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Body Image Perception and Psychological Distress among Students in the University of Buea in Cameroon

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Abstract

Body image is a common concern among young people, especially university-level adolescent students, most of whomseem to be challenged by their bodies, the way they look, their weight and concerns about either losing or gaining weight. Their perceptions and feelings about their bodies and how they physically and psychologically carry themselves allow them to internalize positive or negative body images with corresponding mental health effects. This paper focuses on body image perceptions and psychological distress among some students in the University of Buea in Cameroon. It presents data on four body image-related concerns: eating disorders, body dissatisfaction, avoidance behaviour and thin ideal internalizationand their possible link topsychological distress. A survey was conducted that permitted the collection of questionnaire data from 377 participants, aged 15 to 35. Descriptive statistics were run and the Spearman rho correlation was further used to test the relationship between body image perceptions and psychological distress. Findings showed that eating disorders (r=.610**; P=0.000<0.05), body dissatisfaction (r=0.701**; P=0.000<0.05), avoidance behaviour (r=0.684**; P=0.000<0.05) and thin ideal internalization (r=0.669**; P=0.000<0.05) were significantly related to psychological distress. These implied that psychological distress was more likely among those who portrayedeating disorders as a response to body image, when affected studentsare dissatisfied with their bodies, display excessive avoidance behaviour, and when there are conflicts between student thin-ideal internalizations and their bodies. These findings aligned with previous ones that found similar links between body image perceptions and psychological distress. It was concluded that young people ought to be encouraged to nurture body positivity as a way of helping them develop protective factors for psychological wellbeing and mental health.

Keywords: Body image perception, eating disorder, body dissatisfaction, avoidance behaviour, thin-ideal internalization,psychological distress.

Introduction

University student mental health problems are becoming more common, more problematic and a more serious concern in university campuses. It is vital that all student affairs practitioners understand these concerns and what impact they may have on the academic, social and psychological well-being of students (Schuh et al., 2011). University students have a lot to balance when they start school. Not only are they coming into school with already existing difficulties, now they are also faced with a whole new environment with its own kind of concerns to deal with. The first few weeks can be stressful as students are getting adapted and adjusted to their new living and learning environment. This new environment comes with new food to eat, new people to interact with and a completely different kind of social environment and support systems. It can be a tough adjustment period for many students. But beyond these problems, adolescent students also have to deal with issues relating to their bodies, how they are perceived by others and how others relate with them on the strength of how they physically appear. According to Chance (1988), social beings live in societies that take an interest in forming opinions about each other, but also a concern for building perceptions about individual selves. To Everybody wants to be accepted and recognized in society, hence they try to behave according to the norms of society in order to gain such acceptance and recognition.

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In an effort to stay relevant in society, people tend to compare themselves with others, and in the process develop the motivation to improve, but may also experience psychological distress. Many suffer depression, social anxiety disorders, anger, sleeping problems and disorders, racing thoughts, memory problems, and poor decision making as they battle with adjustment issues (Festinger, 1954). A major area of building perceptions that shape how individuals function in society is body image perception.

Throughout human history, there is the tendency to ascribe importance and relevance to the beauty of the human body. According to White and Brazier (2022), society, media, and popular culture often shape these views, affecting how individuals perceive their own bodies. To Grabeet al. (2008), exposure to such media content and cultural beliefs and attitudes result in body dissatisfaction which increases risks of psychological problems among affected individuals. According to Markey (2010), common psychological problems as a result of body dissatisfaction may include among others eating disorders, depression, anxiety and low self-esteem. Meanwhile Campisi (2012) and Wolniczak (2013) mentioned weakened immune systems and poor sleep quality as some of the psychological disturbances related to body dissatisfaction. Most traditional African societies valorized heavy weight and weighty individuals, men and women, were celebrated and thought of as well fed, healthy and living well. Traditional wrestling warriors were expected to be fatty heavy weighted men with enormous physical strength; meanwhile women ought to be fat and bulky as a sign of beauty and attraction. Weight gains in women were signs that their parents or husbands took good care of them. However, nowadays body image perceptions have changed with a significant media and Western influence that now celebrates thin ideal than chubby bodies. Those with chubby bodies not only run the risk of exposure to diseases such as diabetes and hypertension but also psychological distress, especially among those that are dissatisfied with their bodies.

