial physical and psychological benefits that exercise gives to the body (Andersen, 2005; Cash & Smolak, 2011; Ginis, Eng, Arbour, Hartman & Phillips, 2005; Hausenblas & Fallon, 2006; Rossi & Zoccolotti, 1979), yet failed to undertake exercise because they felt that dieting produced faster results. The inactive participants also displayed lack of motivation towards exercise activities, which appeared to be as a result of feelings self-conscious in the exercise environment. Deciding to undertake excessive dieting behaviours instead of exercise may be because they can assume dieting behaviours in their own private environment, and not feel exposed or under the

scrutiny of others (Gilman, 2007). Research has also suggested a link between body image dissatisfaction and the development of eating disorders (Stice, 2002; Stice, Mazotti, Krebs, & Martin, 1998; Wertheim, Koerner, & Paxton, 2001). In addition, Patton, Selzer, Coffey, Carlin and Wolfe, (1999) showed that extreme dieters are 18 times more likely to develop disordered eating patterns and body image dissatisfaction, in comparison to non-dieters.

Paradoxically, the majority of the inactive females were overweight, and all acknowledged that dieting did not work. Additionally, like the exercisers, the inactive participants identified the media as placing pressure on them to achieve a culturally ideal body. As these participants were classed as overweight, there may be barriers that are inhibiting them from undertaking exercise; thus, they attempted to control their body weight through dieting behaviours.

### **Motives and Barriers to Participation**

#### **Athlete's motive to participate in sport.**

During the interviews with the athletes many motives to participation in sport arose. The athletes identified fulfilling a passion, self-improvement, desire to win, relief from everyday life stresses, mood improvement, and health as motives to participation. The athletes mentioned improvement of body image, however, it was interpreted as a secondary motive and was a derivative of participation. For example, Hannah articulated her motives to participation:

*When I play netball I feel good. I always feel good after a training session or a game. Takes the stress out off me from uni work and stuff. Like it's so hectic at the moment with uni, playing netball is my only down time. It makes me feel relaxed and stress-free... Because I just love playing netball... I'm a competitive person so I like that aspect of it. But I like to keep healthy so it's good in loads of different ways.*

Furthermore, Kelly expressed:

*Because I've always loved it. I enjoy progressing at something. I enjoy all styles of dance as it is fun, energising and keeps me fit and healthy... It makes me feel so good... If I dance in the morning, it wakes me up and gives me more energy for the rest of the day.*

Research exploring the motives to participation of female athletes is sparse. However, Frederick and Ryan (1993) suggested females who participate in sporting activities had higher competence motives compared to those who participated in non-sport activities, which means participating in activities that involve a great deal of skill may encourage competence motives and incite improvement in ability level. It was articulated by all the athletes that they had started participation from a young age, which can help individuals feel self-confident and establish a pattern of positive feelings towards their body, that will continue throughout their lives (Campbell & Haunsenblas, 2009). Thus, it is likely that the participants developed a passion and enjoyment for participating in sport over the years of participation, and body image motives are not relevant to their participation. Additionally, through their participation in sport, the athletes have achieved a culturally ideal body, thus, the other motives identified are seen as having greater significance. During the interviews with these participants it was

evident that there was also a sub-culture of body image applicable to female athletes, rejecting many social norms.

### **Exerciser's motives to participate in exercise.**

The exercisers articulated appearance related motives for why they participate in exercise. They identified motives such as a desire to be thin, a desire to avoid being fat, relief from everyday life stresses, and mood improvement. For example, Liz identified:

*Because I want to be fit and I don't want to be fat and things like that so that kind of drives me to get up and run and so there's no point me sitting at home thinking 'oh I'm feeling a bit fat today' I might as well run and do something about it. That's how I feel anyway.*

Furthermore, Ellie expressed:

*I exercise to lose weight and to look more toned. But I think as well, because it makes me feel good about myself physically and mentally. I think after a hard day at work its good to get a good sweat on and let your worries out.*

It was evident that an avoidance of becoming fat was a key motivator to the exercise participants interviewed. They frequently identified the pressures placed on females by external influences, such as the media, to avoid becoming fat and achieving the ideal body. Avoidance motivation can be described as striving to avoid appearing incompetent (Moreno, Gonzales-Cutre, Sicilia, & Spray, 2010). Therefore, the exerciser's avoidance motivation in this study is to avoid fat development. For example, Liz suggested:

*Yeah well I run because I want to be thinner. I mean I run because I want to be thinner but then it doesn't help that you see constantly in the papers these thin girls. But then as I've got older I appreciate more that they have hair stylists and makeup artists, so they always look fantastic, which makes them look better anyway, but I do like the fact they look thin, because I think its nice. So I exercise for that really.*

This finding supports the research that suggests an individuals motive to exercise can influence their body image perception (LePage & Crowther, 2010). In the case of the exercisers in the present study, it seems that their motive to participation in habitual exercise is mainly for appearance reasons (Vartanian et al., 2012). Thus, suggesting if an individuals motive to exercise is largely to change or improve their body shape, it is likely that body image dissatisfaction will occur (Davis, 2004; LePage & Crowther, 2010; Vartanian et al., 2012).

### **Inactive participant's barriers to participation in sport or exercise.**

The inactive participants in this study identified barriers to participation in sport or exercise. It was clear that this participant group felt they should be participating in some form of exercise, showing the endemic nature of body image concerns. A lack of motivation, lack of time, and intimidation by the exercise environment were identified as reasons as to why they do not complete exercise. For example, Anna suggested, *"I just don't have time. I definitely lack motivation too. I need a good kick up the bum. Although time is a problem if I had the motivation to go in the evening that would be so much better"*.

Furthermore, Laura identified:



*I don't have a lot of motivation. I think it's because I don't enjoy it I struggle to keep the enthusiasm going. Plus with work and everything, I don't really have that much free time, but I do have the odd nights in the weeks.*

*She continued, "Honestly. I'm lazy. I should do more, but it's getting off my ass to do it. I just don't want people to think if I went to a spin class or something, like I'm out of place".*

These findings support current literature which has suggested that the effects of being unfit and intimidated as a result of not participating in exercise can itself be a barrier to participation (Booth, Bauman, Owen, & Gore, 1997; Carruth & Goldberg, 1990; Fabian & Thompson, 1989). This is because the inactive individuals interviewed were concerned about exposing their bodies as they were not close to the cultural ideal, feeling awkward and uncoordinated as most identified not being 'good' at exercise, or having decreased competence motivation (Ebben & Brudzynski, 2008). Additionally, the current findings also support research by Ebben and Brudzynski (2008), Eyler, Baker, Cromer, King, Brownson and Donatelle (1999) and Murthy and Lanford-Smith (2010), which found that one of the main personal reasons for females not participating in exercise, was lack of motivation. This can be explained through the Self-Determination Theory (Deci & Ryan, 1985), which identifies the relationship between extrinsic and intrinsic motivation and the basic human need for autonomy. It proposes that a person must be able to initiate and regulate, through personal choice, the effort used to complete a task in order for the task to be intrinsically rewarding. Deci and Ryan (1985) identified that autonomy, competence, and relatedness are the three criteria necessary for the self-determination theory of motivation. In the present study, it appears that a

reduction in autonomy, competence and relatedness may have led to the inactivity of these participants. It has been found that motivation is a key and important factor leading to participation and adherence to exercise (Roberts, 1992; Ryan, Frederick, Lepes, Rubio, & Sheldon, 1997). Therefore, a lack of motivation would inevitably lead to lack of participation.

Body weight stigmatisation may be the reason that inactive participants felt a lack of motivation towards exercise. It has been suggested that body weight stigma experiences in exercise environments are positively correlated with high BMI (more than 28) and body image dissatisfaction (Vartanian & Shaprow, 2008). Importantly, body weight stigma experiences have been related to increased desire to avoid exercise, thus suggesting that body weight stigma experiences can decrease exercise participation (Vartanian & Shaprow, 2008). This stigmatisation needs to be addressed by health care professionals and exercise instructors in order to allow inactive individuals to feel they are able to exercise without feeling out of place.

## **Summary**

Overall, aside from the dancer, the athletes identified having body image satisfaction, the exercisers and inactive participants displayed body image dissatisfaction. All the participants articulated a cultural ideal body image, for females this was to be slim and toned. The athletes identified accepting their bodies were more muscular than the ideal. The exercisers and inactive females suggested feeling pressure from society to conform to these unrealistic body image ideals. External influences, such as the media, family, and peers were identified across the three groups as having an effect on body image perceptions. The athletes identified low self-presentation concerns, yet the exercisers and

inactive individuals in the present study emphasised high self-presentation concerns and anxiety about their physiques.

The athletes suggested being competitive, passionate, committed individuals, and having self-esteem and self-confidence. The exercisers identified personality characteristics such as being excessively competitive with themselves, and a desire to achieve perfection. For the inactive females in this study, they tended to display personality characteristics such as insecurity, low self-confidence. The athletes highlighted a positive relationship with food and described it as being a fuel for their bodies (Carmichael, Rutberg, & Zawadzki, 2004). The exercisers and inactive participants had a distinct negative relationship with food, and often described restrictive eating behaviours. Fulfilling a passion, self-improvement, desire to win, relief from everyday life stresses, mood improvement, and health were all highlighted motives to participation for the athlete participants. The exercisers all identified appearance related motives as to why they participate in exercise. The inactive participants suggested reasons or barrier to exercise as a lack of motivation, lack of time, and intimidation by the exercise environment (Ebben & Brudzynsky, 2008).

The following chapter will respond directly to the research objectives and answer the present research question. The objectives of the present study were to examine critically the body image perceptions of female elite athletes, habitual exercisers, and inactive individuals; to explore comparatively the body image perceptions of female elite athletes, habitual exercisers, and inactive individuals; and to consider the role of elite sport and habitual exercise within the development of body image perceptions in females.

## CHAPTER FIVE

### Conclusion

#### Introduction

This study set out to explore and understand if body image perceptions differed between elite athletes, habitual exercisers and inactive individuals. It aimed to determine if participation or non-participation in elite sport or habitual exercise has a perceived affect on female body image perceptions. Additionally, it intended to establish if there was perceived link between body image satisfaction in females and participation in elite sport or habitual exercise.

This chapter will explicitly answer the research questions, and identify applications of the findings whilst acknowledging possible future directions on body image perception research. Furthermore, limitations will be addressed, and an account of the researchers reflections on the study will be provided.

#### Explicit Answers to Research Questions

##### **Do body image perceptions differ between female elite athletes, habitual exercisers and inactive individuals?**

It can be concluded that body image perceptions did differ between female elite athletes, habitual exercisers and inactive individuals. Female athletes appeared to have greater body image satisfaction in comparison to female habitual exercisers, and inactive females. Female elite athletes had regard for their health and fitness, and understood that a healthy, balanced diet alongside participation in sport was vital for optimal performance.

Habitual exercisers and inactive females had similar levels of body image dissatisfaction, and both seem to have an innate desire to achieve the ideal body

image as set by external influences (i.e. the media/parents). Habitual exercisers utilise excessive exercise behaviours along with restrictive eating behaviours to achieve the Western cultural ideal body image. However, inactive females held dieting and restrictive eating behaviours in higher regard to participation in sport or exercise, in terms of achieving the ideal physique. For these females, it is the time-efficiency of the method that achieved the Western cultural ideal body image that was important, not its effect on one's health.

**Does participation and non-participation in elite sport or habitual exercise have a perceived affect on female body image perceptions?**

Participation in elite sport had a positive affect on athlete's body image perceptions. It may be questionable whether it is participation in sport in general that leads to body image satisfaction, or the specific sport that is chosen. For example, athletes who participated in team sports had greater body image satisfaction, because less emphasis was placed on team-sport athletes to achieve a specific physique. However, participation in a sport where aesthetic quality is of importance had a negative affect on the athlete's body image perception. In aesthetic sports (i.e. dancing), the nature of the sporting environment often places pressure on the athlete to conform to an ideal slim physique. Athletes who participate in these types of sports are expected to be strong and physically fit, yet their actions to be technical and aesthetically pleasing. This can lead to body image dissatisfaction, self-critical behaviours, and over-analysis of one's own physique.

Participation in habitual exercise can be linked to body image dissatisfaction. However, it seems as though it is not the participation in habitual exercise itself that causes body image dissatisfaction, but participating in habitual exercise is utilised as a tool to try and improve their feelings about one's body.

Paradoxically, the habitual exercise failed to have the anticipated effect, however, only resulted in an increase in exercise participation and more restrictive eating behaviours.

Non-participation in sport or exercise has also been associated with body image dissatisfaction. Non-participation was linked to lowered self-esteem and self-confidence. Non-participation in sport or exercise led to weight gain, which appeared to increase their lack of motivation and decrease one's desire to participate in sport or exercise. Inactive individuals were apprehensive and anxious to participate in sport or exercise due to feelings of self-consciousness in the exercise environment and felt incompetent at the activity. These factors all led to non-participation, which in turn appeared to cause further body image dissatisfaction.

### **Is there a perceived link between body image satisfaction in females and participation in elite sport or habitual exercise?**

A perceived link can be made between body image satisfaction in females and participation in elite sport. Nonetheless, it seems as though a link cannot be made between body image satisfaction in females and habitual exercise. The nature of participating in habitual exercise means exercise routines are habitual, thus it appeared that exercisers did not exercise for enjoyment but because it was a force of habit which can lead to exercise addiction (Adams & Kirby, 2002; Kessler, 2010). Participating in regular yet non-habitual exercise may lead to a healthier relationship with exercise and one's body, thus, potentially leading to the development of a positive body image.

## **Application and Future Direction**

Several directions for future research have been identified following this study. It may be worthwhile considering the affects of different sport types on an athletes' body image perception. Therefore, it may be interesting to conduct a study on team-sport athletes against individual-sport athletes, or aesthetic sports against non-aesthetic sports. Furthermore, it would be note-worthy to investigate the ability of the athlete and the affects on their body image perception. For example, studying international, national, regional and county athletes and understanding how their body image perception differed as level of ability changed. Additionally, it may be worthwhile aiming to understand the affects of different recreational exercises on body image perceptions, for example, strength exercises against cardiovascular exercises.

Furthermore, future research may also be directed towards understanding a larger and more diverse population that is more representative of the general population. This could incorporate a wider age range and people from different backgrounds and ethnicities. Future studies may way to examine the role that race plays in the development of an individuals body image perceptions.

