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Body Image Coping Strategies among University Students and Variations in Terms of Gender in a Developing Country

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ABSTRACT The transition to adolescence is accompanied by rapid, unexpected and novel experiences in social, cognitive, physical, emotional and psychological domains. The issue of body image and perceptions of fatness and slenderness have also become central to western culture and values. The current study examines cognitive and behavioural body image coping strategies among university students, and variations in terms of gender. A quantitative research approach was used to collect data from a sample of 639 undergraduate and post graduate students from a university. The Body Image Coping Strategies Inventory (BICSI) was used to measure coping strategies. The findings indicated that for university students, both genders rely on appearance fixing and positive rational acceptance as their coping strategy, whereas female students rely to a greater extent than male students on these two coping strategies. Perception of body image can influence students' body image and students should be aware of how day-to-day events and situations can activate thoughts, interpretations and conclusions that often trigger positive or negative cognitive and behavioural reactions to their body image experiences and ensuing coping strategies and behaviours.

INTRODUCTION

As university students move to a larger, more impersonal education structure, interaction with peers from diverse geographical and ethnic backgrounds brings with it many challenges (Rabbani et al. 2014). This transitional phase is accompanied by many changes and the possibility of stress which can impact on physical, psychological and mental health, especially with regard to appearance and body image (Gyurcsik et al. 2004). Transition of students from a school environment to a university environment could cause a psychological, academic and social shock for many students (Thawabie and Qaisy 2012; Kumari et al. 2014; Lopez 2014). There is also evidence from studies that adolescents who begin their university studies are at high risk for abnormal weight gain (Al-Daghri et al. 2014). Body image is a complex and a multidimensional phenomenon that comprises attitudes, perceptions and experiences, which a person undergoes with reference to his or her physical appearance (Klepp 1997). The subject of body image and perceptions of fatness and slenderness have become central to western culture and values (Chen et al. 2010). Adolescent females in particular, exhibit concerns about becoming overweight/obese, especially when judged by their peers (Levine and Smolak 2002; Presnell et al. 2004). Although studies have focussed on adolescents, especially with regard to slimness, these studies were concentrated on population living in Western societies (Lee 1993; Wildes et al. 2001). However, body image is culturally determined, and levels of body dissatisfaction differ between sub-cultures and ethnicity, since socio-cultural factors play an important role in the development and prevalence of body dissatisfaction (Chen et al. 2010).

Public discourse on perceived anxiety reported in literature, show semblance of evolution; with stress and coping strategies emerging from various disciplines. Some recent studies: stress and coping strategies on nursing students (Kumar 2011), general stressors among university students (Thawabieh and Qaisy 2012), perceived stress among first year students (Al-Daghri 2014), social and psychological adjustment among students (Jackson and Bybell 2014), stress among adolescents (Kacharoo 2014), levels of stress among adolescents (Kumari et al. 2014), parents and student stressors (Rabbani et al. 2014), and support systems among university students (Tumuti and Wang'eri 2014) are noteworthy. These cited studies reveal growing interest in non-western countries to address stress and sheds imperative foresight on the ongoing research on coping strategies. Often a key voice under-represented from this growing literature is that of the students, particularly in emerging and developing economies. Notwithstanding these affirmations, few studies used the Body Image Coping Strategies Inventory (BIS-SI) through the perceptions/lenses of university students. The BISSI was developed in 2005 (Cash et al. 2005) and refined through various psychometric stages to measure students cognitive and behavioural coping. Within consumer studies, the body is seen to represent an important locus in the discourse of postmodern consumption (Leipämaa-Leskinen 2011). This study seeks to fill this gap in the generation of new knowledge within a community of academic practice and research.

