
The Body Dissatisfaction among Female Athletes and Non-athletes in Malaysia

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Abstract: *This study was aimed to identify the body dissatisfaction among female athletes and in non- female athletes. This present study also examined ideals body size, and media influence towards body dissatisfaction perception among female recreational athletes and non-athletes. Participants were 40 women age ranged between 21 and 30 years: 20 recreational athletes who regularly go to the gym, do running and other sporting activities and 20 non athletes who lead a sedentary life completed self-report measures of ideal body size, body dissatisfaction, and media influence, and provided their demographic details. Results indicated that participants' Body Mass Index (BMI) did not play a role as a significant predictor of body dissatisfaction for the total sample. Female athletes prove to have higher body dissatisfaction on themselves compared to female non-athletes ($M= 2.1818, p<0.05$). These results clearly indicate that females participating in sports experience greater body dissatisfaction than non-athletes females.*

Introduction

Body image refers to the internal perception of one's own physical or outer appearance (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). In many developed countries, rates of body image dissatisfaction – typically measured as the difference between an individual's current and ideal body shape – are very high or rising, particularly among women (Allaz, Bernstein, Rouget, Archinard, & Morabia, 1998; Cash & Henry, 1995). For instance, a Psychology Today survey revealed that 56% of women were dissatisfied with their overall appearance (Garner, 1997). One

particular subgroup that has received a great deal of attention of body image literature is female athletes. Specifically, it has been suggested that female athletes may be at higher risk of body image dissatisfaction and eating disorders due to a need to attain athletic physiques under task (e.g., performance advantages or weight requirements) or social pressure (Davis & Cowles, 1989; Sundgot-Borgen, 1994).

Some research indicates that athletes are at increased risk of eating disorders and body image dissatisfaction compared with the general population (Hausenblas & Carron, 1999; Taub & Blinde, 1992). In contrast, however, other research suggests that athletes report lower body image concerns than non-athletes (Anderson, Zager, Hetzler, Nahikian-Nelms, & Syler, 1996; Hausenblas & Mack, 1999), possibly as a result of increased self-esteem (Bowker, Gadbois, & Cornock, 2003). Self-presentation appears to be significant in sport and exercise environments (Leary, 1992). In both settings, women may perceive that others are evaluating their physique and skill level. This compels self-presentational concerns. Women often engage in exercise to acquire the ideal female body (or one as close to the ideal as possible) suggesting self-presentation concerns as a motive for exercise (Leary, 1992). Accordingly, research shows that many Women report that they exercise to reduce their weight and body fat, and to increase their muscle tone (Gill & Overdorf, 1994; McDonald & Thompson, 1992; Silberstein, Striegel-Moore, 1998). It seems that the fitness craze, for women, is more about the pursuit of thinness than the pursuit of good health (Davis, 1992).

Women who exercise for reasons specifically tied to self-presentation often are dissatisfied with their bodies and are at risk for developing unhealthy eating and exercise patterns (Davis, 1990; McDonald & Thompson, 1990). Thus, women who exercise primarily to obtain an ideal body may be at increased risk for developing potentially serious health problems. Women who exercise excessively may suffer from female athlete triad, a combination of disordered eating, amenorrhea, and osteoporosis that often goes unrecognized.

Body dissatisfaction is related to Social Physique Anxiety (SPA); females who exercise primarily to enhance their appearance (e.g., for weight control, body tone, attractiveness) tend to have high levels of SPA (Crawford & Eklund, 1994; Eklund & Crawford, 1994). Social physique anxiety also may increase women's risk of engaging in unhealthy eating and exercise behaviors (Johnson, Diehl, Petrie, & Rogers, 1995; McDonald & Thompson, 1992).