Many people have concerns about their body image. These concerns are often directed to one's weight, skin, hair, or the shape or size of a certain body part; and the way one feels about their body can be influenced by many factors. This is a typical concern among young people who appear challenged by their bodies, how they look, their weight and concerns about either losing or gaining weight. However it is even a more challenging concern for young girls to lose weight and maintain a body image that is most celebrated in public, the "slay queens," top-notch models, and so on. But there are also those who are concerned about rather gaining weight and who aspire to become the celebrated chubby women, the "WWE Champion" heavy weight lifters, American footballers and much more. Many of the perceptions including individual beliefs of their appearance, their feelings about their bodies and how they physically carry themselves allow people to internalize messages that can lead to either positive or negative body images. Therefore, having a healthy body image, whether "thin or plump" bodies, is an important part of mental health and eating disorder prevention (Stice&Bohon, 2012). This paper therefore focuses on body image perception and psychological distress among some students in the University of Buea in Cameroon. Perceptual attitudes and behaviours related to eating disorders, body dissatisfaction, avoidance behaviour and thin ideal internalization are hypothetically linked to psychological distress.

Literature review

Body image is defined as one's thoughts, perceptions, and attitudes about their physical appearance. It is more or less about what we see and feel about ourselves and our bodies (e.g., height, shape, and weight) when we look in the mirror.Body image is therefore, a multi-faceted construct consisting of self-perception, attitudes, beliefs, feelings, and behaviours related to one's body (Cash &Pruzinsky, 1990; Grogan, 1999; Thompson et al., 1999). It is often viewed as a fixed property that is rooted in the minds of individuals, but it is not exactly fixed as thought. Instead, a person's body image constitutes a dynamic relationship between the individual, the body, and the social environment. Recognition of the multiple facets of body image has led to the development of multidimensional assessments over the last several decades (Cash&Pryzinsky, 2004). Some of the dimensions include body size estimation, body dissatisfaction, appearance investment, body objectification, thin-ideal internalization, body image-related quality of life, body appreciation, body responsiveness, drive for thinness, and drive for muscularity (Grogan, 1999).Interest in body image first appeared in the work of neurologists who observed that brain damage could produce bizarre alterations in a person's perception of his body. Patients suffering from brain damage manifested such extreme symptoms as the inability to recognize parts of their own body and the assignment of entirely different identities to the right and left sides of their bodies (Schilder, 1935). That research also insinuated that neurotic schizophrenic patients frequently had unusual body feelings and were dissatisfied with their bodies. According to Schilder (1935), early neurologists and psychiatrists reported the following kinds of distortions in schizophrenic patients: a sense of alienation from their own body (depersonalization), inability to distinguish the boundaries of their body and feeling of transformation in the sex of their body.

Twokinds of images are formed with body image perception, a positive body image and a negative one. According to NEDA Feeding Hope (2022), positive body image is a clear, true perception of one's shape, seeing and accepting the various parts of their body as they really are. Such body positivity (or body satisfaction) involves feeling comfortable and confident in your body, accepting your natural body shape and size, and recognizing that physical appearance says very little about one's character and value as a person. Meanwhile negative body image involves a distorted perception of one's body, shape and features. It involves body dissatisfaction, feelings of shame, anxiety, and self-consciousness. According to Grant & Phillips (2005), people who experience high levels of body dissatisfaction feel their bodies are flawed in comparison to others, and with these, they are more likely to suffer from distressing conditions such as depression, isolation, low self-esteem, and eating disorders. While there is no single cause of eating disorders, some research indicates that body dissatisfaction and body dysmorphic disorder are the best-known contributors to the development of anorexia nervosa and bulimia nervosa (e.g., Stice, 2001).