Body Image and Coping Strategies

A variety of coping styles are reported in literature such as psychological coping (for example, meditation and rest), physical coping (for example, exercise), problem solving (for example, behavioural and cognitive efforts to make changes), social support (for example, being with friends and family) (Jackson and Bybell 2014). Body image perceptions involve a subjective evaluation of the body. Recent body-image research posits that body image is a function of the cognitive social learning process, which comprises the affective, cognitive and behavioural assessments of size, aesthetics, sensation, function, fitness and health (Pruzinsky and Cash 1990). Such appraisals can lead to a perception of the body that is distinct from its objective size and shape (Pruzinsky and Cash 1990; Ricciardelli and McCabe 2001; Presnell et al. 2004). Body image represents an integral component of self-image. Cash (2002) posits a cognitive-behavioural model, whereby historical and proximal events shape and sustain body-image experiences. Historical influences are past events that predispose a person's thoughts and feelings about body image. The socialisation process that one undergoes regarding the values and standards of physical appearance, experiences through communicating with others and personality dimensions may affect body image development perceptions (Cash et al. 2005). Hence, the positive-to-negative appraisals people make, and the beliefs they have regarding appearance, reflect the satisfaction or dissatisfaction with their own body image. The

proximal processes involve events that trigger and maintain body-image experiences, which include self-dialogues and emotional inferences about the self (Cash 2002). Situational events affect one's self-evaluation by triggering appearance-schematic processes, which influence how information is processed about the self, thus inducing affective experiences. For example, a person who is very conscious about appearance will invest more on how they look and are more likely to react to appearance-related stimuli (Cash et al. 2004). As a result of this process a person may become self-conscious and anxious, or may feel a sense of shame or dejection. When this happens, people engage in coping strategies to manage potentially distressing body-image experiences.

Coping is a survival mechanism that takes place between an individual and the environment in which a response is directed at reducing the psychological, emotional, and physical burden associated with a stressful situation (Snyder and Dinoff 1999). It entails a change in the "cognitive, behavioural and emotional processes in order to deal with internal or external demands" that are placed on an individual (Lazarus and Folkman 1984:51). To understand the process, an individual's appraisal of a demanding situation must be analysed (Cash et al. 2005). Appraisal occurs at two levels, namely the primary phase and the secondary phase. In the primary phase, an individual assesses the risk involved in a situation. If it is appraised as threatening or challenging, the person examines available coping options, known as secondary appraisal, and then decides, sometimes unconsciously, which type of coping strategy to implement in a given situation. The appraisal process together with the emotions that it prompts may alter the means of coping in a situation. This relationship is then reappraised, which leads to a modification in the quality and intensity of emotion (Folkman and Lazarus 1988).

Various coping strategies have different outcomes for individuals. The main coping strategies cited in literature are based on Lazarus and Folkman's (1984) model. According to the model, in any stressful situation, there is more than one option for coping, namely problem-focused and emotional coping strategies. Problem-focused strategies are directed at managing and changing the sources of stressors (Snyder and Dinoff 1999). An emotion-focused coping strategy regulates the emotional responses to stress (Stanton and Franz 1999). There are also other methods of classification, which include approach (engaging) and avoidance (disengaging) behaviours, where an individual attempts to actively deal with or avoid distress (Tobin et al. 1989). When individuals are placed in a context of a potential threat or challenge to their body image, they develop and employ cognitive and behavioural strategies to adjust or cope with these distressing situations or events (Cash 2002). These strategies are maintained through negative reinforcement to the extent that they provide temporary relief through escape and avoidance, thus minimising discomfort.

Research has shown that females are more concerned with their body image as compared to their male counterparts, especially among university students (Murray et al. 2011). Females have shown to report high levels of body dissatisfaction compared to males (Kostanski and Gullone 1998) and reported higher levels of stress in this regard (Hampel and Petermann 2006). Like other adolescents, female university students often seek an ideal feminine body, which is related to being thin and graceful, while males tend to strive for masculine ideals by being muscular (Rudolph 2002).

Objectives of the Study

The purpose of the study the study is to examine the cognitive and behavioural body image coping strategies among university students and variations in terms of gender. A better understanding of these coping strategies may assist in developing a framework for the development and implementation of programs for students to deal with body image coping strategies.

METHODOLOGY

The study is located with a quantitative research paradigm. This was necessary in order to establish gender differences with regard to the coping strategies through a cross-section survey design.

