Exploring the athletic-ideal body image and eating disturbances in a selected South African sample

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Preface

This thesis is submitted in accordance with rule A.8, and specifically in article format as described in rule A.8.2.b of the North-West University.

The three manuscripts comprising this thesis will be submitted to *Body Image*: *An International Journal* (Manuscript 1), *Journal of Phenomenological Psychology* (Manuscript 2), and *Qualitative Psychology* (Manuscript 3).

The referencing style and editorial approach for this thesis are in line with the prescriptions of the *Publication Manual* (6th edition) of the American Psychological Association (APA). All three manuscripts have been styled according to these guidelines, but were appropriately revised to the specifications as required by the respective journals.

For the purpose of this thesis, the page numbering is consecutive as a whole. However, for publication purposes each manuscript was numbered starting from page 1.

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Summary

Exploring the athletic-ideal body image and eating disturbances in a selected South African sample

Keywords: athletic-ideal, balance, body dissatisfaction, body ideal, body ideal internalization, eating disturbances, internalization, obligatory exercise, obsessive exercise, thin-ideal

The athletic-ideal and associated behaviours have not yet been adequately addressed in current literature. For the past two years researchers focused on the thin-ideal internalization. This researcher explored the extent to which the athletic-ideal, body image, and eating disturbances affected on a selected South African sample. This research study is presented in three manuscripts.

The aim of the first manuscript was to explore the relationship between the athletic-ideal internalization and its association with clinical aspects, such as body dissatisfaction, eating disorders, and maladaptive exercise behaviours. This quantitative cross-sectional study included on-campus female students (N = 476) from the three campuses of the North-West University (NWU) in South Africa. Participants completed four online self-report questionnaires (The Sociocultural Attitudes Towards Appearance Scale-4; The MBSRQ Appearance Scale; The Obligatory Exercise Questionnaire; The Eating Attitudes Test). Findings suggested that the athletic-ideal is gaining popularity. Furthermore, significant relationships between athletic-internalization, obligatory exercise and dieting were evident, yet yielded a poor relationship with body dissatisfaction. As with other studies, it appears that the athletic-ideal is less harmful to body dissatisfaction and dieting than the thin-ideal. A

stronger association between obligatory exercise was found with the athletic-ideal than with the thin-ideal.

The aim of the second manuscript was to explore the subjective experiences of individuals that have internalized this ideal and investigated the behaviours associated with reaching the athletic-ideal. This qualitative study followed a phenomenological approach to explore nine participants' perceptions of their athletic-ideal internalization. Data from semistructured interviews were analyzed using the Interpretative Phenomenological Analysis methodology. Results indicated a prominent theme of balance with regard to eating and exercise. In this study, it was evident that participants' pursuits of the athletic-ideal body are more focused on health-related goals than on appearance-related ideals. Following the guidelines of a healthy lifestyle and a balanced exercise routine appears to act as protective factors against body image disturbances, maladaptive eating and compulsive exercise.

In the third manuscript the aim was to explore how practicing psychologists in clinical practice make sense of the athletic-ideal. This study explored how they classify, diagnose and treat their patients who have an athletic-ideal internalization with pathological associated behaviour. The qualitative study followed a grounded theory approach to explore nine psychologists' understanding of the athletic-ideal and subsequent implications for diagnostic classification and treatment. Results indicated that, if the athletic-pursuit includes balance and flexibility, the pursuit can lead to positive psychological and physical benefits. When the inverse is present, obsessive-compulsive and rigidity in the pursuit start to affect psychological, physiological, social and occupational functioning. In the absence of clear, evidence-based diagnostic classification guidelines for a pathological pursuit of the athletic-ideal, diagnostic classifications of eating disorders, muscle dysmorphia and associated depressive and anxiety disorders are often used. Psychologists follow an individualized form

of treatment that includes cognitive behaviour, family systems and psychodynamic approaches. Research on the athletic-ideal internalization in clinical practice is still in its early stages and peer-reviewed evidence is needed to establish diagnostic criteria and course descriptions of a pathological pursuit of the athletic-ideal. In conclusion, the study primarily contributed to the exploration of the athletic-ideal and its associated outcomes in a South-African sample.

Opsomming

’n Verkenning van die atletiese-ideaal-liggaamsbeeld en eetversteurings in ’n geselekteerde Suid-Afrikaanse steekproef

Sleutelwoorde: atletiese ideaal, balans, liggaamsontevredenheid, liggaamsideaal, internalisering van die liggaamsideaal, eetversteurings, internalisering, verpligte oefening, obsessiewe oefening, slank-ideaal

Die atletiese liggaamsideaal en gepaardgaande gedrag word nie voldoende in die huidige literatuur aangespreek nie, aangesien die kalklig vir meer as twee dekades op die internalisering van die slank-ideaal geval het. Hierdie studie ondersoek die mate waarin die atletiese liggaamsideaal, liggaamsbeeld en eetversteurings ’n invloed het op ’n geselekteerde Suid-Afrikaanse steekproef. Die navorsingstudie word in drie manuskripte aangebied.

In die eerste manuskrip word die verband ondersoek tussen internalisering van die atletiese ideaal en kliniese aspekte soos liggaamsontevredenheid, eetversteurings en wanaangepaste oefengedrag. Die kwantitatiewe dwarssnitstudie bestaan uit ’n groep voltydse vrouestudente (N = 476) van die drie kampusse van die Noordwes-Universiteit (NWU) in Suid-Afrika. Die deelnemers het vier aanlyn-selfverslagvraelyste voltooi (*The Sociocultural Attitudes Towards Appearance Scale-4; The MBSRQ Appearance Scale; The Obligatory Exercise Questionnaire; The Eating Attitudes Test*). Resultate dui daarop dat die atletiese liggaamsideaal gewildheid verwerf. Daarbenewens is ’n beduidende verband bevind tussen internalisering van die atletiese liggaamsideaal, selfverpligte oefening en dieet, maar ’n swak verband met liggaamlike ontevredenheid is opvallend. Soos dit ook uit ander relevante studies blyk, wil dit voorkom of die atletiese ideaal ’n minder ongunstige uitwerking het op liggaamsontevredenheid en dieet as die slank-ideaal. Resultate dui ’n groter verband aan

tussen selfverpligte oefening en die atletiese ideaal as tussen selfverpligte oefening en die slank-ideaal.

Die navorsing in die tweede manuskrip was daarop gemik om die subjektiewe ervaring van individue wat die atletiese ideaal geïnternaliseer het sowel as die gedrag wat geassosieer word met die bereiking van dié ideal, te ondersoek. Hierdie kwalitatiewe studie het ’n fenomenologiese benadering gevolg om nege deelnemers se persepsie van die internalisering van hulle atletiese ideaal te ondersoek. Data uit semigestruktureerde onderhoude is geanaliseer met behulp van Interpretatiewe Fenomenologiese Analise. Resultate dui ’n prominente tema van balans ten opsigte van eet en oefening aan. In hierdie studie was dit duidelik dat deelnemers se strewe na die atletiese liggaamsideaal meer gerig is op gesondheidsverwante doelwitte as op voorkomsverwante ideale. Die navolging van die riglyne vir ’n gesonde lewenstyl en gebalanseerde oefening blyk as beskermende faktore teen liggaamsbeeldversteurings, wanaangepaste eetgewoontes en kompulsiewe oefening te dien.

In die derde manuskrip het die verkenning van die atletiese ideaal onder die soeklig gekom na aanleiding van die sin wat praktiserende kliniese sielkundiges daaruit maak. Die ondersoek was gerig op die klassifisering, diagnose en behandeling van pasiënte wat ’n kliniese beeld van atletiese-ideaal-internalisering met patologies verwante gedrag vertoon. ’n Grondige teoretiese benadering is onderliggend aan die kwalitatiewe studie. Nege kliniese sielkundiges se praktykervaring ten opsigte van die atletiese ideaal en gepaardgaande implikasies vir diagnostiese klassifikasie het die ondersoek onderlê. Die resultate dui daarop dat die insluiting van balans en buigsaamheid in die proses tot positiewe psigologiese en fisieke voordele kan lei. Aan die ander kant het obsessief-kompulsiewe elemente en rigiditeit die strewe na die atletiese ideaal negatief beïnvloed, en veral wat betref psigologie, fisiologie, sosiale funksionering sowel as werkverrigting. In die afwesigheid van duidelike,

bewysgebaseerde diagnostiese klassifikasieriglyne vir ’n patologiese beeld van die atletiese ideaal word diagnostiese klassifikasies van eetversteurings, spierdismorfie en verwante depressie- en angsversteurings gebruik in die soeke na ’n patologie van die atletiese ideaal. Sielkundiges volg ’n geïndividualiseerde vorm van behandeling wat kognitiewe gedragsbenadering, gesinsgeoriënteerde en psigodinamiese benaderings insluit. Navorsing oor die internasionalisering van atletiese-ideaal internalisering in die praktyk is nog in sy kinderskoene. Portuurbeoordeelde bewyse is nodig om diagnostiese kriteria en verloopsbeskrywings vir ’n patologie van die atletiese-ideaal te vestig.

Ten slotte het die navorsing in die Suid-Afrikaanse steekproef hoofsaaklik bygedra tot die verkenning van die atletiese ideaal en gepaardgaande aspekte.

Contents

Solemn declaration

I, Lindi Williams, declare that the thesis (article format) hereby submitted by me, in compliance with the requirements for the Ph.D. in Psychology at the North-West University Potchefstroom Campus, is my own independent work. I acknowledged all material and sources used in its preparation, whether it was books, articles, reports, lecture notes, or any other kind of document, electronic or personal communication. I also certify that this thesis (article format) has not previously been submitted for assessment at any other unit/university/faculty and that I have not copied – in part or whole – or otherwise plagiarized the work of other students and/or persons.

I understand and accept that the copies that are submitted for examination are the property of the University.

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Lindi Williams

20686439

Letter of permission

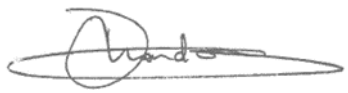
Permission to submit the manuscripts for degree purposes

Permission is hereby granted by the co-authors that the following manuscripts may be submitted by Lindi Williams for the purpose of obtaining a Ph.D. degree in Psychology:

1. Internalization of the athletic-ideal in a female South African student sample.
2. Athletic-ideal internalization: The lived experiences of female students.
3. Practicing psychologists' understanding of the athletic-ideal internalization: Implications for classification and treatment.

The student's work has been submitted to TurnItIn and a satisfactory report has been obtained.

The co-authors, Dr. Del Naidoo, and Dr. Ruan Spies, acted as promoter and copromoter.



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Dr. Del Naidoo Dr. Ruan Spies

SECTION 1: INTRODUCTION

Aims and Manuscripts

The primary aim of this research thesis was to gain a better understanding of the extent to which the athletic-ideal, body image, exercise and eating disturbances have an influence on a select South African sample. To achieve this aim, the study was conducted and are presented in the format of three manuscripts. The first study (Section 2, Manuscript 1) aims to explore the relationship between this internalization of the athletic-ideal and its association with important aspects such as body dissatisfaction, eating and exercise behaviours. The second study (Section 3, Manuscript 2) explores the subjective experience of individuals who have internalized this ideal and investigates the behaviours associated with reaching the athletic-ideal. The third study (Section 4, Manuscript 3) explores how a group of psychologists makes sense of the aforementioned concepts and relationships and the implication for classification.

Introduction of the ideal body type

"Strong is the new skinny" is a catchphrase that implies a shift in the common perception of the ideal body. From the literature it is apparent that the thin-ideal dominated the depiction of beauty in the past. However, the modern-day depiction of the ideal body also proposes being toned and muscular in addition to being thin (Benton & Karazsia, 2015; Dworkin & Wachs, 2009; Grogan, 2016; Homan, 2010; Homan, McHugh, Wells, Watson, & King, 2012). It is important to understand how the internalization of societal beauty standards can contribute to body dissatisfaction, eating habits, and body-related disorders.

According to the tripartite influence model, disordered eating is associated with the internalization of cultural pressures (peer, media and family influences) in terms of appearance (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Internalization refers to a

cognitive endorsement of the cultural ideal of attractiveness to the extent that body image and behaviour are affected (Flament et al., 2012; Homan, 2010; Thompson et al., 1999). In other words, internalization takes place when an individual accepts the culturally and socially depicted ideal as personally appealing and initiates behaviour to conform to this ideal. The internalization and pursuit of an ideal body as determined by a societal standard of beauty can play a significant role in body dissatisfaction and eating disorder behaviour (Keery, Van den Berg, & Thompson, 2004; Shroff & Thompson, 2006; Uhlmann, Donovan, Zimmer-Gembeck, Bell, & Ramme, 2018).

A desire for the ideal body is a significant component of beauty and attractiveness, albeit with numerous changes over the course of history (Grogan, 2016; Peters, Rhodes, & Simmons, 2007).

Historical overview of the ideal body type: Cross-cultural differences in the ideal body

Research has shown noteworthy diversity among cultures in what is considered the ideal body type (Grogan, 2016). In non-Western countries the ideal female body is typically associated with a larger, more natural body size (Cash & Smolak, 2011; Grogan, 2016), while adherence to the thin-ideal seems to be a westernized ideal. Conversely, Tiggemann (2011) demonstrates that the internalization of the thin-ideal has become a transnational phenomenon. Supporting this assertion, the International Body Project, a large cross-cultural survey, found little difference in considerations of attractiveness and body dissatisfaction across 10 world geographical regions (Swami et al., 2010). Furthermore, in a meta-analysis Grabe and Hyde (2006) found minimal to no differences between white and other ethnic groups in terms of body satisfaction. There is an increase in the documentation of eating disorder symptomology in various countries and cultures around the globe (Pike, Hoek, & Dunne, 2014).

South Africa is a country of diverse cultures and studies indicate that the Western thin-ideal has gained popularity among black South Africans (Szabo, 1999; Szabo & Allwood, 2004), evident in an increase in eating disorders in black South African communities (Szabo, 1999; Szabo & Allwood, 2004). Caradas, Lambert, and Charlton (2001) identified abnormal eating attitudes and related body-image issues in a South African adolescent sample from multiple ethnic backgrounds. In a more recent study, Gitau, Micklesfield, Pettifor, and Norris (2014) explored the eating attitudes, body esteem and weight control behaviours among 1,435 South African black and mixed ancestry boys and girls. The authors observed an increased risk of developing eating disorders in their sample, with adolescent girls engaging in weight-loss practices. Prioreschi et al. (2017) found that being overweight or obese was positively associated with a desire to be thinner. The above-mentioned studies emphasize that body image and eating disturbances occur across cultures, implying that the thin-internalization and possibly the athletic-internalization are not only Western phenomena.

Historical overview of the ideal body type: Western Societies

While it is evident from the discussion above that there are various cultural implications inherent in body idealization, historical Western influences are significant and worth considering in more detail. In Europe during the Middle Ages, the ideal body type was a voluptuous figure, complete with full hips and a rounded stomach (Grogan, 2016). The flapper movement of the 1920s depicted the ideal figure as a flatter silhouette (Grogan, 2016). Women made every effort to hide their curves by binding their breasts and wore garments to augment the silhouette (Grogan, 2016). In the 1930s to 1950s, the hour-glass figure became the ideal, with an emphasis on large breasts. Marilyn Monroe epitomised the ideal body with a curvaceous 37-27-35-figure (Sklar, 2017).

In the 1960s the image of the ideal body changed to an extremely the opposite: a thin and slender figure. Women idealized thin and androgynous-looking bodies similar to that of the supermodel Twiggy (Grogan, 2016; Sklar, 2017). The aerobics exercise phenomenon of the 1980s paved the way to yet another ideal body type: that was not only thin, but also looked physically fit and toned. Prominent figures that who promoted the physically fit look include Jane Fonda and Victoria Principal (Grogan 2016). In the 1990s the emaciated body type became the ideal again with the appearance of the so-called waif-like models – with Kate Moss leading the field (Grogan, 2016). At the turn of the century the ideal is a robust appearance: athletic, muscular, toned, and strong (Benton & Karazsia, 2015, Grogan, 2016; Gruber, 2007; Homan et al., 2012; Petrie & Greenleaf, 2011; Robinson et al., 2017; Uhlmann et al., 2018).

Description of the current body ideals: Progression from thin to athletic-ideal?

The thin-ideal maintains that the female body should be very thin with little adiposity (Schaefer et al., 2015; Tiggemann, 2011). The thin-ideal internalization and its outcomes have been researched extensively. Studies indicate that the internalization of this ideal contributes to body image and eating disturbances (Culbert, Racine, & Klump, 2015; Flament et al., 2012; Groesz, Levine, & Murnen, 2002; Homan, 2010; Knauss, Paxton, & Alsaker, 2007; Rodgers, Mclean, & Paxton, 2015; Thompson & Stice, 2001). Disturbances can range from low self-esteem and body dissatisfaction to more severe pathology such as eating disorders. The modern-day depiction of the cultural ideal of attractiveness indicates a major shift from thinness to a more athletic-looking body (Grogan, 2016; Gruber, 2007; Homan, 2010; Homan et al., 2012). For the purpose of this study, the athletic-ideal is referred to as the athletic-ideal. It can be described as a body-ideal that values a visibly toned and muscular appearance in addition to being thin (Benton & Karazsia, 2015; Dworkin & Wachs, 2009;

Grogan, 2016; Robinson et al., 2017; Uhlmann et al., 2018). An added condition placed on this ideal is that the body should not be too toned or too muscular (Petrie & Greenleaf, 2011).

From the discussion above, it is clear that changing societal whims impact body image as women strive to obtain the depicted body ideal. In the next section, consideration is given to body image and the dissatisfaction that often arise as a result of prerequisites that people experience regarding their bodies.

Body image and body dissatisfaction

Body image is a multifaceted concept and several definitions can be found in the literature. Grogan (2016) maintains that body image is the individual's perceptual an individualistic experience as well as a subjective evaluation of the individual's appearance. This includes perceptions, thoughts, and feelings about the body. Body image encompasses a perceptual and an attitudinal dimension (Cash, 2011; Grogan, 2006). The perceptual dimension consists of the accuracy of perceived body size, shape and form. The attitudinal dimension includes two components, namely the negative or positive evaluation of the body (evaluative-affective) and preoccupation with appearance (cognitive-behaviour). Body dissatisfaction is generally defined as a negative subjective evaluation of the weight and shape of one's own body (Ferguson, 2013; Grogan, 2006). Alternatively, body dissatisfaction refers to a discrepancy between current body image and ideal body image (Martin, 2010; Tiggemann, 2011). The tripartite influence model suggests that media pressure is often associated with the internalization of an ideal body image (Thompson et al., 1999).

Media influence on the body ideal

Media portrayal has a long history of affecting and – to some extent – dictating the discourse on the notional body ideal. The longstanding message portrayed by the media is unambiguous: beauty equals thin (Grogan, 2016; Martin 2010). In meta-analytic studies conducted by Groesz et al. (2002) and Grabe, Ward and Hyde (2008), findings indicate that exposure to the thin-ideal in the media elicits body dissatisfaction in women. Recently the change to a more athletic-ideal is becoming more apparent in came to the fore in the media eliciting a new trend. Slogans such as Strong is the new skinny appear on clothing and fitness merchandise. Self-help books such as *Strong is the new skinny: How to eat, live and move to maximize your power* by Jennifer Cohen and Stacey Colino (2014) are gaining popularity. The athletic-ideal is also very prominently displayed on social media platforms such as Instagram, Facebook, YouTube and Pinterest (Uhlmann et al., 2018). A recent trend on social media sites is "fitspiration", a portmanteau word combining "fitness" and "inspiration", where these images are designed to motivate a healthier lifestyle through exercise and healthy eating. In a recent content analysis study by Tiggemann and Zaccardo (2016), the authors found that the most of these images depict thin and toned women. Furthermore, studies have shown researchers are convinced that exposure to these images of lean, toned and fit bodies leads to negative perceptions about the individual's own body and increases negative mood (Benton & Karazsia, 2015; Homan et al., 2012; Tiggemann & Zaccardo, 2015). Research supports the tripartite influence model notion of the effect that media has on body image. What is socially and culturally depicted as the ideal body can affect an individual's perception of their own body (Tiggemann & Zaccardo, 2015). The increase in the portrayal of a new ideal and the influence the media has on governing behaviour to reach this ideal should not be underestimated (Bell, Donovan, & Ramme, 2016). According to Homan (2010), little empirical research can be found on the outcomes of the

internalization of this athletic-ideal. Changes in exercise and diet have traditionally been the method of obtaining the ideal figure. Behavior associated with achieving the athletic-ideal might have additional attributes and warrant further exploration.

Behaviors associated with achieving the ideal body type

With increasing levels of internalization of an athletic-ideal becoming more widespread, the emphasis is now placed on exercise in order to lose weight and achieve this new toned ideal. Barlow, Durand and Hofmann (2018) argue that, although a certain level of fitness can be achieved by all, only a few can reach the levels of fitness and shape that are proposed by the athletic-ideal. Women's magazines consistently feature articles on how to lose weight loss with exercise and dieting (Ethan, Basch, Hillyer, Berdnik, & Huynh, 2016; Luff & Gray, 2009; Willis & Knobloch-Westerwick, 2014). Research has shown that the reason for exercising is significant and can have either a positive or negative effect on body satisfaction. Silberstein, Striegel-Moore, Timko, and Rodin (1988) identified seven general domains for exercising: weight control; attractiveness; tone; mood; health; enjoyment; and fitness. Silberstein et al. (1988) found that their participants' use of exercise to control weight was strongly associated with dysregulated eating. Several authors found that exercise that is motivated to control weight, tone, or improve appearance can be seen as a risk factor for eating disturbances and body dissatisfaction (Furnam, Badmin, & Sneade, 2002; Homan & Tylka, 2014; LePage & Crowther, 2010; Thome & Espelage, 2007; Tylka & Homan, 2015). These authors also found that, when individuals exercise for health reasons, improving mood, fitness, and enjoyment, inverse relationships with eating disturbances and body dissatisfaction were found.

Obligatory exercise and *compulsive exercise* are analogous terms for an abnormal reliance on exercise behaviour (Berczik et al., 2012). These terms are used interchangeably

throughout the research thesis. Obligatory exercise is when an individual's exercise routine becomes compulsive and dominates daily routine at the expense of other activities. This behavior subsequently weakens the healthy element of exercise (Dittmer, Jacobi, & Voderholzer, 2018; Rodgers, Hall, Blanchard, & Munroe, 2001). Obligatory exercise theoretically entails three factors: exercise behaviour, exercise emotionality, and preoccupation with exercise. The emotionality factor associated with missing a workout appears to be an important indicator of obligatory exercise and was also found to be closely related to eating disturbances (Duncan et al., 2012). In a longitudinal study of seven months, Homan (2010) found that athletic-internalization can predict change in compulsory exercise and lead to maladaptive attitudes toward missing an exercise session. Thome and Espelange (2007) explored the relationship between reasons for exercise and obligatory exercise and found that exercising for weight control was a predictor for obligatory exercise. Pritchard and Beaver (2012) added that exercising to achieve a toned body was a predictor for obligatory exercise.

For the human body to function, food intake is essential to complete daily tasks and it is vital to ensure that there is enough energy for physical activity and bodily functions (Mountjoy et al., 2014). When an individual participates in a rigorous exercise routine combined with a low-calorie (low-energy) diet, this behaviour can easily become maladaptive since there is because of the discrepancy between energy intake and energy expenditure. This combination can be dangerous when the individual does not consume enough food to provide the body with sufficient energy for the exercise and important bodily functions (Mountjoy et al., 2014). Disordered eating can be associated with specific measures to control weight, such as fasting, meal skipping, purging, diuretics, laxatives and diet pills (American Psychological Association, 2013). The relationship between the athletic-ideal internalization and eating behaviour appears to be ambiguously represented in the literature. As highlighted previously,

Homan (2010) found a significant correlation between athletic-internalization and dieting; however, the researcher concluded that athletic-ideal internalization did not predict self-reported dieting. In contrast, Bell et al. (2016) found the athletic-ideal internalization to directly predict dieting and bulimic symptoms. Calogero, Davis, and Thompson (2004) found that residents in a treatment center for eating disorders showed higher scores on the athletic-internalization than noneating disordered college students. Pritchard, Parker, and Nielsen (2011) found that the desire for an athletic and muscular body predicted obsessive thinking and guilt feelings about food.

The new athletic-ideal is even more difficult to attain than the thin-ideal as weight training and often the use of supplements are necessary to achieve this toned appearance (Bell et al., 2016; Field et al., 2005; Gruber, 2007). The term *supplement* is a multifaceted concept that can generally be explained as dietary supplements or performance-enhancing supplements. According to Stohs and Kitchens (2013) dietary supplements can be defined as a product that is taken orally to supplement diet and includes, for example, vitamins, minerals, amino acids, and other botanical products. Performance-enhancing supplements – ergogenic aids – are intended to improve energy production and enhance body composition such as promoting muscle growth and reducing body fat (Guimaraes-Ferreira, Dantas, Murai, Duncan, & Zanchi, 2013). According to Grogan (2016), there is an increase in the use of drugs designed to enhance muscularity in men and women. Research has supported this notion of a general increase in supplement use (Bailey et al., 2010; Bailey, Gahche, Miller, Thomas & Dwyer, 2013; Rock, 2007). Field et al. (2005) observed more than 10 000 participants and found that 8% of girls used products to improve appearance, muscle mass and strength. All dietary supplements can be dangerous, especially when used incorrectly in terms of frequency and dosage (Maughan, Depiesse, & Geyer, 2007; Maughan, Greenhaff, & Hespel, 2011; Maughan, King, & Lea, 2004; Neuhouser, 2003; Stohs & Kitchens, 2013).

Supplement use is subsequently an important dietary component related to the athletic-ideal that needs to be explored.

Eating and body dysphoric psychopathology

Having considered the maladaptive behaviours that often co-occur with athletic-internalization, it is notable that psychological professions conceptualize some of these pursuits in specific ways. According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), eating disorders and feeding disorders include a disturbance of eating-related behaviour that impairs physical health and psychosocial functioning (American Psychological Association, 2013). With regard to eating disturbances, anorexia nervosa and bulimia nervosa have been extensively researched. Anorexia nervosa has three diagnostic criteria which include "persistent energy intake restriction; intense fear of gaining weight or of becoming fat, or persistent behaviour that interferes with weight gain; and a disturbance in self-perceived weight or shape" (American Psychological Association, 2013, p. 339). Bulimia nervosa includes recurrent episodes of binge eating, compensatory behaviours, and self-evaluation that are unduly influenced by body shape and weight. According to the DSM-5, a person with a diagnosis of "Other specified feeding or eating disorder" may present with many of the symptoms of other eating disorders such as anorexia nervosa, bulimia nervosa, or binge eating disorder, but will not meet the full criteria for diagnosis of these disorders (American Psychological Association, 2013, p. 353). These disorders typically reflect an internalization of the thin-ideal and associated behaviour. Excessive exercise is found in anorexia nervosa's restricting type and seen as a compensatory behaviour after bingeing in bulimia nervosa (American Psychological Association, 2013).

Another related disorder is body dysmorphic disorder, which is considered an obsessive-compulsive related disorder (American Psychiatric Association, 2013). Individuals diagnosed with body dysmorphic disorder display a preoccupation with perceived defects or flaws in their appearance. When the preoccupation is focused on the idea that the body is too small or not muscular enough, it is referred to as muscle dysmorphia (American Psychiatric Association, 2013). Muscle dysmorphia symptoms is common in the bodybuilding population. In a recent meta-analysis and systematic review, Mitchell et al. (2017) found that muscle dysmorphia symptomatology was more prevalent in bodybuilders that in non-bodybuilder resistance trainers.

Furthermore, exercise addiction and orthorexia nervosa can be associated with the athletic-ideal but are not recognized as formal diagnoses by the DSM-5 (American Psychiatric Association, 2013; Dunn & Bratman, 2016). According to Berczik et al. (2012), exercise addiction can be described as an abnormal reliance on exercise to cope with everyday stress and challenges. These authors differentiate between primary and secondary addiction. Primary addiction is typical of exercise as the main problem that affects functioning, while secondary addiction is typical of exercise as a result of another psychological condition, such as an eating disorder. The term *orthorexia nervosa* was first coined by Bratman (1997) and can be described as an obsession with only eating foods that are deemed pure and healthy. Orthorexia nervosa also includes a rigid avoidance of any food that does not fit their very strict conditions (Koven & Abry, 2015). Although the rationale of these individuals is to be healthy, their restrictive diets could lead to nutritional deficits, medical consequences and relational difficulties, and impairment in daily functioning (Dunn & Bratman, 2016; Koven & Abry, 2015). Understanding the diagnostic aspects of the athletic-ideal is important when considering appropriate psychological treatment approaches as discussed in the next section.

Psychological treatment approaches to eating and body related disorders

In terms of psychological treatment for eating disorders, cognitive-behaviour therapy (CBT) is indicated as the first line of treatment for bulimia nervosa and highly recommended for the treatment of anorexia nervosa (Hay, 2013; Linardon, Fairburn, Fitzsimmons-Craftc, Wilfley, & Brennana, 2017; Sadock, Sadock, & Ruiz, 2015). Enhanced cognitive behavioral therapy or CBT-E has been researched as a beneficial treatment approach for both anorexia nervosa (Dalle Grave, Calugi, Conti, Doll, & Fairburn, 2013; Dalle Grave, Calugi, Ghoch, Conti M, & Fairburn, 2014; Fairburn et al., 2013) and bulimia nervosa (Poulsen et al., 2014; Stefini et al., 2017; Wonderlich et al., 2014). International clinical guidelines on the treatment of eating disorders also recommend CBT as an effective line of treatment. In a systematic review of eight clinical guidelines Hilbert, Hoek, & Schmidt (2017) found that all the guidelines recommended CBT as a treatment approach for bulimia nervosa and six guidelines recommended CBT sessions for the treatment of anorexia nervosa. CBT is also indicated for the treatment of body dysmorphic disorders, but usually in combination with pharmacology (SSRIs) (Greenberg, Chosak, Fang, & Wilhelm, 2012 Phillips; 2017).

Interpersonal therapy for eating disorders (IPT-ED) is indicated to treat the interpersonal difficulties that often form part of the clinical presentation (Murphy, Straebler, Basden, Cooper, & Fairburn, 2012). The authors maintain that interpersonal difficulties can be regarded as a factor in maintaining the eating disorder. In a study by Fairburn et al. (2015) that compared IPT-ED and CBT-E, it was found that IPT-ED can be regarded as an effective alternative to CBT-E. The response was, however, found to be slower and also less pronounced. In the systematic review by Hilbert et al. (2017), four clinical guidelines indicated IPT as a recommended treatment for bulimia nervosa and two recommended IPT as a treatment approach for anorexia nervosa.

Family-based therapy can be regarded as the leading empirically supported therapy for adolescents with anorexia nervosa (Hay, 2013). Family-based therapy is especially indicated as patients are still living with their families and this makes it possible to facilitate addressing the issues within the family (Sadock et al., 2015). In terms of international guidelines, Hilbert et al. (2017) determined that family-based therapy for adolescents was indicated for anorexia nervosa by six guidelines and for bulimia nervosa by four guidelines. Since family-based therapy is labor intensive and costly, Dalle Grave et al. (2013) found CBT-E to be a promising cost-effective treatment for adolescents diagnosed with anorexia nervosa.