Body image concerns often begin at a very young age and for some people, endure throughout life, with devastating developmental outcomes. According to Neves et al (2017), they can begin in childhood or adolescence, influenced by various factors such as peer comparisons, media exposure, family dynamics, and societal beauty standards. At their onset, young individuals may begin to develop negative perceptions of their bodies, leading to low self-esteem, body dissatisfaction and related concerns. These concerns often have far-reaching consequences on the individual's development, affecting among others, self-confidence, social interactions, academic performance, and overall mental health (Aparicio-Martinez et al., 2019). While adolescents are more vulnerable, some adolescents may be more susceptible to body image concerns due to factors like genetics, family history of eating disorders, trauma, or bullying. As earlier mentioned, body image concerns can persist throughout life, leading to mental health issues, including anxiety, depression, and the development of eating disorders (such as anorexia nervosa, bulimia nervosa, or binge eating disorder). Research has also shown that these disorders can have severe physical and psychological consequences (e.g., Gorrell& Murray, 2019; Aparicio-Martinez et al., 2019; Quittkat et al., 2019). They can also affect an individual's social life, relationships, and overall well-being with unhealthy behaviours like extreme dieting, excessive exercise, or the use of substances to cope with body dissatisfaction ranking high among sufferers.

Apparently, discussions about body image and societal pressures affect both men and women, and it can be challenging to definitively state that one gender is more often judged according to standards of body ideals than the other since both men and women experience significant pressure to conform to certain beauty standards. However, women have historically faced longstanding and pervasive beauty ideals and body image expectations, often portrayed through media, fashion, and advertising (Mills et al., 2017). They have been disproportionately affected by the beauty and fashion industries, which have contributed to the perpetuation of unrealistic and narrow standards of beauty, leading to concerns about the impact on women's self-esteem, body dissatisfaction, and even the development of eating disorders.By middle childhood, girl children for example, begin to express concerns about their own body weight or shape, and Cash &Smolak (2011) maintain that 40-60% of elementary school girls (ages 6-12) are concerned about their body weight or about becoming over-weight, outsize and obese. Meanwhile, over one-half of teenage girls and nearly one-third of teenage boys use unhealthy weight control behaviours such as skipping meals, fasting, smoking, consumption of laxatives, and self-induced vomiting or purgingin order to deal with body image concerns (Neumark-Sztainer, 2005). Despite increasing concerns about men's body image, women are undoubtedly the group that is most often judged according to standards of body ideals (Garner, 1996; Fredrickson et al., 1998). Men, too, face their own set of body image pressures and ideals.

Over the years, there has been a growing awareness of these issues in relation to men's body image and the media, advertising, and fitness industries have increasingly promoted images of muscular and lean male bodies, creating pressure for young men to conform to these standards (Mills et al., 2017; Austin et al., 2009). According to Gorrell& Murray (2019), men may also experience body dissatisfaction and engage in behaviours such as excessive exercise, dietary restrictions, or the use of supplements to achieve the desired physique. Estimates vary, but it is true that a significant number of men are affected by these body dissatisfaction concerns (Yamamiya et al., 2005). For example, studies have shown that a substantial percentage of men report dissatisfaction with their body size or shape with their dissatisfaction often linked to societal pressure to achieve a lean and muscular physique, often perpetuated by media and cultural ideals (e.g.,Gorrell& Murray, 2019; Aparicio-Martinez et al., 2019; Quittkat et al., 2019). Also, Leone et al (2005) observe that some men experience a specific type of body dysmorphic disorder known as muscle dysmorphia, with which they become obsessed about their muscle built and engage in excessive exercise and bodybuilding in an attempt to attain a more muscular physique.

Due to stigma and societal expectations surrounding masculinity, men may be less likely to seek help for body image and eating disorder issues leading to underreporting and a lack of awareness of the extent of these problems in the male population (Paxton&Phythian, 1998).*Bonci (2009) insinuates that*male athletes competing in sports that tend to emphasize diet, appearance, size and weight also have a lot of body image issues to deal with. In weight-class sports (wrestling, rowing, horseracing) and aesthetic sports (bodybuilding, gymnastics, swimming, diving) *Bonci (2009)* notes that about 33% of male athletes are affected by body dissatisfaction and related concerns.