Governments in Western societies display messages of the recommended minimum levels of exercise (e.g., DoH, 2011), through initiatives such as 'Change for Life' (Change for Life, 2012). However, it is important that the formation of guidance on over-exercising and the development of a maximum recommended level of physical activity are established (APPG, 2012). The development of such guidelines would make individuals aware of the dangers that are involved with over-exercising, and the physiological and psychological consequences this brings. Additionally, future research may consider studying how the level of

commitment to exercise routines can affect an individual's body image perceptions.

It is essential for health messages to be established on the serious effects repetitive restrictive dieting can have on an individual's body. Furthermore, it is vital to establish exercise environments in which individuals, especially for those new to exercise, can feel comfortable and at ease. Strategies such as 'Race for Life' where females are made aware of the wider benefits of feeling active whilst having a enjoyable time, have been successful. If additional schemes and initiatives were organised to make it simple for inactive women to participate in exercise then increased levels of body image satisfaction in the female may be achieved.

### **Limitations**

There are limitations to this study that future researchers should consider. The present study contributes to the existing body image literature, nevertheless it is important that further research verifies and extends its findings. The information-rich participants examined in this study provided detailed insights into their body image experiences, but it remains essential to examine the body image phenomenon with a larger sample and across a range of sports and exercises.

The athlete participants undertook a variety of sports, which seemed to have an affect on body image perceptions. Participation in a variety of sports lead to differing opinions on body image perceptions, thus, to understand the affect of elite sport on body image perception it may have increased credibility if all athlete participants partook in the same sport. Additionally, it may also have increased



trustworthiness to ensure all exercise participants participated in comparable exercise activities.

The interviews conducted relied on self-report information and pressure may have existed for the females to respond in a certain way, thus, answering inaccurately. The researcher ensured that the participants felt comfortable and established a rapport with all the individuals. However, the participants may not have felt at ease at revealing the whole truth or articulating their feelings and opinions on such sensitive matters, therefore, may have at times felt inclined to answer in a certain way. It has been previously established that individuals at times are unable to describe and explain accurately the reasons for their behaviours (Nisbett & Wilson, 1977), which may include body image perceptions.

The athletes in this study were defined elite level once playing at regional level for three or more years. This limited the findings to a certain extent as other studies may have a differing opinion as to what is classed as elite. It would be necessary to investigate athletes from a super elite (e.g., national), elite (e.g., regional) and social level to determine whether there are any differences in relation to the ability of the athlete, the amount of time spent on participation in sport, and their affects on the athlete's body image perceptions.

## **Reflection**

This research project on the body image perceptions of female elite athletes, habitual exercisers, and inactive individual, I had previous experience and appreciation for this topic from my undergraduate dissertation. I chose this area of research because I am aware of the widespread concerns of body image perceptions, especially in females in Western societies. This area has been

something I have been interested in since attending a lecture on body image and exercise addiction during my undergraduate degree. I was immediately drawn to this area because of my friend's experiences and I relished the thought of learning about this topic. This inspired my choice of topic for my undergraduate thesis and successively my chose of Masters thesis.

Firstly, gaining exercising and inactive participants was the most difficult part of the recruitment process. I anticipated it would be demanding due to the strict criteria chosen, however, finding those who were prepared to talk openly about their body image perceptions was more challenging that expected. After completing the interviews and analysis I now understood and appreciated that the reason recruitment for these two groups was more difficult was because these participants had greater concerns and issues with their body image, more so than the athletes.

When starting this project I very much came from a sport psychology perspective, and as an competitive athlete myself, I wanted to understand what the perspective of other athletes were, how playing sport impacted an athletes body image, and secondary, if exercising or being inactive played a role in the development of one's body image. However, as the project went on I started to change my perspective and become a more broad-minded researcher, understanding the serious effects of exercise and inactivity on an individual's health and well-being.

At the beginning of this project I felt very daunted by the prospect of probing individuals on such a sensitive topic, and although my undergraduate was of a similar theme, I was intending to probe deeper into the individual's experiences. As the project went on, I gained confidence in my ability as a

researcher and understood, that if empathy was displayed and questions were worded thoughtfully, participants would start to open up about their innermost feelings on the subject. Firstly, I conducted pilot interviews on each group to ensure the questions were appropriate. The pilot interviews proved invaluable, with the changing of a few questions, and giving me the confidence to undertake the further interviews. After the pilot interviews I conducted interviews with each participant both face-to-face and via email. Each held a unique opportunity for learning and interpretation of the individuals' body image perception.

Following the pilot interviews, I conducted face-to-face semi-structured interviews. Although I went to the interviews with the same questions (different for each of the three groups), each interview revealed different paths, and singular questions were asked to each participant. Answers to the individual questions were exciting and newfound and I felt it led the study into a new dimension. Surprisingly to me, the most challenging of the interviews were from the athletes, and as the interviews for this group went on I became concerned that I was not generating data. The interviews were shorter than those completed with the exercisers and inactive participants, however in time, I realised that although the interviews were brief, this was purely because the participants had less to say. Though shorter, many of the athlete's interviews were upbeat and positive about their body image, and as a researcher I could relate with some of their opinions and perspectives.

During the interview with one exerciser in particular, she revealed how she had previously had an eating disorder, which she was recovering from and how exercise played an enormous part of her life. Engaging with this participant changed my perspective as a researcher, and I subsequently started to understand

the great importance of positive body image promotion to the exercising community. It was clear that this participant was anguished by her body image perceptions but could not help but feel the way she felt. As a researcher and an exercising female myself, I felt somewhat overwhelmed by her perceptions and felt compassion towards her. I offered this participant the contact details of a sports psychologist. She confirmed that she was in touch with a councilor and had many associates in which she could talk to.

Throughout the primary interviews with the inactive participants, it was challenging for me to get into the mind-set of a sedentary individual. Upon reflection, I myself have never been inactive for a long period of time (unless injured), so felt it difficult at times to relate to them, as I did not possess an understanding or empathy for their inactivity. However, as my perspectives began to change, I became more sympathetic towards their inactive lifestyle, and understood it was not simply because they were 'lazy' and that other factors were causing their inactivity.

Once all the face-to-face interviews were complete, I undertook a second set of interviews via email. I felt it was important to follow up the face-to-face interviews, however felt it challenging to undertake the same method due to the sensitive nature of the study. The email interviews were fairly stable, however the responses to the questions were moderately brief. In terms of the methodological processes, conducting an IPA study has been new and challenging, yet exciting and rewarding. I felt I have a greater understand of a new research design and increased experience on how to conduct efficient interviews on a sensitive topic. I believe I created a good rapport with all the participants and ensured that they were comfortable with the questions and the surroundings.

## References

- Abbott, B.D., & Barber, B.L. (2011). Differences in functional and aesthetic body image between sedentary girls and girls involved in sport and physical activity: Does sport type make a difference? *Psychology of Sport and Exercise, 12*(3), 333-342.
- Ackard, D.M., & Peterson, C.B. (2001). Association between puberty and disordered eating, body image, and other psychological variables. *International Journal of Eating Disorders, 29*, 187-194.
- Adams, J., & Kirkby, R.J. (2002). Excessive exercise as an addiction: A review. *Addiction Research Theory, 10*, 415-437.
- All Party Parliamentary Group (APPG). (2012). *Reflections on body image*. London: YMCA.
- Altabe, M. (1998). Ethnicity and body image: Quantitative and qualitative analysis. *International Journal of Eating Disorders, 23*, 153–9.
- American Psychiatric Association (APA). (2000). *Diagnostic and Statistical Manual of Mental Disorders: DSM – IV-TR*. Washington, DCL: APA.
- The American Congress of Obstetricians and Gynecologists (ACOG). (2007). *Media and body image: Tool kit for teen care*. The American College of Obstetricians and Gynecologists.
- Andersen, M.B. (2005). *Sport psychology in practice*. Leeds: Human Kinetics.

- Anderson, A.E., & DiDomenico, L. (1992). Diet vs. shape content in popular male and female magazines: A dose relationship to the incidence of eating disorders? *International Journal of Eating Disorders, 11*(3), 283-287.
- Anderson, S.L., Zager, K., Hetzler, R.K., Nahikian-Nelms, M., & Syler, G. (1996). Comparison of Eating Disorder Inventory-2 (EDI-2) scores of male bodybuilders to the male college student subgroup. *International Journal of Sport Nutrition, 6*, 255–262.
- Andrist, L.C. (2003). Media images, body dissatisfaction, and disordered eating in adolescent women. *The American Journal of Maternal Child Nursing, 28*, 119-123.
- Audi, R. (2010). *Epistemology: A contemporary introduction to the theory of knowledge*. London: Routledge.
- Bailey, E.J. (2008). *Black America, body beautiful: How the African American image is changing fashion, fitness, and other industries*. Westport: Greenwood Publishing Group.
- Bartlewski, P.P., Van Raalte, J.L., & Brewer, B.W. (1996). Effects of aerobic exercise on social physique anxiety and body esteem of female college athletes. *Women's Sport and Physical Activity Journal, 5*, 49–52.
- Bastiani, A.M., Rao, R., Weltzin, T., & Kaye, W.H. (1995). Perfectionism in anorexia nervosa. *International Journal of Eating Disorders, 17*, 147-152.
- Beebe, R., & Myers, J. (2010). *Professional paramedics: Medical emergencies, maternal health, and pediatrics, volume II*. New York: Delmar Publishers.

- Biddle, S., Fox, K.R., & Boutcher, S.H. (2000). *Physical activity and psychological well-being*. London: Routledge.
- Biesecker, A.C., & Martz, D.M. (1999). Impact of coaching style on vulnerability for eating disorders: An analog study. *Eating Disorders: The Journal of Treatment and Prevention*, 7, 235-244.
- Blowers, L. C., Loxton, N. J., Grady-Flessner, M., Occhipinti, S., & Dawe, S. (2003). The relationship between sociocultural pressure to be thin and body dissatisfaction in preadolescent girls. *Eating Behaviors*, 4, 229-244.
- Blum, M., Johnson, B., & Rodgers, E. (2010). Body image perception in athletes versus non-athletes. *Health and Human Performance: Senior Seminar*.
- Body Image and Health Inc. (2000). *Body Image and the role of a fitness instructor*. Position Paper, (pp. 3-5).
- Booth, M.L., Owen, N., Bauman, A., & Gore, C.J. (1996). Relationship between a 14-day recall measure of leisure-time physical activity and a submaximal test of physical work capacity in a population sample of Australian adults. *Research Quarterly for Exercise & Sport*, 67, 221-227.
- Bordo, S. (1993). *The unbearable weight: Feminism, western culture and the body*. California: University of California Press.
- Borrini-Feyerabend, G., & Buchan, D. (1997). *Beyond fences: seeking social sustainability in conservation*. Gland: IUCN.

- Bosscher, R. J. (1993). Running and mixed physical exercises with depressed psychiatric patients. *International Journal of Sport Psychology*, 24, 170-184.
- Boyd, E.R., & Moncrieff-Boyd, J. (2011). Swimsuit issues: Promoting positive body image in young women's magazines. *Health Promotion Journal of Australia*, 22(2), 102-106.
- Brocki, J. M., & Wearden, A. J. (2006). A critical evaluation of the use of interpretative phenomenological analysis (IPA) in health psychology. *Psychology & Health*, 21, 87-108.
- Brooks-Gunn, J., Burrow, C., & Warren, M.P. (1988). Attitudes toward eating and body weight in different groups of female adolescent athletes. *International Journal of Eating Disorders*, 7(6), 749-757.
- Brouwers, M., & Wiggum, C.D. (1993). Bulimia and perfectionism: Developing the courage to be imperfect. *Journal of Mental Health Counseling*, 15, 141-149.
- Brown, L. (1987). Lesbians, weight and eating: New analyses and perspectives. *Lesbian Psychologies*, 2, 294-309.
- Brownell, K.D. (1991). Personal responsibility and control over our bodies: When expectation exceeds reality. *Health Psychology*, 10, 303-310.
- Buckworth, J., & Dishman, R.K. (2001). *Exercise psychology*. Leeds: Human Kinetics.



- Burton, D., Stokes, K., & Hall, G. (2004). Physiological effects of exercise. *Continuing Education in Anesthesia, Critical Care & Pain, 4*(6), 185-188.
- Bushman, B. J., Baumeister, R. F., Thomaes, S., Ryu, E., Begeer, S., & West, S. G. (2009). Looking again, and harder, for a link between low self-esteem and aggression. *Journal of Personality, 77*, 427-446.
- Campbell, A., & Hsusenblas, H. A. (2009). Effects of exercise on body image: A meta- analysis. *Journal of Health Psychology, 14*(6), 780-793.
- Carmichael, C., Rutberg, J., & Zawadzki, K. (2004). *Chris Carmichael's food for fitness: Eat right to train right*. New York: Berkley Trade.
- Carr, W. (2006). Philosophy, methodology and action research. *Journal of Philosophy of Education, 40*(4), 421-435.
- Carruth, B., & Goldberg, D. (1990). Nutritional issues of adolescents: Athletes and the body image mania. *Journal of Early Adolescence, 10*(2), 122-140.
- Caruso, C. M., & Gill, D. L. (1992). Strengthening physical self- perceptions through exercise. *The Journal of Sports Medicine and Physical Fitness, 32*, 416-427.
- Cash, T. F., Thériault, J., & Annis, N. M. (2004). Body image in an interpersonal context: Adult attachment, fear of intimacy, and social anxiety. *Journal of Social and Clinical Psychology, 23*(1), 89-103.

- Cash, T.F. (2002). A “negative body image”: Evaluating epidemiological evidence. In T.F. Cash & T. Pruzinsky (Ed.), *Body image: A handbook of theory research and clinical practice* (pp. 269-276). New York: Guilford Press.
- Cash, T.F. (2002a). Beyond traits: Assessing body image states. In T.F. Cash & T. Pruzinsky (Eds.), *Body images: A handbook of theory, research, and clinical practice* (pp. 163-170). New York: The Guilford Press.
- Cash, T.F. (2002a). Women’s body images. In G. Wingood & R. Di-Clemente (Ed.), *Handbook of women’s sexual and reproductive health* (pp.175-194). New York: Plenum.
- Cash, T.F. (2004). Body image: Past, present and future. *Body Image: An International Journal of Research*, 1, 1-5.
- Cash, T.F. (2008). *The body image workbook: An eight-step program for learning to like your looks*. California: New Harbinger Publications.
- Cash, T.F., & Fleming, E.C. (2002). Body image and social relations. In T.F. Cash & T. Pruzinsky (Ed.), *Body image: A handbook of theory research and clinical practice* (pp. 277-286). New York: Guilford Press.
- Cash, T.F., & Henry, P.E. (1995). Women's body images: The results of a national survey in the U.S.A. *Sex Roles*, 33, 19-28.
- Cash, T.F., & Pruzinsky, T. (2004). *Body image: A handbook of theory research and clinical practice*. New York: Guilford Press.