In comparison with the treatment approaches listed above, limited research is available on the effectiveness of psychodynamic psychotherapy in eating disorders. Sadock et al. (2015) maintain that psychodynamic psychotherapy could be used with anorexia nervosa, but the process is often very difficult due to patient resistance. In terms of bulimia nervosa, Sadock et al. (2015) claim that the use of psychodynamic psychotherapy has been of limited success. Poulsen et al. (2014) found CBT to be more effective in the treatment of bulimia nervosa compared to psychoanalytic psychotherapy regarding improvement in binging and purging symptoms, eating disorders features, and general psychopathology. According to Hilbert et al. (2017), psychodynamic therapy was less frequently recommended by clinical guidelines for eating disorders. In contrast, Stefini et al. (2017) found CBT and psychodynamic therapy to be effective in treating bulimia nervosa in female adolescents. These authors, however, noted that their study was not designed to be an equivalence trial and that, due to their small sample, potentially small differences between treatments were not measurable.

In a recent systematic review and meta-analysis conducted by Linardon et al. (2017), the authors found that third-wave treatment approaches (dialectical behavioral therapy,

schema therapy, acceptance and commitment therapy, mindfulness-based interventions, compassion-focused therapy) did not show superiority in effectiveness to cognitive-behaviour therapy.

Pharmacological studies have not yet identified medication that promotes the improvement of the core symptoms of anorexia nervosa. A comorbid depressive disorder can, however, be treated with antidepressants (Sadock et al., 2015). Antidepressants (SSRI and MOAIs) seem to be helpful in the treatment of bulimia nervosa (Sadock et al., 2015).

Contribution of study

As evidenced in the preceding sections, the athletic-ideal is a relatively new phenomenon and behaviour associated with this ideal and its implication on psychological functioning is not clear. Research on the internalization of the athletic-ideal and its outcomes is sparse and often ambiguous with the relationship remaining unclear (Homan, 2010).

This research thesis is the first of its kind to explore the athletic-internalization and to evaluate if indicated outcomes of body dissatisfaction, disordered eating and exercise behaviour as indicated by research (Homan, 2010; Bell et al., 2016; Ramme, Donovan, & Bell, 2016) can be found in the South-African context. Currently, research on the athletic-ideal is mostly quantitative in nature. An exploration into this relatively novel ideal from a quantitative and qualitative approach will greatly contribute to the comprehension of the athletic-ideal. A dualistic approach enabled the researcher to make inferences about relationships and to gain a better understanding of participants' experiences of the athletic-ideal. The qualitative nature of the second section of this thesis (Article 2: Internalization of the athletic-ideal in a female South African student sample) enables the researcher to contribute to the deeper understanding of the athletic-ideal from the lived experience of individuals who have an athletic-ideal internalization.

Lastly, this study contributes to the development of a conceptual framework for understanding of the athletic-ideal applicable in the clinical setting. This framework can aid in the development and adaptation of current therapeutic approaches to assist with the appropriate treatment of individuals who display a maladaptive pursuit of the athletic-ideal.

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SECTION 2: MANUSCRIPT 1

Internalization of the athletic-ideal in a female South African student sample

Submitted to

Body Image: An International Journal of Research

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Manuscript: Internalization of the athletic-ideal in a female South African student sample

Running head: INTERNALIZATION OF THE ATHLETIC-IDEAL

Abstract

The investigation into the existence of a thin-ideal internalization has been the focus of research in the past two decades. A clear relationship between this ideal and disturbed eating and body related disturbances was found. Minimal research on the athletic-ideal and relevant outcomes when internalized can be found. This quantitative cross-sectional study explored to what extent student participants from three university campuses (N = 476) have internalized the athletic-ideal and investigated the relationship between this internalization, body dissatisfaction, maladaptive eating, and exercise behaviour using four online self-report questionnaires. Results found that the athletic-ideal is gaining popularity. Furthermore, significant relationships between athletic-internalization, obligatory exercise, and dieting were found, yet yielded a poor relationship with body dissatisfaction. Like other studies, it appears that the athletic-ideal is less detrimental to body dissatisfaction and dieting than the thin-ideal. A stronger association between obligatory exercise was found with the athletic-ideal than with the thin-ideal.

Keywords: athletic-ideal, body dissatisfaction, eating disturbances, internalization, obsessive exercise, thin-ideal

Internalization of the athletic-ideal in a female South African student sample

The female pursuit of the ideal body is prominent throughout history (Grogan, 2016; Sypeck, Gray, & Ahrens, 2004). The ideal body image refers to a specific body size and shape that is considered to symbolize what is seen as beautiful and successful within a culture (Martin, 2010). A culturally constructed thin-ideal that is often promoted by the media and subsequently internalized by women is regarded as a powerful influence on the development of maladaptive eating and exercise behaviour (Culbert, Racine, & Klump, 2015; Thompson & Stice 2001). Internalization can be described as a cognitive endorsement of the cultural ideal of attractiveness and engagement in behaviour to attain this ideal (Homan, 2010; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999; Thompson, Schaefer, & Menzel, 2012). This means that the internalization of what is considered to be the social and cultural ideal governs behaviour that leads to the achievement of the internalized ideal. When considering studies from 1995 to 2005, it is apparent that the thin-ideal was the dominant ideal body type, especially in westernized countries. The thin-ideal can be described as a thin body with little adiposity (Grogan 2016; Homan, McHugh, Wells, Watson, & King, 2012; Schaefer et al., 2015). Research has shown a clear relationship between the thin-ideal, eating, and body disturbances (Flament et al., 2012; Groesz, Levine, & Murnen, 2002; Homan, 2010; Stice, 2002; Thompson & Stice, 2001)

Currently, there is substantial research indicating a renewed evolvement in the ideal body. In addition to a slender frame, the new ideal body also necessitates a toned and muscular appearance (Benton & Karazsia, 2015; Dworkin & Wachs, 2009; Grogan, 2016; Homan, 2010; Homan et al., 2012). As indicated by a content analysis of popular women's magazines, the shift from the thin-ideal to a more athletic-ideal is also evident in the media (Willis & Knobloch-Westerwick, 2014). An overemphasis on exercise in content and

advertisements is evident, with celebrities parading the athletic profile. According to Thompson and Stice (2001), the media plays a significant role in propagating an ideal body. A danger of media support of the athletic-ideal is that the veil of a healthy lifestyle is used to disguise the portrayal of what is seen as the ideal body and behaviour to achieve it. Conlin and Bissel (2014), analyzed the content of health/fitness and beauty/fashion magazines. These authors found that, in both types of magazines, health and body image content were framed as appearance-related rather that health-related as one would expect from a fitness and/or health magazine. A similar trend is obvious in digital media. Boepple and Thompson (2016) analyzed the content of websites – referred to as "fitspiration" websites – that advocate a fit and healthy lifestyle. The authors found that the websites contain similar thematical content to websites that promote thinness and include messages of weight stigmatization and dieting, along with objectifying phrases.

It is evident that research has primarily focused on investigating the outcomes of pursuing the classic thin-ideal. The lack of research regarding this ideal may be attributed to a notion supported by research that women are less inclined than men to subscribe to a muscular appearance (Cafri, Strauss, & Thompson, 2002; Thompson & Cafri, 2007). Despite this notion, preliminary studies can be found that are starting to make a connection between the internalization of the athletic-ideal and possible negative outcomes among women. However, and as expected, these studies are relatively sparse and findings are often ambiguous. In a seven-month longitudinal study, Homan (2010) observed a significant correlation between athletic-ideal internalization and body dissatisfaction, dieting, and compulsive exercise. However, the researcher maintained that athletic-ideal internalization can only predict change in compulsive exercise, but not body dissatisfaction or dieting. Schaefer et al. (2015), reported that the athletic-ideal did not significantly correlate with body dissatisfaction and found small positive correlations with symptoms of disordered eating

somatology. In a more recent study by Bell, Donovan, and Ramme (2016), the authors also found that body dissatisfaction was not associated with the athletic-ideal internalization. Nevertheless, the authors maintained that athletic-internalization can directly predict compulsive exercise, dieting and bulimic symptoms.

From the above-mentioned studies, it is evident that body dissatisfaction, disordered eating and exercise are considered important when exploring how the individual is affected in their pursuit of obtaining and maintaining a perceived body ideal. According to Grogan (2016), body image can be seen as an individual's perceptual experience and subjective evaluation of their appearance. Body dissatisfaction can be described as a negative evaluation of body shape and size. Alternatively, body dissatisfaction results of a discrepancy between current body image and ideal body image (Ferguson, 2013; Grogan, 2006; Martin, 2010; Tiggemann, 2011). In several studies the authors concluded that body dissatisfaction was not associated with the athletic-ideal internalization (Bell, Donovan, & Ramme, 2016; Homan, 2010; Ramme, Donovan, & Bell, 2016; Schaefer et al., 2015). When the athletic-ideal is conceptualized as an ideal that includes being toned and muscular in addition to being thin, exposure studies indicated an association with body dissatisfaction (Benton & Karazsia, 2015; Homan et al., 2012; Tiggemann & Zaccardo, 2015; Uhlmann, Donovan, Zimmer-Gembeck, Bell, & Ramme, 2018).

An individual with a negative body image is at risk to subscribe to maladaptive behaviour, including an unhealthy eating behaviour and/or exercise pattern (Flament et al., 2012; Levine & Piran, 2004; Thompson & Stice, 2001). The pursuit of the ideal body cannot be adequately described without the concept of dieting. According to the American Psychological Association (2013), disordered eating is related to specific measures to control weight; such as fasting, meal skipping, purging, diuretics, laxatives, and diet pills.

In various studies the authors indicate a relationship between the athletic-ideal and disordered eating. As mentioned, above Bell et al. (2016) maintained that athletic-internalization can directly predict dieting and bulimic symptoms. Pritchard, Parker, and Nielsen (2011) reported that a desire to achieve a muscular and athletic body can predict eating-related concerns (specifically obsessive thinking and guilt about eating). In a study by Calogero, Davis, and Thompson (2004), it was found that residents in treatment for an eating disorder showed a high athletic-internalization.

Finally, since the athletic-ideal also incorporates a muscular component, exercise can be regarded as paramount behaviour in the pursuit of this ideal. The role of exercise to lose weight and achieve a toned appearance is evident in the media as magazines often feature articles that promote weight loss through exercise and dieting (Luff & Gray, 2009; Willis & Knobloch-Westerwick, 2014). Exercise is generally regarded as a healthy behaviour and a vital component of a healthy and balanced lifestyle. However, when exercise is motivated by controlling weight or obtaining a more toned appearance, it can be regarded as a risk factor for eating disturbances and body dissatisfaction (Furnam, Badmin, & Sneade, 2002; Homan & Tylka, 2014; LePage & Crowther, 2010; Thome & Espelage, 2007). An exercise routine that is compulsive and dominates daily routine at the expense of other activities can be described as obligatory exercise (Dittmer, Jacobi, & Voderholzer, 2018; Rodgers, Hall, Blanchard, & Munroe, 2001). Exercising to control weight or to achieve a toned body has been found to be a predictor for obligatory exercise (Thome & Espelange; 2007; Pritchard & Beaver, 2012).

The athletic-ideal can still be considered a relatively new phenomenon and behaviour associated with this ideal and its implication on functioning is evidently not yet clear. Research on the athletic-ideal and its association with eating and body-related disturbances, is

available, although the number is substantially less than the thin-ideal publishing. As indicated above, there are often discrepancies in the findings of various studies investigating this ideal. This emphasizes the need for additional research (Ramme et al., 2016).

The objective of the research under discussion is to contribute to previous findings by establishing to what extent participants have internalized the athletic-ideal. Furthermore, the correlations between athletic-internalization, body dissatisfaction, maladaptive eating and exercise behaviour are explored. It was hypothesized that an athletic-internalization would be favored among participants. A further hypothesis is that an athletic-internalization will indicate a positive correlation with body dissatisfaction, maladaptive eating and exercise behaviour.

Methodology

Design

A quantitative approach with a cross-sectional survey design was used. This design enables a researcher to determine the relationship between various variables (Creswell, 2014). The aim of this study was to determine whether the athletic-ideal has been internalized and how this internalization is associated with body dissatisfaction, dieting, and compulsive exercise.

Participants

As detailed in the Introduction research indicates that female populations appear to be highly represented when issues of body dissatisfaction, dieting, and compulsive exercise are broached. A purposive sample of 476 on-campus female students was recruited from the three campuses of the North-West University (NWU) in South Africa: Potchefstroom (n = 373), Mafikeng (n = 50) and Vaal Triangle (n = 53). Participants

ranged in age from 17 to 24 with a mean age of 21.05 years. Furthermore, the mean BMI was calculated as 24.3. The majority of the participants were white (67.86%), while 27.1% were black, 3% were of mixed ancestry, 1% were Asian/Indian, and less than 1% reported "other" ethnicity. The majority of participants indicated their language preference as English (46.11%) or Afrikaans (52.63%). Regarding years of study, 19.79% participants were level 1, 25.68 % level 2, 24.63% level 3, 23.37% level 4/Honours, and 6.53% indicated that they were post-graduate.

A comparison regarding the biographical information of the sample group and the total sample population can be found in Table 1.

Procedure

A secure website was developed by the researcher with the aid of a local web development company (DM Digital). A demographic questionnaire (Appendix C) and four questionnaires (Appendix D to G) that tested the target variables were uploaded to the website. Several security measures were put in place to protect the integrity of participants' information. The completed website was tested on a pilot group of nine female students who were demographically similar to the sample group. The group completed the questionnaires online and were asked to provide feedback on their experience. This feedback was subsequently incorporated into the website's evolution. Access to the participants was obtained via the Institutional Office of the NWU. The contact information of all on-campus female students between the ages of 18 to 24 (N = 14 603) was obtained and these students were emailed a short description of the study. This email also contained their unique username and password to gain access to the website. Some emails went undeliverable due to incorrect email addresses or accounts that were terminated. After two weeks, a follow-up email was sent out as a reminder to potential participants to complete the questionnaire. The

website was closed when the target number (N = 400) of participants was reached. The target number was calculated by a power analysis as indicated in Figure 1. The Statistical Consultation Services of the NWU (Potchefstroom Campus) analyzed the data, using the SAS statistical computer package (SAS Institute Inc., 2016). Analysis included descriptive statistics, reliabilities and confirmatory factor analyses of different psychological tests and correlation analyses. After analysis, individual reports were compiled by the researcher and a unique individual report emailed to participants.

Ethical Considerations

Ethical approval was obtained from the Health Research Ethics Committee (HREC) of the NWU Faculty of Health Sciences (Ethics number: NWU-00026-16-S1). Written consent was also obtained from the Dean of Students of each campus. Informed consent information about the thesis was provided before participants could access the online questionnaires on the site (Appendix A). After confirmation that they had read, understood and consented to participation, access to the questionnaires was granted. To protect the emotional well-being of all participants, a support telephone service was available at all times. A debriefing document was made available to the participants after completion of the questionnaires (Appendix B). This document contained the contact details of the on-campus support services. The managerial heads of the relevant on-campus counselling services were contacted and confirmation of the availability of said services was duly received. Furthermore, three psychologists were recruited to assist with psychological services in the geographical locations of the campuses if the on-campus services were not available.

Measuring Instruments

The purpose of this article was to explore the relationship between the internalization of the athletic-ideal and three possible harmful outcomes, namely body dissatisfaction, dieting or problematized eating behaviour, and compulsive exercise. Measures were subsequently chosen to assess each of the above-mentioned components at issue.

The Sociocultural Attitudes Towards Appearance Scale-4 (SATAQ-4)

The Sociocultural Attitudes Towards Appearance Scale-4 (Schaefer et al., 2015) was designed to measure societal and interpersonal aspects of the appearance ideal. This scale was included to explore whether the South-African female student participants have internalized the new athletic-ideal or still pursue the thin-ideal. This 22-item measure includes two subscales assessing Muscular/Athletic-internalization vs Thin/Low Body Fat internalization. Furthermore, the SATAQ-4 contains three subscales that assess appearance-related pressures from peers, family and the media. According to Schaefer et al. (2015), the SATAQ-4 scale scores showed good convergent validity with measures of body image, eating disturbances and self-esteem. This scale also demonstrated excellent reliability (Cronbach's $\alpha = 0.82 - 0.95$) in American, Italian, Australian and English female samples. In the current study, this scale demonstrated good reliability since the Cronbach alpha value for the various subscales of the SATAQ-4 ranged between 0.77 and 0.95.

The MBSRQ-Appearance Scale (MSBSR-AS)

The MSBSRQ-AS is a shorter version of the Multidimensional Body-Self Relational Questionnaire (MBSRQ) and includes scales pertinent to appearance (Cash, 2000). The MBSRQ-AS is a 34-item measure that consists of five subscales: appearance evaluation; appearance orientation; overweight preoccupation; self-classified weight and the Body Areas

Satisfaction Scale (BASS). The MBSRQ-Appearance Scale is considered to be a well-validated measure for body image and provided insight into participants' perceptions of their body. According to Brown, Cash, and Mitulka (1990), the MBSRQ shows satisfactory internal reliability and construct validity. Good psychometric properties for this scale was found by Saules et al. (2009) with an internal consistency of .73 to .89 and test-retest reliability of .74 to .91. There are several body image questionnaires available. The MBSRQ, however, is the most widely used and well-validated (Duncan & Nevill, 2010; Nevill, Lane, & Duncan, 2015). In the current study, the Cronbach's alpha demonstrated good reliability as values for the various subscales of the MBSRQ-AS ranged between 0.79 and 0.9.

The Eating Attitudes Test (EAT-26)

The Eating Attitudes Test (Garner, Olmsted, Bohr, & Garfinkel, 1982) is a standardized self-report measure designed to measure symptoms of eating disorders. This test was included to promote understanding of participants' eating behaviour. This 26-item measure is an abbreviated form of the original EAT-40 (Garner & Garfinkel, 1979). The measure includes three subscales: Dieting; Bulimia and Food Preoccupation and Oral control. Furthermore, this scale also includes five behavioral questions aimed at identifying behaviour symptoms that could reflect an eating disorder. Garner et al. (1982) maintain that the EAT-26 is reliable and valid and can be used in clinical and nonclinical populations. To demonstrate internal reliability, an alpha coefficient of 0.95 was reported by Garner and Garfinkel (1979). In order to determine the mean score of reliability a study by Gleaves, Pearson, Ambwani and Morey (2014) followed reliability generalization procedures and determined the EAT-26's Mean Cronbach's alpha to be 0.86. Internal reliability of this measure among student-athletes was found by Lane (2003), with an alpha coefficient of 0.79 (Lane, 2003). In this study, the Cronbach's alpha was found to be 0.86, demonstrating good reliability.

The Obligatory Exercise Questionnaire (OEQ)

The Obligatory Exercise Questionnaire (Pasman & Thomas, 1988) specifically explores exercise that the individual feels required to undertake. This questionnaire was included to gain insight into possible maladaptive attitudes and perceptions about exercise. This 20-item questionnaire assesses the three components of obligatory exercise: frequency and intensity of exercise; negative emotionality and preoccupation with exercise. According to Pasman and Thomas (1988), the OEQ demonstrated good internal consistency (0.96) and good test-retest reliability (two weeks, 0.96). In a recent study by Bell et al. (2016) the high level of internal reliability of the OEQ was confirmed with a Cronbach's alpha 0.92. In the present study, this measure obtained a Cronbach's alpha of 0.9.

Results

Descriptive statistics and reliability indices for SATAQ-4, MSBSR-AS EAT-26 and OEQ were calculated and presented in Table 2 and Table 3.

As indicated in Table 2, the measures and their respective subscales were found to be reliable, achieving reliability coefficients that are deemed statistically acceptable (Aron, Aron, & Coups, 2009; Pietersen & Maree, 2009). Confirmatory factor analyses indicated construct validity for all subscales of the SADAQ-4 and the subscales appearance evaluation and self-classified weight of the MBSRQ-AS. Construct validity is obtained when only one factor is extracted, accounting for a relatively high percentage of the total variance (say 60% or higher). The values of the commonalities of the different items in the construct need to be substantial (e.g., higher than 0.4). Although construct validity could not be determined for the other indices, inferences could still be made due to acceptable internal consistency reliability found on these measures.

The SADAQ-4 indicated a mean for the thin-ideal and the athletic-ideal to be 16.96 and 15.14 respectively. According to Cohen (1988), the standardized difference in these means (i.e., dividing the difference by the standard deviation of thin-ideal as reference) is 0.39. This, according to Cohen (1988), can be viewed as a medium effect; thus noticeable. Furthermore, 32.77% of the sample clearly indicated a preference for the athletic-ideal. What is meant by a clear preference is that these participants scored higher on the athletic-ideal-internalization subscale than on the thin-ideal internalization subscale.

A mean of 13.64 was found for the indice media pressures and a mean of 10.45 and 10.10 on family and peer pressures respectively. The standardized differences between mean media pressure and each of the family and peer pressures were 0.59 and 0.65 respectively (both a medium effect). However, the standardized difference between family and peer pressures was small (0.07).

Pearson correlation coefficients were calculated between the SADAQ-4 and the various subscales of the MSBSR-AS, EAT-26, and OEQ. These correlations can be seen in Table 4.

The existence (given by a *p* value) and strength (given by the coefficient *r* between −1 and +1) of a linear relationship between two variables are determined by using Pearson correlation measures.

A conclusion can be made that a correlation exists between two variables when the outcome is significant. Correlation values were interpreted using guidelines suggested by (Cohen, 1988): An absolute value of 0.1 is classified as small; an absolute value of 0.3 is classified as medium and a value of 0.5 is classified as large. Correlations between the SADAQ-4 and the indices of the MSBSR-AS were calculated to better understand the relationship between the two ideals and body satisfaction. Small effect sizes were found with

athletic-ideal internalization and appearance evaluation, appearance orientation, overweight preoccupation, and body area satisfaction. The thin-ideal internalization showed a medium effect with all appearance evaluation, appearance orientation, body area satisfaction, and self-classified weight. A large effect was found between thin-ideal internalization and overweight pre-occupation.

The relationship between the internalization of the thin and athletic-ideal and possible maladaptive eating behaviour indicated the following results. A medium effect size was obtained between athletic-ideal internalization and dieting. Small effect sizes were found with athletic-ideal internalization, bulimia, and food preoccupation. With regard to the behavioral questions of the EAT-26, small effect sizes were found with eating binges, the use of laxatives diet pills and diuretics and exercising more than 60 minutes a day to control weight.

The thin-ideal internalization showed a large effect with dieting and a medium effect with bulimia and food preoccupation. With regard to the behavioral questions of the EAT-26, a small effect was found between eating binges, self-induced vomiting, the use of laxatives, diet pills and diuretics and exercising more than 60 minutes a day to control weight.

With regard to internalization and obligatory exercise, large effect sizes were obtained between athletic-ideal internalization and obligatory exercise. The thin-ideal internalization showed a medium effect with obligatory exercise.

Discussion

During the course of the past decade, researchers noted a change in what is widely considered the ideal body. In addition to slenderness, the current ideal female body should also be toned, creating an athletic-appearance (Benton & Karazsia, 2015; Dworkin & Wachs, 2009; Grogan, 2016; Homan, 2010; Homan et al., 2012). The first aim of this study was to

establish to what extent participants have internalized this new athletic-ideal. In the present study, it is evident that the athletic-ideal is gaining popularity among this sample of the South-African female student population. The results also indicate that the classic thin-ideal can still be considered more popular amongst the sample. It is evident, however, that there is a decrease in the standardized difference between the thin-ideal and athletic-ideal in the current study compared to other studies. In the validation and development of the SATAQ-4, the authors Schaefer et al. (2015), also found that women tended to prefer the thin-ideal internalization, but reported larger standardized differences between the thin and athletic-ideal.

Thin-ideal internalization has been the focus of research in the past few decades. Several studies have indicated a clear relationship between the thin-ideal and the negative outcomes of body dissatisfaction and disordered dieting and exercise (Flament et al., 2012; Groesz et al., 2002; Homan, 2010; Stice, 2002; Thompson & Stice, 2001). The current study aimed to contribute to the body of literature that explores the possibility of a similar relationship between the athletic-ideal internalization and body dissatisfaction, disordered eating and exercise behaviour.

Body satisfaction is an important aspect to consider when evaluating the outcome of a body-ideal internalization. Benton and Karazsia (2015), found that exposure to an ideal that can be considered toned (in other words both thin and somewhat muscular) has a significant influence on body satisfaction. These authors maintain that the influence can be compared to the thin-ideal. Most studies, however, found a minimal association between body dissatisfaction and the athletic-ideal. Subsequently, this ideal is deemed to be less detrimental to body satisfaction than internalization of the thin-ideal (Bell et al.,2016; Homan 2010; Ramme et al., 2016; Schaefer et al., 2015). Similar to other studies, this study demonstrated

poor associations between the athletic-ideal and body dissatisfaction indices. A strong correlation with body dissatisfaction and the thin-ideal internalization was found since significant relationships between the thin-ideal internalization and all five subscales of the MBSRQ-AS were evident (medium and strong effects). Athletic-ideal internalization, on the other hand, only showed weak correlations with appearance evaluation, overweight pre-occupation, and body area satisfaction. The body area satisfaction subscales can be seen as a standard measure of body satisfaction that is often used in research articles (Cash, 2000). In this study, a small effect was found, indicating a relatively weak correlation.

With regard to disordered eating, a moderate relationship between athletic-internalization and the dieting subscale was found during this research study. A weak correlation was found with behavioral symptoms such as the use of laxatives, diet pills, and diuretics to control weight or eating binges. Bell et al. (2016) also found a small, but significant relationship with bulimic symptoms and athletic-internalization that was replicated in this study. The dieting subscale of the EAT-26, among others, explores dietary behaviour that includes the avoidance of specific foods, awareness of calorie intake, guilt after eating and a fear of weight gain. The relationship between this subscale and athletic-internalization suggests that these behaviours are also present among individuals with this ideal, although to a lesser extent than thin-ideal. As mentioned above, research has shown a clear relationship between the thin-ideal and problematic eating behaviour (Flament et al., 2012; Groesz et al., 2002; Homan, 2010; Stice, 2002; Thompson & Stice, 2001). In this study, thin-ideal internalization showed a large effect with dieting and a medium effect with bulimia and food preoccupation.

In this study, the strongest correlation was found between athletic-ideal internalization and obligatory exercise. This finding is supported by literature: Studies either reported a

significant correlation or found that athletic-ideal internalization can predict obligatory exercise (Bell et al., 2016; Pritchard et al., 2011; Homan, 2010). This relationship indicates that women who internalize an athletic-ideal could be at risk of developing a maladaptive relationship with exercise, including experiencing negative emotions, such as guilt, irritability, and depression if they miss an exercise session, or engage in dangerous behaviour like exercising despite being advised not to. It is, however, important to note that when an individual exercise for fitness reasons and not to control weight, obligatory exercise is not necessarily linked to the above-mentioned risks (Homan, 2010; Adkins & Keel, 2005). The reasons for exercise can subsequently be seen as a vital factor to consider when inferences are made from the correlation between athletic-internalization and obligatory exercise.

It is evident that, although the athletic-ideal internalization has indicated a relationship between the above-mentioned outcomes, there is still a stronger relationship between the outcomes of maladaptive eating and body dissatisfaction and the thin-ideal. The obligatory exercise, however, showed a more significant relationship with the athletic-ideal.

Conclusion

This study was able to demonstrate that the athletic-ideal is gaining popularity among this female South African student sample. Furthermore, it demonstrated significant associations with athletic-ideal, obligatory exercise and dieting behaviour. The poor association with body dissatisfaction and athletic-ideal found in literature was confirmed. Similar to previous research, the results of this study appear to support the notion that the athletic-ideal is not as detrimental as the classic thin-ideal phenomenon. Despite the weaker relationships with body dissatisfaction and dieting, Bell et al. (2016) claim that the athletic-ideal should be seen as unrealistic and a problematic ideal to pursue. These authors found that body satisfaction was not a mediating role in the eating and exercise disturbances. This

implies that, although several studies have found that body dissatisfaction is not as affected as with the thin-ideal, the athletic-ideal can still be as detrimental in areas of disturbed eating and exercise. This study highlighted the need for more in-depth studies to explore how the athletic-ideal can influence dieting and exercise behaviour to pursue this ideal.

Limitations and Recommendations

The most prominent limitation of the study is that the sample studied was not representative of the population of South Africa. The researcher's intent was to give all students who met inclusion criteria the opportunity to participate. Unfortunately, the sample that ultimately participated was not representative of the target population and generalizations could not be made. A recommendation is that the study should be replicated and sampling methods used to ensure that the sample is representative of the diverse population of South-Africa. A limitation that became evident when trying to explain the relationships between the ideals and various outcomes, is that the measures used to explore the relationships were developed on the premise and construct of the classic thin-ideal. Per implication, it is doubtful whether researchers are investigating the most relevant concepts in this field. The characteristics of disordered eating in the conventional sense have been compiled following the pursuit of the thin-ideal; thereby highlighting the need for more investigation into the behaviour applied in the pursuit of the athletic-ideal. It also determines the extent to which characteristics vary in comparison to behaviour associated with the thin-ideal. The strong association with obligatory exercise emphasizes the need for a comprehensive exploration of its relationship with the athletic-ideal and exercise. This is relevant because of the indication that risk factors are influenced by participants' reasons for exercise. A measurement that also assesses these reasons can significantly contribute to the understanding of the relationship between disordered exercise and athletic-internalization.

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Tables

Table 1

Demographics of the sample compared to a population sample

	Population	Sample
N	14603	476
Mean age	20.82	21.05
% Race distribution		
Asian/Indian	1.13	1.05
Black	50.6	27.10
Colored	3.36	3.15
White	44.9	67.86
Other	> 0.1	0.8

Table 2

Reliability indicators of measure indices

Measure	Variable	Cronbach Alpha
SADAQ-4	Thin_low_body_fat	.77
	Muscular_athletic	.87
	Family Pressures	.88
	Media Pressures	.95
	Peer Pressures	.92
MBSRQ-AS	Appearance_evaluation	.90
	Appearance_orientation	.79
	Overweight_occupation	.79
	Body_areas_satisfaction	.84
	Self_classified_weight	.81
EAT - 26	Dieting_scale	.87
	Bulimia_nd_food	.69
	Oral_control	.61
	All items	.85
OEQ	All items	.90

Table 3

Descriptive statistics of the sample and measures

Variable	N	Mean	Std Dev
Age	473		1.60
Current Weight	473		13.42
Highest Weight	466		15.71
Lowest Weight	469		10.95
Ideal weight	471		10.58
Height	463		11.06
BMI	461		5.63
Thin_low_body_fat	476		4.71
Muscular_athletic	476		4.93
Family_pressures	476		4.85
Peers_pressures	476		4.72
Media_pressures	476		5.44
Dieting_scale	476		7.54
Bulimia_nd_food	476		2.60
Oral_control	476		3.06
Eating binges	476		0.42
Self-induced vomiting	476		0.26
Laxatives, diet pills & diuretics	476		0.44
Exercised <60 minutes daily	476		0.22
Lost more than 9kg	476		0.30
OEQ	476		11.20
Appearance_evaluation	476		6.48
Appearance_orientation	476		7.05
Overweight_occupation	476		4.13
Body_areas_satisfaction	476		6.77
Self_classified_weight	476		1.48

Note: Please note that on Thin_low_body_fat subscale item b4 was omitted to increase reliability, the scale of it was, however, adjusted to be comparable with Muscular_athletic and literature.