Two environments where there is pressure to conform to a certain body shape are aerobic exercise classes and competitive sport settings. It is important to reiterate that most, if not all, females in our society are exposed to cultural pressure to maintain a thin, toned appearance (Bartky, 1990; Bordo, 1993). Exercise and sport settings present additional pressures on female participants. The atmosphere in aerobic exercise classes emphasizes development of the ideal feminine body; women in these classes describe wanting to develop thin, toned bodies, yet also wanting to avoid becoming too. This focus on attaining an ideal physical appearance is accentuated through the types of exercises employed, and through participants' perception that their appearance is being judged by other class members. This creates a sort of rivalry among some women in exercise classes concerning their body shape and size, and fitness level (Bartky, 1990).

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appearance is accentuated through the types of exercises employed (Markula, 1995), and through participants' perception that their appearance is being judged by other class members (Frederick & Shaw, 1995; Maguire & Mansfield, 1998). This creates a sort of rivalry among some women in exercise classes concerning their body shape and size, and fitness level (Maguire & Mansfield, 1998).

In the athletic environment, many athletes and coaches believe that it is necessary to maintain a certain weight and body shape for optimal athletic performance (Davis, 1992; Petrie, 1996). Athletes and coaches believe that excess weight inhibits speed, endurance, and agility; and it increases fatigue. Conversely, leanness is believed to enhance performance (Davis, 1992). In addition, some sports emphasize aesthetic appeal, or the athletes' appearance during performance (e.g., gymnastics, diving). One negative impact of these performance concerns is shown in studies revealing a disturbing incidence of disordered eating patterns in competitive athletes (Sundgot-Borgen, 1994).

Female athletes who feel that their body is being evaluated by others may be at greater risk. Thus, there is a greater likelihood of high Social Physique Anxiety (SPA) and low body satisfaction. This is consistent with the self-presentation framework, and previous research supports the need to examine this contention. For example, Fredrickson and colleagues (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998) found that putting women into revealing clothing, even when no other people were able to observe them, increased their body shame, which was related to restrained eating. If an athlete perceives her body as less than ideal, this may increase the likelihood of body dissatisfaction and unhealthy eating behaviors.

Athletes had higher levels of perfectionism compared to non-athletes. Additionally, Wilmore (1996) showed that athletes high in perfectionism had a higher drive for thinness than athletes low in perfectionism. Athletes may be so concerned about their performance that they become quite

disappointed in themselves for performing poorly (Gotwals, Dunn, & Wayment, 2003). Researchers have found links between perfectionism and risk factors for developing eating disorders (Hausenblas & Carron, 1999). Krane et al. (2001) compared athletes with non-athletes and found that perfectionism was the only factor that significantly distinguished the groups. Athletes had higher levels of perfectionism compared to non-athletes. Additionally, Wilmore (1996) showed that athletes high in perfectionism had a higher drive for thinness than athletes low in perfectionism. Perfectionism is a personality trait characterized by striving for flawlessness and setting excessively high standards for performance, accompanied by tendencies toward overly critical evaluations of one's behavior (Flett & Hewitt, 2002). In sports, some researchers see perfectionism as an adaptive trait that helps to achieve elite performance (Gould, Dieffenbach, & Moffett, 2002).

Methodology

Participants

Participants were 40 women ranging in age between 21 and 30 years: 20 recreational athletes who regularly go to the gym, do running and other sporting activities and 20 non athletes who lead a sedentary life. ($M = 26.75$, $SD = 2.73$). Among the participants, 19 were Chinese, 6 Malays, 4 Indians and 1 Iban. All participants are recruited through personal contacts. All these women took part in this study voluntarily. All participants completed the questionnaires with the presence of a female experimenter and then debriefed after completing the questionnaires.

Instruments

In this study, we applied Sociocultural Attitudes Toward Appearance Questionnaire-3 (SATAQ-3) (Thompson

et al., 2004) set of question to assess the body image perception for both athletes and non-athletes.

This is a 30-item scale measuring the sociocultural influence of multiple dimensions of the mass media on body image and eating disturbance (1 = Definitely disagree, 5 = Definitely agree). Two dimensions of media influence are measured:

(a) Internalization- General (nine items indicating endorsement and acceptance of media messages touting unrealistic ideals for female beauty and the striving toward these ideals); and

(b) Internalization-Athlete (five items indicating endorsement and acceptance of an athletic and toned body ideal).