- Cash, T.F., & Smolak, L. (2011). *Body image: A handbook of science, practice and prevention (2nd Ed.)*. New York: The Guildford Press.
- Cash, T.F., Winstead, B.A., & Janda, L.H. (1986). The great American shape-up: Body image survey report. *Psychology Today*, 30-37.
- Cash, T.F., Winstead, B.W., & Janda, L.H. (1986). The great American shape-up: Body image survey report. *Psychology Today*, 20(4), 30-37.
- Cassin, S.E., & von Ranson, K. (2005). Personality and eating disorders: A decade in review. *Clinical Psychology Review*, 25, 895-916.
- Charles, N., & Kerr, M. (1986). Food for feminist thought. *Sociological Review*, 34, 537-572.
- Chisuwa, N., & O'Dea, J.A. (2009). Body image and eating disorders amongst Japanese adolescents. *Appetite*, 54, 5-15.
- Change for Life. (2012). 60 active minutes – everyday family activities. *Change for Life*. Retrieved September 20, 2012, from <http://www.nhs.uk/Change4Life/Pages/exercise-ideas-for-kids.aspx>
- Choi, P.Y.L. (2000) *Femininity and the physically active woman*. London: Routledge.
- Collins, R.L. (1996). For better or worse: The impact of upward social comparison on self-evaluations. *Psychological Bulletin*, 119, 51-69.
- Corbin, C.B. & Lindsey, R. (2006). *Fitness for life*. Leeds: Human Kinetics.

- Coughlin, J. W., & Kalodner, C. (2006). Media literacy as a prevention intervention for college women at low- or high-risk for eating disorders. *Body Image, 3*, 35–43.
- Cox, T.L., Ard, J.D., Beasley, T.M., Fernandez, J.R., Howard, V.J., & Affuso, O. (2011). Body image as a mediator of the relationship between Body Mass Index and weight-related quality of life in black women. *Journal of Women's Health, 20*(10), 1573-1578.
- Craighhead, W.E. & Nemeroff, C.B. (2001). *The Corsini encyclopedia of psychology and behavioural Science*. New York: John Wiley & Sons.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. London: Sage Publications.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. London: Sage Publications.
- Cruickshank, S.E. (2006). The relationship between personality traits, body image, and eating behaviors in college Females. *University Honours Programme*.
- Culos-Reed, S.N.C., Brawley, L.R., Martin, K.A., & Leary, M.R. (2002). Self-presentation concerns and health behaviors among cosmetic surgery patients. *Journal of Applied Social Psychology, 32*, 560-569.
- Davis, C. (1992). Body image, dieting behaviors, and personality factors: A study of high-performance female athletes. *International Journal of Sport Psychology, 23*, 179-192.

- Davis, C. (1997). Normal and neurotic perfectionism in eating disorders: An interactive model. *International Journal of Eating Disorders*, 22, 421-426.
- Davis, C. (2000). Exercise abuse. *International Journal of Sport Psychology*, 31, 278-289.
- Davis, C. (2004). Body image and athleticism. In T.F. Cash & T. Pruzinsky (Eds.), *Body image: A handbook of theory, research and clinical practice* (pp. 277-286). New York: Guilford Press.
- Davis, C., & Cowles, M. (1989). A comparison of weight and diet concerns and personality factors among female athletes and non-athletes. *Journal of Psychosomatic Research*, 33, 527-536.
- Davis, C., & Strachan, S. (2001). Elite female athletes with eating disorders: A study of psychopathological characteristics. *Journal of Sport and Exercise Psychology*, 23, 245-253.
- Davison, T.E., & McCabe, M.P. (2006). Adolescent body image and psychosocial functioning. *Journal of Social Psychology*, 146, 15-30.
- De Bruin, A.P., Oudejans, R.R.D., & Bakker, F.C. (2007). Dieting and body image in aesthetic sports: A comparison of Dutch female gymnasts and non-aesthetic sport participants. *Psychology of Sport and Exercise*, 8, 507-520.
- De Bruin, A.P., Woertman, L., Bakker, F.C., & Oudejans, R.R.D. (2009). Weight-related sport motives and girls' body image, weight control behaviors, and self-esteem. *Sex Roles*, 60(9/10), 628-641.

- Department of Health. (2006). *The General Practice Physical Activity Questionnaire (GPPAQ)*. London: Department of Health.
- Department of Health. (2011). *Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officers*. London: Department of Health.
- Derrene, J.L., & Beresin, E.V. (2006). Body image, media, and eating disorders. *Academic Psychiatry, 30*, 257-261.
- Didie, E.R., Kuniega-Pietrzak, T., & Phillips, K.A. (2010). Body image in patients with body dysmorphic disorder: evaluations of and investment in appearance, health/illness, and fitness. *Body Image, 7*(1), 66–69.
- Diedrichs, P., Paraskeva, N., & New, A. (2011). *The Succeed Foundation Body Image Survey*, University of West of England.
- DiGioacchino, R.F., Sargent, R.G., & Topping, M. (2001). Body dissatisfaction among White and African American male and female college students. *Eating Behaviours, 2*(1), 39–50.
- Doark, F. (2011). Self-esteem and body image of Turkish adolescence. *International Journal of Social Behaviour and Personality, 39*(4), 553-561.
- Drever, E. (1995) Using semi-structured interviews in small-scale research (Edinburgh, The Scottish Council for Research in Education).
- Dumitrescu, A. (2006). *Representation of female athletes in Western and Romanian Media*. Master's Thesis, Florida State University, USA.

- Duncan, M.C. (1994). The politics of women's body images and practices: Foucault, the panopticon, and Shape magazine. *Journal of Sport & Social Issues, 18*, 48-65.
- Ebben, W., & Brudzynski, L. (2008). Motivations and barriers to exercise among college students. *Journal of Exercise Physiology, 11*(5), 1-11.
- Elliott, R., Fischer, C.T., & Rennie, D.L. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology, 38*, 215-229.
- Emmelkamp, P.M.G., & van Oppen, P. (2002). Obsessive-Compulsive Disorder. In M. Hersen & L. Krug Porzelius (Eds.), *Diagnosis, conceptualization, and treatment planning for adults: A step-by-step guide*, (pp. 167-184). East Sussex: Psychology Press.
- Evans, J. (2008). *Education, disordered eating and obesity discourse: Fat fabrications*. London: Routledge.
- Eyler, A.A., Baker, E., Cromer, L., King, A.C., Brownson, R.C., & Donatelle, R.J. (1998). Physical activity and minority women: A qualitative study. *Health Education and Behavior, 25*, 640-652.
- Fabian, L.J., & Thompson, J.K. (1989). Body image and eating disturbance in young females. *International Journal of Eating Disorders, 8*, 63-74.
- Fallon, A. E. (1990). Culture in the mirror: Sociocultural determinants of body image. In T. E Cash & T. Pruzinsky (Ed.), *Body images: Development, deviance, and change* (pp. 80-109). New York: Guilford Press.

- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2) 117-140.
- Festle, M.J. (1996). *Playing nice: Politics and apologies in women's sports*. New York: Columbia Press.
- Finlay, L., & Ballinger, C. (2006). *Qualitative research for allied health professionals: Challenging choices*. Sussex: John Wiley.
- Flett, G.L., & Hewitt, P.L. (2005). The perils of perfectionism in sports and exercise. *Current Directions in Psychological Science*, 14, 14- 18.
- Focht, B.C. & Hausenblas, H.A. (2004). Perceived evaluative threat and state anxiety during exercise in women with social physique anxiety. *Journal of Applied Sport Psychology*, 16, 361–368.
- Foland, J.L., Kniffin, M., Foley, J.T., & Bailey, J. (2010). Body image in female participants of an outdoor education program. *American Alliance for Health, Physical Education, Recreation and Dance Conference, (poster presentation)*. Published Abstract: *Research Quarterly for Exercise and Sport*.
- Forsyth, J.P., & Eifert, G.H. (2008). *The mindfulness and acceptance workbook for anxiety: a guide to breaking free from anxiety, phobias, and worry using acceptance and commitment therapy*. Oakland, CA: New Harbinger.
- Fox, K.R. (1999). The influence of physical activity on mental well-being. *Public Health Nutrition*, 2, 411-418.



- Friedman, K., Reichmann, S., Costanzo, P., & Musante, G.J. (2002). Body image partially mediates the relationship between obesity and psychological distress. *Obesity Research, 10*, 33-41.
- Fulkerson, J.A., Keel, P.K., Leon, G.R., & Dorr, T. (1999). Eating-disordered behaviors and personality characteristics of high school athletes and nonathletes. *International Journal of Eating Disorders, 26*, 73-79.
- Fumerton, R. (2006). *Epistemology*. Oxford: Blackwell Publishing.
- Furnham, A., & Greaves, N. (1994). Gender and locus of control correlates of body image dissatisfaction. *European Journal of Personality, 8*, 183-200.
- Furnham, A., Badmin, N., & Sneade, I. (2002). Body image dissatisfaction: Gender differences in eating attitude, self-esteem and reasons for exercise. *Journal of Psychology, 136*, 581-96.
- Furnham, A., Titman, P., & Sleeman, E. (1994). Perception of the female body shapes as a function of exercise. *Journal of Social Behaviour and Personality, 9*. 335-352.
- Gammage, K.L., Hall, C.R., & Ginis, M.K.A. (2004). Self- presentation in exercise contexts: Differences between high and low frequency exercisers. *Journal of Applied Social Psychology, 34*, 1638–1651.
- Ganem, P.A., Heer, H., & Morera, O.F. (2009). Does body dissatisfaction predict mental health outcomes in a sample of predominantly Hispanic college students? *Personality and Individual Differences, 46*(4), 557-561.

- Gardner, F.L., & Moore, Z.E. (2004). A mindfulness-acceptance-commitment-based approach to athletic performance enhancement: theoretical considerations. *Behavior Therapy, 35*, 707-723.
- Gardner, F.L., & Moore, Z.E. (2006). *Clinical sport psychology*. Leeds: Human Kinetics.
- Garner, D.M. (1997). The 1997 body image survey results. *Psychology Today, 30*, 75-80.
- Garner, D.M., Garfinkel, P.E., Stancer, H.C., & Moldofsky, H. (1976). Body image disturbances in anorexia nervosa and obesity. *Psychosomatic Medicine, 38*(5), 227-336.
- Gerner, B., & Wilson, P.H. (2005). The relationship between friendship factors and adolescent girls' body image concern, body dissatisfaction, and restrained eating. *International Journal of Eating Disorders, 37*, 313-320.
- Ghaye, T., Lee, S., Shaw, D.J., & Chesterfield, G. (2009). When winning is not enough: learning through reflections on the 'best-self'. *Reflective Learning, 10*(3), 385-401.
- Gill, D.L., & Dzewaltowski, D.A. (1988). Competitive orientations among intercollegiate athletes: Is winning the only thing? *Sport Psychologist, 2*(3), 212-221.
- Gilman, S.L. (2007). *Diets and dieting: A cultural encyclopedia*. New York: Routledge.

- Ginis, K.A.M., Eng, J.J., Arbour, K.P., Hartman, J.W., & Phillips, S.M. (2005). Mind over muscle? Sex differences in the relationship between body image change and subjective and objective physical changes following a 12-week strength-training program. *Body Image, 2*, 362-272.
- Glaser, B.G. (1978). *Theoretical Sensitivity: Advances in the Methodology of Grounded Theory*. Sociology Press: Mill Valley, CA.
- Goldfield, G.S., Mallory, R., Parker, T., Cunningham, T., Legg, C., Lumb, A., Parker, K., Prud'homme, D., & Adamo, K.B. (2007). Effects of modifying physical activity and sedentary behavior on psychosocial adjustment in overweight/obese children. *Journal of Pediatric Psychology, 32*(7), 783-793.
- Gotwals, J.K., Dunn, J.G.H., & Wayment, H.A. (2003). An examination of perfectionism and self-esteem in intercollegiate athletes. *Journal of Sport Behavior, 26*, 17–38.
- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. *Journal of Applied Sport Psychology, 14*, 172–204.
- Grabe, S., & Hyde, J.S. (2006). Ethnicity and body dissatisfaction among women in the United States: A meta-analysis. *Psychological Bulletin, 132*, 622–640.
- Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin, 134*, 460–476.

- Greene, S.B. (2011). *Body image: Perceptions, interpretations and attitudes*. New York: Nova Science Publication.
- Griffin, J., & Harris, M.B. (1996). Coaches' attitudes, knowledge, experiences and recommendations regarding weight control'. *The Sport Psychologist*, *10*, 180–194.
- Griffin, P. (1992). Changing the game: Homophobia, sexism, and lesbians in sport. *Quest*, *44*, 251-265.
- Groesz, L.M., Levine, M.P., & Murnen, S.K. (2002). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytic review. *International Journal of Eating Disorders*, *31*, 1-16.
- Grogan, S. (2006). Body image and health: Contemporary perspectives. *Journal of Health Psychology*, *11*, 523.
- Grogan, S. (2008). *Body image: Understanding body dissatisfaction in men, women, and children*. London: Routledge.
- Grogan, S., Conner, M., & Smithson, H. (2006). Sexuality and exercise motivations: Are gay men and heterosexual women most likely to be motivated by concerns about weight and appearance? *Sex Roles*, *55*(7/8), 567-572.
- Grogan, S., Conner, M., & Smithson, H. (2006). Sexuality and exercise motivations: Are gay men and heterosexual women most likely to be motivated by concerns about weight and appearance? *Sex Roles*, *55*(7-8), 567-572.