Table 4

Pearson Correlation coefficient's of SATAQ-4 with EAT-26, OEQ, and MSBSR-AS

	Thin-ideal	Athletic-ideal	Family pressures	Peer Pressures	Media pressures
Dieting_scale	***0.58	**0.38	0.37	0.40	0.46
Bulimia_nd_food	**0.30	*0.17	0.37	0.34	0.34
Oral_control	0.05	0.05	-0.03	0.01	0.03
Behavior_A: Eating binges	*0.22	*0.11	0.27	0.25	0.22
Behavior_B: Self-induced vomiting	*0.18	0.05	0.22	0.20	0.18
Behavior_C: Laxatives, diet pills & diuretics	*0.27	*0.18	0.19	0.28	0.28
Behavior_D: Exercised more than 60 minutes daily	*0.15	*0.23	-0.00	0.10	0.06
Behavior_E: Lost more than 9kg	0.02	-0.04	-0.03	0.02	0.03
OEQ	**0.41	***0.58	0.21	0.21	0.25
Appearance_evaluation	**-0.48	*-0.18	-0.49	-0.48	-0.50
Appearance_orientation	**0.32	*0.10	0.23	0.30	0.38
Overweight preoccupation	***0.55	*0.24	0.49	0.52	0.53
Body_areas_satisfaction	**-0.43	*-0.11	-0.43	-0.45	-0.50
Self_classified_weight	**0.34	0.07	0.53	0.46	0.39

Note: * Small effect; ** medium effect; *** large effect

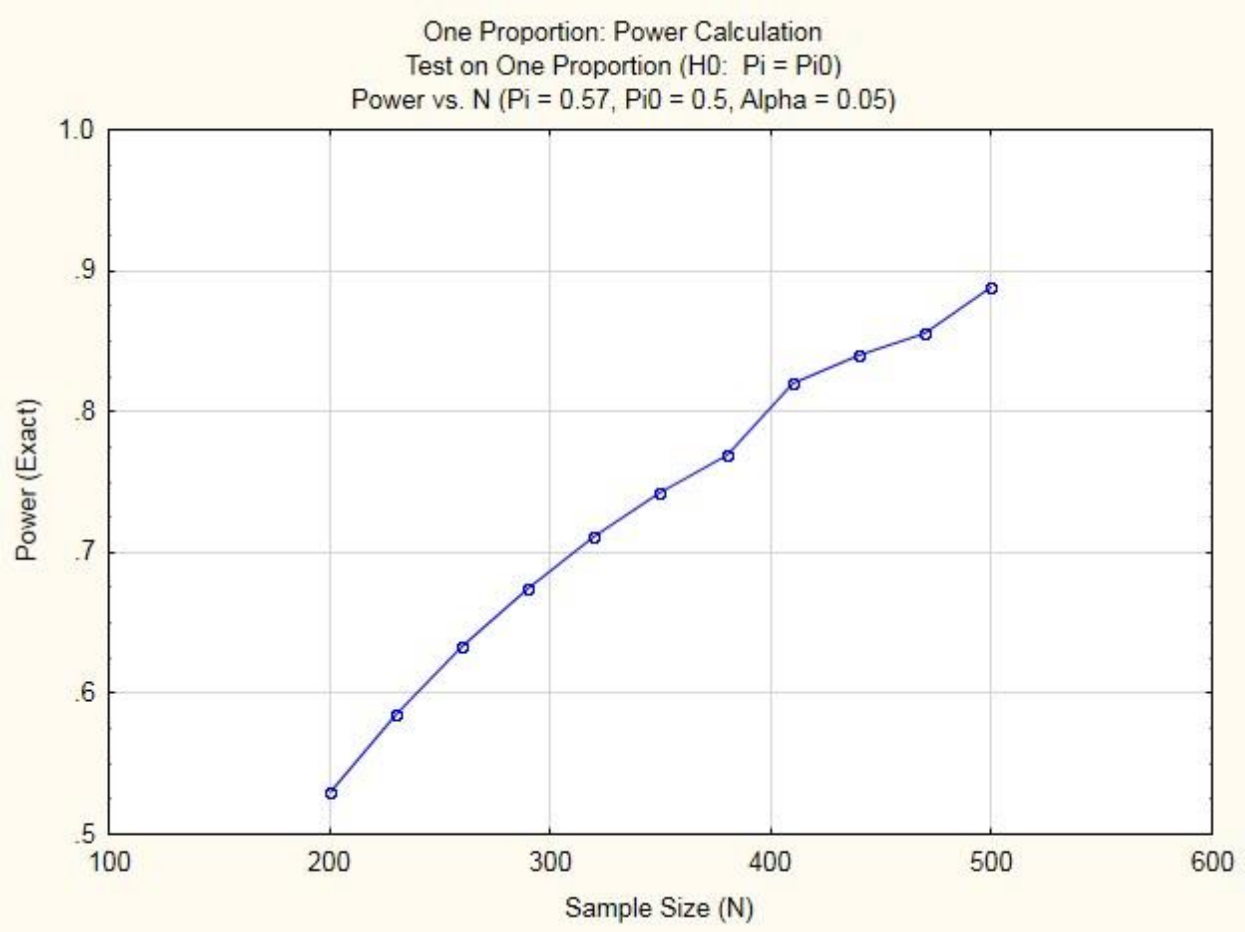

Fig. 1: Power calculation of sample size

SECTION 3: MANUSCRIPT 2

Athletic-ideal internalization: The lived experiences of female students

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Manuscript: Athletic-ideal internalization: The lived experiences of female students.

Running head: ATHLETIC-IDEAL INTERNALIZATION: THE LIVED EXPERIENCES OF FEMALE STUDENTS

Abstract

Research has shown a clear relationship between the thin-ideal internalization, disturbed eating, and body related disturbances. With regards to athletic-internalization, the relationship with these outcomes appears to be less detrimental than were found with the thin-ideal. Minimal research has however been done on the lived experiences of individuals subscribing to the athletic-ideal. This qualitative study followed a phenomenological approach to explore nine participants' perceptions of their athletic-ideal internalization. Data from semistructured interviews were analyzed through Interpretative Phenomenological Analysis. Results indicated a prominent theme of balance with regards to eating and exercise. In this study, it was evident that participants' pursuits of the athletic-ideal body are more focused on health-related goals than on appearance-related ideals. Following the guidelines of a healthy lifestyle and a balanced exercise routine seems to act as protective factors against body image disturbances, maladaptive eating, and compulsive exercise.

*Keywords***:** athletic-ideal, balance, body dissatisfaction, eating disturbances, healthy lifestyle, internalization, obligatory exercise, thin-ideal

Athletic-ideal internalization: The lived experiences of female students

Throughout history, evidence can be found that women strive to attain a culturally constructed ideal body (Cash & Smolak, 2011; Grogan, 2016; Sypeck, Gray, & Ahrens, 2004). Women strive to attain a specific body size and shape that is considered as beautiful or attractive within a culture. A cognitive endorsement of this culturally constructed ideal can be described as internalization and subsequently influence or initiate behaviour to reach the set ideal (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999; Tiggemann, 2011). A body that is thin with very little adiposity (thin-ideal) was seen as the cultural ideal for most westernized countries. (Grogan 2016; Homan, McHugh, Wells, Watson, & King, 2012; Schaefer et al., 2015). Since this ideal dominated for many years, several studies can be found on the thin-ideal and the relationship between this ideal, eating and body disturbances (Flament et al., 2012; Groesz, Levine, & Murnen, 2002; Homan, 2010; Stice, 2002; Thompson & Stice, 2001). In more recent years, however, research indicates that, in addition to being thin, the notion of a toned or muscular appearance has started to gain popularity amongst women. (Benton & Karazsia, 2015; Dworkin & Wachs, 2009; Grogan, 2016; Homan, 2010; Homan et al., 2012). For the purpose of this research article, this ideal will be referred to as the athletic-ideal. Research studies on the athletic-ideal internalization focused on the relationship between this ideal, body satisfaction, and dieting and exercise behaviour.

Since the athletic- ideal can be seen as a relatively new perspective of the ideal body research on this ideal is quite sparse, quantitative in nature and yielding ambiguous findings. Published qualitative studies have often focused on specific populations of professional and/or competitive athletes and eating symptomology (Arthur-Cameselle & Baltzell, 2012; Arthur-Cameselle & Quatromoni, 2011; Cooper & Winter, 2017; de Bruin & Oudejans, 2018; Kroshus, Goldman, Kubzansky, & Austin, 2014; Thiel et al., 2011). Obligatory

(compulsive) exercise in qualitative studies are often limited to individuals with an eating disorder (Bamber, Cockerill, Rodgers, & Carroll, 2000; Kolnes, 2016; Kolnes & Rodriguez-Morales, 2016). The lack of qualitative articles and discrepancies in the findings of various quantitative studies investigating the athletic-ideal is an indication of the need for additional research to explore this ideal. This researcher was especially interested in participants' interpretation and understanding of the athletic-ideal and how it influenced their daily lives. This includes an exploration of how the athletic-ideal influence occupation, social life and other important areas of functioning.

Body dissatisfaction

Body image is defined as the perceptual experience and subjective evaluation of appearance (Grogan, 2016; Grogan, 2006). Subsequently, a negative perceptual experience and subjective evaluation of the body indicate body dissatisfaction. According to the sociocultural perspective body dissatisfaction is created when there is a discrepancy between an individual's current body image and ideal body image (Martin, 2010; Tiggemann, 2011). Research have found a relationship between body dissatisfaction and the athletic-ideal internalization. This relationship, however, is regarded as significantly weaker when compared to the thin-ideal and its predictive relationship with body satisfaction (Homan, 2010; Schaefer et al., 2015; Bell, Donovan, & Ramme, 2016; Ramme, Donovan, & Bell, 2016; Williams, Naidoo, & Spies, 2018a). Furthermore, research reveals that exposure to a toned and fit body only leads to negative body image when an element of thinness is also present (Groesz et al., 2002; Homan et al., 2012; Robinson et al., 2017). The relationship between athletic-ideal internalization and body satisfaction can be compared to the thin-ideal, according to Benton and Karazsia (2015).

Disordered eating

According to the American Psychological Association (2013), disordered eating includes weight control measures such as fasting, meal skipping, purging, diuretics, laxatives, and diet pill use. On the more clinical side of the spectrum of eating disorders, such as anorexia nervosa and bulimia nervosa can be found. When considering the relationship between the athletic-ideal internalization and disordered eating, quantitative research studies indicated a relationship between dieting and symptoms of disordered eating (Bell et al., (2016; Pritchard, Parker, & Nielsen, 2011; Williams et al., 2018a). The use of supplements to achieve a muscular appearance could be an additional dietary component associated with the athletic-ideal. According to Stohs and Kitchens (2013) dietary supplements can be defined as a product that is taken orally to supplement diet and include, for example, vitamins, minerals, amino acids, and other botanical products. Performance-enhancing supplements are intended to improve energy production and augment body composition, such as promoting muscle growth and reducing body fat (Guimaraes-Ferreira, Dantas, Murai, Duncan, & Zanchi, 2013). A danger associated with supplement use is that these products are often used without a complete understanding of the potential risks of the product. Lack of knowledge of supplements may lead to the use of dosages that are unnecessary or even harmful to the user (Maughan, Greenhaff, & Hespel, 2011; Maughan, King, & Lea, 2004; Maughan, Depiesse, & Geyer, 2007; Stohs & Kitchens, 2013)

Obligatory exercise

Obligatory exercise can be described as a compulsive exercise routine that impedes functioning in other social or occupational activities (Dittmer, Jacobi, & Voderholzer, 2018; Rodgers, Hall, Blanchard, & Munroe, 2001). Researchers seems to be harmonious in their findings and suggests a strong association between the athletic-ideal internalization and

disordered exercise (Bell et al., 2016; Pritchard et al., 2011; Homan, 2010; Williams et al., 2018a). Although exercise is usually seen as an important aspect of a healthy lifestyle, in some extreme cases the motivating factor to exercise may lead to maladaptive behaviour. Exercise to control weight or to achieve a toned body has been found to be a predictor for obligatory exercise (Thome & Espelange; 2007; Pritchard & Beaver, 2012). Quantitative studies found that exercise to control weight or change body appearance (e.g., toning) can be regarded as a risk factor for eating disturbances, body dissatisfaction and low self-esteem (Furnam, Badmin, & Sneade, 2002; LePage & Crowther, 2010; Strelan, Mehaffey, & Tiggemann, 2003; Thome & Espelage, 2007). In a grounded theory approach, Cox and Oxford (2004) found that the concept of addiction diminished when participants meaning behind their exercise were explored.

Social influences on creating an ideal-body image

The tripartite influence model is based on sociocultural theories and has received robust empirical support as an etiological model for understanding the development of body image disturbance and disordered eating (Thompson et al., 1999). According to this model three social agents; namely, media, family, and peers play a significant role in the development of a culturally-sanctioned body ideal (Schaefer et al., 2015; Keel & Forney, 2013; Tiggemann, 2011). Research supports the notion that the media contributes to the creation of sociocultural body ideals (Tiggermann, 2011; Groesz et al., 2002; Thompson & Stice, 2001). As mentioned above, research has predominately focused on the classic thin-ideal and has indicated that exposure to this ideal in the media contributes to a negative body image in women (Levine & Murnen, 2009; Grabe, Ward, & Hyde, 2008). With regards to the athletic-ideal research has indicated that this ideal is gaining popularity across various media platforms. (Boepple, Ata, Rum, & Thompson, 2016; Boepple & Thompson, 2016; Schaefer et al., 2015; Tiggemann &

Zaccardo, 2016; Willis & Knobloch-Westerwick, 2014). "Fitspiration" (a portmanteau word for *fitness* and *inspiration*) is an online media movement gaining popularity. These websites include information to inspire and promote a healthy lifestyle in terms of exercising and healthy eating (Boepple &Thompson, 2016; Tiggemann & Zaccardo, 2016). Limited research on the effect of exposure to the athletic-ideal in the media can be found. Media exposure to images of bodies that are toned as well as thin can lead to a negative body image (Homan 2010; Robinson et al., 2017). Research has furthermore shown that exposure to the athletic-ideal on digital media including images on the internet and social media platforms is associated with negative mood, body dissatisfaction and a decrease in self-esteem (Tiggemann & Zaccardo, 2015).

In connection with the family, environment and parents contribute to body image and eating behaviours through appearance-related comments and modeling of appearance-related concerns (Ata, Rojas, Ludden, & Thompson, 2011; Bearman, Presnell, Martinez, & Stice, 2006; Rodgers & Chabrol, 2009). Furthermore, research has demonstrated that the development of the ideal body, body dissatisfaction, and disordered eating are also influenced by peers through appearance-focused conversations, teasing, comments, and criticism (Menzel et al., 2010; Salk & Engeln-Maddox, 2012; Shomaker & Furman, 2009).

Methodology

Design

An exploratory qualitative approach with an interpretative phenomenological design was used. This design enabled the researcher to gain insight into participants' understanding of the athletic-ideal and how it influenced their daily lives. This lived experience and understanding were explored through Interpretative Phenomenological Analysis (IPA) as this design allows a comprehensive exploration of social and cultural constructed perspectives of

a phenomenon (Smith & Osborn, 2015). According to Willig (2013), the purpose of IPA is not searching an objective truth, but rather understanding how an individual makes sense of a particular experience, which is in complete alignment with the objectives of this article.

Sampling method and Participants

Criterion sampling is a type of purposive sampling used where scores on quantitative techniques serve as selection criteria for the subsequent sampling (Sandelowski, 2000). This article formed part of a larger study (N = 476), exploring relationships between athletic-internalization body-image and eating disturbances. The objective of the current study was to gain a better understanding of the lived experience of an athletic-ideal internalization; subsequently, the inclusion of participants with a clear athletic-ideal internalization was paramount. The Sociocultural Attitudes Towards Appearance Questionnaire-4 (SATAQ-4) measure was used in the larger study. This measure includes two subscales assessing Muscular/Athletic-internalization vs Thin/Low Body Fat internalization. Participants who showed a higher score on the Muscular/Athletic-internalization and achieved a score of 20 or more on this subscale were deemed appropriate to participate. Since the total of the Muscular/Athletic-internalization subscale was 25, a cut-off score of 20 can be considered to be well above the mean. Based on the above-mentioned criteria 66 participants were identified and invited to participate in the follow-up study. Nine of these participants indicated a willingness to participate. Dates and times of interviews were arranged with each participant according to their convenience. Demographic information of the sample group can be found in Table 1.

Data collection

Interpretative phenomenological research aims to understand the perceptions of participants by observing their lived experiences. In order to achieve this, the researcher is obliged to use a flexible data collection instrument (Smith & Osborn, 2015; Willig, 2013). Semistructured interviews are considered as the most suitable data collection method for IPA studies (Smith & Osborn, 2015). Although semistructured interviews are seen as nondirective, the research questions guide participants to talk about particular aspects of their life experiences (Willig, 2013). Open-ended research questions facilitated the exploration of the participants' experiences (Larkin & Thompson, 2012). These questions were developed to engage discussion on the four major themes of ideal internalization, body satisfaction, eating patterns, and exercise behaviour. In accordance with Smith and Osborn's (2015) guidance, planning of questions ahead of time were beneficial in exploring possible difficulties that may have arisen during the interview. To minimize any unforeseen difficulties with the structure of the questions, a pilot interview was conducted with an individual demographically similar to the sample group. The feedback of this pilot exercise improved the interview schedule (Appendix J). Examples of the open-ended questions include: Describe your ideal body? How would you describe the athletic-ideal? How would you describe the thin-ideal? What would you say contributed to you having this ideal? What do you do to reach this ideal? How do you currently feel about your body? More specific questions included: Describe your exercise routine? What are your reasons for excising? Describe your diet (overall way of eating). Discuss any other behaviours you engage in to reach this ideal that could be considered unhealthy. How does your exercise routine influence your relationships? How does your eating influence your relationships? The interviews lasted between 30 and 80 minutes and were recorded with a digital recording device.

Data Analysis

Data obtained from interviews were analyzed using the method of Interpretative Phenomenological Analysis (IPA). Methodological guidance was sought from the research promoter trained in, and proficient up to doctoral level in the use of IPA. The data was also evaluated by the research promoter to evaluate consensus of identified themes. The idiographic process of IPA can be divided into five stages; that is, the researcher's initial encounter with the text; initial noting; identification of emergent themes; clustering of themes, and the production of a summary table (Smith & Osborn, 2015; Smith, Flowers, & Larkin 2009; Willig, 2013). In the current study the researcher's first encounter with the data was the interviewing process itself and subsequent transcribing of the interviews. Transcription enabled the researcher to familiarize herself with the data by reading and rereading the text to eliminate possible errors. In the second stage, wide-ranging notes entailing a comprehensive account from the original data were made. As suggested by Smith and Osborn (2015), the researcher attempted to stay true to the participant's words as far as possible. The next stage entailed identifying emergent themes that capture the important quality of the text. Since these themes could be regarded as more interpretative in nature care was taken to ensure that the themes were an accurate reflection of participants' experiences. Themes with an identifiable relationship were clustered together to produce a sub-theme. The process of IPA takes an idiographic approach by firstly analyzing each case independently and subsequently integrating analyses from all cases (Willig, 2013). In order to attain a more comprehensive understanding of the phenomenon, all cases were integrated and a list of master themes was identified.

Ethical Considerations

Ethical approval was obtained from the Health Research Ethics Committee (HREC) of the NWU Faculty of Health Sciences (Ethics number: NWU-00026-16-S1). Informed consent information about the study was provided before the interview (Appendix H). Sufficient time was provided for the participants to read through the document and discuss any questions or concerns they may have about the interview or research study. It was reiterated that participants were not obliged to disclose any information that they were not comfortable with and could end the interview at any time without any consequences to them. Consent was obtained to record the interview. After confirmation that they had read, understood and consented to be recorded the interview commenced. To protect the emotional wellbeing of all participants a question was included in the schedule to explore the participant's thoughts and feelings regarding the interview. An opportunity for debriefing was provided upon completion of the interview to explore whether the participant experienced any discomfort during the interview (Appendix I). The information of the available on-campus support systems was reiterated if any discomfort was experienced at a later stage.

To ensure anonymity all identifiable particulars including the names of the participants were altered in the transcription of the interviews. The recordings and transcripts were saved on a password-protected computer. After completion of the study printed transcripts and study information were stored in a locked cabinet at the North-West University, Potchefstroom campus (COMPRES facilities).

Trustworthiness

To ensure trustworthiness in qualitative research credibility, transferability, dependability, and conformability should be considered (Guba, 1981; Lincoln & Guba, 1985). In terms of credibility and transferability this study made use of a small, fairly homogenous sample that enabled the researcher to thoroughly engage with the data. Dependability and conformability were ensured through constant supervisory sessions to confirm that the coding analysis was sufficiently grounded in the data. Furthermore, conformability was enhanced by keeping a reflexive journal that documented the researcher's own experience, beliefs, and thoughts throughout the study (Appendix O).

Results

This section will explore the prominent themes and various subthemes that emerged from the participant's responses. An overview of the three themes: "Perception of Self", "A balanced lifestyle", and "Societal Pressures" will be discussed. Participants' verbatim quotes provided subtheme names to keep the analysis reflective of participant responses as far possible. A summary of the themes and subthemes can be found in Table 2.

Theme 1: Perception of the ideal body

This theme explores participants' views on the ideal-body and specifically elaborate on their perceptions of the athletic and thin-ideal respectively. Participants' body satisfaction and the aspects that influence their view of their body are explored. Furthermore, views of self with regards to specific occupational roles are described. Questions or statements that prompted these responses included: "Describe your ideal body. How would you describe the athletic-ideal? How would you describe the thin-ideal? What would you say contributed to

you having this ideal? What do you do to reach this ideal? None of the participants indicated that they did not understand the concepts inferred in the questions.

"…every person has a different body type and different picture of who he or she wants to be..." As expected, this purposefully selected group of participants currently subscribes to the athletic-ideal. Participants showed variation regarding a body ideal that they subscribed to in the past. Four participants reported that the thought of an ideal was not important to them, while three participants subscribed to the thin-ideal and two participants reported always having an athletic-ideal. Participants' perceptions of the athletic-ideal corresponded with the description found in the literature (Benton & Karazsia, 2015; Dworkin & Wachs, 2009; Grogan, 2016; Homan, 2010; Homan et al., 2012; Uhlmann, Donovan, Zimmer-Gembeck, Bell, & Ramme, 2018). The athletic-ideal body was described as fit, toned, and visibly muscular.

"I think cause I am an athlete myself for me it is obviously an athletic body that's the kind of ideal thing. So if I kind of imagine the ideal body it's of an Olympic athlete, so someone who is fit toned, healthy obviously uhm you can see muscle…" (Abby).

"…someone who is like muscular… very toned type of body" (Helen).

"… you can see that she is toned you can see muscles through her skin" (Debby).

Corresponding with literature this toned muscular appearance is in addition to being thin. Participants, however, maintain the perception that this ideal warrants not being too thin and/or too muscular.

"…you are thin but you are still…you showing some muscle" (Beth).

"…like a model but not as thin more muscles …but feminine muscles not overdone" (Faith).

"Not 2 % body fat and this steroid look..." (Elsa).

From the participant's responses, it became apparent that participants view the athletic-ideal to be synonymous with a healthy lifestyle. A prominent perception that emerged was the physical benefits that arise from following an active lifestyle. These benefits include being physically fit and strong, and having sufficient energy. Furthermore, it was noted that this lifestyle leads to improved body systems such as cardiovascular and immune systems and subsequently serves as a protective factor against various diseases.

…Mostly to be fit if I walk upstairs I don't want to be out of breath when I get on top…" (Faith).

"…especially for your heart and cholesterol and all those things and fitness … to exercise you have less chance to get, let's say heart attacks, cause the cholesterol level is low, the breathing it's easier" (Grace).

"…I'd say if you have energy and if you don't get sick easily then you have an ideal body like in a good physical condition…" (Ivy).

Participants' descriptions of an individual that pursues the thin-ideal included a body that is primarily focused on being thin and not necessarily strive to have a toned or muscled appearance. Words to describe the thin-ideal look included, *bony*, *skinny*, *petite*, and *lean*.

"…less toned … less of muscles you can see when they walk…" (Carla).

"There is no shape to their body they just weigh like little…" (Debby).

Subsequently, participants maintain that these individuals are less interested in exercise and more focused on their diets. It is important to note that participants reported that when these individuals exercise a preference is given to cardio for its weight loss benefits.

"You would rather eat less than to go to the gym…" (Grace).

"Thin-ideal to me is someone who just doesn't eat or eats very little calories during the day and does a lot of cardio…" (Debby).

Participants reported that individuals subscribing to the thin-ideal are more at risk to have an unhealthy relationship with food based on the fear of gaining weight.

"…on the verge of unhealthy because… their ideal is to be skinny but it's not always a healthy look…. The amount of food you eat…" (Elsa).

"…you don't want to eat your sweets because you going to get fat you don't want to eat that because you going to get fat…" (Beth).

All participants did not necessarily view the thin-ideal as an unhealthy ideal. Especially when an individual's genetic predisposition or body build is more amenable to a thin look.

"…some people just... are genetically predisposed to having that type of body type" (Ivy).

"…A thin-ideal is you are a small person, small bone structure… you're thin it's just like you've been like that forever…" (Grace).

In line with the above-mentioned perception, the participants reported on the attainability and sustainability of a body-ideal. Participants emphasized the importance of pursuing a body ideal that suits your body-type (build, height) and lifestyle.

From the responses, it is evident that the participants believe that the athletic-ideal is a more attainable and sustainable ideal for them personally.

> "…I know it's not a realistic goal for me and that's why I don't see that as an ideal…" (Carla; with reference to the thin-ideal).

> "…you shouldn't have a goal that's unreachable. … I have muscles the muscles is not just gonna go away. ..So a person that is thin doesn't have that muscles so for me to try to be thin now even though my body has muscles, I can't do anything about that..."(Grace).

"…I don't think anyone will ever be a 100% satisfied…" The majority of participants reported not being entirely satisfied with their body or dissatisfaction with certain parts of their body. Except for one participant who reported complete satisfaction, the perception that there was room for improvement regarding weight loss and toning emerged. Participants maintained the view of being in progress to reach complete satisfaction.

> "…out of ten probably like 7 …. I'm still not where I want to be…" (Abby).

> "…Currently, I am not satisfied I would like to be a bit more toned…" (Faith).

> "I feel I am still in the process but overall I feel good, I think when I get the goal I have for the weight loss it will be an 8 and then for toning it will be a 10" (Grace).

Body dissatisfaction could be the result of a perceived discrepancy between an individual's current body and the ideal body (Tiggemann, 2011). In this study, two participants reported palpable dissatisfaction with their current bodies. It appears that this dissatisfaction stems from the perception that their current bodies were not similar or close

enough to the athletic-ideal. Both these participants reported that they were more satisfied with their bodies when they were closer to the athletic-ideal in the past.

"It doesn't look like it at all..." (Debby).

"…currently I hate my weight .... I am still working hard to get back to where I was…" (Helen).

Most participants, however, held the belief that they have control over how their body looked and subsequent control over increasing body satisfaction if active efforts were made.

"...I'm not where I want to be so I was not happy but the thing is I realized I have to make changes…" (Beth).

"…I can't feel that bad about my body if I don't actually do something about it, so it's my fault. So I am uncomfortable but I will get there..." (Carla).

"…because if you want to achieve something that what you need to look like…"

From the responses, it became clear that participants' views of the ideal body were influenced by several expected roles that they were fulfilling at the time or have fulfilled in the past. The most prominent role was that of being an athlete. All the participants reported participating in either athletic or a team sport at school. In addition to going to the gym or cardio exercise sessions, three participants reported a continuation of their competing in athletics and team sports. Participation in sports activities subsequently led to adopting an athletic-ideal body. Participants maintained that this ideal naturally emerged from participation in sport and was associated with enhanced performance in sport.

"…someone who is doing sports on the Olympics you can see that is kind of part of the process if you like fit and healthy…that's the kind of body that you should be taking on to take part on that kind of level." (Abby).

"…in school I participated in a lot of sports that's the people the shapes you see and they do the stuff you do or want to do" (Carla).

"…you are not an athlete because you want a nice body you're an athlete because you want to perform…" (Elsa).

As indicated in Table 1, six participants are currently students in the health sciences field. Furthermore, two participants specifically indicated that they completed personal training courses. Knowledge of a healthy lifestyle in terms of healthy eating, exercise, and supplements was evident throughout their responses.

"…I had nutrition as a module in my first year and we really do need all of those foods so I think if you do cut out a certain food group it could be very unhealthy" (Ivy).

"…Weight training pure for the science behind it it's been proven…the more muscle mass you have the more calories you burn when you are not training…" (Debby).

Following a healthy lifestyle and subsequently looking healthy seemed to be an unwritten rule if you were a student in the relevant field. Looking the part seemed to be related to competency in the relevant field.

"…it's a bit frowned upon if you are not athletically build…because how can you teach people to be athletically and physically active but you are not." (Carla).

"…I think obviously the ideal body will help me in my studies or in my job one day … when I look at a coach he or she must be able to do what he or she coaches" (Beth).

Two participants reported participation in modeling activities in the past while one participant reported being a dancer. From these participants personal experience as well as other participants' perspectives the notion that participation in these activities promotes the pursuance of a thin-ideal became apparent. These participants maintain that being thin is necessary for competency in these activities.

"Well very thin, modeling was thin…that's all what they were worried about is being thin…" (Grace).

"…They don't want you to be muscular if you are a ballet dancer…at that stage it was just about weighing as little as possible…" (Debby).

Theme 2: A balanced lifestyle

The concept of balance was often referred to by participants to describe a healthy lifestyle. Balance was deemed important with regards to eating, exercise, and other daily activities. In general, the responses showed that participants view that it is the extremities of any type of behaviour that can be seen as maladaptive.

"…you don't have a life you only have you and your exercise then I think that is too much." Participants maintained that one should be cautious not to become obsessive in their journey to reach the athletic-ideal. Since our sample included students who had study imperatives, finding a balance between time to exercise and study related activities was evident. A closely related aspect was also finding a balance between pleasurable activities such as socializing with friends, family time and exercise. Participants expressed that one's

exercise routine can be seen as excessive if time spent on exercise impedes on academic and social activities.

> "…when you don't get to your family to your friends or to academic …gym consumes your time or exercise consumes all of your time. You don't have a life you only have you and your exercise then I think that is too much as well..." (Grace).

It appeared that in order to avoid that their exercise routine interferes with daily activities and especially their relationships participants often reported that they will gym in the early mornings.

> "…I go at 5 in the morning so it's not bothering anyone it's not taking time out of the day for anyone either" (Debby).