Body image dissatisfaction is defined as the negative perceptions and feelings a person has about their body and is influenced by factors such as body shape and appearance, attitude towards weight gain, and cultural norms in relation to an ideal body (Philips, 1999). Body dissatisfaction and disordered eating behaviours appear to be widespread among college women (e.g.Schulken et al., 1997). According to Carlson (2004), after adolescent girls experience puberty, they become increasingly aware of their bodies and their sexual attractiveness. As a result, adolescent girls generally struggle more with the necessity of maintaining their bodies and staying attractive, since thin bodies than chubby ones appear most acceptable, especially in Western cultures (Davies & Furnham, 1986; Carlson., 2004). The feeling that a girl's slay body increases her attractiveness and dating potential in the public arena does explain why girls place a higher importance on losing weight and staying attractive (Paxton et al., 2006). Meanwhile, adolescent boys are more likely to idealize a muscular body image rather than a thin ideal, and boys strive for the muscular ideal, which consist of high muscle mass and a V-shaped body. In order to achieve this muscular ideal,with increased muscle mass and a more muscular physique, adolescent boys are more likely to aim for weight gain rather than a weight loss, often referred to as "muscle dysmorphia" or "bigorexia" (Leone et al., 2005; Carlson, 2004).Affected individuals become preoccupied with the belief that they are not muscular enough, even if they have a well-developed physique and may engage in extreme behaviours to try to gain muscle mass. They may also engage in strategies to bulk up, such as consuming high-calorie diets, taking supplements, and participating in intensive strength training and weightlifting routines so that they can increase their overall body mass and muscle size.

Body dissatisfaction has a considerable impact on the emotional and physical health of affected young people. It is associated with a distorted perception of one's body,anxiety, depression and low self-esteem, and is also a robust predictor of dieting, binge eating and eating disorders (Stice, 2001). Body dissatisfaction is also associated with taking diet pills, laxatives, excessive exercise and smoking (Grogan, 1999). Increasing slender images in the media contrast with the rising prevalence of overweight (Sypeck et al., 2006). Exposure to the thin ideal per se is not sufficient to cause dissatisfaction; rather the extent to which this is internalized is what causes dissatisfaction and the rejection of one's body. There is growing evidence that supports relationships between thin ideal internalization and body dissatisfaction (Thompson &Stice, 2001) with many young people today gunning for the thin ideal, the "slay queen" trajectory and a forthright effort to deal with weight gains and chubby plump bodies.Body dysmorphic disorder (BDD) is a common body dissatisfaction disorder in which the individual is preoccupied with the body's faults (Leone et al., 2005). People with body dysmorphic disorder spend much time in front of the mirror, obsessing about their "wrong" or "problem" characteristics and trying to find the best way to cover or distract from it. According to Grant & Phillips (2005), typical behaviours associated to body dysmorphic disorder include compulsive grooming behaviours such as skin picking, mirror checking, plucking eyebrows or combing hair, excessive grooming, and camouflaging. According to Phillips (1999), body dissatisfaction in general and body dysmorphic disorder in particular is also associated with depressive symptoms such as feelings of sadness, low self-esteem, hopelessness as well as suicidal thoughts.

Negative body image or body dissatisfaction potentially contributesto eating disorders; and Muhlheim (2021) argues that many people battling eating disorders place a high value on their body shape and weight when determining their own self-worth. Negative body image is often characterized by dissatisfaction with appearance and engaging in behaviours such as dieting, checking, and/or avoidance, in an attempt to ameliorate the dissatisfaction, the result of which is eating disorders. According to Mayo Clinic Staff (2018), eating disorders are characterized by a persistent disturbance of eating patterns that leads to poor physical and/or psychological health. ToIsham (2022), people who suffer from eating disorders often have an extreme fear of gaining weight, and see themselves overweight, even though they may be severely underweight. They have an overbearing preoccupation with food, eating, and physical appearance. Stice&Bohon (2012) maintain that major eating disorders include anorexia nervosa, bulimia nervosa, binge-eating disorder, and avoidance/restrictive food intake disorder. These eating disordered patterns can be caused by feelings of distress or concern about body shape or weight, and they harm normal body composition and function (Stice, 2001). According to him, these disorders frequently occur together with other mental health concerns, such as depression, substance abuse, or anxiety disorders.