- Gubrium, J.F., & Holstein, J.A. (2002). *Handbook of interview research: Context and methods*. Thousand Oaks: Sage Publications.
- Halbert, C. (1997). Tough enough and woman enough: Stereotypes, discrimination, and impression management among women professional boxers. *Journal of Sport and Social Issues*, 21, 7-36.
- Hales, D. (2011). *An invitation to health: Choosing to change*. California: Wadsworth Cengage Learning.
- Hall, M.A. (2002). The discourse of gender and sport: From femininity to feminism. In S. Scraton & A. Flintoff (Eds.), *Gender and sport: A reader*, (pp 6-17). London: Routledge.
- Hallinan, C. J., & Schuler, P. (1993). Body-shape perceptions of elderly women exercisers and nonexercisers. *Perceptual and Motor Skills*, 77, 451–456.
- Hancock, P., Hughes, B., Jagger, E., Paterson, K., Russell, R., Tulle-Winton, E., & Tyler, M. (2000). *The Body, Culture and Society: An Introduction*. Buckingham: Open University Press.
- Hargreaves, D., & Tiggemann, M. (2003). Longer-term implications of responsiveness to ‘thin ideal’ television: Support for a cumulative hypothesis of body image disturbance? *European Eating Disorder Review*, 11, 465–477.
- Harris, M., & Greco, D. (1990). Weight control and weight concern in competitive female gymnasts. *Journal of Sport and Psychology*, 12, 427-433.

- Harris, M.B., & Foltz, S. (1999). Attitudes toward weight and eating in young women tennis players, their parents, and their coaches. *Eating Disorders: The Journal of Treatment and Prevention*, 7, 191-205.
- Harrison, K. (2000). The body electric: Thin-ideal media and eating disorders in adolescents. *Journal of Communication*, 50, 119–143.
- Harrison, K. (2003). Television viewers' ideal body proportions: the case of the curvaceously thin woman. *Sex Roles*, 48, 255–264.
- Harrison, K., & Hefner, V. (2006). Media exposure, current and future body ideals, and disordered eating among preadolescent girls: A longitudinal panel study. *Journal of Youth and Adolescence*, 35(2), 153-154.
- Hart, E.A., Leary, M.R., & Rejeski, W.J. (1989). The measurement of social physique anxiety. *Journal of Sport & Exercise Psychology*, 94-104.
- Hausenblas, H. A., & Fallon, E. A. (2006). Exercise and body image: A meta-analysis. *Psychology and Health*, 21, 33-47.
- Hausenblas, H. A., & Mack, D. E. (1999). Social physique anxiety and eating disorder correlates among female athletic and nonathletic populations. *Journal of Sport Behavior*, 22, 502–513.
- Hausenblas, H.A., & Carron, A.V. (1999). Eating disorder indices and athletes: An integration. *Journal of Sport and Exercise Psychology*, 21, 230-258.
- Hausenblas, H.A., & Symons-Downs, D. (2001). Comparison of body image between athletes and non-athletes: A meta-analytic review. *Journal of Applied Sport Psychology*, 13, 323- 339.

- Hausenblas, H.A., Brewer, B.W., & Van Raalte, J.L. (2004). Self-presentation and exercise. *Journal of Applied Sport Psychology*, *16*, 3–18.
- Heatherton, T. E, & Baumeister, R. F. (1991). Binge eating as an escape from self-awareness. *Psychological Bulletin*, *110*, 86-108.
- Hersen, M. (2006). *Clinician's handbook of child behavioral assessment*. London: Elsevier Academic Press.
- Hewitt, P.L., Flett, G.L., & Ediger, E. (1995). Perfectionism traits and perfectionistic self-presentation in eating disorder attitudes, characteristics, and symptoms. *International Journal of Eating Disorders*, *18*, 317-326.
- Heywood, L. (1998). *Bodymakers: A cultural anatomy of women's body building*. New Brunswick: Rutgers University Press.
- Hinchey, P.H. (2010). *Finding freedom in the classroom: A practical introduction to critical theory*. New York: Peter Lang Publishing Inc.
- Hormes, J.M., Lytle, L.A., Gross, C.R., Ahmed, R.L., Troxel, A.B., & Schmitz, K.H. (2008). The body image and relationships scale: development and validation of a measure of body image in female breast cancer survivors. *Journal of Clinical Oncology*, *26*, 1269–1274.
- Horn, T.S. (2008). *Advances in Sport Psychology*. Leeds: Human Kinetics.
- Hrabosky, J.R., & Cash, T.F. (2007). Self-help treatment for body-image disturbances. In J.D. Latner, & G.T. Wilson (Eds.), *Self-help approaches for obesity and eating disorders: Research and practice* (pp. 118-138). New York: The Guilford Press.

- Huang, J.S., Donohue, M., Becerra, K., & Ronghui, X. (2009). Relationship between parents' and children's weight perceptions results of a survey. *ICAN: Infant, Child, & Adolescent Nutrition, 1*, 15-20.
- Hubbard, S.T., Gray, J.J., & Parker, S. (1998). Differences among women who exercise for food-related and non-food related reasons. *European Eating Disorders Review, 6*, 255-265.
- Huddy, D. C., Nieman, D. C., & Johnson, R. L. (1993). Relationship between body image and percent body fat among college male varsity athletes and non-athletes. *Perceptual and Motor Skills, 77*, 851-857.
- Jackson, T. (2007). Protective self-presentation, sources of socialization, and loneliness among Australian adolescents and young adults. *Personality and Individual Differences, 43*, 1552-1562.
- Jackson, T.D., Grilo, C.M., & Masheb, R.M. (2000). Teasing history, onset of obesity, current eating disorder psychopathology, body dissatisfaction, and psychological functioning in binge eating disorder. *Obesity Research, 8*, 451-458.
- Johns, D. (1996). Fasting and feasting: Paradoxes of the sport ethic. *Sociology of Sport Journal, 15*, 41-63.
- Katzmarzyk, P.T., Church, T.S., Craig, C.L., & Bouchard, C. (2009). Sitting time and mortality from all causes, cardiovascular disease, and cancer. *Medicine and Science in Sports and Exercise, 41*(5), 998-1005.



- Kee, Y.H., & Wang, J.C.K. (2008). Relationships between mindfulness, flow dispositions and mental skills adoption: A cluster analytic approach. *Psychology of Sport and Exercise, 9*, 393–411.
- Kehily, M.J. (2008). Taking centre stage? Girlhood and the contradictions of femininity across three generations. *Girlhood Studies, 1*, 51-71.
- Koff, E., & Bauman, C.L. (1997). Effects of wellness, fitness and sport skills programs on body image and lifestyle behaviours. *Perceptual and Motor Skills, 84*, 555-562.
- Krane, V. (1997). Homonegativism experienced by lesbian collegiate athletes. *Women in Sport and Physical Activity Journal, 6*(1), 141–163.
- Krane, V. (2001). “We can be athletic and feminine,” but do we want to? Challenges to femininity and heterosexuality in women’s sport. *Quest, 53*, 115–133.
- Krane, V., & Kauer, K.J. (2007). Out on the ball fields: Lesbians in sport. In V. Clarke & E. Peel (Eds), *Out in Psychology: Lesbian, gay, bisexual, trans, and queer perspectives* (pp. 273-290). New York: John Wiley & Sons, Ltd.
- Krane, V., Michalenok, J., Waldron, J., Stiles-Shipley, J., & Brown, S. (1998). *Body image, exercise, and eating behaviors in female exercisers and athletes*. Symposium presented at the Association for the Advancement of Applied Sport Psychology. Hyannis, Massachusetts.

- Krane, V., Waldron, J., Michalenok, J., & Stiles-Shipley, J. (2001). Body image, and eating and exercise behaviors: A feminist cultural studies perspective. *Women in Sport and Physical Activity Journal*, 10(1), 17–54.
- Krayer, A., Ingledew, D.K., & Iphofen, R. (2007). Social comparison and body image in adolescence: A grounded theory approach. *Oxford University Press*, 23(5), 892-903.
- Krentz, E.M., & Warschburger P. (2011). Sports-related correlates of disordered eating in aesthetic sports. *Psychology of Sport and Exercise*, 44(3), 315-321.
- Lafrance, M. N., Zivian, M. T., & Myers, A. M. (2000). Women, weight and appearance satisfaction: An ageless pursuit of thinness. *Women's Bodies Women's Lives: Health, Well Being and Body Image*, 1, 227–236.
- Laghi, F., Pallini, S., D'Alessio, M., & Baiocco, R. (2011). Development and validation of the efficacious self-presentation scale. *The Journal of Genetic Psychology*, 172(2), 209–212.
- Landers, D. M. & Arent, S. M. (2001) Physical activity and mental health. In R. N. Singer, H. A. Hausenblas & C. M. Janelle (Ed.), *Handbook of sport psychology (2nd Ed.)* (pp. 740–65). New York: John Wiley.
- Langdrige, D. & Hagger-Johnson, G. (2009). *Introduction to research methods and data analysis in psychology*. London: Prentice Hall.
- Lanham-New, S., Stear, S., Shirreffs, S., & Collins, A. (2011). *Sport and exercise nutrition*. West Sussex: Wiley-Blackwell.

- Larkin, J., Razack, S., & Moole, F. (2007). Gender, sport, and development. In *Literature Reviews on Sport for Development and Peace*, Commissioned by Sport for Development and Peace, International Working Group of the United Nations. Toronto: University of Toronto, Faculty of Physical Education and Health, pp. 89-123.
- Leary, M.R. (1992). Self-presentational processes in exercise and sport. *Journal of Sport & Exercise Psychology*, *14*, 335-339.
- Leary, M.R., & Kowalski, R.M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, *107*, 34-47.
- Leone, J.E., Sedory, E.J., & Gray, K.A. (2005). Recognition and treatment of muscle dysmorphia and related body image disorders. *Journal of Athletic Training*, *40*(4), 352-359.
- LePage, M.L., & Crowther, J. (2010). The effects of exercise on body satisfaction and affect. *Body Image*, *7*(2), 124-130.
- Lerner, R.M., & Jovanovic, J. (1990). The role of body image in psychosocial development across the life span: A developmental contextual perspective. In T.F. Cash, & T. Pruzinsky (Eds.), *Body images: Development, deviance, and change*, (pp. 110-127). New York: Guilford.
- Leventhal, H., Nerenz, D.R., & Steele, D.J. (1984). Illness representations and coping with health threats. In A. Baum, S.E. Taylor & J.E. Singer (Ed), *Handbook of Psychology and Health, Volume IV: Social Psychological Aspects of Health* (pp. 219-252). Hillsdale, NJ: Erlbaum.

- Levine, M.P., & Chapman, K. Media influences on body image. In T.F. Cash & L. Smolak. *Body image: A handbook of science, practice and prevention (2nd Ed.)*, (pp. 101-109). New York: The Guildford Press.
- Levine, M.P., Smolak, L., & Hayden, H. (1994). The relation of sociocultural factors to eating attitudes and behaviors among middle school girls. *Journal of Early Adolescence, 14*, 472-491.
- Li, G.S. (1996). Self-perceptions of female dancers, athletes, exercisers, and non-exercisers. (Doctoral Dissertation, Springfield College).
- Lieberman, M., Gauvin, L., Bukowski, W.M., & White, D.R. (2001). Interpersonal influence and disordered eating behavior in adolescent girls: The role of peer modeling, social reinforcement, and body related teasing. *Eating Behavior, 2*, 215–236.
- Liechty, J.M. (2010). Body image distortion and three types of weight control behaviors among non-overweight girls in the U.S. *Journal of Adolescent Health, 47*, 176-182.
- Lim, C.L.S., & Omar-Fauzee, M.S., & Rosli, M.H. (2011). The body dissatisfaction among female athletes and non-athletes in Malaysia. *Journal of Asia Pacific Studies, 2(1)*, 55-69.
- Lim, C.L.S., Omar-Fauzee, M.S., & Rosli, M.H. (2011). The body dissatisfaction among female athletes and non-athletes in Malaysia. *Journal of Asia Pacific Studies, 2(1)*, 55-69.

- Linder, K.J., & Caine, D.J. (1992). Physical and performance differences between female gymnasts competing at high and low levels. *Journal of Human Movement Studies*, 23, 1-15.
- Lloyd, H., & Dallos, R. (2008). First session solution-focused brief therapy with families who have a child with severe intellectual disabilities: mothers' experiences and views. *Journal of Family Therapy*, 30(1), 5-28.
- Loland, N. W. (1999). Some contradictions and tensions in elite sportsmen's attitudes towards their bodies. *International Review for the Sociology of Sport*, 3, 291-302.
- Lutkenhouse, J.M., Gardner, F.L., & Moore, C.E. (2010). A randomized controlled trial comparing the performance enhancement effects of Mindfulness-Acceptance-Commitment (MAC) performance enhancement and psychological skills training procedures. Manuscript in preparation.
- Magdelinski, T. (2009). *Sport, Technology, and the Body: The Nature of Performance*. London: Routledge.
- Manore, M.M. (1999). Nutritional needs of the female athlete. *Clinics in Sports Medicine* 18(3), 549-563.
- Markula, P. (1995). Firm but shapely, fit but sexy, strong but thin: The postmodern aerobicizing female bodies. *Sociology of Sport Journal*, 12, 424-453.

- Martin, G. C., Wertheim, E. H., Prior, M., Smart, D., Sanson, A., & Oberklaid, F. (2000). A longitudinal study of the role of childhood temperament in the later development of eating concerns. *International Journal of Eating Disorders, 27*, 150–162.
- Martin, G.N., Buskist, W., & Carlson, N.R. (2009). *Psychology: And MyPsychLab*. Boston: Allyn & Bacon.
- Martin, J.B. (2010). The development of ideal body image perceptions in the United States. *Nutrition Today, 45*(3), 98-110.
- Martin, K.A., & Lichtenberger, C.M. (2002). Fitness enhancement and changes in body image. In T.F.Cash & T. Pruzinsky T (Eds.) *Body image: A handbook of theory, research, and clinical practice* (pp.414–421). New York: The Guilford Press.
- Martin, K.A., Sinden, A.R., & Fleming, J.C. (2000). Inactivity may be hazardous to your image: The effects of exercise participation on impression formation. *Journal of Sport & Exercise Psychology, 22*, 283–291.
- Martinsen, E. W., & Morgan, W. P. (1997). Antidepressant effects of physical activity. In P. Morgan (Ed.), *Physical activity and mental health* (pp. 93–106). Washington DC: Taylor and Francis.
- Maxwell, K., & Tucker, L. (1992). Effects of weight training on the emotional well-being and body image of females: predictors of greatest benefit. *American Journal of Health Promotion, 6*, 338–344.