"…just eat a balanced diet a bit of everything…" Participants maintained the view that healthy eating includes the consumption of all food groups. Two participants specifically mentioned seeking the guidance of a dietician to ensure that they follow a nutritious diet. This view was also evident in the descriptions of their daily dietary intake that included fruit and vegetables, protein, and carbohydrates. Participants reported that the exclusion or complete restriction of certain food groups can be seen as unhealthy and not part of a balanced diet. The general view of "fad" diets that promote the exclusion of a food group is not only unhealthy but often seen to lead to weight gain once the diet is stopped.

> "My parents always taught me just eat a balanced diet a bit of everything this whole like Tim Noakes thing where you can't eat this and you can't eat that, I don't believe in that…" (Abby).

> "It's a healthy way of living but don't cut out carbs completely… try to be healthier and distribute your meals evenly in the different food groups but don't cut out a certain food group or nutrient" (Carla).

Participants furthermore maintain that deviation from healthy eating is a paramount component to balanced eating. Deviation entails including the occasional "treat" in your diet, in other words, foods that are usually seen as unhealthy, such as sweets or fast-foods. It is important to note that participants emphasized that these deviations should be occasional and not a regular occurrence.

> "You are allowed to have a treat, or ice-cream or enjoy red meat or whatever your preference is but as long as its balanced why not?" (Faith).

> "I think people can take it too far like completely deprive themselves of like the smaller pleasures" (Ivy).

Participants still maintained that although the excluding of a food group is not ideal, a balanced diet still entails a form of portion control. Although most participants seemed opposed to the idea of counting calories the importance of being conscious about what and how much you eat was evident. This view includes eating carbohydrates only when needed and minimizing unnecessary fats and sugars and opting for a more "healthier" option when eating out.

> "I'm not on a specific diet plan I'm just cautious and careful of what I eat and how much I eat" (Faith).

> "Healthy is when I need sugar I will eat fruit or I'll have tea with honey…So instead of sugar, I'll have honey because is a more healthy option" (Grace).

With regards to the use of supplements the general consensus was that supplements should only be used when indicated or necessary. This includes added vitamins or minerals not sufficient in dietary intake.

> "…pretty much anything, vitamins, like protein shakes, keratin, pretty much anything that you don't naturally get in your diet" (Ivy).

> "…supplements are more like vitamins and minerals and …we as human don't get everything from our diets so I think supplements are good if you use it in the right way" (Beth).

"…with the athletic-ideal you learn to see food as like a fuel". Participants emphasized that a healthy lifestyle includes both eating healthy and being active.

> "So if you don't focus on your diet and on your exercise you won't be healthy "(Beth).

> "I would say the athletic-ideal is more….is to me healthier than the thin-ideal its shows that you are active and not just eating right..." (Carla).

From responses, it was evident that eating and exercise are seen as interactive concepts. Participants maintained that their food intake is often influenced by their activity level. Food was regarded as the fuel the body needs to sustain energy. Participants furthermore maintained that the use of supplements can be beneficial if the body needs additional nutrients due to strenuous exercise.

> "…eating plan will help you to have sustain energy…for instance low GI for sustained energy and a balanced diet that you build up stores for energy" (Carla).

> "…to be athletic you need to eat the right amount you need to eat the right foods" (Elsa).

Participants furthermore maintained that the use of supplements can be beneficial if the body needs additional nutrients due to strenuous exercise.

> "I would definitely advise it to someone who is going to compete in a competition who needs it cause if you are not going to use it is going to be detrimental to your health and well as your performance" (Debby).

Participants also expressed that an active lifestyle allows one more deviation from healthy eating due to the increase in energy burning. As mentioned above, however, it was apparent that this deviation should be regarded as occasional and not a daily occurrence.

> "I know its fine I'm not gonna pick up 10 kg's just from having one McDonalds meal I'm gonna end up working it off anyway" (Abby).

An additional connection between exercise and diet was that participants feel that they are more drawn to healthy food when they exercise.

> "I eat healthy when I exercise when I don't exercise I feel lazy I feel eating food that is not good for me like take aways" (Grace).

Exercise: planned, organized, methodical. The participants' descriptions of their exercise routine showed evidence of planning and structure to their exercise routine with rules and guidelines for exercise. Participants often reported following some type of programme that guides the type of exercise to be done during the week. With regards to the frequency and duration of exercise participants varied in aiming to exercise three to four times a week with exercise sessions ranging from 30 minutes to an hour.

> "So it is one every day a different part that I'm gymming on Mondays it would be leg day on Tuesdays it would be shoulder and chest..." (Grace).

"…I try to work every muscle group in my body like every week so I will have like a leg day, a back day an ab day, arms and shoulders basically and a cardio day and so on…" (Ivy).

Staying with the perception of balance participants reported the importance of combining cardio type exercises with bodyweight or strength-based exercises.

"…you need to do resistance like weight training you need to do cardio as well" (Elsa).

"…full body so it doesn't just focus on one thing and it….I don't know it's just an overall workout…" (Ivy).

Cardio-type exercises like running, jogging, or swimming was often associated with efforts to lose weight or enhancing fitness. Bodyweight and strength-based exercises, on the other hand, was more associated with toning and reaching an athletic appearance.

"…I don't want to do cardio for let's say every day of the week, then it will take the muscles away and it will take everything away....Only make you fitter but it will...you won't get that…you won't get my ideal body…" (Beth).

"So weight training will be the benefit in the long run…if you wanna lose weight quickly yes then cardio might be the solution…weight training leads to muscle gain" (Debby).

A general agreement among the participants was that exercise becomes unhealthy when it becomes excessive. Excessive exercise was often referred to as overtraining that can lead to injury.

"Yes, I do think that some people take it too far. Like you get these people that…go gym 2-3 times a day and there is something like overtraining. You can overtrain your body" (Ivy).

"…like overworking their body and you can see when they start getting injuries" (Abby).

The importance of recovery from exercise was evident. In order to avoid injury of over-training the body, participants maintained that one should have dedicated rest days. Recovery from sickness or injury was viewed as paramount and training during this time was generally viewed as unhealthy behaviour.

"…your body aren't use to training for every day you have to rest sometimes…" (Beth).

"…if you feel that your body needs a rest day like you don't wanna do anything then take that. It is important that you listen to your body" (Abby).

Participants often viewed exercise as a means to achieve a specific set performance goal rather than just exercising to look good. This was regarded as a process that often takes time to achieve.

"…it's still like more a training towards a goal rather than what I want to look like" (Abby).

"…is was quite a long road to go but I'm happy with the progress" (Faith).

This subtheme considered balance as a concept communicated by the participants. In the next section, participants' linking of exercise and emotion regulation are considered.

"... spiritually, physically, mentally it makes me feel good". Participants reported on the stress-relieving benefits they experience from exercise and how they utilize exercise as a

means of managing/processing negative emotions. Exercise was described as a paramount method to regulate emotion. From responses, it was evident that participants enjoy exercising and reported that they experience an improved mood after exercise.

> "…for me it's a form of relieving stress so when can't do it I don't know where to go with all my issues that I get from work" (Faith).

> "…you can really like feel the change in your mood…if I go run and I come back then I feel good for the rest of the day" (Abby).

Furthermore, participants described exercise as a means of temporary escapism to a personal space where they could escape current life stressors and find peace of mind.

> "…training gives me relief from reality..." (Beth).

> "…people who run it's for them that's a way to vent or get away" (Debby).

> "I'm getting connected, my mind again spiritually and I don't think of anything else *(*Grace).

As mentioned above, participants also maintained that following an active lifestyle contributed to emotional wellbeing. Although most participants also acknowledge that they exercise to improve their appearance it was maintained that the athletic-ideal is more than just looking good, but also encompasses feeling good, feeling healthy, and taking care of your body.

> "…it's not about looks is more about how you feel inside…" (Ivy).

> "…it's about balance not only doing it because you want to look good…" (Carla).

As mentioned above, most participants reported that they refrain from exercise when they are sick or need to fulfil other responsibilities (mostly study related). Most participants reported an understanding stance, in other words, not being too hard on themselves when they are unable to exercise due to social or work-related activities. On the other hand, however, participants often reported negative emotions such as frustration when they are unable to exercise due to illness.

> "…I'm not going to say just because I miss my training now the world is going to end…" (Beth).

> "…let's say I'm sick, I know I can't exercise then I understand it or let's say I've been away for a while I don't punish myself because I didn't I'll just come back and start my routine again…" (Grace).

> "I had bronchitis now for 10 days and I haven't been to the gym and it is just not nice" (Ivy).

> "I've been sick last week so I couldn't do anything the whole of last week and I could feel I was getting kind of depressed, and like not angry but just kind of annoyed…" (Abby).

"…a symptom of disorder". Participants maintained that the absence of balance can be regarded as maladaptive. Eating disorders such as anorexia nervosa and bulimia nervosa were viewed as dangerous behaviour to control weight. Clinical behaviours such as skipping meals, starving oneself, obsessive thoughts of restriction of calories, mental preoccupation, purging, and excessive exercise were identified as unhealthy.

"…bulimia, anorexia and to stop eating to uh….I think those things can help you reach the goal but it is not good for your body and it is not mentally either" (Grace).

"When I was in high school there was a girl in my class who got anorexia and it was really bad. Like she had to be admitted to a hospital and everything…" (Abby).

"…people who don't eat and exercise for a ridiculous amount of time but that's also a symptom of disorder" (Debby).

In general, participants agreed that being "too thin" is unhealthy. From responses, it is evident that participants view the extreme of the thin-ideal as maladaptive.

"…super skinny is...being like too thin like anorexic kind of thin" (Helen).

"…there is a difference between thin and very thin" (Carla).

As mentioned above, supplements use was only encouraged when dietary intake lacks needed vitamins and minerals. The unnecessary use of supplements and especially replacing meals was regarded as unhealthy. Participants maintained that knowledge on the correct use is paramount in order to avoid misuse that subsequently can be unhealthy for the body.

"…can't just use it every single day for how many months then it won't work…yes, you get a meal replacement shake or a protein shake...but…it mustn't replace your diet" (Beth).

"When you're using it wrong…also if you overuse them like, I've come across people where they're literally on a shake diet, they don't eat food they just drink shakes and I don't think that's healthy" (Ivy).

The use of anabolic steroids participants was unanimously seen as dangerous and unhealthy for the body.

"…I don't think it's necessary…I just think is really really unhealthy…" (Elsa).

"…I know there is research all over that this is not good for your liver or this is not good for your kidneys…" (Grace).

Theme 3: Societal Pressures

This theme explores how participants experience societal pressure to subscribe to a specific ideal. This includes how relationships contributed to participants formation of the athletic-ideal and how the pursuit of this ideal in turn influence relationships with others. Furthermore, participants' thoughts on how media influences body image are discussed.

"…girls feeling the pressure of society…" Participants verbalized an awareness of societal pressure to conform to a stereotypical image of what one is supposed to look like. Participants maintain that susceptibility to this pressure may lead to dissatisfaction with your own body. It was also identified that activities like athletics, modeling, and dancing place pressure on individuals to subscribe to a specific ideal.

"…The ideal that society has….So if you are this tall person and a bit overweight and society think no you need to lose weight and you are susceptible to their opinion of you then I think it might be a problem" (Faith).

"I was in activities where you are supposed to look a certain way" (Grace).

"…I've always obviously got caught up in the whole girls need to look a certain way or you know or you know be thin or have abs…" (Ivy).

"…the media creates an image for what a girl should look like..." Research has shown that media exposure to a perceived ideal body can influence an individual perception of their own bodies (Tiggemann, 2011; Thompson & Stice, 2001). Participants reported that they experience exposure to the athletic-ideal, especially on social media and magazines. Participants confirmed that the athletic-ideal is starting to gain popularity in the media. There was, however, some divide amongst participants whether the thin-ideal or athletic-ideal is more presented in the media. Nevertheless, most participants reported an aspect of deception due to a flawless depiction of the female body in media whether it is athletic-ideal or a thin-ideal. This depiction includes the use of programs (e.g., Photoshop), and models posing in a specific way to create a more flattering angle. Participants maintained that this unreasonable societal expectation created by this deception can lead to body dissatisfaction.

> "…in the media they say you must have perfect skin you must have a perfect body…. The media show it a little bit different and when you are young, you don't know about Photoshop you don't know about these beauty apps" (Beth).

> "…Instagram specifically influenced the athletic body ideal because we all know Instagram is like the … everyone looks perfect on Instagram everyone looks happy…" (Elsa).

> "…you go like on Instagram or Pinterest or whatever and you see all these perfect girls and then you're like that's what I need to look like to be attractive and then you start hating your own body…and none of that is true…like the media really lie about it…" (Ivy).

Two participants, on the other hand, reported that they are not influenced by the media but motivated by the portrayal of an athletic body respectively.

"The media is not a factor in my life, I don't bother or … I see it but it doesn't matter to me..." (Carla).

"…I've never looked at a picture and feel demotivated it always like yeah … whenever I want to get motivated I just buy my magazine ..." (Grace).

Relationships and the athletic-ideal. Responses from participants indicated several positive aspects surrounding the pursuit of an athletic-ideal and relationships with friends and family. Participants' responses indicated that exercise can be viewed as a socializing opportunity. Several participants indicated that they often train with their friends, family or with their partner.

"…me and my friend, we used to gym together every morning…it was our bonding time…" (Grace).

"…my best friend she is actually very supportive…she joins me at the gym I got her to sign up as well…" (Faith).

Participants indicated a preference to be surrounded by like-minded individuals that understand the importance of a healthy lifestyle in terms of exercising and eating healthy. This includes friends and family members being supportive of their efforts to attain an athletic body ideal. Furthermore, participants also maintained being motivated and guided by significant others to pursue a healthy lifestyle.

"...It could be positive maybe if you have a group of friends that exercise together…that could be good for their relationship because now they know their struggles they know what they are working for together…it's a good influence on relationships" (Carla).

"…majority of the people I get along with all do sport and on campus like the people that I sit with in class they all know that I train and everything they're supportive about it ... we respect each other for the things we do..." (Abby).

Participants also seem to play an advisory and motivational role among friends and family. Two participants specifically indicated that they completed personal training courses.

"…There are some girls that train with me not every day some of my friends that want to also now start getting in shape … so generally just help them with what they need to do …" (Debbie).

"…I can also help people exercise cause it makes them feel good it makes me feel good it's just a good feeling about exercising and being healthy" (Grace).

From the above results, it is evident that general consensus among participants was that their relationships support, motivate and guide their efforts to reach an athletic-ideal. Participants also report significant others that do not follow the athletic-ideal, but this did not seem to bother participants or influence their relationships with these individuals negatively.

Although not as prominent, participants reported incidences where body-related comments from others were seen in a negative light and contributed to feelings of body dissatisfaction.

"…like my brother's an athlete then he sees all the athletic perfect girls and he is always like nah you need to go like for a jog and you need to lose weight…" (Ivy).

"…Somebody told me … you have legs that could kick-start a Boeing …and I didn't take it as a compliment at all they said it was a compliment but to me, it wasn't at all…" (Carla).

Discussion

In the topic under discussion, the concept of a healthy lifestyle specifically in terms of balance appears to act as protective factors against body image disturbances, maladaptive eating, and compulsive exercise. Although most participants reported being mostly satisfied with their bodies, they indicated that there was room for improvement regarding weight loss and toning. The literature supports the pervasiveness of body dissatisfaction amongst women with regards to weight (Rodin, Silberstein, & Striegel-Moore, 1984; Runfola et al., 2013; Tantleff-Dunn Barnes, & Larose, 2011; Swami et al., 2010). However, current literature on the athletic-ideal indicates a weaker correlation with body dissatisfaction when compared to the thin-ideal internalization (Homan, 2010; Schaefer et al., 2015; Bell et al., 2016). In the present study, there are several factors that could support this finding. Firstly, participants' perception of balance in reporting being too thin or too muscular is not seen as ideal. Secondly, participants maintained the importance to pursue a body-ideal that is attainable and sustainable based on their body type that also contributes to a healthier perception of their bodies. Thirdly, participants reported a sense of control over their appearance and subsequent satisfaction. Lastly, participants placed more emphasis on having a healthy body despite notions of weight loss and toning wishes. This health perspective, as opposed to a perspective based on appearance, could be regarded as a protective factor against maladaptive eating and exercise behaviour that is not considered healthy for the body. Participants emphasized the importance of a balanced, nutritious diet including all food groups, the occasional treat, and portion control. Participants' perspectives subsequently seem to be in line with a total diet approach that is seen as a paramount focus of healthy eating (Freeland-Graves & Nitzke, 2013). Participants were also able to identify eating behaviour associated with eating disorders and viewed the behaviour as unhealthy due to the lack of balance. Another perspective that contributes to healthier outlook with regards to food is that food is fuel for

the body that guides the adaptation of their diets to support their activity level. Furthermore, the lack of knowledge of supplements can lead to unnecessary use and potentially harmful consequences (Maughan et al., 2004; Stohs & Kitchens, 2013). Participants advocated using supplements only when dietary intake proves insufficient and unanimously warned against the use of anabolic steroids. The participants' balanced view of diet can also be regarded as a protective factor against maladaptive use of supplements. As suggested by Freeland-Graves and Nitzke (2013), a diet that focuses on variety, moderation, and proportionality can assist in preventing unnecessary reliance on supplements.

Research indicates a connection between athletic-ideal and compulsory exercise (Homan, 2010; Bell et al., 2016; Williams et al., 2018a). A major criterion used to identify a maladaptive behavioral pattern is its impediment on social, occupational, or other important areas of functioning (American Psychological Association, 2013). By the same token obligatory exercise includes a compulsive aspect that impedes functioning in other social or occupational activities. From the theme a balanced lifestyle, however, it is evident that participants show awareness in maintaining balance regarding their pursuit of the athletic-ideal. Responses indicated that participants do not allow their exercise routine to interfere with important occupational, academic, or social activities. Participants even reported that they view exercise as a socializing opportunity. This balanced perspective with regards to exercise, eating, and a general positive predisposition with regards to body-image can be associated with the participants' reason for exercising. Research indicates that woman who exercise for health-related reasons, mood regulation, and enjoyment reported higher levels of body satisfaction and self-esteem and lower incidence of disordered eating (Homan & Tylka, 2014; Prichard & Tiggemann, 2008; Strelan et al., 2003; Vartanian, Wharton, & Green, 2012; Tylka & Homan, 2015). Although participants acknowledged that their motivation and reason to exercise has an appearance-related component, exercise was predominantly motivated by

health-related reasons. Participants maintained that they exercise for health and fitness, improvement of mood, and overall enjoyment of exercise.

In addition to exercise to influence weight, intense guilt associated with the postponement of exercise can be associated with disordered eating and reduced levels of quality of life (Mond, Hay, Rodgers, & Owen, 2006; Mond & Calogero, 2009). Participants' opinion about predominant exercise-for-heath-related reasons evidently influenced their perspective when they were unable to exercise, whatever the reason. Their responses conveyed insight into their emotional discomfort when social or occupation responsibilities, recovery from exercise (rest days), and illness prevented them from exercising. However, these feelings seem to be due to the absence of the psychological and physical benefits associated with exercise rather than an obsessive attitude to exercise or a fear of gaining weight.

Consistent with previous research it was found that the athletic-ideal has gained popularity in the media especially on social media platforms. Participants explicitly indicated increased exposure to the athletic-ideal on social networking sites, such as Facebook, Twitter, and Instagram that are gaining increased popularity among young women and can be associated with body image concerns and disordered eating (Fardouly &Vartanian, 2015; Mabe, Forney, & Keel, 2014; Meier & Gray, 2014; Tiggemann & Slater, 2013). They also reported experiencing societal pressure to conform to a stereotypical image of what one is supposed to look like. Participants were of one mind regarding the deceptive nature of media portrayal of a flawless body – regardless of a thin or athletic appearance – and the impact it had on their own body image. Research has indicated that the content of print and digital media, pertaining to the athletic-ideal, predominantly conveys appearance-related messages rather than health-related messages. This includes the promotion of thinness, weight

stigmatization, dieting, and objectifying phrases that can contribute to a negative body image and body dissatisfaction (Boepple et al., 2016; Boepple & Thompson, 2016; Conlin & Bissel, 2014; Tiggemann & Zaccardo, 2016).

Regarding peer and family influences, this study supports literature's notion that the development of a body ideal is influenced by family and peers (Ata et al., 2011; Bearman et al., 2006; Jones, 2011; Menzel et al., 2010; Rodgers & Chabrol, 2009; Salk & Engeln-Maddox, 2012; Shomaker & Furman, 2009). Participants mostly reported a family and peer environment that support, motivate, and provide guidance to pursue a healthy lifestyle. Participants reported the preference to surround themselves with individuals that are like-minded in terms of a healthy and active lifestyle but also reported support from those that do not necessarily follow a healthy lifestyle.

Conclusion

The aim of this research project study was to explore participants understanding of the athletic-ideal and identifying how the internalization of this ideal influence their daily lives. In terms of the concepts of body satisfaction, eating, and exercise, participants maintained a perspective of balance and health that seemed to act as protective factors against body dissatisfaction, maladaptive eating, and obsessive exercise. The pursuit of the athletic-ideal in this study is considered synonymous with leading a healthy lifestyle that embraces healthy eating, balanced exercise, and the quest of a body that is attainable and sustainable. Furthermore, a social environment that supports this healthy lifestyle serves as a protection against social relationships being negatively influenced by an athletic-ideal internalization.

Limitations and Recommendations

In the study at hand, the experience of nine female students from a relatively homogeneous demographic background was subjected to scrutiny. A specific limitation in this study, for example, was that the sample had an over-representation of white students and students from the health sciences. Relevant results appear to indicate that students in this field of study are often inherently exposed to concepts of health, diets and exercise. Future recommendations are to further explore the experience of the athletic-ideal in samples of males, older females, females of other ethnicities, and nonstudent populations.

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Tables

Table 1

Participants Demographics

Name*	Age	Race	Year of study	Field of study
Abby	19	White	1st year.	Human and Social Sciences or Arts.
Beth	21	White	2nd year.	Health Sciences.
Carla	21	White	3rd year.	Health Sciences.
Debby	24	White	3rd year.	Health Sciences.
Elsa	19	White	1st year.	Health Sciences.
Faith	23	White	4th year.	Economic and Management Sciences.
Grace	25	White	7th year.	Health Sciences.
Helen	20	Black	2nd year.	Theology.
Ivy	20	White	2nd year.	Health Sciences.

Note * Pseudonyms were used to protect the identity of participants

Table 2

Summary of themes and subthemes

Theme	Subtheme
Theme 1: Perception of the deal body	"…every person has a different body type..."
	"…I don't think anyone will ever be a 100% satisfied…"
	"…if you want to achieve something that is what you need to look like…"
Theme 2: A balanced lifestyle	"…you don't have a life, you only have you and your exercise then I think that is too much."
	"…just eat a balanced diet a bit of everything…"
	"…with the athletic-ideal you learn to see food as like a fuel."
	Exercise: planned, organized, methodical.
	"... spiritually, physically, mentally it makes me feel good."
	"…a symptom of disorder."
Theme 3: Societal pressures	"…girls feeling the pressure of society…"
	"…the media creates an image for what a girl should look like..."
	Relationships and the athletic-ideal.

SECTION 4: MANUSCRIPT 3

Practicing psychologists' understanding of the athletic-ideal internalization: Implications for classification and treatment

Submitted to

Qualitative Psychology

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Manuscript: Practicing psychologists' understanding of the athletic-ideal internalization: Implications for classification and treatment

Running head: PRACTICING PSYCHOLOGISTS' UNDERSTANDING OF THE ATHLETIC-IDEAL INTERNALIZATION

Abstract

This study explored how practicing psychologists make sense of the athletic-ideal internalization in clinical practice. This qualitative study followed a grounded theory approach to explore a purposive sample of nine psychologists' understanding of the athletic-ideal and subsequent implications for diagnostic classification and treatment. Results indicated that, when the athletic-pursuit encompasses balance and flexibility, the pursuit can lead to positive psychological and physical benefits. When the inverse is present, an obsessive-compulsive and rigid pursuit, psychological, physiological, social and occupational functions can be affected. In the absence of clear, evidence-based diagnostic classification guidelines for a pathological pursuit of the athletic-ideal, diagnostic classifications of eating disorders, muscle dysmorphia and associated depressive and anxiety disorders are often used. Psychologists follow an individualized form of treatment that includes cognitive-behaviour, family system and psychodynamic approaches. Research on the athletic-ideal internalization in clinical practice is still in its early stages and peer-reviewed evidence is needed to establish diagnostic criteria and course descriptions of a pathological pursuit of the athletic-ideal.

*Keywords***:** athletic-ideal, body dissatisfaction, body ideal, body ideal internalization, eating disturbances, internalization, obligatory exercise, thin-ideal

Practicing psychologists' understanding of the athletic-ideal internalization: Implications for classification and treatment

The pervasiveness of body dissatisfaction amongst women led to the *normative discontent* coined by Rodin, Silberstein, and Striegel-Moore (1984). Understanding the role that the body plays in a client's functioning is a significant aspect of psychological treatment.

The contemporary female body ideal has shifted from the thin-ideal to a more athletic-ideal body type (Benton & Karazsia, 2015; Dworkin & Wachs, 2009; Grogan, 2016; Homan, 2010; Homan, McHugh, Wells, Watson, & King, 2012). The athletic-body ideal can be described as a body that promotes the appearances of having a muscular upper body, toned abdomen and firmer lower body (Gruber, 2007; Robinson et al., 2017). In addition to being visibly toned, the athletic-ideal still incorporates an element of being thin or lean (Robinson et al., 2017; Uhlmann, Donovan, Zimmer-Gembeck, Bell, & Ramme, 2018). According to Petrie and Greenleaf (2011), society deems women attractive when they are lean and toned, but warns against being "too" toned or "too" muscular. Uhlmann et al. (2018) maintain that the athletic-ideal (labeled as fit-ideal in their study) can be seen as an amalgamation of a thin and muscular ideal and that women do not desire these ideals in isolation. Bell, Donovan, and Ramme (2016) argue that the athletic-ideal can subsequently be seen as even more unrealistic to attain than the thin-ideal, since muscularity in a female body can only be achieved with substantial weight and cardiovascular exercise combined with a dietary regime.

Historically in western society, the thin-ideal was regarded as the embodiment of beauty (Homan, 2010). In the past two decades, empirical research focused on the thin-ideal internalization and found it to be detrimental to both mental and physical health (Uhlmann et al., 2018). Research has indicated a clear relationship with thin-ideal internalization and

disturbance in body-satisfaction, disordered eating and compulsive exercise (Flament et al., 2012; Groesz, Levine, & Murnen, 2002; Homan, 2010; Stice, 2002; Thompson & Stice, 2001; Williams, Naidoo, & Spies 2018a).

Research studies on the outcomes of the athletic-ideal internalization are significantly less than for the thin-ideal. In recent years, however, the shift in the body ideal has started to gain merit, leading to more empirical studies on athletic-ideal internalization and its outcomes. According to these studies, athletic-ideal internalization was associated with disordered eating and exercise behaviours, while a poorer relationship with body-dissatisfaction was indicated (Bell et al., 2016; Homan, 2010; Ramme, Donovan, & Bell, 2016; Schaefer et al., 2015; Williams et al., 2018a).When the athletic-ideal, however, is conceptualized to include an element of thinness in addition to being toned, exposure studies indicate an increase in body dissatisfaction (Benton & Karazsia, 2015; Homan et al., 2012; Tiggemann & Zaccardo, 2015). Uhlmann et al. (2018) maintain that women who strive for the athletic-ideal engage in unhealthy behaviours and display body dissatisfaction equal individuals pursuing the thin-ideal. Moreover, they maintain that these individuals then engage in unhealthy behaviours to achieve muscularity – a combination that can be particularly dangerous (Uhlmann et al., 2018; Benton & Karazsia, 2015). In terms of disordered eating, Bell et al. (2016) found the athletic-ideal internalization to directly predict dieting and bulimic symptoms. In a study by Calogero, Davis, and Thompson (2004), the authors found that patients in a treatment center for eating disorders had higher scores on an athletic-ideal internalization measure than noneating disordered college students. As mentioned above, for the female body to attain a toned and muscular appearance, significant weight and cardiovascular exercise combined with a strict diet regime are necessary (Bell et al., 2016). This dietary regime may include the use of dietary sports supplements in order to facilitate this muscular and toned appearance (Ramme et al., 2016; Field et al., 2005).

Although supplement use is not inherently dangerous, the incorrect usage thereof, motivated by the pursuit of an unrealistic ideal, may lead to harmful consequences (Maughan, Depiesse, & Geyer, 2007; Maughan & Lea, 2004; Maughan, Greenhaff, & Hespel, 2011). Research has indicated a clear relationship with the athletic-ideal and disordered exercise behaviour. In a short-term longitudinal study conducted by Homan (2010), the author found the athletic-ideal internalization to predict change in compulsive exercise over a seven-month period. Bell et al., (2016) also found the athletic-ideal to directly predict compulsive exercise. In a recent study by Williams, Naidoo, and Spies (2018b), the authors explored the lived experience of female students with an athletic-ideal. These authors found that the pursuit of an athletic-ideal is not necessarily synonymous with pathological outcomes, as participants highlighted the importance of balance in their diets and exercising routines. When balance forms a central part of the athletic-pursuit, participants found the athletic-internalization to contribute rather positively to their functioning (Williams et al., 2018b).

The question that arises is how clinicians make sense of this athletic-ideal if the pursuit of this specific ideal becomes pathological and contributes to the need for clinical intervention. In terms of the athletic-ideal and the associated pathological behaviours listed above, eating disorders (anorexia nervosa, bulimia nervosa, other specified eating disorder), and body dysmorphic disorders (muscle dysmorphia) could be regarded as differential diagnoses in terms of the DSM-5. Comorbid diagnoses often associated with the above-mentioned disorders are depressive and anxiety-related disorders (American Psychological Association, 2013). These symptoms are often the presenting reasons for seeking therapy.

In terms of psychological treatment for eating disorders, Cognitive-behavioral therapy (CBT) is indicated as the first line of treatment for bulimia nervosa and also highly recommended for the treatment of anorexia nervosa (Fairburn et al., 2015; Hay, 2013;

Linardon, Fairburn, Fitzsimmons-Craft, Wilfley, & Brennan, 2017; Sadock, Sadock, & Ruiz, 2015; Wonderlich et al., 2014). Cognitive behavioral therapy combined with pharmacology (SSRIs) is typically used as a treatment for body dysmorphic disorders (Greenberg, Chosak, Fang, & Wilhelm, 2012; Phillip; 2017).

Additionally, Interpersonal therapy could be useful in the treatment of anorexia nervosa and bulimia nervosa in addressing associated interpersonal difficulties that could maintain these disorders (Murphy, Straebler, Basden, Cooper, & Fairburn, 2012). Family-based therapies are especially indicated and empirically supported when working with adolescents with eating disorders (Hay, 2013; Le Grange & Rienecke, 2018). Family-based therapy is beneficial to address family issues that may have contributed to the origin or maintenance of the eating disorder (Le Grange, Lock, Loeb, & Nicholls, 2010).