This questionnaire was used to assess women's recognition and acceptance of body appearance from media influence. Cronbach's a coefficients in this present study are as follows: Internalisation- General 0.88, and Internalisation-Athlete 0.85. (Thompson et al., 2004).

Besides SATAQ-3, we also used Photographic Figure Rating Scale (PFRS; Swami et al., 2008) in this study. This scale of photographic body image represents an advance on the more widely-used Contour Drawing Figure Rating Scale (Thompson & Gray, 1995) and consists of 10 gray-scale photographic figures of real women in front-view. The images represent two women from each of the established BMI categories: emaciated (<15 kg/m²), underweight (15–18.5 kg/m²), normal weight (18.5–24.9 kg/m²), overweight (25.0–29.9 kg/m²), and obese (>30 kg/m²). Fig.1 shows the PFRS used in this study. Previous study had shown that the PFRS has high construct validity and test-retest reliability (Swami et al., 2008).

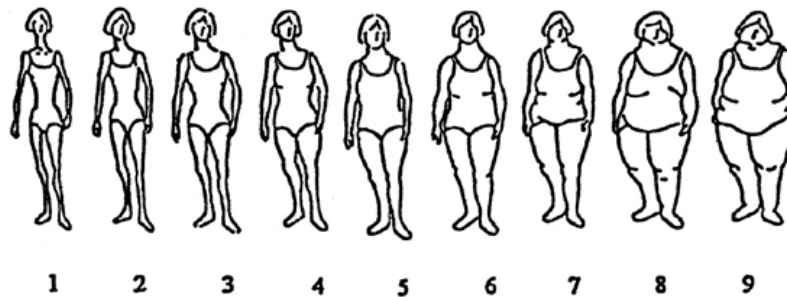


Figure 1: Photographic Figure Rating Scale (PFRS; Swami et al., 2008)

Each of the nine figures was scored from 1 to 9, with "1" representing the most slender figure and "9" representing the heaviest figure. This score used two items: current body image and body image ideal. The current body image item asked the respondent to identify which figure most accurately represented her current body shape. The ideal body image item asked which body shape they desired. Subtracting the ideal body image from the current body image yielded the BD rating. The BD rating could range from -8 to 8. Thus, a BD rating of >0 indicated that the participant's current body image was heavier than her ideal body image. A BD rating of <0 indicated that the participant's current body image was lighter than her ideal body image. No discrepancy between the current and ideal body image indicated that she chose the same figure for both items and scored a zero for BD.

Results and Discussion

Statistical analysis was done in SPSS version 16.0. Independent T-test was used to determine whether there is a significant difference between Athlete and Non-athlete perception towards their body dissatisfaction. Mean score for athlete group is 2.18 (\pm SD 0.603) and non athlete type is 3.78 (\pm SD 1.092) $p<0.05$. Results indicate that there is a significant difference between athlete and non-athlete type and body dissatisfaction.

Table 1: Independent T-Test result between female athletes and non-athletes

Athlete Type	n	Mean	SD	t	p
Athlete	20	2.1818	0.603	3.920	0.002
Non-athlete	20	3.778	1.092		

These findings are consistent with previous studies that have shown body image disorders to be more prevalent among athletes involved in sports that promote leanness (de Bruin et al., 2007; Davidson et al., 2002) In other words, it maybe that athletes wish to be thinner not because they want to look more attractive, but because of their belief in an association between thinness and task performance (de Bruin et al., 2007). This has important implications, as it highlights the importance of body image satisfaction: successfully attaining idealised body shapes may result in improved self-esteem in sporting arenas, but athletes may also experience body dissatisfaction in social environments, where the perceived demands to conform to socially-prescribed norms of attractiveness are greater (Russell, 2004).