In addition, people who suffer from eating disorders can experience a wide range of physical health complications, including strain on the cardiovascular system, joint and muscle injuries, hormonal imbalances, and kidney failure, which may lead to death (Isham, 2022).

Common eating disorders that are a consequence of body dissatisfaction are anorexia nervosa and bulimia nervosa. Anorexia nervosa is an eating disorder most commonly characterized by extreme weight loss and distorted body image. People with this type of eating disorder typically severely restrict caloric intake. Thus, anorexia nervosais a disorder that involves a relentless pursuit of extreme thinness and a distorted body image, sometimes through starvation (King, 2013; Mash & Wolfe, 2016).Individuals with anorexia nervosa often severely restrict their food intake, leading to significant weight loss and being underweight for their age and height and may also engage in behaviours like calorie counting, food avoidance, or extreme dieting. Anorexia nervosa can lead to severe physical health complications, such as malnutrition, electrolyte imbalances, heart problems, weakened bones, damage to various organ systems as well as to psychological and emotional effects such as depression, anxiety, social withdrawal, irritability, and cognitive distortions related to the body and food (Gorrell& Murray, 2019; Aparicio-Martinez et al., 2019). Meanwhile, bulimia nervosa is a serious eating disorder characterized by recurrent episodes of binge eating followed by compensatory behaviours aimed at preventing weight gain (King, 2013). According to Gorrell& Murray (2019), episodes of binge eating are characterized by the consumption of an excessive amount of food in a relatively short period of time while experiencing a loss of control over one's eating. To counteract the effects of binge eating, individuals with bulimia may engage in various compensatory behaviours, such as self-induced vomiting, misuse of laxatives or diuretics, excessive exercise, or strict dieting in an attempt to control their weight or alleviate feelings of guilt or shame (Coelho et al., 2014). Like with people with anorexia, people with bulimia nervosa often have a distorted body image and are preoccupied with their weight and shape, often seeing themselves as overweight, even if their weight is within a normal or healthy range. They may also suffer a range of physical health problems, including electrolyte imbalances, dental issues (from stomach acid exposure during vomiting), gastrointestinal problems, cardiovascular complications; as well as psychological distress, including depression, anxiety, and low self-esteem (Mash & Wolfe, 2016; Coelho et al., 2014; King, 2013).

Another body image perception effect is avoidance behaviour, referred to by Stapleton et al. (2014), as a range of actions and strategies aimed at avoiding information or situations that trigger distress or negative thoughts about one's body shape, weight, or size. The behaviours may include voidance of mirrors, scale avoidance, wearing loose-fitted clothing, and avoidance of revealing clothing and/or situations in which revealing clothing may be required (Marshall et al., 2019). Avoidance behaviours play a significant role in the development of eating disorders and in the maintenance of body image disturbance (Fairburn et al., 2003). Avoiding exposing the body to one's own and others' gaze, provoking feelings and fighting the limits of body shape are behaviors that translate a profound dissatisfaction with one's own body (Thompson et al., 1999). With avoidance behaviour, a self-imposed lifestyle may be developed to specifically accommodate the individual's negative body image. These behaviours can significantly impact an individual's quality of life and mental health. According to Rosen et al. (1991), all situations that may cause some concern regarding one's physical appearance are categorically avoided. Therefore, avoidance behaviours may contribute to social isolation, reduced participation in activities, and the perpetuation of negative body image perceptions, and over time, they can become more ingrained and reinforce body dissatisfaction (Stapleton et al., 2014; Cash & Fleming, 2002). For instance, someone living with an eating disorder may skip a friend's birthday party out of their desire to avoid the anxiety and guilt linked to avoidingor eating certain foods like pizza and cakes, eating in front of others, and/or perceived body judgment from peers. Sufferers might suffer from social anxiety related to eating in front of others; and the fear of judgment, scrutiny, or criticism from peers can be overwhelming, making social gatherings, especially those involving food, particularly challenging. Therapies such as cognitive-behavioural therapy (CBT), which can help individuals challenge irrational thoughts and behaviours related to food and body image, can be effective. Additionally, family and peer support, as well as creating a non-judgmental and empathetic environment can be essential for recovery.