Research on the effectiveness of psychodynamic psychotherapy as a treatment approach to eating disorders is comparatively sparse compared to other approaches. Sadock et al. (2015) maintain that a psychodynamic psychotherapy process with anorexia nervosa is often very difficult due to patient resistance and claims its use in bulimia nervosa to be of limited success. Hilbert, Hoek, and Schmidt (2017) reported that psychodynamic therapy is less frequently indicated by international clinical guidelines for eating disorders compared to the other therapies listed above. In a study by Stefini et al. (2017), however, the authors found both CBT and psychodynamic psychotherapy were effective in the treatment of bulimia nervosa in female adolescents.

No studies could be found in the literature that specifically indicate or suggest treatment approaches for individuals with an athletic-ideal and pathological exercise and eating behaviours. Grounded theory (GT) is useful in research areas where the phenomenon under investigation is underdescribed. GT provides the researcher with data collection and

analysis strategies to generate a theory of social and psychological processes that is inductive in nature (Chamaz & Tweed, 2012). Ultimately GT provides an explanatory framework of understanding for the phenomenon under investigation (Willig, 2013). By utilizing GT, the aim of this study was to explore the understanding practicing psychologists had of the athletic-ideal. All participants had clinical experience of eating and body-related disturbances. This understanding included how psychologists clinically make sense of the athletic-ideal in terms of psychopathology, diagnostic classification, and implications for treatment.

Methodology

Design and Sampling

Since the aim of the study was to explore participants' client experience of the athletic-ideal to ultimately help inform their understanding of the athletic-ideal, the grounded GT approached was deemed most appropriate. Since this original publication of GT (Glaser & Strauss 1967), several versions of GT have evolved. Staying true to a constructivist paradigm, the researcher made use of Charmaz's (2006) constructivist version. This version of GT acknowledges that the researcher's role in the analysis of the data and its interpretation, as well as the interaction with the data, can influence the research process (Charmaz, 1995; Willig, 2013).

A purposive sample of HPCSA registered practicing psychologists with experience in working with eating and body related disturbances were included (n = 9). Participants were recruited via the several available Facebook groups for psychologists. Psychologists that posted in these groups, indicating a special interest and experience in working with eating and body-related disorders, were contacted via email to gauge interest in

participating in the study. A brief description and aims of the study were emailed to the participants. The participants' years of experience and number of clients with eating and body related disturbances were not specified since the depth of their experiences were of more value than time spent working in the field. As such, the clinicians' subjective proficiencies were regarded at face value. Interviews were scheduled on dates and times that were convenient for the participants and conducted at the psychologists' various places of practice.

Data collection and Analysis

GT can include data from various data collection techniques as well as existing texts and documents (Willig, 2013). For the purpose of this article, semistructured interviews (Appendix M) were conducted with the participants (Tweed & Charmaz, 2012). These semistructured interviews consisted of key questions concerning the phenomenon under investigation, however, the format allowed the researcher to diverge and explore a response in more detail, making way for a more in-depth understanding of a social phenomenon (Creswell, 2014). This method of inquiry allowed the researcher to explore the depth of experience of the participants. Examples of interview questions include: What is your understanding of the athletic-ideal? What is your understanding of the thin-ideal? What behaviour do clients display to achieve the athletic-ideal? Can you tell me about your most memorable client with an athletic-internalization? How do you make sense of the athletic-ideal in terms of diagnostic classification? If you could compile your own DSM criteria for in terms of the athletic-ideal, what would they be? What is your preferred treatment method in dealing with an individual with an athletic-internalization?

With GT, data collection and analysis follow a cyclical process and data was analyzed after the completion of each interview. Data was analyzed in accordance with GT principles,

theoretical sampling, coding, and constant comparative analysis (Willig, 2013). Theoretical sampling entails exploring additional case studies and interrelated data sets to develop new insight or to elaborate on existing emerging themes through the coding process (Chamaz, 2015). This iterative approach enabled the researcher to adjust the interview schedule when returning to the field and to add questions based on aspects that emerged during previous interviews and data analysis. Constant comparative analysis entails the ongoing process of the identification of similarities and differences among categories through a coding process. Initially, line-by-line coding processes were more descriptive in nature, but as coding progressed, a more analytic understanding of the data developed (Tweed & Charmaz, 2012; Willig, 2013). GT thus consists of a back-and-forth exploration between data and participants in order to reach theoretical saturation (Willig, 2013). In accordance with Glaser and Straus (1967), saturation is reached when no additional data can be found to develop categories. Saturation is important to ensure that the data can be seen as an adequate reflection of participants' perspectives (Kolb, 2012). The analysis suggested that data saturation was not entirely achieved in all areas. The conceptual framework described in the results section subsequently only focused on the areas where data was deemed saturated. Areas not fulfilling the criteria of saturation described above are listed in the limitation section.

Strategies to enhance trustworthiness

To ensure trustworthiness the four criteria as originally proposed by Guba (1981) – credibility, transferability, dependability, and conformability – were observed (Lincoln & Guba, 1985). To ensure credibility, thick descriptions aimed to stay as close as possible to the participants' original words and negative cases were continuously reviewed as the theoretical framework evolved (Shenton, 2004; Willig, 2013). Ongoing memo-writing of

the researcher's thoughts and interpretations formed part of an audit trail to assist the researcher to keep track of the unfolding analysis (Tweed & Charmaz, 2012; Willig, 2013). Conformability and dependability were ensured by regular supervision sessions, continued analysis of negative cases, and keeping a reflexivity journal (Appendix O).

Ethical Considerations

Ethical approval was obtained from the Health Research Ethics Committee (HREC) of the NWU Faculty of Health Sciences (Ethics number: NWU-00026-16-S1). Before the commencement of the interview, the informed consent information was emailed to the participants (Appendix L). A hard copy was provided to the participant to sign and time was allocated before the commencement of the interviews to answer any possible questions that the participants might have had. Consent for the interview to be digitally recorded was also obtained. After completion of the interview the researcher inquired if any discomfort was experienced during the interview. Participants did not report any discomfort, but rather commented that they enjoyed the interview and found the topic interesting. Anonymity was ensured by removing all identifiable particulars from transcriptions. Digital recordings and transcriptions of the interviews were saved on a password-protected computer. The printed transcriptions and data analysis documentation were stored in a locked cabinet at the North-West University, Potchefstroom Campus (COMPRES facilities) after completion of the study.

Results

This section aims to provide a conceptual framework of psychologists' understanding of how a pathological pursuit of the athletic-ideal could influence various domains of functioning. This framework was derived from practicing psychologists' understanding of

clients, who in the clinical experience of the practitioner, displayed an athletic-internalization. This section furthermore describes how participants diagnostically make sense of the athletic-ideal and explore treatment indications for psychological intervention. A summary of the themes can be found in Table 1.

The internalization of the athletic-ideal: Healthy or not?

In this study, the pursuit of the athletic-ideal was seen as a healthier alternative to the thin-ideal. The thin-ideal was seen to be more associated with unhealthy properties that with harming the body. It appears that the focus on exercise and building muscle leads to the development of some insight that the body needs proper nutrition to be able to perform athletically. Furthermore, the importance of performance could be used as a motivating factor in a clinical setting or therapeutic process to entice proper nutrition.

> "…I think it's a slightly healthier compulsion than an eating disorder…controlled eating but still within healthy limits a reasonable amount of exercise…" (Participant 9).

> "… I imagine people doing sport, I think about them maybe putting a bit more value and nutrition into their bodies as means to kind of enjoy the outdoors and enjoys their abilities and compete…" (Participant 8).

In this study, the participants suggested that the pursuit of the athletic-ideal can be considered a healthy ideal when the individual's cognitions and subsequent behaviours show evidence of balance.

Balance. The pursuit of an athletic-ideal can be regarded as healthy when it allows for flexibility in eating and exercise patterns. It includes flexibility regarding set exercise routines and eating plans to prevent the pursuit of the ideal from becoming obsessive or all-

encompassing to the extent that other elements of functioning are compromised. Balance also necessitates maintaining the body in a healthy state by reasonable amounts of exercise and good nutrition.

> "…the clients that are okay with skipping the gym. Uhm they are OK with having a slice of cake with a friend on a Wednesday afternoon. Uhm or they'll still go to pizza night but they'll eat the pizza and that will be OK…" (Participant 1).

Benefits of exercise. The act of exercising is seen as healthy when it adds value to the individual's life. This includes positive psychological effects, such as enjoyment, improvement in self-esteem, and the physical benefits on various body systems. When done in a group setting, exercise can also induce a sense of belonging. Once again, it is important to maintain balance by sosializing in other settings as well.

> "…there's not a preoccupation…there's not a fixation….It's not about being thin or being underweight it's actually just about being healthy, having more energy, sleeping better. You know, making lifestyle changes…" (Participant 3).

Caution of "healthier" label. The athletic-ideal is also deemed by society as socially acceptable and healthy, thus behaviours associated with reaching the ideal are subsequently not challenged or questioned. The pursuit of the athletic-ideal does not guarantee that behaviour associated with this ideal is always healthy. The socially acceptable status of the athletic-ideal as synonymous with healthy carries the inherent danger that possible pathological behaviours are overlooked. Psychologists identified that euphemisms or socially accepted terms are being used by their clients that mask destructive behaviours and thinking patterns. Examples include saying, "I want to be toned and lean" as opposed to, "I want to be thin and skinny". In terms of food, *clean eating*, *gluten-free* and *organic* are terms used to

describe eating patterns. This terminology seems to provide a sense of rationalization of subjective healthy eating and a healthy body ideal; therefore, it is vital that the clinician explores the possibility of a pathological pursuit.

> "… socially acceptable way to express other forms of pathology…" (Participant 9).

> "… It's more appropriate to say I'm going to just get my body strong, I'm just going to be healthy….People were not talking about I want to be thin, they were saying I want to be healthy. That was a euphemism for pathological eating habits…" (Participant 4).

Participants reported on their clients' restrictive eating patterns in of eating healthy foods. *Orthorexia* is a term used to describe a pattern of being pre-occupied with healthy eating (Dunn & Bratman, 2016; Koven & Abry, 2015) and was considered relevant to the clinical picture of an individual pursuing an athletic-ideal body type.

> "…So it may be a rigid adherence to…let's say like they'd only eat fresh foods and they're afraid of anything that's processed and as it progresses it begins to look more and more like an anorexic picture…" (Participant 3).

The internalization of the athletic-ideal: The effects of pathological pursuits on functioning

The absence of balance and flexibility in thought and behaviour impedes functioning in the psychological, social and biological domains of the individual. In this section, the effect of pursuing the athletic-ideal in a pathological and obsessive way in these various domains is discussed.

Psychological domain. This domain firstly includes the individual's understanding and evaluation of the self. Furthermore, cognitive, behavioural, and emotional domains are discussed.

***Impaired relationship with self*.** In this study, self-esteem and perfectionism were also identified as core underlying characteristics that can make an individual vulnerable to pursue the athletic-ideal in a pathological way.

Poor self-esteem. Poor body image which includes not being satisfied with body shape, weight and size was identified by participants. Individuals try to improve this impaired internal state by focusing on external behaviours. This entails a diminished sense of self-worth and value when not exercising. Participants reported that clients feel that they are not good enough and would be very self-critical if they were unable to exercise.

> "… self-esteem maintenance. So they don't exercise they don't feel good enough…" (Participant 7).

> "…woman particularly, they are trying to solve all their life problems through the expression of weight or athletic and that kind of thing. So they tied up their self-esteem and their identity in looking a certain way…" (Participant 4).

As discussed above, the pursuit of the athletic-ideal is becoming more and more socially acceptable. Society rewards the attainment of the ideal in the sense that the individual is seen as valuable and successful. Individuals compare themselves with other individuals who, in their mind, have reached this ideal. The attainment of the athletic-ideal is seen as a comment on the individual's personality as disciplined, driven and hardworking. The inverse leads to the individual feeling inadequate when they are unable to reach the perceived ideal.

"So whatever society portrays as the ideal they would want to meet….that ideal presents happiness, worth, uhm admiration…" (Participant 5).

Perfectionism. In connection with self-esteem, the belief that one should be perfect to be good enough was a prominent construct that emerged from the data. According to participants, clients set unrealistically high standards and expectations for themselves. Clients function from a dichotomous view where it is either perfection or failure.

"…probably an abnormal relationship with self, uhm defined or specified by high standards and a perfectionistic nature" (Participant 2).

"…its either I do this a 110% or it's not good enough. There is no room for error…" (Participant 4).

Cognitive aspect. As mentioned above, the absence of balance and flexibility in one's cognition leads to obsessional and rigid thought patterns. These two aspects dominate the individual's perception or views of food and exercise.

Obsessive-compulsive aspect. Cognition in terms of the athletic-ideal becomes obsessive when it becomes an all-consuming thought and ultimate priority. This pre-occupation with reaching the athletic-ideal will eventually impede other domains of functioning as a significant amount of time and emotional resources are dedicated to the pursuit

"…So then it will become pathological and when the thought processes become pathological when it becomes the only focus and it's the only thing that you prioritize and it's taking over all other aspects of life…" (Participant 5).

In anorexia nervosa, the number on the scale is never deemed as low enough and the mind-set of losing a bit more weight is often present. According to participants, this concept of an ever-changing goal post can also be present when pursuing an athletic-ideal with the individual pushing the body further and further in terms of exercise. Similar to eating disorders, the aspect of body distortion is present as the individual is unable to perceive gains or incorporate feedback from others.

> "…so when their perception of themselves and their body and their behaviours in relation to that start to become I think more and more distorted….they start getting compliments and all of that like from friends and family… they can't see it and the continue to push themselves like further and further" (Participant 3).

Rigidity. Connected to this obsessive-compulsive aspect, rigidity is present in their thought patterns, behaviour and personality structure. This includes the difficulty in challenging these individuals in terms of their thinking and behaviour as they're set in their ways of doing things with little room for any flexibility. This element poses a challenge in terms of treatment as the individual's willingness to change is paramount to the therapeutic process.

> "…these patients are so rigid. They are so set in their ways. They are so strong in their beliefs. They are so hard-core with what they believe and think and feel about themselves and their world" (Participant 2).

> "So they become very rigid around that routine and will not compromise in any way shape or form" (Participant 3).

Need for control. Closely associated with rigidity as identified is the need to feel in control over an aspect when other aspects in life are perceived to be out of control. The

athletic-ideal and associated behaviours to reach it in itself promote a sense of control and structure.

> "That's something that they can have control of…I'm going to go for something that I can control. So everything else around me seems to be falling apart, this I can control. So this I'm gonna go for, I can do this…" (Participant 8).

> "…focusing on something that they feel they have control over as opposed to actually dealing with the underlying like issues" (Participant 3).

View of food and exercise. According to participants, their clients' view of food and exercise are often influenced by obsession and rigidity and often include an element of irrationality. Food is not seen as neutral but has been placed in a good and bad category. Similar to an anorexia nervosa picture, a fear of these "bad" foods is present. This leads to avoidance and restriction of the perceived bad foods. In terms of exercise, views include fears of what would happen if they do not exercise, including the fear of gaining weight or losing their fitness. There is a notion that the amount of exercise to be undertaken is determined by the compensation that must be made for calories consumed.

> "So it becomes very distorted as well around this fear that if they're not exercising what is going to happen to them? Are they gonna lose their fitness in two days? Are they gonna gain all this weight? Are they gonna be called lazy? Are they gonna feel lazy?" (Participant 7).

When a cognitive obsession with reaching the athletic-ideal develops, it is often associated with compulsive behaviours. It was evident that these clients' cognitions of food and exercise inevitably became noticeable in their behaviours as discussed in the following section.

Emotional aspect. This emotional aspect of functioning is affected mostly when the individual is unable to perform associated behaviours that stem from the obsessional pursuit of the athletic-ideal.

Distressed when unable to exercise. All participants reported that clients experience distressing emotions, most notably anxiety and frustration when they are unable to exercise for some reason. When considering the obsessive-compulsive aspect discussed above, the inability to perform one's compulsion often leads to anxiety.

> "…anxiety comes to mind. So say for instance they are ill and they're advised against exercising. Uhm they would feel anxious about exercising or feel frustrated …I would say they were unhappy about it and perhaps even annoyed with the doctor saying that…" (Participant 1).

Frustration intolerance and emotional numbing. Participants reported that exercise and restrictive eating are often used as means to dampen or avoid uncomfortable emotions. It appears as though clients rely on the practicing of these behaviours for emotional regulation. Subsequently, when they are unable to exercise, or restrict and control their food, their mood is negatively affected.

> "… there's a disruption in terms of your emotional regulation or the individual's been through some kind of trauma…behaviour whether it's over-exercising or under eating it's often in service of numbing" (Participant 3).

> "Being dependent on exercise probably as well for mood maintenance." (Participant 2).

Behavioral aspect. According to participants their clients' views of food and exercise, rigidity and obsessive pursuit of the ideal contribute to restrictive eating and compulsive exercise behaviour.

Restrictive eating. Restrictive eating firstly includes the limiting and counting of calories. A heightened awareness of the intake of calories in conjunction with calories burned through exercise was reported. Restrictions in terms of food groups entail that preference is given to certain food groups such as proteins, fruits and vegetables while other groups such as starches and fats are limited or avoided. Specific eating times, being involved in the preparation and planning meals in advance form part of the very controlled picture of eating.

> "…even the whole clean eating phenomena… it becomes so rigid in some people's mind that they are just as restricted as other people it's just that they are cutting out many many types of food and then claiming to only eat healthy food but what's unhealthy is that there is no balance, there's no flexibility and there is actually a… a fear of food…" (Participant 7).

The use of supplements. While this sub-theme may not be widely represented across participants, it is nonetheless significant enough to be represented here. With individuals pursuing an athletic-ideal, the aspect of supplements to aid the process of reaching an athletic or muscular look is present. The use of supplements as a means to reach the athletic-ideal could be detrimental to health if used obsessively or not correctly.

> "… they're taking huge amounts of whey protein, creatine…a doctor isn't following them …and to me, it's just with all these combinations that they just do for themselves, I'm just concerned about the damage that is happening…" (Participant 8).

Excessive exercise. The amount of exercise deemed as healthy will vary amongst individuals. Responses indicated that exercise is rather labelled as excessive when an obsessional cognition is present, leading exercise to be carried out in a compulsive way. Duration and frequency can also be questioned when a rigid exercise routine interferes with other areas of functioning.

> "It's not a matter of quantity necessarily, I mean it can be a matter of quantity as well but I think it's more a matter of compulsion when there is an obsessive uhm train of thoughts and the exercising is done in a compulsive way" (Participant 9).

> "So when exercise obviously puts you physically in a position where you can't perform your duties or your responsibilities the way that you should. If it occupies your mind and your time to such a level as you can also not meet your responsibilities…" (Participant 6).

Physiological domain. The behaviour components of restrictive eating and excessive exercise can be associated with physiological consequences.

Physical injury through excessive exercise. In addition to amount and frequency, participants reported that exercise can also be regarded as excessive when the intensity, amount and frequency of exercise lead to physical injury. This also includes exercising while ill or not giving the body sufficient resting time. A connected premise is that the attainment of a visibly athletically fit body is a lengthy process. According to participants, their clients are eager to see quick results. This can lead to exercise and eating behaviours that could be damaging to their bodies.

> "So when I see it is where literally their not paying attention to injury. …It's when the doctor says you are injured do not go on the treadmill, you are injured do not sign up for that race. They'll do it anyway…" (Participant 4).

> "So you aspire to be something but you don't actually know the process that happened and obviously you gonna fill in the gaps and adolescents for example and even young adults are impressionable and so you'll do anything in extremes in order to reach that…" (Participant 3).

Other physiological consequences of restrictive eating and excessive exercise. Participants also reported on how the pathological pursuit of the athletic-ideal can influence the client's physical health. This includes impairment in functioning in reproductive systems (such as disruptions in the menstrual cycle).

> "…if there's bodily malnutrition uhm where the body can no longer function…" (Participant 6).

> "….So what is clear is that these women are going to battle to have children. Because that athletic-ideal isn't going to help them to menstruate. They not … they're not the natural female form…" (Participant 4).

Social domain. As mentioned above, when the athletic-ideal is pursued in an obsessive way, other areas of functioning are affected. Social (interpersonal) functioning is affected as the obsessive pursuit takes priority in the individual's life and takes them away from time spent with significant others. It may also lead to conflict when thoughts and behaviours are challenged.

Time with significant others. Individuals who obsessively pursue the athletic-ideal sacrifice quality time with family and friends as behaviours in pursuit of the ideal becomes a priority. This can also entail refraining from social events/gatherings that might place them in jeopardy to compromise their rigid beliefs of food and exercise.

> "So, in my opinion, it impairs your social functioning if you avoid going to your friend's house because there will be pizza there. Or you won't be able to exercise this evening due to attending the party. I think that is unhealthy" (Participant 1).

> "…You can have a normal fulfilling adult relationship because you're preoccupied with this..." (Participant 5).

Furthermore**,** clients also tend to avoid and withdraw from others who challenge or question their behaviours. Conflicts with significant others occur when confronted or challenged in of their behaviours. Commentary on their out of norm behaviours is viewed negatively.

> "…at the end of the day the whole mindset, the whole thought process is around getting to whatever you believe is that goal and then conflict obviously it cause conflict because people see this process people that love the person and they confront it. (Participant 5).

Rigid subgroup. Connecting and identifying with others is generally seen as a positive social aspect. This sub-theme includes the aspect of rigidity within the sub-group in terms of only socializing on this platform and neglecting other social responsibilities. Furthermore, a culture of rigidity and striving for perfectionism is cultivated and promoted within the sub-culture.

> "Social, they see being at the gym as social interactions. Yes, it can be but is not the only thing. So neglect of family life, neglect of social life…" (Participant 8).

> "… the environment resonates with their internal pathology so it's very difficult to try and bring it back because if they work in those perfectionistic environments they expect a certain ideal. It's almost like they become admired in those environments…" (Participant 4).

Occupational domain. Functioning in school or work-related activities is compromised due to the pursuit of the ideal being time-consuming. This includes problems with concentration, possibly due to physiological consequences or obsessive thought pattern.

> "…the thoughts almost like become obsessive, it's all they think about. It impacts on concentration …So if they sitting at work they're not exactly focusing on the task at hand…" (Participant 3).

Diagnostic understanding of pathological pursuit of athletic-ideal.

In the following discussion the researcher attempted to determine how participants make sense of the athletic-ideal in terms of diagnostic classification. Clinicians rely on their clinical judgment to explore pathological thoughts and behaviours. Their insight guides and informs the clinical focus and subsequent treatment approaches. Associated symptoms and differential diagnoses related to the athletic-ideal are discussed.

Description of the athletic-ideal internalization. Participants' understanding of the athletic-ideal internalization includes a conceptualization of the pursuit of a body type that emphasizes a muscular and toned appearance. In addition to being toned, the element of being lean and thin is seen to be still very much part of the overall appearance. The pursuit of

this ideal entails following a specific diet and exercise regime. Emphasis is, however, placed on exercise as an important element in the athletic –ideal. Furthermore, this ideal entails an aspect of being physically fit and the ability to perform and compete in various sporting activities.

> "…My understanding is that girls, mostly girls, would like to look fit and have a low fat percentage, uhm, and perhaps have some muscles and that they strive for that, looking like that..." (Participant 1).

> "…it's not only about being thin but is about being perceived should be you know thin and strong and firm and toned. ….but is no longer good enough too just be seen like as the perfect weight your body need to look a certain way or to emulate a certain a certain ideal.." (Participant 3).

Clinical Judgment: Identifying aspects for clinical attention. Participants noted that, in the absence of clear, evidence-based diagnostic classification guidelines, it falls onto the clinician to identify aspects of the clinical picture to guide diagnosis (and subsequent treatment). Participants reported that the pathological pursuit of the athletic-ideal is not reported as an area of concern or as the presenting problem that guides their clients to seek treatment. The potentially pathological elements in their thinking and behaviour towards food and exercise only become evident when the clinician explores and probes further as part of the clinical exploration.

> "…it's never a presenting problem. I've never had anybody come in and say I'm exercising compulsively. People never see it as a problem..." (Participant 9).

The pursuit of the athletic-ideal is often seen as healthy and possible pathological behaviours are overlooked. Thus, a possible diagnosis is masked by this perception that the

individual is healthy. This includes, for example, that the client may fall into a healthy weight category, yet remains stuck in obsessive thoughts and destructive behaviours.

> "…if the focus is so much around you know toning and creating muscle to have an athletic frame then I think the uhm the anorexia on some level might be a bit masked because people might look healthier than what they really are…" (Participant 5).

The understanding of the athletic-ideal could be placed on a continuum. Clinical judgment is necessary to identify the progression from a healthy pursuit to a pathological pursuit that requires clinical intervention. This includes the notion that an athletic-ideal presentation could develop into a diagnosable eating-disorder or be a contributing factor to the diagnosis of another mental disorder.

> … I think they all report a certain need for the athletic body type but it … it goes into a pathological situation where they then just completely and utterly overdo it and starve their bodies in the process" (Participant 6).

Associated symptoms, differential, and co-morbid diagnoses. Participants reported uncertainty as to where to categorically place an individual whose clinical picture included a pathological pursuit of the athletic-ideal. The DSM 5 does not provide a stand-alone classification/diagnosis in this regard. Since the pathological pursuit of the athletic-ideal shares characteristics of disordered eating behaviours, anorexia nervosa and bulimia nervosa could be regarded as the most obvious differential diagnoses that are considered. Participants reported a stronger association with anorexia nervosa as the client's underlying personality seemed to share the characteristics of perfectionism and rigidity. Participants shared the notion that the athletic-ideal and thin-ideal can be described as different

presentations but that the underlying features are very similar. These include aspects such as perfectionism, obsessiveness and anxiety surrounding the body.

> "…I think that if the behaviour is very similar to an anorexic it's just the weight that's the difference. I think you can think of it very much as an anorexic type of diagnosis..." (Participant 7).

> "So the athletic-ideal and the thin-ideal I would probably go back to that statement at the foundational level they are probably somewhere in the same ballpark of struggling with the same type of issue but the presentation is different" (Participant 2).

Participants furthermore recognized that an element of body distortion is present as clients presented with a disturbance in the way their body weight, size and shape are perceived. This suggests that an association with body dysmorphic disorder can be made.

> "…they don't see their own definition. So someone else can clearly see the definition and they can't see their own definition. So there's dysfunction in that there are… body dysmorphia kind of thing…" (Participant 7).

Participants furthermore reported that anxiety and depressive symptoms were often part of their clients' clinical picture.

> "…not just pure depression or just pure anxiety the mixed bag where you got depression and anxiety presenting themselves together. So a lot of that …I'd say most of them..." (Participant 8).

Participants reported that clients present with rigidity in their personality structure similar to the rigidity in clients with a diagnosis of anorexia nervosa. As discussed above, the aspect of perfectionism is often part of the clinical picture. Furthermore, participants

identified borderline, narcissistic and obsessive-compulsive personality traits with some of their client presentations.

> "…I feel that there's this underlying personality structure, disorder and I'm going to the DSM-IVR … I'm looking at cluster B, particularly. The cluster B's are in my experience very prone to this athletic built kind of thing…" (Participant 8).

> "…the athletic type can become very rigid and it's that rigidity that is more seen in your anorexia. So I think it's looking at rigidity in personality…" (Participant 4).

Treatment indications

As discussed above, pathology in terms of the pursuit of an athletic-ideal was seen to be a different presentation of similar underlying factors found in other eating and body related disorders. Participants mentioned following a similar approach to therapy as they would for eating disorders.

Multidisciplinary approach. The treatment of eating and body related disorders includes the involvement of various professions in order to address specific areas of functioning. On a physiological level, the involvement of a dietician and medical professional (psychiatrist or general practitioner) was deemed as important by participants. The involvement of the medical professional includes evaluating physical consequences and also addressing the associated psychological symptoms (anxiety, depression) through medication. The additional aspect of exercise prominent in the pursuit of this ideal calls for the involvement of professionals such as a biokineticist or sports specialist.

> "…obviously for me, I need to work as part of a multi-disciplinary team. Especially when you managing like medical consequences. So to have a psychiatrist involved and to have a dietician involved as well" (Participant 3).

Treatment approaches. Participants predominantly reported working from Cognitive-behavioral, Psychodynamic and Family system psychotherapy/psychological approaches to address concerns related to the athletic-ideal.

Cognitive-behavioral approach. Participants following this approach reportedly focused on challenging the client's beliefs around their bodies and the perceived ideal.

> "…the distorted thought and perceptions around their bodies and how that then influences you know their actions in service of that and how do we challenge those like practically in terms of like real life…" (Participant 3).

> "…I use a lot of CBT because there's a lot of irrational thoughts, there's a lot of irrational ideas around food and eating and themselves..." (Participant 6).

Insight-orientated approaches. This approach entailed longer-term therapy aimed at understanding and exploring where pathology stems from.

> "… I work from a psychoanalytic perspective and I just believe in that perspective for everybody … behaviour is a symptom it's always a symptom of something else and it's sort of to understand what that other thing is. What is this defence mechanism doing for them? How's it serving them? Getting a bit of insight into that and start to look at sort of what it would be like for them to change…" (Participant 7).

This approached included looking at dysfunctional early attachment patterns that inform the individual's perception of the ideal body and relating to others. Participants

furthermore reported on the aspect of regression. This includes emotional immaturity and resistance to becoming a woman or "growing up" and the need to be taken care of.

> "Something in their childhood the attachment that they had was dysfunctional and because of that attachment, this is now something that prone for them this is something that they can attach to…it's almost for me like a pseudo mom the gym and it's providing all the feel-good aspects and therefore it makes them feel good." (Participant 8).

> "I think that…that obsessive kind of pursuit somehow whether it's conscious or not is about almost sort of keeping that pre-pubescent body" (Participant 3).

Family System approaches. This approach entailed understanding the behaviour of the individual in terms of their function in the system. Participants deemed it beneficial to involve family members in the therapeutic process to address pathology in the system. Although participants noted seeing more and more young adults and adults that strived for an athletic body, adolescence was seen as the most vulnerable age for the development of an ideal body. This approach was especially recommended when adolescent participants sought therapy.

> "…if you work with your adolescent uhm yes family therapy is definitely part of the process because it's communicating something in the family…" (Participant 5).

Relationship dynamics within the family that can possibly be enabling dysfunctional behaviour were noted by participants. These include modelling of the athletic-ideal and related behaviour by parents and also parental expectation and validation of related behaviours.

> "…if that were a way in which you elicited love from your parents then that is how you continue. So if your father was an athlete or your mother was a sportsperson …Then you continue that. It is still a parental template" (Participant 4).

Regardless of the therapeutic approach followed by the participants, it was evident that participants held the notion that every client's case should be viewed as unique and different. This includes understanding the subjective world of the individual and exploring what the function of the behaviour is for the individual. The focus of therapy is not necessarily on eating and exercise behaviour but rather on exploring the underlying factors that contribute to the manifestation of these symptoms. These individual aspects will then govern the goals for the therapeutic process and also direct the approach that would benefit the client. Subsequently, participants often reported drawing from the different approaches discussed above to address the identified needs of the client.