In this study also, the relationship between BMI and body dissatisfaction was being study. To determine the relationship between those two indicators, Pearson Correlation was used to measure how strong the relationship is between Participant BMI and Body Dissatisfaction among females' athletes and non athletes. In this statistical analysis, result indicates that there is no direct correlation between BMI and body dissatisfaction among respondents. Table 2 shows the result of the Pearson correlation analysis.

Table 2: Relationship between participant's BMI and body dissatisfaction

Variables	Pearson Correlation (r)	p
Participant BMI	-0.014	0.953
Body Dissatisfaction (BD)	1	

** . Correlation is significant at the 0.01 level (2-tailed).

Participants' BMI did not play a role as a significant predictor of body dissatisfaction for the total sample. This signifies that those with a lower BMI did not necessarily have higher body dissatisfaction in themselves. Since the average BMI is relatively low; there could not be an obvious relationship between these two variables, those with lower BMI are generally satisfied with their bodyweight or body shape and there is no a need for dieting or a drive for thinness. Another factor to why there is no relationship between these two variables is that the sample population is too small to gain any significant results on this relationship.

Pearson Correlation was used to measure how strong the relationship is between Internalization Athlete Score and Body Dissatisfaction among females. Results indicate that there is a direct correlation between the Internalization Athlete Score and body dissatisfaction among female athletes and non-athletes. Pearson Correlation was found out to be at 0.57 which means that the correlation relationship is moderately strong. The higher the Internalization Athlete Score is the higher the Body Dissatisfaction score is for the sample population. Higher Body Dissatisfaction score signifies a more dissatisfied perception of the body. Table 3 shows the relationship between Internalization Athlete Score and body dissatisfaction among participants.

Table 3: Relationship between Internalization Athlete Score and body dissatisfaction among participants.

Variables	Pearson Correlation (r)	p
Athlete Internalisation Score	0.57	0.008
Body Dissatisfaction (BD)	1	

** . Correlation is significant at the 0.01 level (2-tailed).

The higher the Internalization Athlete Score is, the lower the Body Dissatisfaction score is for the sample population. Lower Body Dissatisfaction score signifies a more dissatisfied perception of the body. Athletes had the highest scores on the Internalization-Athlete subscale of the SATAQ-3, indicating their greater acceptance of an athletic body ideal. Arguably, athletes are exposed to leaner, more muscular or more athletic images than other athletes or non-athletes, so this will result in greater body dissatisfaction (Zucker et al., 1999).

Limitation and future considerations

A small sample size may not have produced significant results on this research. It would be better this study was able to gather more respondents. Participants self-reported their attitudes and behaviors on this questionnaire, and may have not been completely honest in their responses. Individuals may have defined sports participation in a variety of ways. The category of athletes and non athletes is too broad. This study can be further researched in terms of body dissatisfaction in what kind of sports women are participating in, such as leanness-promoting sports or non leanness-promoting sports, and competitive or non competitive level sports. Despite these limitations, athletes, professors, and coaches can use these findings to help recognize female athletes that may be at risk for the development of eating disorders.

Conclusion

Results from this study suggest that female athlete is having more dissatisfaction towards their body image compared to non-female athletes. It was also found out that a person BMI did not reflect their true satisfaction towards their body image in reality. This study has long-term significance contribution in terms of suggesting that coaches and athletic departments of competitive athletes should be on the look-out for sports-related anxiety as these athletes may be at higher risk for eating disorder symptoms in comparison to women who are less anxious about their performance and those who are not involved in athletics. In conclusion, the present results suggest that athletes have a higher degree of body dissatisfaction than non-athletes. In some cases, body dissatisfaction may lead to the female athlete triad, a combination of disordered eating, amenorrhea, and osteoporosis that often goes unrecognized

(Hobart & Smucker, 2000). Early recognition of the female athlete triad may be improved by assessments and screening that take into account body dissatisfaction and media influences. Of course, there are also many situations in which sport participation can result in improved well-being, including higher self-esteem or life satisfaction (Bowker et al., 2003; Landers & Arent, 2001). The continuing task for psychologists, therefore, will be to identify those situations and thereby help improve body image among athletes.

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