- McCabe, M.P., & Ricciardelli, L.A. (2001). Parent, peer, and media influences on body image and strategies to both increase and decrease body size among adolescent boys and girls. *Journal of Adolescence*, *36*, 225–240.
- McMinn, L.G. (2000). *Growing strong daughters: Encouraging girls to be all they're meant to be*. London: Baker Books.
- MedicineNet. (2005). MedicineNet Health Research Survey Report: Health concerns and weight management survey results, January 2005. URL <http://www.medicinenet.com/pdf/hr0501weightmanagement.pdf> (accessed 28 September 2011).
- Mellor, D., Fuller-Tyszkiewicz, M., McCabe, M. & Ricciardelli, L.A. (2010). Body image and self-esteem across ages and gender: A short-term longitudinal study. *Sex Roles*, *63*, 672– 681.
- Meston, C. M., & Buss, D. M. (2009). *Why women have sex: Understanding sexual motivations from adventure to revenge (and everything in between)*. New York: Times Books.
- Milkie, M.A., & Peltola, P. (1999). Playing all the roles: Gender and the work–family balancing act. *Journal of Marriage and the Family*, *61*, 476–490.
- Miller, J.L., & Levy, G.D. (2005). Gender role conflict, gender-typed characteristics, self-concepts, and sport socialization in female athletes and non-athletes. *Sex Roles*, *35*, 111-122.

- Mintz, L.B., & Betz, N.E. (1986). Sex differences in the nature, realism, and correlates of body image. *Sex Roles, 15*(3), 185-195.
- Molloy, B.L., & Herzberger, S.D. (1998). Body image and self-esteem: A comparison of African-American and Caucasian women. *Sex Roles, 38*, 631–643.
- Moreno, J., Gonzales-Cutre, D., Sicilia, A., & Spray, C. (2010). Motivation in the exercise setting: Integrating constructs from the approach avoidance and achievement goal framework and self-determination theory. *Psychology of Sport and Exercise, 11*(6), 542-550.
- Morrison, M.A., Morrison, T.G. & Sager, C. (2004). Does body satisfaction differ between gay men and lesbian women and heterosexual men and women? *Body Image: An International Journal of Research, 1*, 127-138.
- Murphy, E., & Dingwall, R. (2003). *Qualitative methods and health policy research*. New York: Aldine de Gruyter.
- Murthy, P., & Lanford-Smith, C. (2010). *Women's global health and Human Rights*. Sudbury, MA: Jones and Bartlett.
- Neumark-Sztainer, D., Paxton, S. J., Hannan, P. J., Haines, J., & Story, M. (2006). Does body satisfaction matter? Five-year longitudinal associations between body satisfaction and health behaviors in adolescent females and males. *Journal of Adolescent Health, 39*, 244–251.
- Newell, R. (2000). *Body image and disfigurement care*. London: Routledge.



- Noles, S.W., Cash, T.F., & Winstead, B.A. (1985). Body image, physical attractiveness, and depression. *Journal of Consulting and Clinical Psychology, 53*, 88-94.
- Nooteboom, S.G. (2006). *Adaptive measures: The governance for sustainable development*. Delft: Eburon Academic Publishers.
- O'Dea, J.A. (2003). Why do kids eat healthful food? Perceived benefits of and barriers to healthful eating and physical activity among children and adolescents. *Journal of the American Dietetic Association, 103*, 497–501.
- Olivardia, R. (2002). Body image and muscularity. In T.F. Cash & T. Pruzinsky (Eds.), *Body image: A handbook of theory, research, and clinical practice* (pp. 210-218). New York: Guilford Press.
- Orbach, S. (1993). *Hunger strike: The anorectics struggle as a metaphor for our age*. London: Penguin.
- Palmer, L.K. (1995). Effects of a walking program on attributional style, depression, and self-esteem in women. *Perceptual and Motor Skills, 81*, 891-898.
- Patton, G.C., Selzer, R., Coffey, C., Carlin, J.B., & Wolfe, R. (1999). Onset of adolescent eating disorders: Population based cohort study over 3 years. *British Medical Journal, 318*, 765–768.
- Patton, M. (2002). *Qualitative research and evaluation methods*. Thousand Oaks: Sage Publications.

- Pawlak, R., Malinauskas, B., & Rivera, D. (2009). Predicting intentions to eat a healthful diet by college baseball players: Applying the theory of planned behavior. *Journal of Nutrition Education and Behavior, 41*(5), 334-339.
- Paxton, S.J., Schutz, H.K., Wertheim, E.S., & Muir, S.L. (1999). Friendship clique and peer influences on body image concerns, dietary restraint, extreme weight-loss behaviors, and binge eating in adolescent girls. *Journal of Abnormal Psychology, 108*, 255–66.
- Pelegri, A., & Petroski, E.L. (2009). Physical inactivity and its association with nutritional status, body image dissatisfaction and sedentary behavior in adolescents of public schools. *Journal of Pediatrics Paulista, 27*, 366-373.
- Phares, V., Steinberg, A. R., & Thompson, J. K. (2004). Gender differences in peer and parental influences: Body image disturbance, self-worth, and psychological functioning in preadolescent children. *Journal of Youth and Adolescence, 33*, 421–429.
- Pierce, E. F., & Daleng, M. (1998). Distortion of body image among elite female dancers. *Perceptual and Motor Skills, 87*(3), 769-770.
- Pimenta, A.M., Beunza, J.J., Bes-Rastrollo, M., Alonso, A., López, C.N., Velásquez-Meléndez, G., & Martínez-González, M.A. (2009). Work hours and incidence of hypertension among Spanish University graduates: the Seguimiento Universidad de Navarra prospective cohort. *Journal of Hypertension, 27*(1), 34-40.
- Plante, T.G., & Rodin, J. (1990). Physical fitness and enhanced psychological health. *Current Psychology Research and Reviews, 9*, 3-24.

- Pollatou, E., Bakali, N., & Theodorakis, Y. (2010). Body image in female professional and amateur dancers. *Research in Dance Education, 11*(2), 131-137.
- Pringle, J., Drummond, J., McLafferty, E., & Hendry, C. (2011). Interpretative phenomenological analysis: A discussion and critique. *Nurse Researcher, 18*(3), 20-24.
- Radell, S.A., Adame, D.D., & Cole, S.P. (2002). Effect of teaching with a mirror on body image and locus of control in women ballet dancers. *Perceptual and Motor Skills, 95*, 1239–1247.
- Ransdell, L. B., Wells, C. L., Manore, M. M., Swan, P. D., & Corbin, C. B. (1998). Social physique anxiety in postmenopausal women. *Journal of Women and Aging, 10*, 19–39.
- Rao, V.V.P., & Overman, S.J. (1986). Psychological well-being and body image: A comparison of black women athletes and non-athletes. *Journal of Sport Behavior, 9*, 79–91.
- Reel, J.J., Greenleaf, C., Baker, W.K., Aragon, S., Bishop, D., Cachaper, C., Handwerk, P., Locicero, J., Rathburn, L., Reid, W.K., & Hattie, J., (2007). Relations of body concerns and exercise behavior: A meta-analysis. *Psychological Reports, 101*, 927-942.
- Rees, T., & Freeman, P. (2009). Social support moderates the relationship between stressors and task performance through self-efficacy. *Journal of Social and Clinical Psychology, 28*(2), 244-263.

- Ricciardelli, L.A., & McCabe, M.P. (2001). Children's body image concerns and eating disturbance: A review of the literature. *Clinical Psychology Review, 21*, 325–344.
- Ridolfi, D.R., Myers, T.A., Crowther, J.H., & Ciesla, J.A. (2011). Do appearance focused cognitive distortions moderate the relationship between social comparisons to peers and media images and body image disturbance? *Sex Roles, 65*(7-8), 491-505.
- Roberts, A., Cash, T.F., Feingold, A., & Johnson, B.T. (2006). Are Black-White differences in females' body dissatisfaction decreasing? A meta-analytic review. *Journal of Consulting and Clinical Psychology, 74*, 1121–1131.
- Roberts, G.C., (1992). *Motivation in sport and exercise*. Champaign: Human Kinetics.
- Robson, C. (2011): *Real world research: A resource for users of social research methods in applied settings*. West Sussex: Wiley-Blackwell.
- Rosen, J.C., Reiter, J., & Orosan, P. (1995). Cognitive-behavioral body image therapy for body dysmorphic disorder. *Journal of Consulting and Clinical Psychology, 63* (2), 263–269.
- Rosenfeld, L. B., Richman, J. M., & Hardy, C. J. (1989). Examining social support networks among athletes: Description and relationship to stress. *Sport Psychologist, 3*, 23-33.
- Rossi, B., & Zoccolotti, P. (1979). Body perceptions in athletes and non-athletes. *Perceptual Motor Skills, 49*, 723-726.

- Rothblum, E., Solovay, S. & Wann, M. (2009). *The fat studies reader*. New York: New York University Press.
- Royce, W.S., Gebelt, J.L., & Duff, R.W. (2003). Female athletes: Being both athletic and feminine. *Athletic Insight*, 5, 1–15.
- Rudiger, J. A., Cash, T. F., Roehrig, M., & Thompson, J. K. (2007). Day-to-day body-image states: Prospective predictors of intra-individual level and variability. *Body Image: An International Journal of Research*, 4, 1–9.
- Russell, K. M. (2004). On versus off the pitch: The transiency of body satisfaction among female rugby players, cricketers, and netballers. *Sex Roles*, 51, 561-574.
- Ryan, R.M., Frederick, C.M., Lepas, D., Rubio, N., & Sheldon, K.M. (1997). Intrinsic motivation and exercise adherence. *International Journal of Sport Psychology*, 28, 335–354.
- Saint-Phard, D., Van Dorsten, B., Marx, R.G., & York, K.A. (1999). Self-perception in elite collegiate female gymnast, cross-country runners, and track-and-field athletes. *Mayo Clinic Proceedings*, 74, 770-4.
- Salbach, H., Klinkowski, N., Pfeiffer, E., Lehmkuhl, U., & Korte, A. (2007). Body image and attitudinal aspects of eating disorders in rhythmic gymnasts. *Psychopathology*, 40, 388-393.
- Schilder, P. (1950). *The image and appearance of the human body*. New York: International Universities Press.

- Schlenker, B.R., & Leary, M.R. (1982). Social anxiety and self-presentation: A conceptualization and model. *Psychological Bulletin*, *92*, 641–669.
- Schutz, H.K., Paxton, S.J., & Wertheim, E.H. (2002). Investigation of body comparison among adolescent girls. *Journal of Applied Social Psychology*, *32*, 1906–1937.
- Schwandt, T.A. (2000). Three epistemological stances for qualitative inquiry: Interpretivism, hermeneutics and social constructionism. In N.K. Denzin, & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 189-214). Thousand Oaks: Sage Publications.
- Scruton, S. (1992). *Shaping up to womanhood: Gender and girls' physical education*. Buckingham: Open University Press.
- Share, T.L., & Mintz, L.B. (2002). Differences between lesbian and heterosexual women in disordered eating and related attitudes. *Journal of Homosexuality*, *42*, 89-106.
- Shaw, R. L. (2001). Why use interpretative phenomenological analysis in Health Psychology? *Health Psychology Update*, *10*, 48-52.
- Shepard, R., & Raats, M. (2006). *The psychology of food choice*. Oxfordshire: CABI.
- Sherman, R., Thompson, R., & Rose, J. (1996). Body mass index and athletic performance in elite female gymnasts. *Journal of Sport Behavior*, *19*, 338-344.

- Sherry, S.B., Vriend, J.L., Hewitt, P.L., Sherry, D.L., Flett, G.L., & Wardrop, A.A. (2009). Perfectionism dimensions, appearance schemas, and symptoms of body image disturbance in community members and university students. *Body Image, 6*(2), 83–89.
- Shilling, C. (2008). *Changing Bodies: Habit, Crisis and Creativity*. London: Sage.
- Shoneye, C., Johnson, J., Steptoe, A., & Wardle, J. (2011). A qualitative analysis of black and white British women's attitudes to weight and weight control. *Journal of Human Nutrition and Dietetics, 24*(6), 536–542.
- Siever, M. (1994). Sexual orientation and gender as factors in socioculturally acquired vulnerability to body dissatisfaction and eating disorders. *Journal of Consulting and Clinical Psychology, 62*, 252-260.
- Silverman, D. (2000). Analyzing talk and text. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research*, pp. 821–834. Thousand Oaks, CA: Sage Publications.
- Silverman, S.J. (2010). *Research methods in physical activity*. Leeds: Human Kinetics.
- Sira, N., & White, C.P. (2010). Individual and familial correlates of body satisfaction in male and female college students. *Journal of American College Health, 58*(6), 507-514.
- Slade, P.D., Newton, T., Butler, N.M., & Murphy, P. (1991). An experimental analysis of perfectionism and dissatisfaction. *British Journal of Clinical Psychology, 30*, 169-176.

- Slater, A., & Tiggemann, M. (2011). Gender differences in adolescent sport participation, teasing, self-objectification and body image concerns. *Journal of Adolescence*, 24(3), 455-463.
- Small, K. (2001). *Body image*. University of Calgary Addressing Body Image, Self-Esteem, and Eating Disorders Semester II Independent Inquiry, 2(2), 17-23.
- Smith, D.E., Thompson, J.K., Raczynski, J.M., & Hilner, J.E. (1999). Body image among men and women in a biracial cohort: The CARDIA study. *International Journal of Eating Disorders*, 25, 71– 82.
- Smith, J. A. (2004). Reflecting on the development of interpretative phenomenological analysis and its contribution to qualitative research in psychology. *Qualitative Research in Psychology*, 1(1), 39-54.
- Smith, J. A. (2010). Interpretative phenomenological analysis: a reply to Amedeo Giorgi. *Existential Analysis*, 21(2), 186–191.
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. London: Sage Publications.
- Smith, J.A. (2008). *Qualitative psychology: A practical guide to research methods*. London: Sage Publications.
- Smith, J.A., & Osborn, M. (2008). Interpretive phenomenological analysis. In J.A. Smith (Ed), *Qualitative Psychology: A Practical Guide to Research Methods* (pp. 53-80). London: Sage Publication.