> "…you do the history taking, you start to understand the bigger picture, the person. A big factor would be understanding the function of the behaviour, what are they getting out of it? Obviously, it's different for each person…" (Participant 7).

> "… depending you know depending on the individual or something that's a little bit more like insight oriented. I am … I'm predominately like systemically trained but again it depends on the needs like the needs of the individual…" (Participant 3).

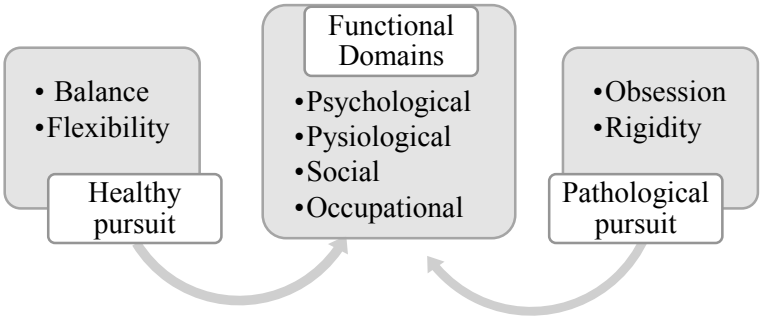
Discussion

Research suggests that an athletic-internalization appears to be less detrimental than a thin-internalization (Homan 2010; Ramme et al., 2016; Schaefer et al., 2015). Results indicated that the clinicians in this study agreed to some extent that the pursuit of the athletic-ideal in itself holds some protective elements. Participants reported that individuals with an

athletic-ideal held some insight that nutrition was important in order to sustain performance and build muscle. Thus, the healthy pursuit of the athletic-ideal could be seen as a deterrent to restrictive eating. It is important to note that the notion that the athletic-ideal could be a healthier alternative than the thin-ideal has very specific conditions. As suggested by Williams et al. (2018b), for the athletic-ideal to maintain its "healthy" status, the components of balance and flexibility are paramount. The characteristics of balance and flexibility inherent in this pursuit will subsequently lead to the individual enjoying the positive physical and psychological benefits that exercise has to offer. The irony is that often, behind this "healthy" label, pathological behaviours can be disguised or rationalized. This is demonstrated by Uhlmann et al. (2018, p. 23) in a study appropriately labeled as "The fit beauty ideal: A healthy alternative to thinness or a wolf in sheep's clothing?" The pursuit of the athletic-ideal is not automatically synonymous with being healthy and it is important to take a closer look at how the pursuit could affect functioning when the conditions of balance and flexibility are not adhered to.

A conceptual framework (Figure 1) that developed from the data indicates that the absence of balance and flexibility could lead to the athletic-ideal being pursued in a pathological way. In other words, when the pursuit of the athletic-ideal becomes rigid or entails an obsessional element, distorted thinking patterns and compulsive behaviour become evident. This, in turn, affects other areas of functioning (physiological, social and occupational).

Figure 1



In terms of psychological functioning, all participants noted that they had identified an obsessive-compulsive and rigid thinking pattern in their clients who pathologically pursued the athletic-ideal. Research has indicated significant relationships between obsessive-compulsive traits, perfectionism and rigidity (Anderluh, Tchanturia, Rabe-Hesketh, & Treasure, 2003; Anderluh, Tchanturia, Rabe-Hesketh, Collier, & Treasure, 2009). In the current study, it appeared that an impaired relationship with the self can include poor self-esteem, body dissatisfaction, and perfectionistic beliefs. Research has shown a relationship between poor self-esteem, perfectionism and eating and body-related disorders such as anorexia nervosa and body dysmorphic disorder (Farstad, McGeown, & von Ranson, 2016; Hartmann, Thomas, Greenberg, Matheny, & Wilhelm, 2014; Peck & Lightsey, 2008; Stice, 2002; Wade, O'Shea, & Shafran, 2016).

When cognitions and definitions of the self are rooted in obsessiveness and rigidity, associated behaviours, in turn, become compulsive and rigid. This study indicated that behaviours commonly found in eating disorders, such as restrictive eating and compulsive exercise (American Psychiatric Association, 2013), very much continue to form part of a pathological athletic-ideal pursuit. An additional concern with the athletic-ideal is the maladaptive use of supplements to attain the toned or muscular component of this ideal (Field

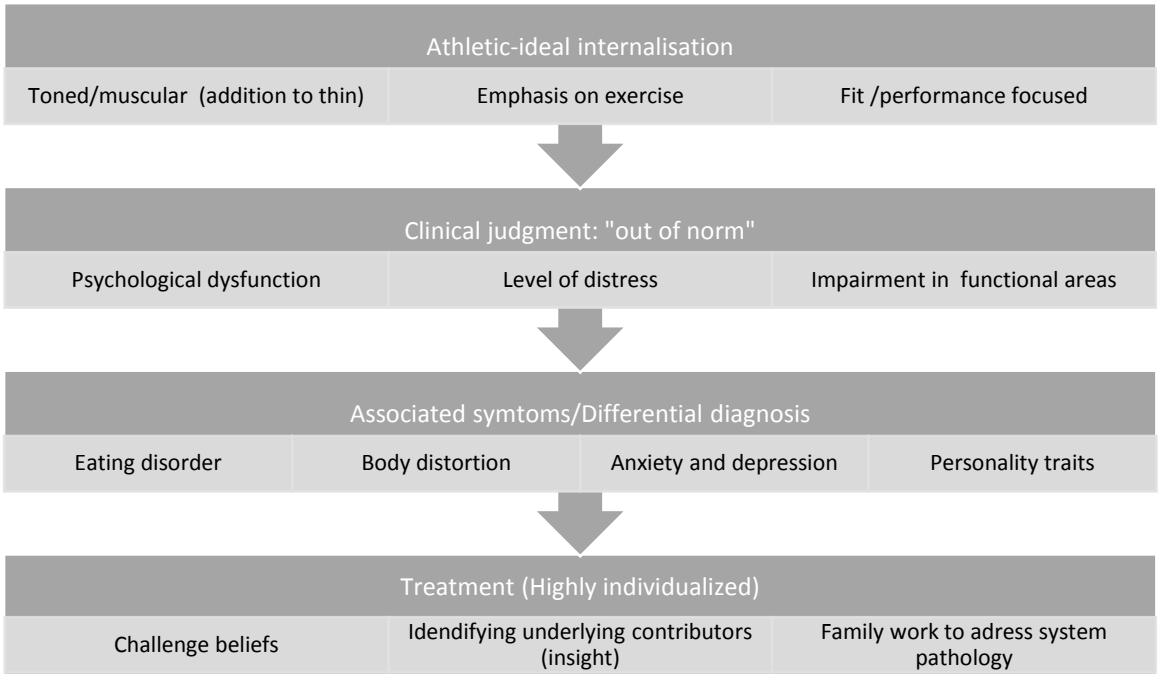
et al., 2005). A concern with the use of this seemingly harmless nutritional substance is the danger that usage could progress from protein powders and shakes to illicit substances such as anabolic steroids (Hildebrandt, Harty, & Langenbucher, 2012).

Results indicate that individuals with the pathological pursuit of the athletic-ideal attempt to maintain self-esteem through rigid exercise and control, but often very restrictive eating patterns. Emotional distress (frustration, depression and anxiety symptoms) are evident when clients are unable to comply with a very rigid and structured exercise routine. Research has shown an association with exercise to control weight or change body appearance such as toning and eating disturbances, body dissatisfaction, and low self-esteem (Furnam, Badmin, & Sneade, 2002; LePage & Crowther, 2010; Strelan, Mehaffey, & Tiggemann, 2003) and obligatory exercise (Thome & Espelange, 2007; Pritchard & Beaver, 2012).

Compulsive exercise combined with restrictive eating in turn also affects the physiological functioning of the individual. In this study, participants reported that clients exercise to the point of and/or despite physical injury. Physical health is often compromised as indicated by disruptions in the menstrual cycle. Finally, social and occupational functioning is compromised as the pursuit of the athletic-ideal becomes an all-encompassing priority and work, family and friends are neglected. This is in line with the literature claiming that exercise is considered excessive when it interferes with other important activities and is continued despite injury and other medical difficulties (American Psychiatric Association, 2013).

In Figure 2, the process of identifying, classifying, and specified treatment followed by the psychologist in their clinical practice is indicated.

Figure 2



Clinicians' understanding of the athletic-ideal was in line with the description of the athletic-ideal in literature, that is, a visibly toned body in addition to being lean and thin (Robinson et al., 2017; Uhlmann, 2018). Additionally, the notion of athleticism or fitness, was also reported, highlighting the prominent aspect of exercise in this presentation (Homan, 2010; Bell et al., 2016).

According to Barlow, Durand, and Hofmann (2018, p. 4), abnormal behaviour is defined as "a psychological dysfunction within an individual that is associated with distress or impairment in functioning and a response that is not typical or culturally expected". In this study, a major concern raised by the psychologists was that the pursuit of the athletic-ideal had become increasingly socially accepted and endorsed. As mentioned above, behaviours motivated by underlying obsessive-compulsive thoughts or driven by a self-critical are not seen by the clients as a concern. This healthy notion or belief that one is healthy may keep them out of the therapy room. As mentioned above, individuals with the athletic-ideal seen in

clinical practice often participate in group-based activities (e.g., cross-fit, running, cycling,). Gordon-Elliott (2016) reports that diagnosis and treatment of athletes or individuals who participate in sport can be quite challenging because they will have numerous explanations for their behaviour in terms of performance enhancement or the sports culture. Subsequently, the client's reason for seeking treatment may not involve behaviours associated with reaching the athletic-ideal, but rather for comorbid depression, anxiety and relational problems. Clinicians must rely on their clinical observation and interview skills to identify whether psychological dysfunction, emotional distress, and impairment in areas of functioning are indeed present.

In terms of diagnostic classification, there is an absence of clear, evidence-based diagnostic classification guidelines for a pathological pursuit of the athletic-ideal. An eating disorder diagnosis, more specifically anorexia nervosa, was seen as the most obvious differential diagnosis. The underlying personality structure in terms of perfectionism, rigidity and the need for control was seen as characteristic in individuals with anorexia nervosa and clients in treatment with a pathological pursuit of the athletic-ideal. According to the DSM- 5, a crossover between the subtypes of anorexia nervosa over the course of the disorder is not uncommon (American Psychological Association, 2013). A related hypothesis is that a crossover from the more classical anorexia presentation to a more athletic-type can be possible or that an athletic-ideal pursuit can develop into a more classic anorexia presentation. According to the DSM-5, individuals with anorexia nervosa present with a disturbance in the self-evaluation of their body shape and weight (American Psychiatric Association, 2013). Similarly, an element of body distortion in terms of muscle definition was reported. When distortion of muscle definition becomes evident and turns into the focus of clinical attention, a differential diagnosis of muscle dysmorphia (specifier of body dysmorphic disorder) can be considered (American Psychiatric Association, 2013). Body

dysmorphia falls into the category of obsessive, compulsive, and related disorders in the DSM-5 and ties into the obsessive-compulsive aspect reportedly observed with their clients. Furthermore, participants reported diagnosing based on observed depressive and anxiety symptoms. In terms of comorbidity, the DSM-5 reports that bipolar, depressive and anxiety disorder often co-occur with anorexia nervosa and depressive disorders in bulimia nervosa (American Psychiatric Association, 2013).

While clients do not necessarily meet the criteria for a personality disorder, specific personality traits such as rigidity, obsessive-compulsiveness, borderline, and narcissistic traits were observed. In a meta-analysis and systematic review to explore eating disorders and personality disorders, Farstad et al. (2016) found avoidant and obsessive-compulsive personality disorders to be more associated with anorexia nervosa restricting type. Borderline and paranoid personality disorder are more frequently diagnosed in anorexia nervosa, binge-eating/purging type, and bulimia nervosa (Farstad et al., 2016; American Psychiatric Association, 2013).

Treatment often includes a multidisciplinary approach and specifically involves a medical professional when psychological consequences are noted. In line with current treatment efficacy studies (Hay, 2013; Fairburn et al., 2015; Linardon et al., 2017; Sadock et al., 2015), participants reported on using cognitive-behaviour approaches in order to challenge irrational dysfunctional thinking patterns and identify core beliefs that inform pathological eating and exercise behaviours. Similarly, as with adolescents with anorexia nervosa (Le Grange et al., 2010), family-based treatment was deemed important to address familial pathology that may be enabling the dysfunctional behaviour. The use of insight-orientated therapies in terms of understanding attachment difficulties were reported.

According to Tasca and Balfour (2014), unmet attachment needs lead to maladaptive defences and eating disorder symptoms as means of coping with the vulnerability.

The individualized nature of therapy was emphasized by all participants and the importance of entering the subjective world of the client to understand associated behaviour was seen as paramount to the therapeutic process.

Conclusion

This research article is novel in its attempt to explore how clinicians in the field of eating and body related disorders make sense of the athletic-ideal and its presentation in clinical practice. Results indicated that the shift to an athletic-ideal is also emerging in clinical practice. Having an athletic-ideal internalization in itself can't be labeled as pathological. When the individual with this internalization practices balances and maintains a sense of flexibility, the pursuit of this ideal can contribute to the development of a healthy lifestyle. Inversely, when the pursuit of this ideal becomes rigid and obsessional, dysfunction in various areas of functioning becomes evident. In order words, having an athletic-ideal does not necessarily mean that the individual is pathological in their pursuit but when pre-disposing factors such as obsessive-compulsive, rigidity and perfectionism traits are inherent in the personality, the individual is at risk to pursue any ideal in a pathological way.

The healthy and socially accepted connotation of the athletic-ideal internalization has an inherent danger. Individuals who partake in behaviours that are detrimental to their well-being are overlooked by significant others or missed by professionals. Research on the athletic-ideal and its relevant outcomes is still in its infancy and it seems that the field of psychology has not yet reached consensus on the outcomes of internalizing an athletic-ideal, as is evident in the ambiguous findings reported. Currently, there is also an absence of clear,

evidence-based diagnostic classification guidelines for a pathological pursuit of the athletic-ideal. Peer-reviewed evidence is needed to establish diagnostic criteria and course descriptions.

Limitation and Recommendations

A major limitation of the study is that complete data-saturation was not obtained in all sub-themes that emerged from the data. An area where data-saturation was especially lacking was in terms of the demographics of the clinical population, athletic-ideal internalization in terms of professional athletes and bodybuilders. A recommendation is to include psychiatrists, dieticians, and biokineticists in order to triangulate data with different professionals and perspectives on the athletic-ideal. A further recommendation is to interview participants with a clinical diagnosis of eating or body related disorders and incorporate their lived experiences with clinical professional views.

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Tables

Table 1

Summary of themes and subthemes

Theme	Subtheme
1. The internalization of the athletic-ideal: Healthy or not?	Balance
	Benefits of exercise
	Caution of "healthier" label
2. The internalization of the athletic-ideal: The effects of pathological pursuits on functioning	Psychological domain
	Physiological domain
	Social domain
	Occupational domain
3. Diagnostic understanding of pathological pursuit of athletic-ideal.	Description of athletic-ideal internalization
	Clinical judgment: Identifying aspects for clinical attention.
	Associated symptoms, differential and co-morbid diagnoses
4. Treatment indications	Multidisciplinarily approach
	Treatment approaches

SECTION 5: SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

This research study showed that the popular slogan Strong is the New Skinny unquestionably holds merit. The general aim of this study was to explore the extent to which the athletic-ideal, body image and eating disturbances influenced a select South African sample. This thesis had three specific aims that were addressed in three separate manuscripts. In this section, the main conclusion of the three manuscripts as well as an integrative conclusion is given. The contribution of the research thesis, limitations and future recommendations are also presented.

For the past two decades, research has mainly focused on the thin-ideal internalization. There is an abundance of studies that indicate that the thin-ideal is associated with body dissatisfaction, disordered eating, and compulsive (obligatory) exercise (Flament et al., 2012; Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002; Homan, 2010; Stice, 2002; Thompson & Stice, 2001). In recent years, there has been evidence that the depiction of the ideal female body has shifted from a thin-ideal to an athletic-ideal. The athletic-body can be described as visibly toned and muscular (but not too muscular) in addition to being thin (Benton & Karazsia, 2015; Grogan, 2016; Gruber, 2007; Homan, McHugh, Wells, Watson, & King, 2012; Petrie & Greenleaf, 2011; Robinson et al., 2017; Uhlmann, Donovan, Zimmer-Gembeck, Bell, & Ramme, 2018). The athletic-ideal and associated aspects such as body dissatisfaction, disordered eating, and exercise have not been researched to the extent of the thin-ideal. Research results concerning disordered eating and body satisfaction are ambiguous.

The majority of studies did not find an association between the athletic-ideal and body dissatisfaction (Bell, Donovan & Ramme, 2016; Homan, 2010; Ramme, Donovan &

Bell, 2016; Schaefer et al., 2015). Nevertheless, there is every indication that when the athletic-ideal is conceptualized as an ideal that includes a toned as well as thin appearance, an association with negative body image and/or body satisfaction is evident (Benton & Karazsia, 2015; Homan et al., 2012; Tiggemann & Zaccardo, 2015; Uhlmann et al., 2018). Ambiguity is also evident from research results regarding the association between the athletic-ideal and disordered eating. While some studies show an association between disordered eating and the athletic-ideal (Bell et al., 2016; Calogero, Davis, & Thompson, 2004; Pritchard, Parker, & Nielsen, 2011), other studies failed to prove a significant relationship (Homan, 2010; Schaefer et al., 2015). There is consensus in research, however, that an athletic-ideal internalization can predict compulsive exercise (Bell et al., 2016; Homan, 2010; Pritchard et al., 2011; Uhlmann et al., 2018).

Main conclusions: Section 2 / Manuscript 1: Internalization of the athletic-ideal in a female South African student sample.

In the first manuscript a quantitative cross-sectional survey design was used to explore the relationship between the athletic-ideal internalization and its association with body dissatisfaction, disordered eating and maladaptive exercise behaviours. Participants included on-campus female students (N = 476) from the three campuses of the North-West University (NWU) in South Africa. Participants completed four online self-report questionnaires (SATAQ-4, MSBSR-AS; EAT-26, OEQ) to explore body-ideal internalization, body satisfaction, disordered eating, and obligatory exercise respectively. Results found that the athletic-ideal is indeed gaining popularity in a South-African context. Significant relationships between athletic-internalization, obligatory exercise and dieting were found, yet yielded a poor relationship with body dissatisfaction. Similar to other studies, it appears that the athletic-ideal is less detrimental to body dissatisfaction and dieting than the

thin-ideal (Bell et al., 2016; Homan, 2010; Schaefer et al., 2015). Furthermore, this study also found a stronger association between obligatory exercise and the athletic-ideal than with the thin-ideal. According to Bell at al. (2016), body dissatisfaction cannot be seen as a mediating role in eating and exercise disturbances. This suggests that, despite the weaker relationship with body dissatisfaction, there is a need for more in-depth exploration of how eating and exercise behaviour is influenced when an individual subscribes to the athletic-ideal.

Main conclusions: Section 3 / Manuscript 2: Athletic-ideal internalization: The lived experiences of female students

Since minimal research has been conducted on the lived experiences of individuals subscribing to the athletic-ideal, the second manuscript answered the call for a more in-depth investigation of the athletic-ideal. An exploratory qualitative approach with an interpretative phenomenological design was used to explore nine participants' perceptions of their athletic-ideal internalization. Data collected from semistructured interviews was analyzed through Interpretative Phenomenological Analysis (IPA). Results indicated that, although participants indicated that they were not completely satisfied with their bodies, there appeared to be protective elements in their actions. Protective elements included insight regarding the attainability of a healthy body; internal locus of control concerning body satisfaction, and a stronger focus on a healthy-body. Results indicated a prominent theme of balanced eating and exercise. Participants emphasized the importance of a balanced, nutritious diet that includes all food groups and allows for occasional deviation. Balanced exercise implied a work-out program that did not impede important occupational, academic or social activities. Following the guidelines of a healthy lifestyle and a balanced exercise

routine appears to act as a protective factor against body image disturbances, maladaptive eating, and compulsive exercise.

Main conclusion: Section 4 / Manuscript 3: Practicing psychologists' understanding of the athletic-ideal internalization: Implications for classification and treatment

With the third manuscript the aim was to explore how practicing psychologists (N = 9) make sense of the athletic-ideal internalization in clinical practice. This qualitative study followed a grounded theory approach aimed to explore the psychologists' understanding of the athletic-ideal and subsequent implications for diagnostic classification and treatment. Findings suggested that, if the athletic-pursuit included balance and flexibility, the pursuit set in motion positive psychological and physical benefits that accompany a healthy lifestyle. The opposite was correspondingly indicated: When the pursuit involves obsessive-compulsive and rigidity elements, impairment in psychological, physiological, social and occupational domains becomes evident.

Results also indicated that there is an absence of clear, evidence-based diagnostic classification guidelines for a pathological pursuit of the athletic-ideal. Psychologists subsequently relied on eating disorders, muscle dysmorphia and associated depressive and anxiety disorders as diagnostic classifications. Psychologists reported using approaches grounded in behavioral, family system and psychodynamic methods. Regardless of approach, the unique individualized, client-based formulation in treatment was emphasized. This study indicated that there is a need for peer-reviewed evidence to establish diagnostic criteria and course descriptions of a pathological pursuit of the athletic-ideal.

Integrated conclusion

The manuscripts firstly indicated that the athletic-ideal has indeed started to gain popularity amongst this sample of South-African women (Manuscript 1 and Manuscript 2), or in the client base of the psychologists studied in Manuscript 3. It must be stated that these studies have a demographic limitation (as indicated in the component sections of the project). More studies are necessary to clarify the applicability of findings to more representative populations.

The notion that the athletic-ideal is not associated with body dissatisfaction as suggested by research was confirmed in Manuscript 1. Qualitatively, however, Manuscript 2 and 3 indicated that, as Rodin, Silberstein, and Striegel-Moore (1984) suggested, the "normative discontent" women have with their bodies is still very much present despite an athletic-ideal internalization. Participants in Manuscript 2 indicated that, although they were mostly satisfied with their bodies, there was room for improvement regarding weight loss and toning. This manuscript also, however, indicated that, when the athletic-ideal internalization promotes having healthy-body as opposed to appearance-related ideals, it can serve as a protective element in terms of body dissatisfaction. In Manuscript 3, individuals in therapy who were deemed by the psychologists to have an athletic-ideal (pathological pursuit) indicated an impaired relationship with the self. Impaired relationship with the self was often associated with body discontent. These studies suggest that the relationship between the athletic-ideal and body satisfaction is quite complex. A hypothesis is that, when the athletic-ideal pursuit contains balance, flexibility and a greater focus on being healthy, it can contribute to body satisfaction. The inverse, an obsessional, rigid and appearance-based athletic-ideal pursuit can, in turn, lead to body dissatisfaction similar to that of the thin-ideal.

In Manuscript 1, it became clear that the athletic-ideal has associations with disordered eating and a strong association with obsessive/compulsive exercise. These

findings are supported by research. Manuscript 3 also indicated that, when an athletic-pursuit contains elements of obsessive-compulsive and rigidity, behaviours such as restrictive eating patterns and compulsive exercise are noted in their patients. Such behaviours subsequently also impede other areas of functioning.

Manuscript 2 and 3, however, highlighted that the internalization of the athletic-ideal does not automatically predict that pathology is present in eating and exercise behaviours. In both manuscripts, it was evident that, when the athletic-pursuit is followed in a balanced way, it can contribute to an individual following a healthy lifestyle regarding eating and exercise. Homan et al. (2012), speculated that the athletic-ideal internalization role in influencing motivation for exercise could contribute to health benefits. This speculation is supported by research as exercise for health-related reasons, mood regulation and enjoyment are related to higher levels of body satisfaction and self-esteem and a decrease in disordered eating (Homan & Tylka, 2014; Prichard & Tiggemann, 2008; Strelan, Mehaffey, & Tiggemann, 2003; Vartanian, Wharton, & Green, 2012; Tylka & Homan,2015). As indicated by the results of Manuscript 2, participants' pursuits of the athletic-ideal body were more focused on health-related goals than on appearance-related ideals. In Manuscript 3, the reseacher cautions that the "healthy" label should be carefully examined by clinicians as euphemisms or socially accepted terms are being used by their clients that sometimes mask destructive behaviours and thinking patterns.

In conclusion, the athletic-ideal cannot merely be regarded as healthy or labeled as unhealthy. The pursuit of an athletic-ideal can be healthy or unhealthy depending on whether the pursuit adds to, or subtracts from functioning. From Manuscript 2 and 3 it is evident that, when the pursuit is followed in a balanced way, it can lead to physical and psychological benefits.

The contribution of the study

Since the athletic-ideal is a relatively new phenomenon, studies often differ on both the name and conceptualization of the athletic-ideal (Ramme et al., 2016). Research and research outcomes on the internalization of the athletic-ideal are also sparse and often ambiguous and the relationship vague (Homan, 2010). This indicates that research on the athletic-ideal is still in its early stages and more studies, quantitative and qualitative, are needed to establish concurrency in the research community. The overall contribution of this research thesis was to add to the understanding of the athletic-ideal within the studied sample. This research thesis is the first of its kind to explore the athletic-internalization and its indicated outcomes of body dissatisfaction, disordered eating, and exercise behaviour in the South-African context.

Research studies on the athletic-ideal have for the most part been quantitative in nature. The qualitative nature of Manuscript 2 contributed to a more in-depth understanding of participants lived experiences of the athletic-ideal. This study lastly contributed to the development of a conceptual framework of the athletic-ideal as applicable in the clinical setting. The study also highlighted the possible benefits an athletic-ideal internalization can offer. This knowledge can inform treatment focus and therapeutic approaches to assist in the appropriate treatment of individuals who display a maladaptive pursuit of the athletic-ideal.

Limitations of the study and recommendations for future research

A major limitation of Manuscript 1 is that the sample demographics in terms of race was not representative of the population. This means that generalizations to the population could not be made. A further limitation is that measures used to explore the athletic-ideal and its relationships were developed on the premise and construct of the classic thin-ideal. The implication with this is a doubt whether researchers are investigating the most relevant

concepts in this field. According to Bell et al. (2016), current measures on the athletic- and thin-ideal (Schaefer et al., 2015) regard athleticism and thinness as isolated constructs. The conceptualization of the athletic-ideal, however, indicates that the element of thinness is still very much part of the athletic-ideal. A recommendation is the development of a measure that incorporates the element of thinness when evaluating athletic-internalization.

Furthermore, the characteristics of disordered eating in the conventional sense have been compiled and created following the pursuit of the thin-ideal. This highlights the need for further investigation into the behaviour applied in the pursuit of the athletic-ideal and determines the extent to which they vary in comparison to behaviour associated with the thin-ideal. A further limitation of the study, that became evident when trying to explain the relationships of the ideals, were measures that could have been included to enhance understanding. Since the athletic-ideal could include the use of supplements in a maladaptive way, a measure that evaluates supplement use can greatly contribute to the conceptualization of disordered eating patterns. The strong relationship with obligatory exercise emphasizes the need to explore the relationship with the athletic-ideal and exercise in more depth. This is salient since it is indicated that risk factors are influenced by participants' reasons for exercise. A measure that also assesses these reasons can significantly contribute to the understanding of the relationship between disordered exercise and athletic-internalization.

In Manuscript 2**,** the experiences of nine female students from a relatively homogeneous demographic background were explored. A specific limitation in this manuscript was that the sample had an over-representation of white students and students from the health sciences. Future recommendations are to explore the experience of the athletic-ideal in samples of males, older females, females of other ethnicities and nonstudent populations. Future studies may also benefit from including a group with a clinical diagnosis

of an eating or body–related disorder so that experiences can be explored and compared to a nonclinical sample.

A major limitation of Manuscript 3 is that complete data-saturation was not obtained in all subthemes that emerged from the data. An area where participant representativeness was especially lacking was in terms of the demographics of the clinical population, athletic-ideal internalization in terms of professional athletes and bodybuilders. A recommendation is to include psychiatrists, dieticians and biokineticists in order to triangulate data with different professionals and perspectives on the athletic-ideal. A further recommendation is to interview participants with a clinical diagnosis of eating or body related disorders and incorporate their lived experiences in addition to clinical professional's views. This will enable the researcher to confirm hypotheses made by clinicians in terms of athletic-internalization and contribute to a more holistic understanding of the impact on functioning.

Concluding remarks

The researcher approached this study hoping to get clarity and a clear understanding of the athletic-ideal and its associated outcomes. After completion of this study, however, even more questions originated. Although the athletic-ideal has its associations with the body and eating-related problems, it also has the intrinsic possibility of being a protective factor of the devastating effects that eating and body related disorders often lead to. As a psychologist, the researcher feels enthusiastic to contribute more to the understanding of and literature on how the pursuit of the athletic-ideal can support and be incorporated in the treatment of eating and body-related disorders.

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Full Thesis Appendices

Appendix A – Manuscript 1: Informed consent form

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

HREC Stamp

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

TITLE OF THE RESEARCH PROJECT:

Exploring the athletic-ideal, body image and eating disturbances in a select South African sample

REFERENCE NUMBERS: *[NWU-00026-16-S1]*

PRINCIPAL INVESTIGATOR: Lindi Williams (Clinical Psychologist)

ADDRESS:

North-West University
Faculty of Health Sciences
Private Bag X6001
Potchefstroom
2522

CONTACT NUMBER:063 792 6356

You are being invited to take part in a research project that forms part of my PhD study. Please take some time to read the information presented here, which will explain the details of this project. Please ask the researcher any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you do decline, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (*NWU-00026-16-S1*) and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki and the ethical guidelines of the National Health Research Ethics Council. It might be necessary for the research ethics committee members or relevant authorities to inspect the research records.

What is this research study all about?

- *This study will be conducted at all three the campuses of the North-West University and will involve the online completion of four questionnaires. 400 participants will be included in this study.*
- *The aim of this study is to explore what is seen as the ideal body and how our ideal body can influence eating, exercise and satisfaction with our current body. 400 participants will be included in this study*

Why have you been invited to participate?

- *You have been invited to participate because you are a female student between the ages of 18 to 24.*

What will your responsibilities be?

- *You will be expected to complete four online questionnaires that will take approximately 30 to 40 minutes.*

Will you benefit from taking part in this research?

- The indirect benefit for you as a participant will be an enhanced understanding of what you regard the ideal body to look like and what behaviour you display to reach this ideal.
- Furthermore, the profession of psychology will gain a better understanding of how an ideal body image can influence behaviour.

Are there risks involved in your taking part in this research?

- The risks in this study are that awareness of previously unknown characteristics can cause some discomfort (shock, disbelief, embarrassment), support services will be available to minimise this discomfort.
- It is important to note that your well-being is important to the researcher. If the questionnaires indicate that you might benefit from support systems you will be contacted by the researcher. The decision to make use of this support services is completely voluntary.
- The above-mentioned process of getting support services available to you will, unfortunately, mean that you will not remain completely anonymous (your details will have to be given to the support professional). All information, however, will be kept completely confidential. The support professionals are all bound by their professional obligations related to client confidentiality.

What will happen in the unlikely event of some form of discomfort occurring as a direct result of your taking part in this research study?