Thin-ideal internalization is a popular internalized body ideal among most young people today. Itrefers to the extent to which individuals cognitively adopt or internalize the societal and cultural ideal of thinness as the standard for beauty and attractiveness and engage in behaviours designed to produce an approximation of these ideals (Thompson, 1990). When individuals internalize the thin ideal, they may develop a heightened level of body dissatisfaction, perceiving themselves as falling short of the ideal and engaging in negative self-comparisons with others who they may perceive as more in line with the thin-ideal. According to Kandel (1980), thin-ideal internalization results from social reinforcement whereby individuals internalize attitudes that are approved of by significant or respected others. Specifically, family, peers, and the media are thought to reinforce the thin-ideal body image through comments or actions that support and perpetuate these ideals (Pasavac et al., 1998).

According to Hohlstainet al (1998), thin-ideal agents communicate expectations concerning the benefits of thinness, such as increased social acceptance, and these expectations play a key role in the propagation of this ideal. Thin-ideal internalization can contribute to negative body image, which can manifest as feelings of shame, self-consciousness, and a strong desire to change one's appearance through dieting, exercise, or other means.Certain factors can increase the likelihood of thin-ideal internalization, including peer pressure, exposure to fashion and beauty media, and cultural influences that prioritize thinness as a marker of beauty, attractiveness, and success. When exposed to thin-ideal media, Pasavac et al., (1998) found that only those who were dissatisfied with their bodies reported greater weight concerns in comparison to the ideal. They suggested that women with low body dissatisfaction were affected by the thin imagery because they either had a body similar to the models or they grounded their self-worth in areas unrelated to body image.

There is abundant evidence of links between body image perceptions and psychological distress. According to Horowitz (2007), psychological distress refers to a broad range of emotional and mental health symptoms that indicate a state of emotional suffering or discomfort, and can manifest in various forms and severity levels. It often indicates a level of emotional pain or discomfort that may interfere with a person's daily functioning and overall well-being. Psychological distress may involve overwhelming and persistent negative emotions, such as sadness, anxiety, fear, anger, guilt, or shame (Adams et al., 2006). It can also affect a person's thought processes with individuals experiencing racing thoughts, difficulty concentrating, irrational fears or worries, or a sense of hopelessness. According to Kessler et al. (2007), there are also behavioural symptoms and people with psychological distress may become withdrawn, agitated, irritable, or engage in self-destructive behaviours such as self-harm, substance abuse or suicidal thoughts. Emotional distress can also manifest physically, with symptoms like headaches, muscle tension, digestive problems, sleep disturbances, and changes in appetite. People in distress may isolate themselves, have difficulty communicating, or experience conflicts with others due to their emotional state. They may develop functional impairment and suffer difficulties to effectively function in various aspects of life, including work or school performance, daily routines, and self-care.

As psychological distress is experienced in response to stress and is associated with a perceived inability to cope effectively, its relationship with stress and coping among higher education students is also of interest (Rider, 2004). According to health surveys, young people from 12 to 25 years suffer from an insufficient level of psychological health (Grebot&Barumandzadeh, 2005); and students have more psychological problems than any population group. According to Lejoyeux&Lehert(2011), common psychological distress conditions include depression, anxiety, stress, and sleeping disorders. Depression, or major depressive disorder, is characterized by persistent feelings of sadness, hopelessness, and a loss of interest or pleasure in previously enjoyed activities (Horowitz, 2007). It can also involve changes in appetite, sleep disturbances, fatigue, feelings of worthlessness or guilt, difficulty concentrating, and thoughts of self-harm or suicide. Meanwhile, anxiety disorders encompass a range of conditions characterized by excessive worry, fear, or apprehension. Common anxiety disorders include generalized anxiety disorder (GAD), panic disorder, social anxiety disorder, and specific phobias (Bandelow& Michaelis, 2015). Symptoms may include restlessness, muscle tension, irritability, racing thoughts, and physical symptoms such as rapid heartbeat and sweating. Another related concern is stress, natural response to challenging or threatening situations, but chronic or overwhelming stress can lead to psychological distress. Stress may manifest as irritability, difficulty relaxing, muscle tension, headaches, and changes in appetite and sleep patterns (Attia et al., 2022). They observe that prolonged stress can contribute to the development of other mental health conditions such as sleep disorders.