Sample

A sample a total of 900 undergraduate and post graduate male and female students, randomly selected from the a university in South Africa. Participants had the right not to participate in the study or withdraw at any part of the survey. The participants were informed of the nature and purpose of the study and were assured of the confidentiality and anonymity of the responses given. A total of 639 valid questionnaires (n=639), which were completely filled in were used for analysis.

Instrumentation

Demographic questions were used to gather basic information about the participants including age, gender, level of study and participation in physical activity. Information about cultural background was not collected, as the majority of students enrolled in the faculty belong to one ethnic group. A 29 item Body Image Coping Strategies Inventory (BICSI), developed by Cash et al. (2005) was used to measure coping strategies. A factor analysis of the BICSI indicated three internally consistent coping subscales: avoidance, appearance fixing and positive rational acceptance. The subscales were found to be reliable for males and females with Cronbach alpha values ranging from 0.74 to 0.91 (Cash and Grasso 2005). Respondents were requested to indicate on a four point scale, a number ranging from zero to three, to indicate how well each way of coping describes what respondents exactly do or would do, with 0 denoting definitely not like me; 1 denoting mostly not like me; 2 denoting mostly like me; and 3 denoting definitely like me.

RESULTS

The sample consisted of 375 (58.7%) undergraduate and 264 (41.2%) post graduate students. More female students (38.8% undergraduate and 24.4% post graduate) participated in this study than male students (19.9% undergraduate and 16.9% post graduate). Most female (31.9%) and male (17.7%) students were between 22 and 25 years of age, and the majority of these students participate in physical activity (female =41.8% and male =30.1%). Male students participated mostly in team sports (14.3%), walking/ jogging (13.2%) and gym/aerobics (5.9%), while female students participated mostly in walking/ jogging (33.3%), gym/aerobics (6.8%) and dancing (6.8%). However, a large majority of the students did not participate in any form of physical activity (female=58.2% and male = 69.9%).

Pearson correlation was calculated between gender and the three body image coping strategies. The result indicated that there was a significant positive relationship between gender and appearance fixing (r=0.236, p<0.001) as well as between gender and positive rational acceptance (r=0.179, p<0.001). For male students (n=235), all three factors were positively correlated. Appearance fixing was significantly positively associated with avoidance (r = 0.413, p < 0.001) and with positive rational acceptance (r=0.392, p<0.001). Avoidance was significantly positively associated with positive rational acceptance (r=0.360, p<0.001). For female students (n=404), all three factors were also positively correlated. Appearance fixing was significantly positively associated with avoidance (r=0.372, p<0.001) and with positive rational acceptance (r=0.238, p<0.001). Avoidance was significantly positively associated with positive rational acceptance (r=0.247, p<0.001). Table 1 shows the relationship between gender and body image coping strategies.

A statistically significant difference was found between male and female students in two out of the three body image coping strategies. The results show that female students differed significantly from their male counterparts on the appearance fixing and positive rational acceptance coping strategies. No statistically significant difference was found for the avoidance coping strategy, indicating that male and female students apply similar coping strategies to avoid or deny threats. Table 2 reports on the relationship between gender and appearance fixing challenges/threats.

Appearance fixing is "directed at altering appearances by covering, camouflaging or correcting the perceived defect" (Cash et al. 2005: 192). Out of ten challenges/threats; female students had significantly higher coping scores than

Table 1: Overall relationship between gender and body image coping strategies

Body image coping strategies	Male		Female		Significance
	Mean	Standard deviation	Mean	Standard deviation	
Appearance fixing	0.9383	0.5818	1.2391	0.6079	$p = 0.000^{***}$
Avoidance	1.0186	0.4327	0.9864	0.4318	p = 0.364
Positive rational acceptance	1.7207	0.4891	1.8898	0.4229	$p = 0.000^{***}$