- *Should you have the need for further discussions after the completion of the questionnaires an opportunity will be arranged for you to receive psychological services if necessary.*

Who will have access to the data?

- *Only the researchers and the statistician will have access to the data and they are all bound by the confidentiality principles governing research. As for electronic data, it will be password protected and all data removed from the dedicated site. Reporting of findings will be anonymous. Data will be safely stored for 5 years before being confidentially destroyed.*

Will you be paid to take part in this study and are there any costs involved?

- *No, you will not be paid to take part in the study. Please make use of the NWU available internet services to complete the online questionnaires.*
- *If you are unable to use these services data usage expenses will be reimbursed by means of a data bundle. If you take part, there will thus be no costs involved for you.*

Is there anything else that you should know or do?

- You can contact Lindi Williams at 063 792 6356; info@bodyideal.co.za if you have any further queries or encounter any problems.
- You can contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 1206; carolien.vanzyl@nwu.ac.za if you have any concerns or complaints that have not been adequately addressed by the researcher.
- You will receive a digital copy of this information and consent form for your own records.

How will you know about the findings?

- A brief report of your results will be made available to you.
- The findings of the research will be shared with you electronically in article form, after completion of the study.

Declaration by participant

By signing below, I …….…… agree to take part in a research study entitled: Exploring the athletic-ideal, body image and eating disturbances in a select South African sample

I declare that:

- I have read this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions to the researcher and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed.

Signed at (*place*) .....…….. on (*date*) ……...…….. 20....

..... **.....**

Signature of participant Signature of witness

Declaration by researcher

I *(name)* ……..…… declare that:

- I encouraged him/her to ask questions via email and responded in a timely manner.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above.

Signed at (*place*) .....….....…….. on (*date*) ……...…….. 20....

..... **.....**

Signature of researcher **Signature of witness**

INVITATION TO PARTICIPATE IN FOLLOW-UP STUDY

Thank you for your participation. In the current study, we looked at body ideal, body dissatisfaction, eating, and exercise behaviour. In the next part of the project the researchers aim is to gain a more-in-depth understanding of the athletic body ideal and its associated behaviours. In this follow-up study 12 to 15 participants will be contacted to participate based on their responses from the questionnaires that you just completed. If you would like to be considered for possible participation please tick appropriate box below. Please note that in order to contact you for further participation anonymity cannot be ensured, all information, however, will be kept completely confidential.

What will your responsibilities be?

- *You will be expected to attend one individual interview with the researcher that will take approximately 60 minutes to complete.*

Please keep in mind that your participation is **entirely voluntary** and you are free to decline to participate. If you do decline, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part. Please tick the appropriate box.

☐ Yes, I would like to be contacted for ***possible*** participation in follow-up study.

☐ No, I would only like to participate in the current study.

Appendix B – Manuscript 1: Debriefing information

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

Debriefing Information:

TITLE OF THE RESEARCH PROJECT:

Exploring the athletic-ideal, body image and eating disturbances in a select South African sample

REFERENCE NUMBERS: *[NWU-00026-16-S1]*

PRINCIPAL INVESTIGATOR: Lindi Williams

ADDRESS:

North-West University
Faculty of Health Sciences
Private Bag X6001
Potchefstroom
2522

CONTACT NUMBER:

063 792 6356

Thank you for your participation in the current study.

What was the purpose of the study?

- *The aim of this study is to gain a better understanding of the extent to which the athletic-ideal, body image, exercise and eating disturbances have an influence on a select South African sample.*
- *The purpose of this study was to explore the relationship of how your perception of an ideal body can influence eating behaviour, exercise patterns and your satisfaction with your current body.*

What were your responsibilities?

- *You were asked to complete 4 online questionnaires. Each questionnaire measured specific aspects of your lifestyle.*
- *The SATAQ-4, was used to determine if your ideal preference is a thin or athletic-ideal.*
- *The Eat-26, explored your eating habits.*
- *The OEQ, was used to assess if you engage in exercise that you feel required or obligated to undertake.*
- *MSBSR-AS, explored the extent to which you are satisfied with your current body.*

What are we expecting to find?

- Previous research has shown that there is a relationship between believing the ideal body should be thin or athletic and eating, exercise and our current satisfaction with our bodies.
- We are expecting similar relationships in the current study.

Did your experience any form of discomfort as a direct result of you taking part in this research study?

- *If you experienced any form of discomfort or feel that you may benefit from our support services in relation to any issues raised through participation in this study please contact Lindi Williams at 063 792 6356*

Is there anything else that you would like to know?

- You can contact Lindi Williams at 063 792 6356 *OR* info@bodyideal.co.za if you have any further queries**.**

Thank you again for your participation

On-campus Support Services

Potchefstroom Campus	Student Counselling and Development	**018 299 2893** 24-hour phone-in service for psychological crises: **018 299 1777**
Vaal Triangle campus	Student Counselling and Development	**0 16 910 3195**
Mafikeng Campus	Guidance and Counselling Centre	**018 389 2592**

Appendix C – Demographic Questionnaire

1. Age

Please indicate your present age. _____

2. Language Preference

Please indicate your language preference below by marking the number-box below with an X.

English	**1**
Setswana	**2**
Afrikaans	**3**
Other	**4**

3. Academic year level

Please indicate your current academic year level by marking the number-box below with an X.

1st year	**1**
2nd year	**2**
3rd year	**3**
4th year/Honours	**4**
Post-graduate	**5**

4. Field of study

Please indicate the field of study you intend to major in by marking the number-box below with an X.

Education	**1**
Human and Social Sciences or Arts	**2**
Law	**3**
Natural Sciences, Engineering, Agriculture or Technology	**4**
Economic and Management Sciences	**5**
Health Sciences	**6**
Theology	**7**

5. Race

Please indicate your race by marking the number-box below with an X.

Asian	**1**
Black	**2**
Coloured	**3**
Indian	**4**
White	**5**
Other	**6**

6. Campus

On which campus do you study?

Vaal Triangle	**1**
Mafikeng	**2**
Potchefstroom	**3**

7. Weight

Please indicate your present weight. _____(Kg)

8. Height

Please indicate your present height. _____(m) **e.g., 1.68m**

Appendix D – The Sociocultural Attitudes Towards Appearance scale -4 (SATAQ – 4)

Sociocultural Attitudes Towards Appearance Questionnaire – 4

Directions: Please read each of the following items carefully and indicate the number that best reflects your agreement with the statement.

Definitely Disagree = 1
Mostly Disagree = 2
Neither Agree Nor Disagree = 3
Mostly Agree = 4
Definitely Agree = 5

	Definitely Disagree				**Definitely Agree**
1. It is important for me to look athletic.	1	2	3	4	5
2. I think a lot about looking muscular.	1	2	3	4	5
3. I want my body to look very thin.	1	2	3	4	5
4. I want my body to look like it has little fat.	1	2	3	4	5
5. I think a lot about looking thin.	1	2	3	4	5
6. I spend a lot of time doing things to look more athletic.	1	2	3	4	5
7. I think a lot about looking athletic.	1	2	3	4	5
8. I want my body to look very lean.	1	2	3	4	5
9. I think a lot about having very little body fat.	1	2	3	4	5
10. I spend a lot of time doing things to look more muscular.	1	2	3	4	5

Answer the following questions with relevance to your Family (include: parents, brothers, sisters, relatives):

11. I feel pressure from family members to look thinner.	1	2	3	4	5
12. I feel pressure from family members to improve my appearance.	1	2	3	4	5
13. Family members encourage me to decrease my level of body fat.	1	2	3	4	5
14. Family members encourage me to get in better shape.	1	2	3	4	5

Answer the following questions with relevance to your Peers (include: close friends, classmates, other social contacts):

15. My peers encourage me to get thinner.	1	2	3	4	5
16. I feel pressure from my peers to improve my appearance.	1	2	3	4	5
17. I feel pressure from my peers to look in better shape.	1	2	3	4	5
18. I get pressure from my peers to decrease my level of body fat.	1	2	3	4	5

Answer the following questions with relevance to the Media (include: television, magazines, the Internet, movies, billboards, and advertisements):

19. I feel pressure from the media to look in better shape.	1	2	3	4	5
20. I feel pressure from the media to look thinner.	1	2	3	4	5
21. I feel pressure from the media to improve my appearance.	1	2	3	4	5
22. I feel pressure from the media to decrease my level of body fat.	1	2	3	4	5

Note: SATAQ-4 Scoring:
Internalization – Thin/Low body fat: 3, 4, 5, 8, 9
Internalization – Muscular/Athletic: 1, 2, 6, 7, 10
Pressures – Family: 11, 12, 13, 14
Pressures – Peers: 15, 16, 17, 18
Pressures – Media: 19, 20, 21, 22

Appendix E - The MBSRQ-Appearance Scale (MSBSR-AS).

THE MBSRQ-AS

INSTRUCTIONS--PLEASE READ CAREFULLY

The following pages contain a series of statements about how people might think, feel, or behave. You are asked to indicate the extent to which each statement pertains to you personally.

Your answers to the items in the questionnaire are anonymous, so please do not write your name on any of the materials. In order to complete the questionnaire, read each statement carefully and decide how much it pertains to you personally. Using a scale like the one below, indicate your answer by entering it to the left of the number of the statement.

EXAMPLE:

_____ I am usually in a good mood.

In the blank space, enter a **1** if you **definitely disagree** with the statement;
enter a **2** if you **mostly disagree**;
enter a **3** if you **neither agree nor disagree**;
enter a **4** if you **mostly agree**;
or enter a **5** if you **definitely agree** with the statement.

There are no right or wrong answers. Just give the answer that is most accurate for you. Remember, your responses are confidential, so please be completely honest and answer all items.

1	2	3	4	5
Definitely Disagree	**Mostly Disagree**	**Neither Agree Nor Disagree**	**Mostly Agree**	**Definitely Agree**

_____ 1. Before going out in public, I always notice how I look.

_____ 2. I am careful to buy clothes that will make me look my best.

_____ 3. My body is sexually appealing.

_____ 4. I constantly worry about being or becoming fat.

_____ 5. I like my looks just the way they are.

_____ 6. I check my appearance in a mirror whenever I can.

_____ 7. Before going out, I usually spend a lot of time getting ready.

_____ 8. I am very conscious of even small changes in my weight.

_____ 9. Most people would consider me good-looking.

_____ 10. It is important that I always look good.

_____ 11. I use very few grooming products.

_____ 12. I like the way I look without my clothes on.

_____ 13. I am self-conscious if my grooming isn't right.

_____ 14. I usually wear whatever is handy without caring how it looks.

_____ 15. I like the way my clothes fit me.

_____ 16. I don't care what people think about my appearance.

_____ 17. I take special care with my hair grooming.

_____ 18. I dislike my physique.

continued on the next page

1	2	3	4	5
Definitely Disagree	**Mostly Disagree**	**Neither Agree Nor Disagree**	**Mostly Agree**	**Definitely Agree**

_____ 19. I am physically unattractive.

_____ 20. I never think about my appearance.

_____ 21. I am always trying to improve my physical appearance.

_____ 22. I am on a weight-loss diet.

For the remainder of the items use the response scale given with the item, and enter your answer in the space beside the item.

_____ 23. I have tried to lose weight by fasting or going on crash diets.

1. Never
2. Rarely
3. Sometimes
4. Often
5. Very Often

_____ 24. I think I am:

1. Very Underweight
2. Somewhat Underweight
3. Normal Weight
4. Somewhat Overweight
5. Very Overweight

_____ 25. From looking at me, most other people would think I am:

1. Very Underweight
2. Somewhat Underweight
3. Normal Weight
4. Somewhat Overweight
5. Very Overweight

continued on the next page

26-34. Use this 1 to 5 scale to indicate how dissatisfied or satisfied you are with each of the following areas or aspects of your body:

1	2	3	4	5
Very Dissatisfied	**Mostly Dissatisfied**	**Neither Satisfied Nor Dissatisfied**	**Mostly Satisfied**	**Very Satisfied**

_____ 26. Face (facial features, complexion)

_____ 27. Hair (color, thickness, texture)

_____ 28. Lower torso (buttocks, hips, thighs, legs)

_____ 29. Mid torso (waist, stomach)

_____ 30. Upper torso (chest or breasts, shoulders, arms)

_____ 31. Muscle tone

_____ 32. Weight

_____ 33. Height

_____ 34. Overall appearance

Appendix F – The Eating Attitdes Test (EAT-26)

Eating Attitudes Test (EAT-26)©

Instructions: This is a screening measure to help you determine whether you might have an eating disorder that needs professional attention. This screening measure is not designed to make a diagnosis of an eating disorder or take the place of a professional consultation. Please fill out the below form as accurately, honestly and completely as possible. There are no right or wrong answers. All of your responses are confidential.

Part A: Complete the following questions:

1) Birth Date	Month:		Day:		Year:	2) Gender:	Male □ Female □
3) Height	Feet :		Inches:				
4) Current Weight (lbs.):			5) Highest Weight (excluding pregnancy):				
6) Lowest Adult Weight:			7: Ideal Weight:				

Part B: Check a response for each of the following statements:		Always	Usually	Often	Some times	Rarely	Never
1.	Am terrified about being overweight.	□	□	□	□	□	□
2.	Avoid eating when I am hungry.	□	□	□	□	□	□
3.	Find myself preoccupied with food.	□	□	□	□	□	□
4.	Have gone on eating binges where I feel that I may not be able to stop.	□	□	□	□	□	□
5.	Cut my food into small pieces.	□	□	□	□	□	□
6.	Aware of the calorie content of foods that I eat.	□	□	□	□	□	□
7.	Particularly avoid food with a high carbohydrate content (i.e. bread, rice, potatoes, etc.)	□	□	□	□	□	□
8.	Feel that others would prefer if I ate more.	□	□	□	□	□	□
9.	Vomit after I have eaten.	□	□	□	□	□	□
10.	Feel extremely guilty after eating.	□	□	□	□	□	□
11.	Am preoccupied with a desire to be thinner.	□	□	□	□	□	□
12.	Think about burning up calories when I exercise.	□	□	□	□	□	□
13.	Other people think that I am too thin.	□	□	□	□	□	□
14.	Am preoccupied with the thought of having fat on my body.	□	□	□	□	□	□
15.	Take longer than others to eat my meals.	□	□	□	□	□	□
16.	Avoid foods with sugar in them.	□	□	□	□	□	□
17.	Eat diet foods.	□	□	□	□	□	□
18.	Feel that food controls my life.	□	□	□	□	□	□
19.	Display self-control around food.	□	□	□	□	□	□
20.	Feel that others pressure me to eat.	□	□	□	□	□	□
21.	Give too much time and thought to food.	□	□	□	□	□	□
22.	Feel uncomfortable after eating sweets.	□	□	□	□	□	□
23.	Engage in dieting behavior.	□	□	□	□	□	□
24.	Like my stomach to be empty.	□	□	□	□	□	□
25.	Have the impulse to vomit after meals.	□	□	□	□	□	□
26.	Enjoy trying new rich foods.	□	□	□	□	□	□

Part C: Behavioral Questions: In the past 6 months have you:		Never	Once a month or less	2-3 times a month	Once a week	2-6 times a week	Once a day or more
A	Gone on eating binges where you feel that you may not be able to stop? *	□	□	□	□	□	□
B	Ever made yourself sick (vomited) to control your weight or shape?	□	□	□	□	□	□
C	Ever used laxatives, diet pills or diuretics (water pills) to control your weight or shape?	□	□	□	□	□	□
D	Exercised more than 60 minutes a day to lose or to control your weight?	□	□	□	□	□	□
E	Lost 20 pounds or more in the past 6 months	Yes □		No □			

* Defined as eating much more than most people would under the same circumstances and feeling that eating is out of control

Appendix G – The Obligatory Exercise Questionnaire (OEQ)

Obligatory Exercise Questionnaire (OEQ)

Directions: Listed below are a series of statements about people's exercise habits. Please circle the number that reflects how often you could make the following statements:

NEVER SOMETIMES USUALLY ALWAYS

1 2 3 4

1. I engage in physical exercise on a daily basis. 1 2 3 4
2. I engage in one/more of the following forms of exercise: walking, jogging/running or weightlifting. 1 2 3 4
3. I exercise more than three days per week. 1 2 3 4
4. When I don't exercise, I feel guilty. 1 2 3 4
5. I sometimes feel like I don't want to exercise, but I go ahead and push myself anyway. 1 2 3 4
6. My best friend likes to exercise. 1 2 3 4
7. When I miss an exercise session, I feel concerned about my body possibly getting out of shape. 1 2 3 4
8. If I have planned to exercise at a particular time and something unexpected comes up (like an old friend comes to visit or I have some work to do that needs immediate attention) I will usually skip my exercise for that day. 1 2 3 4
9. If I miss a planned workout, I attempt to make up for it the next day. 1 2 3 4
10. I may miss a day of exercise for no good reason. 1 2 3 4
11. Sometimes, I feel a need to exercise twice in one day, even though I may feel a little tired. 1 2 3 4
12. If I feel I have overeaten, I will try to make up for it by increasing the amount I exercise. 1 2 3 4

13. When I miss a scheduled exercise session I may feel tense, irritable or depressed. 1 2 3 4

14. Sometimes, I find that my mind wanders to thoughts about exercising. 1 2 3 4

15. I have had daydreams about exercising. 1 2 3 4

16. I keep a record of my exercise performance, such as how long I work out, how far or fast I run. 1 2 3 4

17. I have experienced a feeling of euphoria or a high during or after an exercise session. 1 2 3 4

18. I frequently push myself to the limits. 1 2 3 4

19. I have exercised when advised against such activity (i.e., by a doctor, friend, etc.) 1 2 3 4

20. I will engage in other forms of exercise if I am unable to engage in my usual form of exercise. 1 2 3 4

Appendix H – Manuscript 2: Informed Consent form

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

HREC Stamp

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

TITLE OF THE RESEARCH PROJECT:

Exploring the athletic-ideal, body image and eating disturbances in a select South African sample

REFERENCE NUMBERS: *[NWU-00026-16-S1]*

PRINCIPAL INVESTIGATOR: Lindi Williams (Clinical Psychologist)

ADDRESS:

North-West University
Faculty of Health Sciences
Private Bag X6001
Potchefstroom
2522

CONTACT NUMBER:

063 792 6356

You are being invited to take part in a research project that forms part of my PhD study. Please take some time to read the information presented here, which will explain the details of this project. Please ask the researcher any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you do decline, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (*NWU-00026-16-S1*) and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki and the ethical guidelines of the National Health Research Ethics Council. It might be necessary for the research ethics committee members or relevant authorities to inspect the research records.

What is this research study all about?

- *This study will be conducted at all three campuses of the North-West University and will involve a semi-structured interview with individuals that regard an athletic look as the ideal body. 12 to 15 participants will be included in this study.*
- *The aim of this study is to gain a better understanding the of the athletic body ideal.*
- *In this part of the study, we are interested in your experience with the athletic-ideal body image and behaviours associated with reaching this athletic-ideal. 12 to15 participants will be included in this study.*

Why have you been invited to participate?

- *You have been invited to participate because during the first study it showed that you regard the ideal body type to be athletic and toned.*

What will your responsibilities be?

- *You will be expected to attend one individual interview with the researcher that will take approximately 60 minutes to complete.*

Will you benefit from taking part in this research?

- *The indirect benefits for you as a participant will be the opportunity to share your views of the athletic-ideal and gain a deeper insight of your ideal body type and behaviours associated in reaching this ideal.*
- *Furthermore, the profession of psychology will gain a better understanding of the dynamics of the athletic-ideal and associated behaviour*.

Are there risks involved in your taking part in this research?

- *The risks in this study are that this insight into the previously unknown may cause emotional discomfort such as shock, disbelief or even shame. Support services will be available to minimise this discomfort.*

What will happen in the unlikely event of some form of discomfort occurring as a direct result of your taking part in this research study?

- *Should you have the need for further discussions after the interview an opportunity will be arranged for you to attend an extended debrief session. Psychological support services will also be made available if necessary.*

Who will have access to the data?

- *Anonymity and confidentiality will be ensured. During transcription data will be coded to ensure that no link can be made to a specific participant. Confidentiality will be ensured by the way data will be captured, changing*

identifying data during transcription and deleting the digital recordings once data have been transcribed. Only the researchers will have access to the data. Data will be kept safe and secure by locking hard copies in locked cupboards in the researcher's office and for electronic data, it will be password protected. Reporting of findings will be anonymous. Data will be stored for 5 years before being confidentially destroyed.

What will happen with the data/samples?

- *This is a once off collection, after analysis of the data at the NWU: Potchefstroom Campus the data will be stored in a locked safe located on the Potchefstroom campus.* This safe belongs to the COMPRES scientific committee and will be monitored and supervised by the committee.

Will you be paid to take part in this study and are there any costs involved?

- *No, you will not be paid to take part in the study. The interview will be scheduled at a convenient time and date on campus. If you do take part, there will thus be no costs involved for you.*

Is there anything else that you should know or do?

- You can contact Lindi Williams at 063 792 6356 or info@bodyideal.co.za if you have any further queries or encounter any problems.
- You can contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 1206; carolien.vanzyl@nwu.ac.za if you have any concerns or complaints that have not been adequately addressed by the researcher.
- You will receive a copy of this information and consent form for your own records.

How will you know about the findings?

- The findings of the research will be shared with you electronically in article form, after completion of the study.

Declaration by participant

By signing below, I …….…… agree to take part in a research study entitled: Exploring the athletic-ideal, body image and eating disturbances in a select South African sample

I declare that:

- I have read this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions to both the person obtaining consent, as well as the researcher and all my questions have been adequately answered.

- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (*place*) .....…..…….. on (*date*) ……...…….. 20....

..... **.....**

Signature of participant Signature of witness

Declaration by researcher

I *(name)* ……..…… declare that:

- I explained the information in this document to ……..
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter.

Signed at (*place*) .....…..…….. on (*date*) ……...…….. 20....

..... **.....**

Signature of researcher **Signature of witness**

Appendix I– Manuscript 2: Debriefing information

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

Debriefing Information:

TITLE OF THE RESEARCH PROJECT:

Exploring the athletic-ideal, body image and eating disturbances in a select South African sample

REFERENCE NUMBERS: *[NWU-00026-16-S1]*

PRINCIPAL INVESTIGATOR: Lindi Williams

ADDRESS:

North-West University
Faculty of Health Sciences
Private Bag X6001
Potchefstroom
2522

CONTACT NUMBER:

063 792 6356

Thank you for your participation in the current study.

What was the purpose of the study?

- *The aim of this study is to gain a better understanding of the extent to which the athletic-ideal, body image, exercise and eating disturbances have an influence on a select South African sample.*
- *The purpose of this study was to explore your experience of the athletic-ideal and behaviours you display in order to reach this ideal.*

What were your responsibilities?

- *You were asked to participate in a semistructured interview with the researcher. During this interview, you were asked questions so that the researcher could truly understand your lived experience.*

What are we expecting to find?

- *Other participants that find the athletic body to be attractive will also be interviewed. We are hoping to find differences and similarities so that we can have a better understanding of this athletic-ideal and how it influences our behaviour.*

Did your experience any form of discomfort as a direct result of you taking part in this research study?

- *If you experienced any form of discomfort or feel that you may benefit from our support services in relation to any issues raised through participation in this study, please discuss this with me now so that the support services available to you can be explored.*

Is there anything else that you would like to know?

- If you have any questions you can ask me now or you can contact **Lindi Williams at 063 792 6356** *OR* **info@bodyideal.co.za** at a later date

Thank you again for your participation.

On-campus Support Services

Potchefstroom Campus	Student Counselling and Development	**018 299 2893** 24-hour phone-in service for psychological crises: **018 299 1777**
Vaal Triangle campus	Student Counselling and Development	**0 16 910 3195**
Mafikeng Campus	Guidance and Counselling Centre	**018 389 2592**

Appendix J – Manuscript 2: Interview Schedule

English	**Afrikaans**
1. Describe your ideal body? **Possible prompts/follow-up questions:** • Since when? • What was your body ideal before your current ideal? • How would you describe the athletic-ideal? • How would you describe the thin-ideal?	1) Beskryf jou ideale liggaam? **Moontlike opvolgvrae:** • Van wanneer af? • Wat was jou ideaal voor jou huidige ideaal? • Hoe sal jy die atletiese ideaal beskryf? • Hoe sal jy die maer-/dun ideaal beskryf?
2. How does the athletic-ideal compare with the thin-ideal?	2) Hoe vergelyk die atletiese ideaal met die maer-/dun ideaal?
3. What would you say contributed to you having this ideal? **Possible prompts/follow-up questions:** • Media? • Friends? • Family?	3) Wat, sal jy sê, het daartoe bygedra dat jy hierdie ideaal het? **Moontlike opvolgvrae:** • Media? • Vriende? • Gesin/familie?
4. What do you do to reach this ideal?	4) Wat doen jy om hierdie ideaal te bereik?
5. Describe your exercise routine? **Possible prompts/follow-up questions:** • How often? When? • What are your reasons for excising?	5) Beskryf jou oefenprogram/-roetine? **Moontlike opvolgvrae:** • Hoe gereeld? Wanneer? • Wat is jou redes vir oefen?

• How are you influenced when you are unable to exercise for some reason? • When will you consider excise to be unhealthy?	• Hoe word jy geraak as jy om die een of ander rede nie kan oefen nie? • Wanneer sal jy oefening as ongesond beskou?
6. Describe your diet (overall way of eating)? **Possible prompts/follow-up questions:** • How often? When? • When will you consider an eating plan to reach the athletic-ideal to be unhealthy? • What is your view on the use of supplements?	6) Beskryf jou dieet (algehele manier van eet)? **Moontlike opvolgvrae:** • Hoe gereeld? Wanneer? • Wanneer sal jy ’n eetplan om die atletiese ideaal te bereik as ongesond beskou? • Wat is jou siening van aanvullings?
7. Discuss any other behaviours you engage in to reach this ideal that could be considered unhealthy.	7) Beskryf enige ander gedrag om die ideaal te bereik wat as ongesond beskou kan word.
8. How do you currently feel about your body? **Possible prompt/follow up:** • Since when? • How does your athletic-ideal influence satisfaction with your body?	8) Hoe voel jy tans oor jou liggaam? **Moontlike opvolgvrae:** • Van wanneer af? • Hoe beïnvloed jou atletiese ideaal jou tevredenheid met jou liggaam?
9. Describe how the athletic-ideal ideal affects your relationships with others? **Possible prompts/follow-up questions:** • Family members? Friends? Other? • Hoe does your eating influence your relationships? • How does your exercise routine influence your relationships?	9) Beskryf hoe die atletiese ideaal jou verhoudings met ander beïnvloed? **Moontlike opvolgvrae:** • Familielede, vriende, ander? • Hoe beïnvloed eet jou verhoudings?

• How does your view of your body influence your relationships?	• Hoe beïnvloed jou oefenprogram jou verhoudings? • Hoe beïnvloed jou siening van jou liggaam jou verhoudings?
10. Describe how this ideal affects your everyday life?	10) Beskryf hoe hierdie ideaal jou daaglikse lewe beïnvloed?
11. Describe your thoughts and feelings when you talk/think about the athletic-ideal?	11) Beskryf jou gedagtes en gevoelens wanneer jy oor die atletiese ideaal dink/praat.
12. Discuss anything relevant aspect that we did not cover in this interview.	12) Beskryf enige relevante aspek waaroor ons nie in hierdie onderhoud gepraat het nie.

Appendix K – Manuscript 2: Example of data analysis

This section includes extracts from the transcribed transcripts used in Manuscript 2.

The corresponding data from the excel spreadsheet is included to illustrate how themes and subthemes where categorized.

Examples include:

- Transcript extract from participant 1.
- Transcript extract from participant 6.
- Transcript extract from participant 9.
- Corresponding data from excel datasheet indicating subsequent data analysis stages.

to listen to your body and even though you might feel ok... Look there's nothing wrong to do one or two reps more in a set but when you start getting to like ok now I've done 10 already now I am gonna do another 20 then you getting down the wrong path you shouldn't be doing that.

Ok, Uhm, what you saying is when you over train. Any other instances where you think exercise can be unhealthy?

Uhm, kind of maybe people, you get a lot of people who is very subconscious about their weight so then they do that just because they feel ok 'I've now eaten 500 calories I've got to do this many exercises otherwise, you know, I'm gonna start putting on weight' . I don't think I'm like that, at all. Where I don't take into account how many calories, obviously when I'm eating cake I've kinda know ok Ive gotta now work this off. It's a bad thing because you a have to maintain as a runner, you know, your weight but I don't go sit an go ok this slice of bread is too many calories or you know I can't drink this coke or something like that I'm not like that. But I know there are other people who do take it very very seriously.

Ok can you describe to me what you eat?

Om my word ok. Uhm for breakfast I'll have you know that jungle oats with apple and raisin and cinnamon and it's also like now when the semester started again, my timetable now is like very... On Monday I only have practical in the afternoon, but because its so time consuming we will be there from 12 until 5, 6 so I'll have breakfast and then usually on the busy days I'll take like a peanut butter sandwich and apple with and that's on Monday , Tuesday, Wednesday . Thursday my classes are just scattered so I'll take again bread with peanutbutter and apples and Friday I don't have any class. But uhm ja sometimes now and then Ill go and buy like a granadilla twist or something or a muffin. I think I eat generally healthy like for dinner I don't eat like bad stuff. I just like have meat potatoes and vegetables basically every night like I have pasta maybe once a week , or once every two weeks, kind of. I don't , now and then I'll have like take way but then I won't feel back cause I know I don't eat that every day like , I hear other students going to McDonalds every night or steers or something I'm not like that at all. Like this girl (giggles) she came in, you know when they like have a thing, like a form and then they ask for money cause they going on like a sport thing I was making dinner and she came in and she was like why you eating so healthy, that was like that was funny. Ja , I don't know I do think I eat quite healthy it comes from home as well my parents eat healthy don't smoke don't drink , I don't do any of that so . I think I live quite a good lifestyle.

If you say healthy can you maybe give me a little more detail if you say you eat healthy?

I think if you have the mind-set of nothing is ever good enough for you. So you keep on pushing and pushing and pushing and never reaching a limit that you are actually set for yourself. For me that instance then it will be unhealthy exercise.

Ok can you describe to me what you eat?

My daily or overall? *You can do daily and then overall*

Uhm, I will do meal prep weekly. I will do light meat, white meat , fish and the a lot of vegetables, green vegetables but I will eat in the evenings as swell supper but that will be not as healthy it will be potatoes, chops uhm sometimes hamburgers whatever someone else is cooking that I don't have to prepare. So evening meals not as healthy lunch time meals very healthy. So ja, morning ja I don't do breakfast although it's the most important meal of the day some said but for me if I eat the morning I would want to eat the entire day so I don't eat in the morning and then meal prep in the afternoons and then supper I don't cook I just eat what everyone else makes.

Ok so what is your overall view of eating what do you think is healthy eating?

For me healthy eating is a balanced diet not necessarily just focusing on counting you carbs and being conscious as to this is my diet plan. For me healthy eating, balanced eating that what it is for me. Yes you are allowed to have a treat, or ice-cream or enjoy red meat or whatever your preference is but as long as its balanced why not

Do you think an eating plan to reach the athletic ideal can be unhealthy?