Sleep disorders can result in disrupted sleep patterns and inadequate rest, leading to psychological distress. Meanwhile conditions like insomnia, sleep apnea, and restless leg syndrome can interfere with a person's ability to get restorative sleep, which can impact mood, cognitive functioning, and overall well-being (Medic &Hemels, 2017). According to them, insomnia is a sleep disorder characterized by difficulty falling asleep, staying asleep, or both and people who suffer it often experience daytime fatigue, irritability, and difficulties with concentration and memory due to their disrupted sleep patterns. Chronic insomnia can also contribute to the development of mood disorders like depression and anxiety. But sleep apnea is a condition where someone's breathing is repeatedly interrupted during sleep, sometimes leading to loud snoring, choking or gasping for air, and frequent awakenings throughout the night. Sleep apnea not only disrupts sleep but can also lead to serious health issues, including cardiovascular problems, high blood pressure, and daytime sleepiness that impairs cognitive function (Jean-Louis, 2008). Meanwhile restless leg syndrome is a neurological disorder characterized by uncomfortable sensations in the legs, often accompanied by an irresistible urge to move them. These sensations typically occur at night and can make it extremely difficult to fall asleep and stay asleep. Chronic sleep disruption due to restless leg syndrome can lead to mood disturbances and cognitive deficits during the day.

Addressing these sleep disorders may be essential for improving overall well-being and quality of life and treatment options for these conditions may include lifestyle changes, behavioral therapy, medications, or in some cases, medical devices like continuous positive airway pressure machines for sleep apnea.

Methods

Sample

Table 1: Sample

Characteristic	Frequency	Percentage
Faculty/School		
Social and Management Science (SMS)	188	49.9
Faculty of Health Science (FHS)	82	21.8
Faculty of Education (FED)	78	20.7
Faculty of Arts (FA)	29	7.7
Year of study		
Freshman	131	34.7
Sophomore	120	31.8
Junior/third-year	126	33.4
Gender		
Male	143	37.9
Female	226	59.9
Age		
15 – 20	30	7.9
21 -25	170	45
26 –30	127	33.6
31 - 35	50	13.3
Marital status		
Single	293	77.7
Married	77	20.4
Widowed	7	1.9

Table 1 presents the study sample which was made up of 377randomly selected undergraduate students from four faculties/schools in the University of Buea. Majority of the sample was selected from SMS (49.9%), then 21.8% from FHS, 20.7% from FED and 7.7% from FA. Of the 377 participants, 34.7% were freshman, 31.8% sophomore and 33.4% junior or third-year students. There were more female participants (59.9%) than male participants (37.9%), and they were aged between 15 to 35 with the majority of them aged between 21 to 24 years (45%), followed by those in the rage of 26 to 30 years (33.6%), then 13.3% were aged between 31 to 35, and 7.9% were between 15 to 20 years. Finally, the bulk of the sample was single (77.7%), followed by 20.4% that was married and 1.9% that was widowed.

Instruments

The instrument used for data collection was a self-constructed questionnaire on body image perception and psychological distress among university students. Measures of body image perception considered were eating disorder, body dissatisfaction, avoidance behaviour and thin-ideal internalization and were cross-examined against psychological distress.The contention was that it is common to have students manifest their body image perceptions through distorted behavioural, psychological, and nutritional dispositions that may be observed eating disorders, body dissatisfaction tendencies, avoidance behaviours and thin-ideal internalisation tendencies. These body image perceptions and psychological distress variables were further characterized to permit itemization and data collection.