Note: * p<0.05; ** p<0.01; *** p<0.001

Table 2: Relationship	between gend	ler and appearan	ce fixing challenge	es / threats
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Appearance fixing challenges /	Male		Female		Significance
threats	Mean	Standard deviation	Mean	Standard deviation	
I spend extra time trying to fix what I don't like about my looks	0.851	0.956	1.050	1.005	$p = 0.015^{*}$
I seek reassurance about my looks from other people	0.711	0.812	0.832	0.943	p = 0.088
I do something to try to look more attractive	1.213	0.964	1.394	1.009	$p = 0.027^*$
I spend more time in front of the mirror	0.681	0.913	1.631	1.057	$p = 0.000^{***}$
I think about what I should do to change my looks	0.843	0.865	1.045	0.936	$p = 0.007^{**}$
I fantasise about looking good	0.953	0.988	1.500	1.060	$p = 0.000^{***}$
I think about how I could "cover up" what's troublesome about my looks	0.766	0.857	1.109	1.032	$p = 0.000^{***}$
I compare my appearance to that of physically attractive people	0.711	0.873	0.700	0.873	p = 0.887
I make a special effort to look my best	1.830	0.985	2.134	0.922	$p = 0.000^{***}$
I make a special effort to hide or "cover up" what's troublesome about my looks	0.826	0.901	0.988	0.979	$p = 0.028^*$

Note: * p<0.05; ** p<0.01; *** p<0.001

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male students on eight of these variables. The largest significant discrepancy between male and female students was found in two challenges, namely: 'I spend more time in front of the mirror' and 'I fantasise about looking good'. Both genders scored high on the challenge: 'I make a special effort to look my best', although female students' coping score was significantly higher than male students. Male and female students significantly scored low on five challenges: 'I spend extra time trying to fix what I don't like about my looks', 'I do something to try to look more attractive', 'I think about what I should do to change my looks', 'I think about how I could "cover up" what's troublesome about my looks', indicating that these challenges are not a threat to their body image perception and they do not need to cope with these challenges.

Table 3 outlines the relationship between gender and avoidance challenges/threats. Avoidance is "an attempt to escape or avert stressful body-image situations" (Cash et al. 2005:192) and consists of eight questions. Four of these variables indicate a statistically significant difference between male and female students. Male students' coping score was higher than female students' on the challenges: 'I try to tune out my thoughts and feelings' and 'I avoid looking at myself in the mirror', whereas female students' coping score was higher on 'I eat something to help me deal with the situation' and 'I react by overeating'.

Table 4 reports on the relationship between gender and positive rational acceptance challenges/threats. Positive rational acceptance "entails strategies emphasizing acceptance of the challenging event and positive self-care or rational self-talk about one's appearance" (Cash et al. 2005:192) and consists of eleven questions. Eight of these variables indicate a statistically significant difference between genders. Male and female students' coping score on six of the situations identified in the positive rational acceptance strategy are high, where female students' coping scores are higher than the male students coping score for: 'I remind myself of my good qualities', 'I tell myself the situation will pass', 'I try to figure out why I am challenged or threatened by the situation', 'I remind myself that I will feel better after a while', 'I tell myself that I probably look better than I feel I do', and 'I react by being especially patient with myself'. Male and female students significantly scored low on two challenges :'I tell myself that I am probably just overacting about the situation' and 'I tell myself that I'm just being irrational about things'), indicating that these two challenges are not a threat to their body image perception and they do not need to cope with these challenges.

DISCUSSION

Body image coping mechanisms refer to strategies that students use to manage their thoughts and feelings that are associated with their body image threats and challenges (Melnyk et al. 2004). This study found that university students rely on appearance fixing and positive rational acceptance as their coping mechanism. In other words, students attempt to alter or conceal as-

Table 3: Relationship between gender and avoidance challenges / threats

Avoidance challenges / threats	Male		Female		Significance
	Mean	Standard deviation	Mean	Standard deviation	
I try to tune out my thoughts and feelings	1.966	0.837	1.800	0.881	$p = 0.018^*$
I try to ignore the situation and my feelings	1.191	0.930	1.228	1.005	p = 0.645
I avoid looking at myself in the mirror	0.872	0.847	0.450	0.762	$p = 0.000^*$
I eat something to help me deal with the situation	0.945	1.013	1.181	1.114	$p = 0.006^*$
I tell myself that I am helpless to do anything about the situation	0.562	0.837	0.535	0.864	p = 0.700
I react by overeating	0.643	0.872	0.854	0.989	$p = 0.005^*$
I withdraw and interact less with others	1.013	0.908	1.012	0.962	p = 0.996
I make no attempt to cope or deal with the situation	0.957	0.942	0.832	0.900	p = 0.095