In some instances yes I might think so especially with girls feeling the pressure of society as I felt quite some time ago I think it can be unhealthy cause you will overdo it I mean you want to reach your goal and the sooner the better for most of us. So if you then just eat strictly what's on that diet plan maybe its not nutritional and not sufficient and then what then. So for me yes I think it can be but also in a limit not entirely if you are "self gedisiplineerd" I don't think that will be a problem.

Ok when I say supplements what do you think of?

Hmmm whey protein, ISO , USN, BIOGEN. Uh, I don't like that word.

excessive exercise
Over train
raining for wrong reasons
steroids : unhealthy

wrong reason : looks based

physical health : exercise to be healthy

not excl food group deviate @ times all food groups

Deviation from healthy due to training
emotional eater.
Deviation possible

3277 Yes, I do think that some people take it too far. Like you get these people that sommer go gym 2-3
3278 times a day and there is something like overtraining. You can over train your body. And I also think
3279 there are people that train for the wrong reasons so... Like for example you get guys that use steroids
3280 so their training for the wrong reasons cause why would they be using steroids then cause I mean it
3281 one of the most unhealthy things you can do. So they are obviously just training for the looks and
3282 that's not healthy I think.

3283 *Ok so if you say training for the wrong reasons, what will that be?*

3284 I think if it is only about looks but I think that is something that changes with time. Uhm I don't know...
3285 ***(Long pause)***

changed with her acc to previous statement

3286 *What is the right reason then, to exercise?*

3287 To be healthy I think

3288 *Ok, you answered that. Can you describe to me what you eat?*

3289 Uh, generally I try to have a very balanced diet. Like I don't believe in cutting out a certain food group
3290 or anything like that. I think it's all just about balance. So I try to avoid stuff like carbonated drinks and
3291 very sugary foods and stuff like that, but it is not like I deprive myself. Like I will also have some on
3292 occasion. So generally I try to get in my veggies, get in my protein, get in my carbs get in everything
3293 but just very balanced.

3294 *Ok so if you say you still have it occasionally, uhm when will you decide you can have it?*

3295 Uhm ag, I think if I had a good week of training, but like I'm an emotional eater so if I decide I need a
3296 chocolate, I'll eat a chocolate and I won't feel bad because I know I've been training and I've been
3297 eating healthy, so it's not gonna bother me. And I also think if you train and eat healthy your body is
3298 better equip to handle like unhealthy foods. Like if you only eat unhealthy foods your GI tract actually
3299 gets messed up and you can't process them and it's just a vicious cycle. So I think if you have a
3300 generally healthy lifestyle like I drink about maybe once a month, I try to avoid alcohol , I try to avoid
3301 sugary food but if the opportunity arises I'm not gonna be radical fussy about it.

3302 *Ok can you describe how a normal week of eating will look for you? Or a normal day?*

excessive exercise
overtraining 2-3x/day

Wrong reason
Steroids = unhealthy for body

wrong reason: only for looks

Healthy

Balanced eating
⊖ excluding food groups
minimize sugar: still have it on occasion

deviat ✓ = trained hard
emotional eater = chocolate

Healthy life style = better equip to digest unhealthy food
⊖ extreme

Name	MASTER THEME	superodinate theme	#	emergent theme
Abby	Perception of balance	Balanced eating	157	not implementing restrictions
Ivy	Perception of balance	balanced eating	3292	all food groups: veg, protein, and carbs
faith	Perception of balance	balanced eating	2352	balance eating: not counting carbs
Ivy	Perception of balance	balanced eating	3289	balanced eating : not excluding foodgroups
faith	Perception of balance	balanced eating	2354	deviate from healthy eating
Ivy	Perception of balance	balanced eating	3299	deviation from healthy eating allowed : due to healthy lifestyle
Ivy	Perception of balance	balanced eating	3295	deviation from healthy eating allowed : due to training
Ivy	Perception of balance	balanced eating	3296	deviation from healthy eating allowed : due to training & healthy eating
Abby	Perception of balance	Balanced eating	169	Deviation from healthy eating allowed:frequency
Ivy	Perception of balance	balanced eating	3290	Deviation from healthy eating allowed:frequency
Abby	Perception of balance	Balanced eating	166	Deviation from healthy eating allowed:frequency
faith	Perception of balance	balanced eating	2359	Diet plan not nutitional
faith	Perception of balance	balanced eating	2344	Healthy lunch: protein and vegtables
faith	Perception of balance	balanced eating	2344	Meal prep
faith	Perception of balance	balanced eating	2345	No restrictions at dinner
faith	Perception of balance	Clinical/Problematic	2363	Knowledge of different types supplements: Dislike
faith	Perception of balance	Clinical/Problematic	2347	No breakfast
Ivy	Perception of balance	Clinical/Problematic	3278	steroids: seen as unhealthy
Ivy	Perception of balance	Clinical/Problematic	3284	wrong reasons to exercise: look based
Ivy	Perception of balance	emotional regulation	3295	emotional eater
Abby	Perception of balance	Exercise and food conencti	157	active life style allows deviation
Ivy	Perception of balance	Exercise and food conencti	3297	train and eating healthy : body can disgest unheathy food better
Ivy	Perception of balance	Exercise:planned, organize	3277	excessive exercise : overtraining
Abby	Perception of balance	Exercise:planned, organize	149-151	Excessive exercise: overtraining
Abby	Perception of balance	Exercise:planned, organize	148	Recovery: listening to body: long term care
Abby	Perception of balance	General Balance	162	Diet influenced by daily schedule
faith	Perception of balance	General Balance	2360	self-dicipline
faith	Perception of Self	Body satisfaction	2339	Not sattisfied: never ending process
Ivy	Perception of Self	Healthy body	3287	Physical health: exercise to be healthy
Abby	Perception of Self	Weight management	157	Appropriate weight: Weight management as athlete
Abby	Perceptions of society	Social Aspect	173	Guidance: Healthy lifestyle modelled by parents
faith	Perceptions of society	Social Aspect	2354	Societal pressure : driven to reach ideal

quote
I don't go sit an go ok this slice of bread is too many calories or you know I can't drink this coke
So generally I try to get in my veggies, get in my protein, get in my carbs get in everything but just very balanced
For me healthy eating is a balanced diet not necessarily just focusing on counting you carbs and being conscious as to this is my diet plan. For me healthy
Uh, generally I try to have a very balanced diet. Like I don't believe in cutting out a certain food group or anything like that. I think it's all just about balanc
you are allowed to have a treat, or ice-cream or enjoy red meat or whatever your preference is but as long as its balanced why not
. So I think if you have a generally healthy lifestyle like I drink about maybe once a month, I try to avoid alcohol , I try to avoid sugary food but if the oppor
Uhm ag, I think if I had a good week of training
, I'll eat a chocolate and I won't feel bad because I know I've been training and I've been eating healthy, so it's not gonna bother me
now and then I'll have like take way but then I won't feel back cause I know I don't eat that every day like
So I try to avoid stuff like carbonated drinks and very sugary foods and stuff like that, but it is not like I deprive myself. Like I will also have some on occasi
sometimes now and then Ill go and buy like a granadilla twist or something or a muffin
So if you then just eat strictly what's on that diet plan maybe its not nutritional and not sufficient and then what then.
I will do light meat, white meat , fish and the a lot of vegetables, green vegetables
I will do meal prep weekly
but I will eat in the evenings as swell supper but that will be not as healthy it will be potatoes, chops uhm sometimes hamburgers whatever someone else
Hmmm whey protein, ISO , USN, BIOGEN. Uh, I don't like that word.
So ja, morning ja I don't do breakfast although it's the most important meal of the day some said but for me if I eat the morning I would want to eat the e
And I also think there are people that train for the wrong reasons so... Like for example you get guys that use steroids so their training for the wrong reas
I think if it is only about looks but I think that is something that changes with time
but like I'm an emotional eater so if I decide I need a chocolate
Where I don't take into account how many calories, obviously when I'm eating cake I've kinda know ok Ive gotta now work this off.
And I also think if you train and eat healthy your body is better equip to handle like unhealthy foods. Like if you only eat unhealthy foods your GI tract act
Yes, I do think that some people take it too far. Like you get these people that sommer go gym 2-3 times a day and there is something like overtraining. Yo
when you start getting to like ok now I've done 10 already now I am gonna do another 20 then you getting down the wrong path you shouldn't be doing t
it is so important to listen to your body especially when you like want to in the long run go , like running for me at the Olympics
Uhm for breakfast I'll have you know that jungle oats with apple and raisin and cinnamon and it's also like now when the semester started again, my time
So for me yes I think it can be but also in a limit not entirely if you are "self gedisiplineerd" I don't think that will be a problem.
I think if you have the mind-set of nothing is ever good enough for you. So you keep on pushing and pushing and pushing and never reaching a limit that y
To be healthy I think
It's a bad thing because you a have to maintain as a runner, you know, your weight
I eat quite healthy it comes from home as well my parents eat healthy don't smoke don't drink , I don't do any of that so . I think I live quite a good lifestyl
In some instances yes I might think so especially with girls feeling the pressure of society as I felt quite some time ago I think it can be unhealthy cause you

Appendix L – Manuscript 3: Informed consent form

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

HREC Stamp

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

TITLE OF THE RESEARCH PROJECT:

Exploring the athletic-ideal, body image and eating disturbances in a select South African sample

REFERENCE NUMBERS: *[NWU-00026-16-S1]*

PRINCIPAL INVESTIGATOR: Lindi Williams (Clinical Psychologist)

ADDRESS:

North-West University
Faculty of Health Sciences
Private Bag X6001
Potchefstroom
2522

CONTACT NUMBER:

063 792 6356

You are being invited to take part in a research project that forms part of my PhD. Please take some time to read the information presented here, which will explain the details of this project. Please ask the researcher any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you do decline, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (*NWU-00026-16-S1*) and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki ad the ethical guidelines of the National Health Research Ethics Council. It might be necessary for the research ethics committee members or relevant authorities to inspect the research records.

What is this research study all about?

- *This study will involve individual semi-structured interviews with experienced psychologists trained and registered to practice in clinical or counselling psychology. 12 -15 participants will be included in this study.*
- *The aim of this study is to gain a better understanding of the extent to which the athletic-ideal, body image, exercise and eating disturbances have an influence on a select South African sample.*
- *The objectives of this research are: to explore your experience of working with clients presenting with eating and/or body-related disturbances and possible exposure to the athletic-ideal.*

Why have you been invited to participate?

- *You have been invited to participate because you indicated that you have experience in working with eating and/or body-related disturbances.*
- *You have also complied with the following inclusion criteria: Registered clinical or counselling psychologist in practice.*
- *You will be excluded if you are not registered with the HPCSA*

What will your responsibilities be?

- *You will be expected to attend one individual interview with the researcher that will take approximately 60 minutes to complete.*

Will you benefit from taking part in this research?

- The indirect benefits for you as a participant will be the opportunity to share your views on the athletic-ideal and your experience in working with eating and body related disturbances. The bigger benefit will be to the psychological profession gaining a better understanding of the athletic-ideal, its associated behaviours and possible treatment guidelines.

Are there risks involved in your taking part in this research?

- The risks in this study are minimal due to the topic being more of an intellectual nature.

What will happen in the unlikely event of some form of discomfort occurring as a direct result of your taking part in this research study?

- *Should you have the need for further discussions after the interview an opportunity will be arranged for you to attend a debrief session with the researcher.*

Who will have access to the data?

- *Anonymity and confidentiality will be ensured. During transcription, data will be coded to ensure that no link can be made to a specific participant. Confidentiality will be ensured by the way data will be captured, changing identifying data during transcription and deleting the digital recordings once data have been transcribed. Only the researchers will have access to the data. Data will be kept safe and secure by locking hard copies in locked cupboards in the researcher's office and for electronic data it will be password protected. Reporting of findings will be anonymous. Data will be stored for 5 years before being confidentially destroyed.*

What will happen with the data/samples?

- *This is a once off collection, after analysis of the data at the NWU: Potchefstroom Campus the data will be stored in a locked safe located on the Potchefstroom campus.* This safe belongs to the COMPRES scientific committee and will be monitored and supervised by the committee.

Will you be paid to take part in this study and are there any costs involved?

- *No, you will not be paid to take part in the study. The interview will be scheduled at a time and place convenient to you. There will thus be no costs involved for you if you do take part.*

Is there anything else that you should know or do?

- You can contact Lindi Williams at 063 792 6356 or info@bodyideal.co.za if you have any further queries or encounter any problems.

  You can contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 1206; carolien.vanzyl@nwu.ac.za if you have any concerns or complaints that have not been adequately addressed by the researcher.

  You will receive a copy of this information and consent form for your own records.

How will you know about the findings?

- The findings of the research will be shared with you electronically in article form, after completion of the study.

Declaration by participant

By signing below, I ……..…… agree to take part in a research study entitled: Exploring the athletic-ideal, body image and eating disturbances in a select South African sample

I declare that:

- I have read this information and consent form and it is written in a language with which I am fluent and comfortable.

- I have had a chance to ask questions to both the person obtaining consent, as well as the researcher and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (*place*) .....…..……. on (*date*) ……...…….. 20....

..... **.....**

Signature of participant Signature of witness

Declaration by researcher

I *(name)* ……..…… declare that:

- I explained the information in this document to ……..
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter.

Signed at (*place*) .....…..……. on (*date*) ……...…….. 20....

..... **.....**

Signature of researcher **Signature of witness**

Appendix M – Manuscript 3: Interview Schedule

1. What is your understanding of the athletic-ideal? What is your understanding of the thin-ideal?	- How would you differentiate between the athletic- and thin-ideal? - Presentation in practise compared to thin-ideal?
2. What behaviour do clients display to achieve the athletic-ideal?	Possible prompt questions: How often? - Eating (clean eating, supplement) - Exercise (when excessive?) - Relationships (friends, family, partner) - Daily functioning - Other (e.g., pregnancy, stopping secondary characteristics) When would you consider this behaviour unhealthy? Do these individuals report distressing emotions?
3. In your experience, what contributes to the development of the athletic- ideal?	- Family - Friends - Media - Other
4. Can you tell me about your most memorable client with an athletic internalisation?	
5. Can you tell me more about the demographics of clients with an athletic-internalization?	Male presentation Age Ethnicity Marital status Education level
6. How do you make sense of the athletic-ideal in terms of diagnostic classification?	Possible prompt questions: Anorexia?

	Bulimia? Body dysmorphic? What is your understanding of orthorexia?
7. If you could compile your own DSM criteria for in terms of the athletic- ideal. What will they be?	
8. It's been proposed that the thin-ideal and athletic-ideal can be regarded as different presentations of similar underlying factors. What are your thoughts on this?	Masking diagnosis for eating disorder? More similar to anorexia than bulimia? Athletic used as rationalisation/euphemism for unhealthy behaviours?
9. What is your preferred treatment method in dealing with an individual with an athletic internalisation?	Possible prompt questions: Therapeutic modality? Prognosis? Referral?
10. Can you tell me about clients that have an athletic-ideal but had a healthier view of exercise and eating?	Exercise Eating Body image Difference between other clients?
11. How is this athletic-ideal applicable to professional athletes?	
12. Can you think of anything relevant we did not discuss?	Open question
13. How was this interview for you?	Explore experience of discomfort

Appendix N – Manuscript 3: Example of data analysis

This section includes extracts from the transcribed transcripts used in manuscript 3. The corresponding data from the excel spreadsheet is included to illustrate how themes and subthemes where categorized.

Examples include:

- Transcript extract from participant 1.
- Transcript extract from participant 2.
- Transcript extract from participant 3.
- Corresponding data from excel datasheet indicating subsequent data analysis stages.

237 You'll ... ag you'll first go to the gym and then you'll come later. Uhm so she,
238 she actually came due to a relational problem with her husband. Husband
239 wanting a baby, uhm and she avoiding the subject or trying to procrastinate on
240 it.

241 *Ok an you think it is because of her wanting to keep her body as it is?*

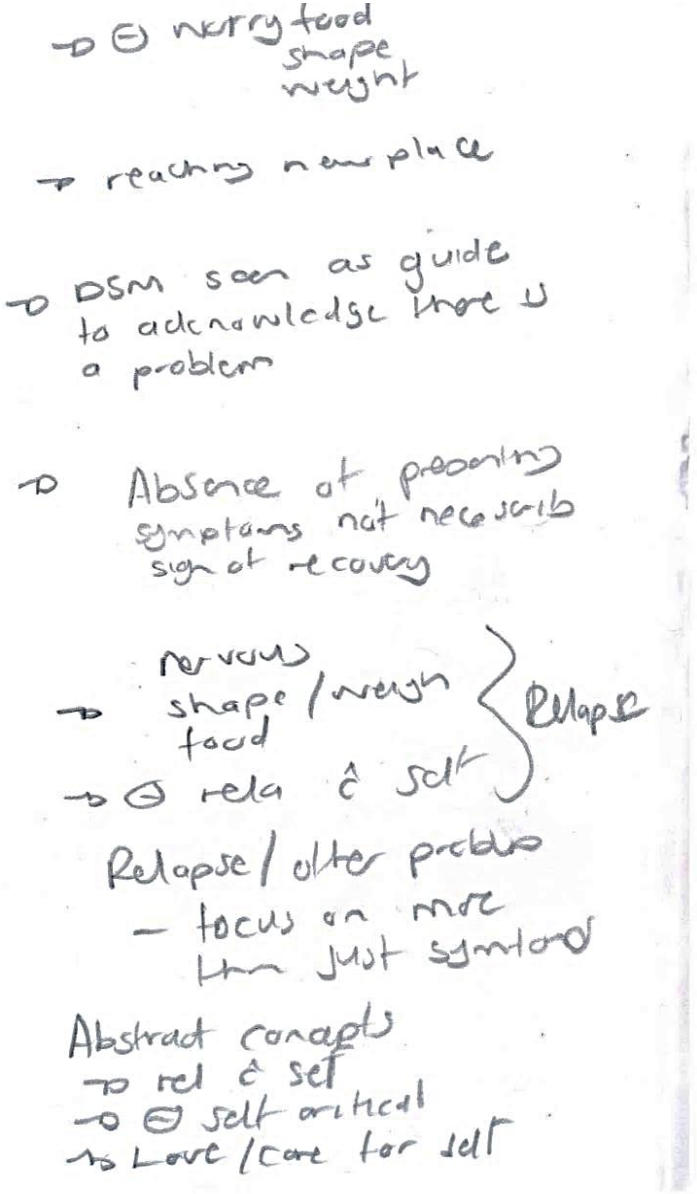
242 Yes, number one ... her main concern then was if I get pregnant I will not look
243 the way I want to look. I might feel sick most of the day being pregnant and
244 then I won't be able to gym or exercise. And there is specific things I can and
245 cannot eat while being pregnant. So it wasn't about having a baby or not
246 having a baby it was about my body is going to change if I'm pregnant.

247 *And how did her... what behaviour did she do to obtain the ideal?*

248 Exercising twice a day everyday except for Sundays or one day a week. Uhm
249 and following a very restrictive diet and then she came for partner relational
250 problems. Uhm Husband wants to go out on a Friday night lets go have dinner
251 somewhere but there will be conflict because uhm she cannot eat what the
252 restaurant is offering. She cannot control what the restaurant putting on her
253 plate. So even if she were to .... Say for instance have chicken and a salad at
254 home she wouldn't have control over how the chicken is prepared or how the
255 salad is prepared in a restaurant.

256 *SO she would avoid going out with her husband then?*

person not worrying about food and shape and weight? Is it the person reaching a new place in their lives? What is the actual definition? And if you ask that question, I don't really worry too much about the DSM . The DSM for me is just a guide to say, you meet the criteria of acknowledging that you have a problem. If you don't want to acknowledge the problem you've got another problem. But if you at least do start acknowledging that you have the problem and these are the reasons why. Then we can start moving to how do we fix the problem? But if you... let's take bulimic behaviour of binging and purging, if you can't get a patient to stop binging and purging, which yes has to happen. Does that mean your work is done? I don't believe so. Because they can still present with a lot of nervousness and anxiety about food or shape and weight. Let's take it even further they can still have a very negative relationship with themselves. Which on a later stage sets you up for potential relapse. So you can stop the active behaviours you can stop bingeing and purging but that's like the alcoholic who stops drinking. If you do not resolve things that can cause further drinking or contributed to you started drinking. Is the alcoholic healed who doesn't drink? Partly yes. Is the bulimic who doesn't binge or purge anymore healed? Yes to a big extend they are healed they are recovered. But they are... or recovering but I don't think that's the full road. Especially if you consider relapse and preventing further problems down the road. I do think it's necessary to focus on more on abstracts things like working on the relationship with yourself, learning not to be self-critical, learning to love and care for



thin and athletic is more about how many about how many bones actually needs to be exposed. So if I could start to see my collar bones or I could start to see my ribs exposed then I'm achieving what is my definition of an athletic-ideal.

Ok what behaviour do clients display to achieve an athletic-ideal?

So it will be severe like dietary restriction or almost like othorextic type behaviour in terms of only eating you know certain foods and cutting out others. And then excessive amount of exercise like every day and then they would display like huge amounts of anxiety if they can't get to the gym or if they perceive themselves to have eaten a little bit more than they believe they should have.

If you say excessive amount of exercise? What would that look like?

So in my clinical experience would be more than 2 hours a day every day.

Ok what type of exercise will they be doing?

So both weight and cardio exercise anything that they belief sort of like pushes them beyond a particular limit and obviously now these days ... which may also then tie in with the question of an athletic ideal... is you know all the fitness devices that you know everyone wears and they constantly like self- monitoring and tracking and making sure they'd burned X amount of calories and done... you know got their heart rate up to whatever level they pushing for.

client → bones exposed

subjective achievement

- dietary restriction
- othorextic behaviour
- certain food
- cutting out others

+ huge amounts of exercise every day
+ Anxiety = can't go to gym
2+ every day = eaten too much

Cardio + weight → beyond limit

fitness device — constant monitoring calories/ heartrate

Name	Master	Sub master	theoretical coding	theoretical coding
P 3	Functioning	Behaviour	Excessive exercise	amount/frequency
P 3	Functioning	Behaviour	Excessive exercise	amount/frequency
P 3	Functioning	Behaviour	Excessive exercise	amount/frequency
P 1	Functioning	Behaviour	Restrictive eating	controlled
P 1	Functioning	Behaviour	Restrictive eating	controlled
P 3	Functioning	Behaviour	Restrictive eating	Food group restrictions
P 3	Functioning	Behaviour	Restrictive eating	General
P 3	Functioning	Behaviour	Restrictive eating	General
P 1	Functioning	Behaviour	Restrictive eating	impair other areas
P 1	Functioning	Interpersonal	Conflict with significant others	commentary on behaviours
P 1	Functioning	Interpersonal	Conflict with significant others	conflicting when views challenged
P 1	Functioning	Interpersonal	Conflict with significant others	conflicting when views challenged
P 1	Functioning	Interpersonal	Conflict with significant others	conflicting when views challenged
P 1	Functioning	Interpersonal	Conflict with significant others	conflicting when views challenged
P 1	Functioning	Interpersonal	Time with significant others	reaching ideal priority
P 3	Functioning	intrapersonal	Cognitive aspect	obsessive/compulsive aspect
P 3	Functioning	intrapersonal	Emotional distress	anxiety
P 2	Functioning	intrapersonal	Emotional distress	Anxiety
P 3	Functioning	intrapersonal	Emotional distress	Negative emotions when unable to exercise
P 2	Functioning	intrapersonal	Impaired relationship with self	comparison with others
P 2	Functioning	intrapersonal	Impaired relationship with self	Self-esteem
P 2	Functioning	intrapersonal	Impaired relationship with self	Self-esteem
P 2	Functioning	intrapersonal	Impaired relationship with self	self-esteem
P 3	Functioning	When is it healthy?	Caution/ Perception on being "healthy"	Euphenism/rasionalization
P 2	Treatment	Diagnostic aspect	Diagnostic challenge	DSM
P 2	Treatment	Therapeutic approuch	Therapeutic aspects	deeper focus not symptoms
P 2	Treatment	Therapeutic approuch	Therapeutic aspects	deeper focus not symptoms
P 2	Treatment	Therapeutic approuch	Therapeutic aspects	deeper focus not symptoms

#	descriptive coding
923	amount/frequency: weight and cardio - pushes beyond limit
921	Amount/frequency:Exercise more that 2 hours everyday
916	Amount/frequency:exessive amount of exercise - everyday
245	Control over food intake : Concerns about pregnancy : eating restrictions
251	Control over preperation: Conflict to go to restaurant
915	Certain foods / cutting out others
914	Dietary restrictions
914	Othorexic behaviour
243	Impair other areas of functioning :concerns about pregnancy: sick - won't be able to exercise
237	Social comentary : gym before social activities
246	concerns about pregnancy : body will chance
242	concerns about pregnancy: will not look the way I want to look
238	Relational problem: procrastinating on having baby (husband wanted baby)
249	restrictive diet - relational implications
248	Frequency of exericse: 2 a day everyday (except one day) - relational implication
925	Fitness device : constant monitoring (calories/heartrate)
918	Anxiety - perception of having eaten little more than that they believe they should have
547	anxiety and nervousness about food, shape , weight
917	anxiety if cant exercise/gym
549	comparison to others: negative realtionship with self - can cause relapse
558	learning not to be self-critical
558	learning to love and care for self
557	relationship with self
910	exposed ribs/collor bones - what is "their" definition of athletic
539	DSM seen as guideline to meet criteria for acknowledging there is a problem
544	Definition for recovery is more than just the absence of presenting symtoms
557	Relapse and prevention of futher problems - Abstract aspects to focus on
556	Relapse and prevention of futher problems - important to focus on undelying

Appendix O – Reflexivity

As a female, I am cognizant of the ideal body that the media has depicted in movies, magazines and advertisements and I have previously felt the pressure to attain this ideal. In recent years, I have noticed a shift in the ideal, the ideal female body today is not only thin but also athletic-looking. I acknowledge that I subscribe to this athletic-ideal as I find it attractive when a woman have visibly toned muscles. I understand that one can only reach this ideal by combining a healthy eating plan with an appropriate exercise regime.

As a psychologist introspection is an action that you start doing in your master's year and never stop doing. When I reflect on my behaviour I evaluate whether I have maladaptive patterns of behaviour, in other words, behaviour that interferes with my functioning in some way. I do not believe that my athletic-ideal internalisation has influenced my behaviour in such a way that it could be considered maladaptive. I understand, however, that I have to maintain a heightened awareness of my cognitions in order to prevent maladaptive thoughts and subsequently behaviours from developing.

When working with participants I maintained awareness of my own thoughts and feeling regarding this ideal. Documenting this process throughout the research thesis was vital to ensure that my own bias does not affect the data and subsequent findings. Mindfulness of my personal perspective about the athletic-ideal and an understanding of the lens that I use to view participants enhanced the quality of the research thesis.

Extract made during data analysis (Manuscript 2)

14/06/2017 – Data analysis – Gaby

Gaby was my first participant and I feel the only "real" athlete. What do I mean by real? – Actively working on the possibility of on making athletics her career – Olympics. Gaby gave

me the impression that being an athlete you automatically develop the athletic body. I got the feeling that she beliefs that wanting the body as part of your goal is more acceptable than wanting the look without working towards a goal. Her identity seem very much part of being an athlete. I strongly feel that due to her athletic thinking it seems healthier BUT there are several times where" distorted" thinking slipped through OR "normal;" dissatisfaction with our bodies? No mention of romantic relationships?

16/06/2017 – Data analysis – Ivy

Feels like she definitely has a good body image and that she is healthy and happy with her body. With her she claims it's not about how you look but how you feel.

18/07/2017 – Data analysis – Debbie

Debbie's frustration with not being able to lose weight is very evident. She tried several what can be seen as unhealthy methods in order to lose weight. Specialized knowledge from studies and being a personal trainer evident. I find that there are several inconsistencies with saying, "looks is not everything" but later saying it is her "alles". I got the feeling that she wanted to seem ok. I find that she often used humour when talking about "being fat".

07/08/2017– Data analysis – Elsa

It appears to me that the behaviour this participant engages in to reach the athletic-ideal can be seen as a protective measure to unhealthy behaviour she previously employed to have a skinny look. She seems to have insight into her "unhealthy" thinking patterns and actively work to cope with them.

Extract made during data analysis/memo writing (Manuscript 3)

15/4/2018 – Participant 2

- Athletic-ideal
    - Muscle definition/Shape/Body fat %/Toned
    - Exercise additional part of problem
- Thin-ideal
    - Lose weight
    - Small and petite
    - Scale very important
- Exercise
    - Compulsive
    - Exercise when sick
    - Regulate self esteem
    - Mood maintenance
- Eating
    - self-defined as healthy/unhealthy
    - Fats and carbs seen as unhealthy
    - More structure/direct aim

18/4/2018 – Participant 3

- Athletic – strong and toned
- Thin – important to differentiate between healthy versus destructive / eating disordered
- See athletic-ideal in addition to being thin
- Athletic- "said to be healthy"
- Introduction of term *orthorexia* – very focused on being "super healthy"
- Athletic-ideal – stunted development –? Regression
- Social media – before and after – without process of getting there
- Maudsley model?

02/05/2018 – participant 4

- Psychodynamic viewpoint evident
- Athletic-ideal – strong focus on subculture – rigidity in culture

- Moral undertones of food
- Against CBT – seen as feeding into pathology
- Therapy – needs to be "okay with mess"
- Defence against vulnerability
- Ever-moving goal post

27/07/2018 – Participant 7

- Participant have a positive view of the athletic-ideal
- Addicts in recovery – exercise used to shift focus
- Exercise – competition, group orientated
- Therapy – important to understand the function of the behaviour.

Appendix P – Originality Reports (TurnItIn)

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ORIGINALITY REPORT

4%	1%	3%	1%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Hayley S. Bell, Caroline L. Donovan, Robin Ramme. "Is athletic really ideal? An examination of the mediating role of body dissatisfaction in predicting disordered eating and compulsive exercise", Eating Behaviors, 2016 Publication	<1%
2	Kristin Homan. "Athletic-ideal and thin-ideal internalization as prospective predictors of body dissatisfaction, dieting, and compulsive exercise", Body Image, 2010 Publication	<1%
3	Lauren M. Schaefer, Natasha L. Burke, J. Kevin Thompson, Robert F. Dedrick et al. "Development and validation of the Sociocultural Attitudes Towards Appearance Questionnaire-4 (SATAQ-4).", Psychological Assessment, 2015 Publication	<1%
4	Robin A. Ramme, Caroline L. Donovan, Hayley S. Bell. "A test of athletic internalisation as a	<1%

Appendix Q – Declaration by language editor

DECLARATION BY LANGUAGE EDITOR 19 February 2019

I hereby declare that I have language-edited the dissertation by L. Williams (orcid.org/ 0000-0001-6368-1454) submitted in the fulfilment of the requirements for the degree Doctor of Philosophy in Psychology at the North West University to the satisfaction of the student and her supervisors.

Title of dissertation: Exploring the athletic-ideal body image and eating disturbances in a selected South African sample

Promoter: Dr D Naidoo

Co-promoter: Dr R Spies

……

Dr. A.D. Kotze

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