- Smolak, L. (2004). Body image in children and adolescents: Where do we go from here? *Body Image, 1*, 15-28.
- Smolak, L., & Levine, M. P. (2001). Body image in children. In J.K. Thompson & L. Smolak (Eds.), *Body image, eating disorders, and obesity in youth: Assessment, prevention, and treatment* (pp. 1– 39). Washington: American Psychological Association.
- Smolak, L., Levine, M.P., & Striegel-Moore, R. (1996). *The developmental of psychopathology of eating disorders: Implications of research, prevention and treatment*. London: Routledge.
- Smolak, L., Murnen, S.K., & Ruble, A.E. (2000). Female athletes and eating problems: a meta-analysis. *International Journal of Eating Disorders, 27*, 371-380.
- Sonstroem, R. J. (1997). Physical activity and self-esteem. In Morgan, W. P. (Ed.), *Physical activity and mental health*, (pp. 128–143). Washington: Taylor and Francis.
- Sperry, S., Thompson, J. K., Sarwer, D. B., & Cash, T. F. (2009). Cosmetic surgery reality TV viewership. *Annals of Plastic Surgery, 62*, 7–11.
- Stein, P.N., & Motta, R.W. (1992). Effects of aerobic and nonaerobic exercise on depression and self-concept. *Perceptual and Motor Skills, 74*, 79-89.
- Stewart, A.D., Benson, P.J., Michanikou, E.G., Tsiota, D.G., & Karli, M.K. (2003). Body image perception, satisfaction and somatotype in male and female athletes and non-athletes: Results using a novel morphing technique. *Journal of Sports Science, 21*, 815-823.

- Stice, E. (2002). Risk and maintenance factors of eating pathology: A meta-analytic review. *Psychological Bulletin*, *128*, 825-848.
- Stice, E., Killen, J.D., Hayward, C., & Taylor, C.B. (1998). Age of onset for binge eating and purging during late adolescence: A 4-year survival analysis. *Journal of Abnormal Psychology*, *107*, 671-675.
- Stice, E., Maxfield, J., & Wells, T. (2003). Adverse effects of social pressure to be thin on young women: An experimental investigation of the effects of fat talk? *International Journal of Eating Disorders*, *34*(1), 108-117.
- Stice, E., Mazotti, L., Krebs, M., & Martin, S. (1998). Predictors of adolescent dieting behaviors: A longitudinal study. *Psychology of Addictive Behaviors*, *12*, 195-205.
- Stice, E., Nemeroff, C., & Shaw, H. (1996). A test of the dual pathway model of bulimia nervosa: Evidence for restrained-eating and affect-regulation mechanisms. *Journal of Social and Clinical Psychology*, *15*, 340-363.
- Stice, E., & Shaw, H.E. (2002). Role of body dissatisfaction in the onset and maintenance of eating pathology: A synthesis of research findings. *Journal of Psychosomatic Research*, *53*, 985-993.
- Stice, E., & Whitenton, K. (2002). Risk factors for body dissatisfaction in adolescent girls: A longitudinal investigation. *Developmental Psychology*, *38*, 669-678.
- Stutzer, A. (2007). *Limited self-control, obesity and the loss of happiness*. Iza discussion papers 2925, Institute for the Study of Labor (IZA).

- Sundgot-Borden, J., & Garthe, I. (2011). Elite athletes in aesthetic and Olympic weight-class sports and the challenge of body weight and body compositions. *Journal of Sport Sciences, 29*, 101-114.
- Swami, V., Airs, N., Chouhan, B., Leon, M. A. P., & Towell, T. (2009). Are there ethnic differences in positive body image among female British undergraduates? *European Psychologist, 14*(4), 288–296.
- Swami, V., Steadman, L., & Tovée, M.J. (2009). A comparison of body size ideals, body dissatisfaction, and media influence between female track athletes, martial artists, and non-athletes. *Psychology of Sport and Exercise Science, 10*, 609-614.
- Thelen, M. H., & Cormier, J. (1995). Desire to be thinner and weight control among children and their parents. *Behaviour Theory, 26*, 85–99.
- Thompson, J.K. (1990). *Body image disturbance: Assessment and treatment*. New York: Pergamon.
- Thompson, J.K., & Smolak, L. (2001). Body image, eating disorders, and obesity in youth: The future is now. In J.K. Thompson & L. Smolak (Eds.), *Body image, eating disorders, and obesity in youth: Assessment, prevention, and treatment* (pp. 1– 39). Washington: American Psychological Association.
- Thompson, J.K., Heinberg, L.J., Altabe, M.N., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment and treatment of body image disturbance*. Washington: American Psychological Association.

- Thompson, R.A. (1987). Management of the athlete with an eating disorder: Implications for the sport management team. *The Sport Psychologist, 1*, 114-126.
- Thompson, R.A., & Sherman, R.T. (1993). Reducing the risk of eating disorders in athletes. *Eating Disorders: The Journal of Treatment and Prevention, 1*, 65-78.
- Tiggemann, M. (2005). Body dissatisfaction and adolescent self-esteem: Prospective findings. *Body Image, 2*, 129–135.
- Tiggemann, M., & Slater, A. (2004). Thin ideals in music television: A source of social comparison and body dissatisfaction. *International Journal of Eating Disorders, 35*, 48–58.
- Tiggemann, M., & Williamson, S. (2000). The effect of exercise on body satisfaction and self-esteem as a function of gender and age. *Sex Roles, 43*(1/2), 119-127.
- Torres-McGehee, T.M., Monsma, E.V., Gay, J.L., Minton, D.M., & Mady, A.N. (2011). Prevalence of eating disorder risk and body image distortion among National Collegiate Association Division I varsity equestrian athletes. *Journal of Athletic Training, 46*, 345-351.
- Tucker, L.A., & Mortell, R. (1993). Comparison of the effects of walking and weight training programs on body image in middle-aged women: An experimental study. *American Journal of Health Promotion, 8*, 34–42.
- Van den Hoonaard, W. (2002). *Walking the tightrope: Ethical issues for qualitative researchers*. Toronto: University of Toronto Press.

- Van Hoorn, J.L., Komlosi, A., Suchar, E., & Samelson, D.A. (2000). *Adolescent development and rapid social change: Perspectives from Eastern Europe*. Albany: State University of New York Press.
- VanderWal, J.S., & Thelen, M. (2000). Predictors of body image dissatisfaction in elementary-age school girls. *Eating Behaviors, 1*, 1–18.
- Vartanian, L.R. (2009). When the body defines the self: Self-concept clarity, internalization, and body image. *Journal of Social and Clinical Psychology, 28*, 94-126.
- Vartanian, L.R., & Shaprow, J.G. (2008). Effects of weight stigma on exercise motivation and behavior: A preliminary investigation among college-aged females. *Journal of Health Psychology, 13*, 131-138.
- Vartanian, L.R., Wharton, C.M., & Green, E.B. (2012). Appearance vs. health motives for exercise and for weight loss. *Psychology of Sport & Exercise, 13*, 251-256.
- Wardle, J., Bindra, R., Fairclough, B., & Westcombe, A. (1993). Culture and body image: body perception and weight concern in young Asian and Caucasian British women. *Journal of Community and Applied Social Psychology, 3*, 173-181.
- Weaver, A.D., & Byers, E.S. (2006). The relationship among body image, body mass index, exercise, and sexual functioning in heterosexual women. *Psychology of Women Quarterly, 30*, 333-339.

- Wertheim, E.H., Koerner, J., & Paxton, S. (2001). Longitudinal predictors of restrictive eating and bulimic tendencies in three different age groups of adolescent girls. *Journal of Youth and Adolescence*, 30, 69–81.
- Wertheim, E.H., Paxton, S.J., & Blaney, S. (2009). Body image in girls. In L. Smolak & J. K. Thompson (Eds.), *Body image, eating disorders, and obesity in youth: Assessment, prevention, and treatment* (pp. 47-76). Washington, DC: American Psychological Association.
- Wilbram, M., Kellett, S., & Beail, N. (2008). Compulsive hoarding: A qualitative investigation of partner and carer perspectives. *British Journal of Psychology*, 47(1), 59-73.
- Wilde, K. (2006). Women in sport: Gender stereotypes in the past and present. *Body Image*, 22, 115-124.
- Wildes, J., Emery, R., & Simons, A. (2001). The roles of ethnicity and culture in the development of eating disturbance and body dissatisfaction. *Clinical Psychology Review*, 21, 521–551.
- Williams, P., & Cash, T.F. (2001). Effects of a circuit weight training program on the body images of college students. *International Journal of Eating Disorders*, 30, 75–82.
- Willig, C. (2001). *Interpretative phenomenology*. Milton Keynes: Open University Press.
- Wilmerding, V., McKinnon, M., & Mennier, C. (2005). Body composition in dancers. *Journal of Dance Medicine and Science*, 9(1), 18-23.

- Wilmore, J.H. (1996). Eating disorders in the young athlete. In O. Bar-Or (Ed.), *The child and adolescent athlete (vol. VI of the Encyclopedia of sports medicine)* (pp. 287-303). Cambridge: Blackwell Science.
- Wilmore, J.H., Costill, D.L., & Kenney, W.L. (2008). *Physiology of sport and exercise*. Leeds: Human Kinetics.
- Wolanin, A.T. (2005). Mindfulness-Acceptance-Commitment (MAC) based performance enhancement for Division I collegiate athletes; A preliminary investigation (Doctoral Dissertation, La Salle University, 2003). *Dissertation Abstracts International-B*, 65 (7), 3735-3794.
- Wood, J.V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin*, 106, 231-248.
- Yamamiya, Y., Cash, T.F., Melnyk, S.E., Posavac, H.D., & Posavac, S.S. (2005). Women's exposure to thin-and-beautiful media images: body image effects of media-ideal internalization and impact-reduction interventions. *Body Image*, 2(1), 74-80.
- Ziegler, P.J., Chor, S.K., Sherr, B., Nelson, J.A., Larson, W.A., & Drewnowski, A. (1998). Body image and dieting behaviors among elite figure skaters. *International Journal of Eating Disorders*, 24(4), 421-427.
- Ziegler, P.J., Kannan, S., Jonnalagadda, S.S., Krishnakumar, A., Taksali, S.E., & Nelson, J.A. (2005). Dietary Intake, Body Image Perceptions, and Weight Concerns of Female US International Synchronized Figure Skating Teams. *International Journal of Sports Nutrition and Exercise Metabolism*, 15, 550-566.

Zoletic, E., & Durakovic-Belko, E. (2009). Body image distortion, perfectionism and eating disorder symptoms in risk group of female ballet dancers and models and in control group of female students. *Psychiatry Danub*, 21(3), 302-309.



## Appendix A

### Body Image Perception – information sheet



#### **Dear Participant**

Thank you for showing an interest in taking part in this study. This sheet will tell you a bit more about the study and what we would like you to do. Please read this carefully.

#### **What is the project about?**

For this study we are interested in looking at how often you take part in physical activity and whether this has an effect on your level of body satisfaction.

#### **Who is taking part in the study?**

We would like approximately 10 participants (or more if possible) to take part.

#### **What will I be asked to do?**

If you volunteer for this study, we will ask you to complete an interview (at a time that is convenient to you). This will give us an indication of your level of physical activity and body image satisfaction. The interview will specifically explore how you feel about your body, but please note that if you feel uncomfortable with any of the questions, or are unwilling to answer any question, you do not need to answer them and you may stop the interview. Any information gathered from the interview will remain confidential and your participation within the study will be strictly confidential.

#### **When will I do it?**

You can complete the interview at an appropriate time that suits you. The interviews will take place at a safe and private location at the University's Oxstalls Campus.

#### **Do I have to take part?**

No, taking part in this study is entirely your choice. Moreover, if you do choose to take part in the study, you are free to withdraw from it at any point and any data collected will not be used within the study. If you decide you no longer want to be part of the study after the interview, contact the researcher (Victoria Reeve) who will withdraw you immediately.

#### **What will you do with the information?**

All the information will be collected and securely stored on a computer at the University of Gloucestershire, and the results will only be seen by the research team. Any data that may reveal the identity of the participants will not be used in the final study.

#### **What if I have any questions?**

If you have any questions or would like to discuss any of the issues that come up during your interview please contact my supervisor, Denise Hill (details below).

Thank you for your time – Victoria Reeve [victoriareeve@connect.glos.ac.uk](mailto:victoriareeve@connect.glos.ac.uk)

#### **Supervisor details:**

Dr Denise Hill  
Course Leader Sport Science  
BASES Accredited Sport and Exercise Scientist  
University of Gloucestershire  
[dhill@glos.ac.uk](mailto:dhill@glos.ac.uk)

## Appendix B

### **An investigation into body image perceptions**

I have been informed that Victoria Reeve, a student at the University of Gloucestershire is completing a study that explores the link between levels of physical activity and body image satisfaction.

Victoria has requested my involvement in the study.

I understand that I will need to complete an interview which will require me to identify how often I exercise and how I perceive by body.

I understand that the results of the interview will be kept confidential and that my involvement in the study will not be revealed.

I appreciate that by taking part in this study, there are no foreseeable risks and discomfort. However, a BASES Accredited Sport and Exercise Scientist (Dr Denise Hill) is supervising the project and is available for consultation, if you have any questions or would like to discuss any of the issues that come up during your interview for consultation.

I have been informed that any questions I have regarding this study will be answered by Victoria, or her supervisor (Dr Denise Hill) at the University of Gloucestershire ([dhill@glos.ac.uk](mailto:dhill@glos.ac.uk); 01242 715157).

I understand that it is possible to withdraw from the interview at any point. I also understand that if after the interview I decide I no longer want to take part in the study I can contact Victoria who will withdraw me immediately from the study.

I have read the above information and fully understand the nature of the study and my role within it. I therefore sign this consent form knowing that I still may withdraw from the study at any point.

Participant signature:

Researcher signature:

Date:



## Appendix C

### Interview Schedule - Athletes

#### **Demographic Details**

- What age are you?
- Which ethnic group would you class as best suited to yourself?
- What types of activities do you enjoy doing in your spare time?
  - How do these activities make you feel?
  - Why do you do them?
- Do you enjoy physical activity?
  - Do you prefer recreational exercise or playing sport?
  - Which sport do you play?
  - Why do you play sport?
  - How does it make you feel when you play your sport?
  - How often do you participate in sport?
  - How important is your sport in your life?
  - Has it always been important to you?
  - Why is it important?