Note: * p<0.05; ** p<0.01; *** p<0.001

Table 4: Relationship between gender and positive rational acceptance challenges / threats

Positive rational acceptance	Male		Female		Significance
challenges / threats	Mean	Standard deviation	Mean	Standard deviation	
I consciously do something that might make me feel good about myself as a person	2.289	0.802	2.308	0.810	p = 0.782
I remind myself of my good qualities	2.238	0.839	2.460	0.769	$p = 0.001^{**}$
I tell myself that I'm just being irrational about things	1.034	0.842	1.223	0.885	$p = 0.008^{**}$
I tell myself the situation will pass	1.991	1.054	2.297	0.930	$p = 0.000^{***}$
I try to figure out why I am challenged or threatened by the situation	1.766	1.114	1.963	0.989	$p = 0.025^*$
I tell myself that I am probably just over-reacting about the situation	1.187 *	0.919	1.413	0.927	$p = 0.003^*$
I remind myself that I will feel better after a while	1.634	1.059	1.911	0.975	$p = 0.001^{**}$
I tell myself that there are more important things than what I look like	2.017	1.021	2.082	0.997	p = 0.433
I tell myself that I probably look better than I feel I do	1.834	0.971	2.035	0.958	$p = 0.011^{*}$
I react by being especially patient with myself	1.647	0.978	1.871	0.915	$p = 0.004^{**}$
I tell myself that the situation is not that important	1.289	0.966	1.225	1.004	p = 0.430

Note: * p<0.05; ** p<0.01; *** p<0.001

pects that they experience as distressing, and they engage in self-talk to accept their appearance and emotions. Cash et al. (2005), found a positive association between all three coping strategies for males, but for females these authors found a positive relationship between appearance fixing and avoidance, a negative relationship between avoidance and positive rational acceptance, and no relationship between positive rational acceptance and appearance fixing. In contrast, the current study found that all three body image coping strategies (appearance fixing, avoidance and positive rational acceptance) were positively associated for both genders. A study by Lopez (2014) on coping strategies among university students also found that that there was a direct relationship with problem-focused coping, emotion-focused and adaptive coping indicating that the use of problemfocused coping increase in the use of emotionfocused coping which led to an increase in the use of adaptive coping.

It seems that appearance fixing increase through concealing attributes that are distressing to a student and it increases a student's emotional reaction to avoid or deny these threats. This leads to an increase in students' engagement in constructive self-talk to accept their appearance and emotions. Students apply the body image coping strategies in a positive manner to deal with the threat or challenge that they face in terms of body image, and this could indicate the these students have a good body image perception. In a previous study undertaken by Nolan and Surujlal (2012), students at the same university indicated that they have a positive body image perception, felt confident about their physical attractiveness, were content with most areas of their body and valued fitness. In other countries such as in Korea, students utilise a variety of coping techniques such as suppressive coping (that is, avoidance of coping and denial of problems), reactive coping (i.e. strong emotional responses and at time impulsivity) (Jackson et al. 2013).

Melnyk's et al. (2004) which combines the three coping strategies into two groups, namely maladaptive coping (which consists of appearance fixing and avoidance strategy) and adaptive coping (positive rational acceptance), revealed that adaptive coping leads to acceptances of appearances, which result in more favourable body image states (Cash and Hrabosky 2003). However, in the current study, female students seem to utilise one maladaptive coping strategy (appearance fixing) and one adaptive coping strategy (positive rational acceptance) to a significantly greater extent than their male counterparts. These differences indicate that female students are more susceptible than male students are to their cognitive and behavioural body image coping strategies. These results are partially consistent with studies by Cash and Grasso (2005), although the study of Cash et al. (2005) indicates that women utilise all three strategies to a significantly greater extent than men, where women were more prone to respond to body image threats with appearance-fixing thoughts and behaviours.

The two major threats (in this study) regarding appearance-fixing thoughts and behaviours for female students, in relation to male students, were that female students indicated that the time spent in front of the mirror and about fantasising to look good are their major challenges. A study by Cho et al. (2013) report that females pay more attention to slim bodies to avoid feeling the psychological pressure related to their body image especially when they are overweight. Furthermore, according to the social comparison theory, females tend to evaluate themselves through comparison with others who are more attractive. Reports of negative body image among females have been empirically linked with mental health concerns for women, including a higher prevalence of depression. Furthermore, females with a negative body image are more likely to seek elective cosmetic surgery and use products claiming to guarantee weight loss. Furthermore, numerous studies examining female students have reported high levels of body dissatisfaction and weight concerns (Smith and Davenport 2012).

Both genders try to cope with the challenge of looking their best, whereas female students spend more time and effort on this challenge. Nolan and Surujlal (2012) found that female students were more satisfied with their appearance than male students were. This could be true for the current study, because female students spend more time and effort to cope and conceal areas that they do not like, and due to this 'covering up'; they tend to be more satisfied with their appearance. Similar results emerged in a study undertaken by Melnyk et al. (2004), where it was found that women shifted to a more favourable body image states after they were able to conceal / camouflage their 'flaws'. Overall, the students do not regard the appearance fixing challenges as a threat to their body image perception.

The major avoidance challenge that both genders face was to tune out their thoughts and feelings, whereas male students spend more time and effort on this challenge. Smith-Jackson, et al. (2011) indicate that women college students participate in a cycle of eating as a result of body image concerns, and then feeling bad about themselves for eating, followed by depression, frustration, and perception of negative body image. Cash et al. (2004) reported that a better body image quality of life was relates to less eating disturbance among women. In the current study, female students indicate that they use eating as an emotional reaction to avoid stressful bodyimage situations, although most of the females do not perceive eating as a threat. In general, the students did not engage in avoidance as a coping strategy towards their body image appearance, and this could indicate the students in this study do not have negative perceptions about their body image. This is in contrast to previous studies, which found that engagement in higher levels of avoidance coping were related to less favourable body-image dissatisfaction, and were more likely to believe that their physical appearance influenced their personal worth and sense of self (Melnyk et al. 2004; Cash et al. 2005).

CONCLUSION

University students of both genders rely on appearance fixing and positive rational acceptance as their coping mechanism, whereas female students rely to a greater extent than male students on these two coping strategies, indicating that female students are more susceptible than male students to their cognitive and behavioural body image coping strategies. Perception of body image can influence students' body image quality of life and students should be aware of how day-to-day events and situations can activate certain thoughts, interpretations and conclusions that will trigger positive or negative cognitive and behavioural reaction to their body image experiences, and ensuing coping strategies and behaviours. Notwithstanding these results this study exemplifies the need for students to be aware that greater use of maladaptive coping than adaptive coping strategies can lead to negative aspects, like eating disorders and depressive symptoms.

RECOMMENDATIONS

It is recommended that students be sensitized about the importance of seeking advice and professional assistance from the appropriate university support structures in dealing with stressful situation regarding their body. In addition, the study recommends that students be sensitized about the risks of engaging in unhealthy comprising life styles such as such as non-exercise which may compromise their body image. Peer social and family support is also encouraged as these are important sources of resources when dealing with body image coping strategies. Special self-care approaches or workshops should be introduced by the university counselling and support services that encourage physical and emotional well-being. Issues such as use of social support, emotional regulation strategies and mindfulness should be introduced to students in their first year of study as part of the first year student experience at the university. Students therefore need to be made aware of the need to reduce stress on their mental health and this could be accomplished by utilising the free counselling services offered by the university. University counsellors and psychologists play a critical role in the development of outreach programs on campuses. For instance, counsellors and psychologists can serve as active agents in promoting healthy body awareness and eating behaviours through the use of psycho-education programs and events, such as incorporating a health care and coping awareness week or a university wide health fair in an effort to target issues including healthy body image, self-esteem and self-acceptance, adopting a health-conscious lifestyle, and nutritious eating habits. These campus wide events could provide students with free nutritional screenings, blood pressure readings, diabetes testing, informational brochures, and the ability to sample and learn how to create inexpensive healthy snacks and meals.

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