#### **Appearance**

- How do you feel about the way you look?
  - Are you happy or unhappy with how you look?
  - Why do you feel like this?
  - Does feeling like this affect the way you think/feel/behave?
  - If so - How does it affect the way you think/feel/behave?
- Do you actively take care of your appearance?
  - If so - How do you take care of how you look? Why do you take care of how you look?
  - Have you ever tried to change your body?
  - If so – What method did you use?
  - Do you think it's important to take care of how you look?
  - If so – Why? What happens as a result?
  - If not – Why not?
- Are there times when you feel better about how you look?
  - When are those time?

- Why do you feel better at those times?
- What makes you feel worse at other times?
- Is there something that can trigger you to feel worse about your appearance?
  - If so – what is that? Why does it make you feel like that?
- Do you care about what people think about your appearance?
  - How do their opinions make you feel/think?
  - Do their opinions affect the way you feel about yourself?
  - If so – Why?
  - If not – Why not?
  - How do you think others perceive your looks?
  - Why do you think they think that?
- Do you think there are any external factors that influence the way you view your appearance?
  - Parents
  - Peers
  - Media
  - Coaches
  - Any other factors?
  - How do they affect you?
  - Why do they affect you?
- When you look in the mirror what's the first thing you think?
  - Why?
- Do you think playing sport affects the way you view your body?
  - How?
  - Does the type of sport you participate in place particular importance on a specific body type?
  - If so – What is that type? Who places the importance? How does it affect the way you view your body?
  - What do you think about women who undertake recreational exercise?
  - What do you think about their appearance?
  - What do you think about people who are inactive?
  - Why do you think that?

## Media

- Does the media affect the way you view your own body?
  - If so – How does it affect you? Why does it affect you? How does it make you think/feel?
  - If not – Why do you not let it affect you?
  - Where do you see images of these celebrities? (TV, magazines, internet)
- What do you think the media portrays the ideal body to have?
  - How does that make you think/feel about your body?
  - Do you agree with the ideal the media portray?
  - If so – Why do you agree?
  - If not – Why do you not agree?
  - Do you feel you compare yourself with the images you see in the media?
  - If so – In what way do you compare yourself? Do you feel you compare favourably or negatively with these images?
  - If not – Why do you think you don't compare yourself?
  - What effects do you think this ideal image has had on your social group/peers?
- Are there any famous people/athletes you desire to be like?
  - If so – Who? In what way? Why?
  - Which famous people/athletes do you think has the best body?
  - Why do you think it's the best?
  - Who is your role model body wise?
- Do you think playing sport affects your view on these ideals?
  - If so – How? Why?
  - If not – Why not?
- What is the ideal image of a woman's body in our culture in your mind?
  - Why do you think this is the ideal?
  - Do you think you compare favourably to this ideal?
  - If so – Why? How?
  - If not – Why not?
  - Do you wish you looked like this ideal?
  - If so – Why?
  - How does this ideal affect women in general?

## Health

- Is it important is it for you to lead a healthy lifestyle?
  - Why do you think leading a healthy lifestyle is important?
  - Is it more important for you to have a healthy body or a perfect body (even if having the perfect body means living by unhealthy means), or do you think it's the same thing?
  - Why is that more important?
  - Do you think playing sport has an effect on your health?
  - If so – How do it have an affect? Why does it have an effect?
  - If not – Why does it not affect your health?
- Are you in control of your health?
  - If so – How? What do you do?
  - If not – How are you not in control?
  - Do you avoid activities that will threaten your health?
  - If so – Why? How?
  - If not – Why not? What do you do to threaten your health?
  - How predictable is your health?
  - How often do you get physically ill?
  - Do you ever feel like you take your health for granted?
  - If so – Why? How?
  - If not – How do you make sure you don't take your health for granted?
- How important is the role of sport in keeping healthy?
  - If so – Why?
  - What affects does playing sport have on the way you view your health?
  - How do you think you would feel about your health if you were more active?
  - Do you think people who play sport or participate in recreational exercise are viewed differently in society compared to inactive people?
  - How? Why?
  - How does that make you think/feel? (Is it fair?)
  - Why do you think that?

- Do you think playing sport makes you make greater effort to be healthy in other areas of your life?
- If so – How would you be healthier? Why?
- If not – do you think playing sport is the only way to lead a healthy lifestyle? How else?

## **Diet**

- Do you make effort to eat a healthy and balanced diet?
  - If so – Why do you try to eat healthy?
  - If not – Why not?
  - Is it important for you to eat a healthy diet when playing sport?
  - Does your diet affect your performance?
  - Why do you think it is important to eat a balanced diet? (Even if you do not)
  - Do you worry about what you eat?
  - If so – Why? How does this make you think/feel?
  - If not – Why? How does this make you think/feel?
- Does what you eat affect the way you feel about your body?
  - If so – How do you think/feel?
  - Do you think playing sport affects your diet?
  - If so– How do you think/feel?
- Do you ever crash diet, or follow specific diets?
  - If so - What type of diets do you follow? Why do you follow them? Do they work?
  - Do you control the amount of calories or fat you have in your diet?
  - If so – Why? Does it achieve what you intended it to?
  - If not – Why not?
  - If eating a restrictive diet means an ideal body, would you adopt that lifestyle?
  - Why?
  - Is being slim more important than being healthy?
  - Would you rather have the ideal body or be able to eat what you like?
  - Why would you prefer that?
  - Have you ever used weight loss/gain products?

- If so – What was your reasons for using these products? How was it? How long did you use this product?
- Where did you find out about these products?
- How important is enjoying your food to you?
  - Why is it of this importance?
  - Is it more important for you to enjoy the food you eat or to eat food that you think will keep you slim?
  - Why?
  - Do you plan your meals or do you eat what you like when you like? Why?
- Do any external influences effect you diet?
  - Parents? Peers? Media? Coaches? Anything else?
  - How?
- What is the role of nutrition in your life and in your sport?
  - Is it an important role?
  - If so – Why?
  - If not – Why not?
- How do you think women who participate in recreational exercise diet compares to yours?
  - How do you think a woman who is inactive diet compares to yours?
  - Do you think their diet would be different? Better or worse?
  - Why?

### **Fitness**

- Would you class yourself as physically fit?
  - Is this natural fitness or do you work to improve it?
  - Why do you play sport?
  - What affect does playing sport have on your fitness?
  - What do you enjoy about playing sport?
  - How does it make you think/feel about yourself?
  - Have you always played sport?
  - If so – Why do you prefer it from recreational exercise?
  - If not – What made you take up a sport?
  - Have you ever been inactive or a recreational exerciser or have you always been someone who plays sport?



- If so – how did you feel when you were inactive/exerciser compared to now? Are there any differences in how you view your body now?
- Would you class yourself as an active person who is always on the go?
  - What makes you this type of person?
  - What activities do you do?
  - Why do you enjoy them?
  - How do they make you feel about your body?
  - Do you feel playing sport effects the way you view your body?
  - Why? How does exercise make you feel about yourself?
  - Is playing sport an important part of your life?
  - If so – How is it? How would you feel if you could not play sport?

### **Body Weight**

- How do you think/feel about your body weight?
  - How well do you know your body weight?
  - Does it fluctuate or is it consistent?
  - Do you actively control your body weight?
  - If so – How? Why?
  - If not - Why? Is you body weight healthy? Does it stay constant?
  - Do you think playing sport affects your body weight?
  - If so - Why? How does it affect you?
  - If not – Why do you think it doesn't affect you?
  - Do you think it would have a positive or negative effect on your body image?
  - Why do you think that?
- Do you manage your weight for your sport or does sport manage your weight?
  - What is the role of sport in your weight management?
- Do you care about other people's opinion of your body weight?
  - If so – Why do you care? Does it affect the way you view your body? How?
  - If not – Why do you not care?
- Are there certain areas of your body you are more and less content with than others?
  - Which areas are these?

- Why?
- How do these areas make you feel?
- Do you think overall you have a positive body image?
  - If so – Why?
  - If not – Why not?
  - How does playing sport affect your body image?
- Are you sensitive about your body?
  - If so - When do you recall becoming sensitive to your feelings about your body? Is there one incident that made you feel particularly conscious about your body? What was it?
  - If not – Why do you think you aren't sensitive about your body?
- Is there anything/anybody that affects the way you feel about your body?
  - Media, parents, authority, coaches, relationships?
  - How do these sources make you feel?
  - How does the type sport you participate in affect you feel about your body?
  - Does it have an affect?
  - Is there a preferred body type in your sport?
  - Does your body type affect your performance? How?
  - Does achieving a good performance place more pressure on you to maintain this physique?
  - How have your feelings about your body evolved over time?
  - How have your feelings affected the way you interact with men?
  - How have your feelings affected your career choices? Clothing choices? Eating behaviour?
  - Do your feelings about your body change from day to day or are they consistent?

## Appendix D

### Interview Schedule - Exercisers

#### Demographic Details

- What age are you?
- Which ethnic group would you class as best suited to yourself?
- What types of activities do you enjoy doing in your spare time?
  - How do these activities make you feel?
  - Why do you do them?
  - Are you interested in film/ TV series or music?
  - What type?
  - Why do you enjoy them?
  - Who is your favourite female celebrity?
  - Why do you like them?
- Do you enjoy exercise?
  - Why do you enjoy exercise?
  - How does it make you feel?
  - How often do you participate in exercise?
  - How important is exercise in you life?
  - Why is it important?
  - What type of exercise do you undertake?

#### Appearance

- How do you feel about the way you look?
  - Are you happy or unhappy with how you look?
  - Why do you feel like this?
  - Does feeling like this affect the way you are?
  - If so - How does it affect the way you are?
- Do you actively take care of your appearance?
  - If so - How do you take care of how you look? Why do you take care of how you look?
  - Have you ever tried to change your body?
  - If so – What method did you use? Was exercise one of these methods?
  - Do you think it's important to take care of how you look?
  - If so – Why? What happens as a result?

- If not – Why not?
- Are there times when you feel better about how you look?
  - When are those time?
  - Why do you feel better at those times?
  - What makes you feel worse at other times?
  - Is there something that can trigger you to feel worse or better about your appearance?
  - If so – what is that? Why does it make you feel like that? Does exercise help or hinder?
- Do you care about what people think about your appearance?
  - How do their opinions make you feel/think?
  - Do their opinions affect the way you feel about yourself?
  - If so – Why?
  - If not – Why not?
  - How do you think others perceive your looks?
  - Why do you think they think that?
- Do you think there is anything that influence the way you view your appearance?
  - Parents?
  - Peers?
  - Media?
  - Any other factors?
  - How do they affect you?
  - Why do they affect you?
  - Do these factors increase or decrease you exercise behaviours?
- When you look in the mirror what's the first thing you think?
  - Why?
- Do you think exercise affects the way you view your body?
  - How?
  - What is your motive for exercise? Appearance? Health?
  - Why is that your motive do you think?
  - What do you think about women athletes?
  - What do you think about their appearance?
  - Do they have a good body?
  - Do you aspire to have an athletic body?

- What do you think about people who are inactive?
- Why do you think that?

## **Media**

- Does the media affect the way you view your own body?
  - If so – How does it affect you? Why does it affect you? How does it make you think/feel?
  - If not – Why do you not let it affect you?
  - Where do you see images of these celebrities? (TV, magazines, internet)
- What do you think the media portrays the ideal body to have?
  - How does that make you think/feel about your body?
  - Do you agree with the ideal the media portray?
  - If so – Why do you agree?
  - If not – Why do you not agree?
  - Do you feel you compare yourself with the images you see in the media?
  - If so – Who do you compare yourself to? Do you feel you compare favourably or negatively with these images?
  - If not – Why do you think you don't compare yourself?
  - What effects do you think this ideal image has on your exercise behaviour?
  - Does it affect your friends/ peers?
- Are there any famous people you desire to be like?
  - If so – Who? In what way? Why?
  - Which famous people do you think has the best body?
  - Why do you think it's the best?
  - Who is your role model body wise?
- Do you think being a regular exerciser affects your view on these ideals?
  - If so – How? Why?
  - If not – Why not?
- What is the ideal image of a woman's body in our culture in your mind?
  - Why do you think this is the ideal?
  - Do you think you compare favourably to this ideal?
  - If so – Why? How?
  - If not- Why not? How?

- Do you wish you looked like this ideal?
- If so – Why?
- How do you think this ideal affect women in general?

## **Health**

- Is it important is it for you to lead a healthy lifestyle?
  - Why do you think leading a healthy lifestyle is important?
  - Is it more important for you to have a healthy body or a perfect body (even if having the perfect body means living by unhealthy means), or is it the same thing?
  - Why is that more important?
  - Do you think being an exerciser has an effect on your health?
  - If so – How do it have an affect? Why does it have an effect?
  - If not – Why does it not affect your health?
  - Does health impact your exercise behaviour?
- Are you in control of your health?
  - If so – How?
  - If not – How are you not in control?
  - Do you avoid activities that will threaten your health?
  - If so – Why? How?
  - If not – Why not? What do you do to threaten your health?
  - How predictable is your health?
  - How often do you get physically ill?
  - Do you ever feel like you take your health for granted?
  - If so – Why? How?
  - If not – How do you make sure you don't take your health for granted?
- How important is the role of exercise in keeping healthy?
  - If so – Why?
  - If not – Why do you not want to be more active?
  - Do you exercise for health or appearance reasons?
  - What makes you exercise?
  - Does being an exerciser affect the way you view your health?
  - If so – How? Why?
  - If not – Why not?
  - Do you think active people are viewed differently in society?

- How? Why?
- How does that make you think/feel? (Is it fair?)
- Do you think being an exerciser makes you make greater effort to be healthy in other areas of your life?
- If so – How would you be healthier? Why?
- If not – do you think exercise is the only way to lead a healthy lifestyle?

## **Diet**

- Do you make effort to eat a healthy and balanced diet?
  - If so – Why do you try to eat healthy?
  - If not – Why not?
  - Why do you think it is important to eat a balanced diet? (Even if you do not)
  - Do you worry about what you eat?
  - If so – Why? How does this make you think/feel?
  - If not – Why? How does this make you think/feel?
- Does what you eat affect the way you feel about your body?
  - If so – How do you think/feel?
  - Do you think being an exerciser affects your diet?
  - If so– How do you think/feel?
- Does your exercise habits affect your diet?
- Does your diet ever effect how you exercise?
- Do you ever crash diet, or follow specific diets?
  - If so - What type of diets do you follow? Why do you follow them? Do they work?
  - Do you control the amount of calories or fat you have in your diet?
  - If so – Why? Does it achieve what you intended it to?
  - If not – Why not?
  - If eating a restrictive diet means an ideal body, would you adopt that lifestyle?
  - Why?
  - Is being slim more important than being healthy?
  - Would you rather have the ideal body or be able to eat what you like?
  - Why would you prefer that?

- Have you ever used weight loss/gain products?
- If so – What was your reasons for using these products? How was it? How long did you use this product?
- Where did you find out about these products?
- How important is enjoying your food to you?
  - Why is it of this importance?
  - Is it more important for you to enjoy the food you eat or to eat food that you think will keep you slim?
  - Why?
  - Do you plan your meals or do you eat what you like when you like? Why?
- Do any external influences effect you diet?
  - Parents? Peers? Media? Anything else?
  - How?
- How do you think a woman who plays sports diet compares to yours?
  - How do you think a woman who is inactive diet compares to yours?
  - Do you think their diet would be different? Better or worse?
  - Why?

### **Fitness**

- Would you class yourself as physically fit?
  - Is this natural fitness or do you work to improve it?
  - Why do you exercise?
  - What do you enjoy about exercise?
  - How does it make you think/feel about yourself?
  - Have you ever played sport?
  - If so – why do you not now? What do you prefer about recreational exercise?
  - Have you ever been inactive or have you always been someone who exercises?
  - If so – how did you feel when you were inactive? Are there any differences in how you view your body now?
- What role does exercise have on the way you view yourself?
  - Does the way you view yourself motivate you to keep exercising?
  - Why did you begin to exercise?



- Why do you exercise now?
- Would you class yourself as an active person who is always on the go?
  - What makes you this type of person?
  - What activities do you do?
  - Why do you enjoy them?
  - How do they make you feel about your body?
  - What motivates you to exercise?
  - Do you feel exercising effects the way you view your body?
  - Why? How does exercise make you feel about yourself?
  - Is exercise essential to your weekly routine?
  - How would you feel if you didn't complete as much exercise, as you would like to? Why would you feel like this?

### **Body Weight**

- How do you think/feel about your body weight?
  - How well do you know your body weight?
  - Does it fluctuate or is it consistent?
  - Do you actively control your body weight?
  - If so – How? Why?
  - If not - Why? Is you body weight healthy? Does it stay constant?
  - Do you think being an exerciser affects your body weight?
  - If so - Why? How does it affect you?
  - If not – Why do you think it doesn't affect you?
  - Do you think it would have a positive or negative effect on your body image?
  - Why do you think that?
- Do you care about other people's opinion of your body weight?
  - If so – Why do you care? Does it affect the way you view your body? How?
  - If not – Why do you not care?
- Are there certain areas of your body you are more and less content with than others?
  - Which areas are these?
  - Why?
  - How do these areas make you feel?
  - Do you work on these areas when exercising?

- Do you think overall you have a positive body image?
  - If so – Why?
  - If not – Why not?
  - Does exercise have an effect on your body image?
- Are you sensitive about your body?
  - If so - When do you recall becoming sensitive to your feelings about your body? Is there one incident that made you feel particularly conscious about your body? What was it?
  - If not – Why do you think you aren't sensitive about your body?
- Is there anything/anybody that affects the way you view your body
  - Media, parents, authority, relationships?
  - How do these sources make you feel?
  - How have your feelings about your body evolved over time?
  - How have your feelings affected the way you interact with men?
  - How have your feelings affected your career choices? Clothing choices? Eating behaviour?
  - Do your feelings about your body change from day to day or are they consistent?

## **Appendix E**

### **Interview Schedule – Inactive**

#### **Demographic Details**

- What age are you?
- Which ethnic group would you class as best suited to yourself?
- What types of activities do you enjoy doing in your spare time?
  - How do these activities make you feel?
  - Why do you do them?
  - Are you interested in film/ TV series or music?
  - What type?
  - Why do you enjoy them?
  - Who is your favourite female celebrity?
  - Why do you like them?
  - Do you enjoy exercise or sport?

#### **Appearance**

- How do you feel about the way you look?
  - Are you happy or unhappy with how you look?
  - Why do you feel like this?
  - Does feeling like this affect the way you think/feel/behave?
  - If so - How does it affect the way you are?
- Do you actively take care of your appearance?
  - If so - How do you take care of how you look? Why do you take care of how you look?
  - Have you ever tried to change your body?
  - If so – What method did you use?
  - Do you think it's important to take care of how you look?
  - If so – Why? What happens as a result?
  - If not – Why not?
- Are there times when you feel better about how you look?
  - When are those time?
  - Why do you feel better at those times?
  - What makes you feel worse at other times?
  - Is there something that can trigger you to feel worse about your appearance?
  - If so – what is that? Why does it make you feel like that?

- Do you care about what people think about your appearance?
  - How do their opinions make you feel/think?
  - Do their opinions affect the way you feel about yourself?
  - If so – Why?
  - If not – Why not?
  - How do you think others perceive your looks?
  - Why do you think they think that?
- Do you think there are any external factors that influence the way you view your appearance?
  - Parents
  - Peers
  - Media
  - Any other factors?
  - How do they affect you?
  - Why do they affect you?
- When you look in the mirror what's the first thing you think?
  - Why?
- What do you think about women who exercise regularly?
  - What do you think about women who play sport?
  - What do you think about their appearance?
  - Do they have a good body?
  - Is their body something that you desire or do not think it is attractive?
  - What do you think the difference in body type is between women who exercise and women who play sport?
  - Which, in your opinion, do you think is more desirable?
  - Why is it more desirable?
  - What makes the other less desirable?

### **Media**

- Does the media affect the way you view your own body?
  - If so – How does it affect you? Why does it affect you? How does it make you think/feel?
  - If not – Why do you not let it affect you?
  - Where do you see images of these celebrities? (TV, magazines, internet)

- What do you think the media portrays the ideal body to have?
  - How does that make you think/feel about your body?
  - Do you agree with the ideal the media portray?
  - If so – Why do you agree?
  - If not – Why do you not agree?
  - Do you aspire to be like this ideal?
  - If so – How do you try and reach this ideal?
  - If not – Why is it not something you aspire to look like?
  - Do you feel you compare yourself with the images you see in the media?
  - If so – In what way do you compare yourself? Do you feel you compare favourably or negatively with these images?
  - If not – Why do you think you don't compare yourself?
  - What effects do you think this ideal image has had on your social group/peers?
- Are there any famous people you desire to be like?
  - If so – Who? In what way? Why?
  - Which famous people do you think has the best body?
  - Why do you think it's the best?
  - Who is your role model body wise?
- Do you think being inactive affects your view on these ideals?
  - If so – How? Why?
  - If not – Why not?
  - Do you think if you completed more physical activity you would have a different view on the ideal body?
- What is the ideal image of a woman's body in our culture in your mind?
  - Why do you think this is the ideal?
  - Do you think you compare favourably to this ideal?
  - If so – Why? How?
  - If not – Why not? How?
  - Do you wish you looked like this ideal?
  - If so – Why?
  - How do you think this ideal affect women in general?

## **Health**

- Is it important is it for you to lead a healthy lifestyle?

- Why do you think leading a healthy lifestyle is important?
- Is it more important for you to have a healthy body or a perfect body (even if having the perfect body means living by unhealthy means), or do you think that is the same thing?
- Why is that more important?
- Do you think being inactive has an effect on your health?
- If so – How do it have an affect? Why does it have an effect?
- If not – Why does it not affect your health?
- Does your health have an impact on being inactive?
- Are you in control of your health?
  - If so – How?
  - If not – How are you not in control?
  - Do you avoid activities that will threaten your health?
  - If so – Why? How?
  - If not – Why not? What do you do to threaten your health?
  - How predictable is your health?
  - How often do you get physically ill?
  - Do you ever feel like you take your health for granted?
  - If so – Why? How?
  - If not – How do you make sure you don't take your health for granted?
- Do you wish you were more active?
  - If so – Why?
  - If not – Why do you not want to be more active?
  - What inhibits you from being active?
  - Does being inactive affect the way you view your health?
  - If so – How? Why?
  - If not – Why not?
  - How do you think you would feel about your health if you were more active?
  - Do you think active people are viewed differently in society?
  - How? Why?
  - How does that make you think/feel? (Is it fair?)
  - Does society reward active people? How?

- If you were more active physically do you think would make a greater effort to be healthy in other areas of your life?
- If so – How would you be healthier? Why do you not undertake these activities already?
- If not – do you think exercise is the only way to lead a healthy lifestyle?

## **Diet**

- Do you make effort to eat a healthy and balanced diet?
  - If so – Why do you try to eat healthy?
  - If not – Why not?
  - Why do you think it is important to eat a balanced diet? (Even if you do not)
  - Do you worry about what you eat?
  - If so – Why? How does this make you think/feel?
  - If not – Why? How does this make you think/feel?
- Does what you eat affect the way you feel about your body?
  - If so – How do you think/feel?
  - Do you feel your diet would be healthier if you were an active person?
  - If so – Why?
  - If not – Why not?
- Does being inactive affect your eating habits?
  - If so – How?
- Do you ever crash diet, or follow specific diets?
  - If so - What type of diets do you follow? Why do you follow them? Do they work?
  - Do you control the amount of calories or fat you have in your diet?
  - If so – Why? Does it achieve what you intended it to?
  - If not – Why not?
  - If eating a restrictive diet means an ideal body, would you adopt that lifestyle?
  - Why?
  - Is being slim more important than being healthy?
  - Would you rather have the ideal body or be able to eat what you like?

- Why would you prefer that?
- Have you ever used weight loss/gain products?
- If so – What was your reasons for using these products? How was it? How long did you use this product?
- Where did you find out about these products?
- How important is enjoying your food to you?
  - Why is it of this importance?
  - Is it more important for you to enjoy the food you eat or to eat food that you think will keep you slim?
  - Why?
  - Do you plan your meals or do you eat what you like when you like? Why?
- Do any external influences effect you diet?
  - Parents? Peers? Media?
  - How?
- How do you think a woman who exercises' diet compares to yours?
  - How do you think a woman who plays sports' diet compares to yours?
  - Do you think their diet would be different? Better or worse?
  - Why?

### **Fitness**

- Would you class yourself as physically fit?
  - Why? Is it natural?
  - How?
  - Why do you not exercise?
  - What inhibits you from undertaking exercise?
  - Why does it stop you from exercising?
  - How does it make you feel?
  - Have you ever exercised or played sport?
  - If so - How did it make you feel about yourself? Did you feel better about your body when you used to exercise or now? Why did you stop exercising?
  - If not - Is there a reason why you have never been somebody who exercises regularly?
- Do you think being inactive affects the way you perceive your body?



- How does it affect the way you view your body?
- How does it make you think/feel?
- What do you think about women who exercise?
  - What do you think about women who play sport?
  - Is it something you would like to do?
  - Why do you think like that?

### **Body Weight**

- How do you think/feel about your body weight?
  - How well do you know your body weight?
  - Does it fluctuate or is it consistent?
  - Do you actively control your body weight?
  - If so – How? Why?
  - If not - Why? Is your body weight healthy? Does it stay constant?
  - Do you think being inactive affects your body weight?
  - If so - Why? How does it affect you?
  - If not – Why do you think it doesn't affect you?
  - Do you think if you were a regular exerciser or played sport you would have more control over your weight?
  - Do you think it would have a positive or negative effect on your body image?
  - Why do you think that?
- Do you care about other people's opinion of your body weight?
  - If so – Why do you care? Does it affect the way you view your body? How?
  - If not – Why do you not care?
- Are there certain areas of your body you are more and less content with than others?
  - Which areas are these?
  - Why?
  - How do these areas make you feel?
- Do you think overall you have a positive body image?
  - If so – Why?
  - If not – Why not?
  - Do you think being inactive affects your body image?
  - If so - Why?

- If not – Why not?
- Are you sensitive about your body?
  - If so - When do you recall becoming sensitive to your feelings about your body? Is there one incident that made you feel particularly conscious about your body? What was it?
  - If not – Why do you think you aren't sensitive about your body?
- Is there anything/anybody that affects the way you view your body?
  - Media, parents, authority, relationships?
  - How do these sources make you feel?
  - How have your feelings about your body evolved over time?
  - How have your feelings affected the way you interact with men?
  - How have your feelings affected your career choices? Clothing choices? Eating behaviour?
  - Do your feelings about your body change from day to day or are they consistent?

## Appendix F



### General Practice Physical Activity Questionnaire

Date.....

Name.....

1. Please tell us the type and amount of physical activity involved in your work.

		Please mark one box only
a	I am not in employment (e.g. retired, retired for health reasons, unemployed, full-time carer etc.)	
b	I spend most of my time at work sitting (such as in an office)	
c	I spend most of my time at work standing or walking. However, my work does not require much intense physical effort (e.g. shop assistant, hairdresser, security guard, childminder, etc.)	
d	My work involves definite physical effort including handling of heavy objects and use of tools (e.g. plumber, electrician, carpenter, cleaner, hospital nurse, gardener, postal delivery workers etc.)	
e	My work involves vigorous physical activity including handling of very heavy objects (e.g. scaffolder, construction worker, refuse collector, etc.)	

2. During the last week, how many hours did you spend on each of the following activities?  
Please answer whether you are in employment or not

Please mark one box only on each row

		None	Some but less than 1 hour	1 hour but less than 3 hours	3 hours or more
a	Physical exercise such as swimming, jogging, aerobics, football, tennis, gym workout etc.				
b	Cycling, including cycling to work and during leisure time				
c	Walking, including walking to work, shopping, for pleasure etc.				
d	Housework/Childcare				
e	Gardening/DIY				

3. How would you describe your usual walking pace? Please mark one box only.

Slow pace (i.e. less than 3 mph)	<input type="checkbox"/>	Steady average pace	<input type="checkbox"/>
Brisk pace	<input type="checkbox"/>	Fast pace (i.e. over 4mph)	<input type="checkbox"/>