Table 2: Reliability analysis

Variables	Cronbach's Alpha Coefficient	Variance	Number of valid cases	Number of valid items
Eating disorder	0.649	1.936	377	10
Body dissatisfaction	0.426	0.001	377	10
Avoidance behaviour	0.976	0.000	377	10
Thin-ideal internalisation	0.442	0.000	377	10
Psychological distress	0.736	0.115	377	10
Integrated value mapping	**0.826**	**0.46.49**	**377**	**50**

Reliability analysis showed a good level of consistency in respondent appreciation of body image perception and psychological distress. Overall, the instrument was reliablewith an integrated value mapping of 0.826. Cronbach Alpha Coefficient values ranged from 0.426 to 0.976 with body dissatisfaction (0.426) and thin ideal internalization (0.442) scoring the least alpha values. On aggregate, the instrument was judged reliable and could be comfortably used to collect data on body image perception and psychological distress among university students.

Data analyses

The EpiData version 7.0 for entering data (Dean et al., 2011) was first used to enter the data and run for missing data, consistency, and to minimize any data entry errors. The data were further subjected to descriptive statistics to generate frequencies, percentages and mean distributions. The descriptive data were further used to verify the hypotheses that were tested in the study. The Spearman rho correlation test was used to compare proportions in order to establish the explanatory power of body image perception on the psychological distress of students in the University of Buea.

Findings

Descriptively, participants were concerned about eating patterns with 75.5% of them persistently disturbed by them. In line with these patterns, they displayed a range of characteristics that depict the presence of eating disorders.While 63.7% of them showed signs of an inner urge to eat lessand 72.4% followed some rules regarding eating habits as a way of dealing with body image concerns, 67.4% were uncomfortable each time they ate much.Meanwhile, 71.4% of participants were conscious about weight gain or fattening and were striving to lose weight and slim down. Of the 71.4% who were striving to slim down, 60% showed symptoms of bulimia nervosa, repeatedly using self-induced vomiting to manage their weight. Finally, 61.3% showed symptoms of anorexia nervosa and reportedly generally disliked food as a consequence of their body image perception, habitually eating very little (75.9%). Some 70.3% of those with anorexia nervosa were guilty each time they ate certain types of food.However, between bulimia nervosa and anorexia nervosa, 63.7% of participants were simply unable to control their eating habits.

When body dissatisfaction wasinvestigated as a perceptual characteristic of body image, 84.4% participants felt satisfied with their bodies while 73.2% disliked their physical appearance with 62.1% feeling that they were physically repulsive and unattractive. Of this category, 81.5% were making some kind of effort to work on their bodies and improve upon their physical appearance.Meanwhile, 79% showed signs of body dysmorphic disorder as they were compulsively drawn to the mirror, checking the mirror to ease their fears about how they look or continuously checking to see if their self-perceived deformity is still there or has become worse. While 76.4% participants suffered body-shame and felt that their physical appearance was embarrassing to others, 69% of them further showed signs of gravitophobia, a scale anxiety that comes with the fear of stepping on the scale. Finally, 77.5% participants were uncomfortable in the presence of others due to their physical appearance and among them, 70.6% were uncomfortable with the fact that they had a pot belly.

Descriptive data further showed strong evidence of avoidance behaviour as a consequence of self-perceived body image. In this regard, 72.4% participants avoided social gatherings and events because of the disregard for theirbody, and in the same vein, 66% avoided public fitting or changing rooms. At the beach or public swimming pools, 72.1% avoided wearing swimming pants and costumes since they did not like their physical features.Meanwhile 72.7% avoided intimate love relationships because of the nature of their bodies. Avoidance behaviour was also demonstrated in the type of outfits individuals avoided, and in this regard, 69.8% participants with signs of body dissatisfaction were extremely conscious about what outfits they wore.Meanwhile 73.7% simply adopted certain costumes and outfits as a way of managing their physical features.

The data on thin-ideal internalization showed that while 80.6% participants wanted to be like models on television shows and magazines, 88% feared or disliked being like the said models. Of those who were pro-thin-ideal, 73.5% of them were doing everything to lose weight and attain their desired thin-ideal. Among some of the practices adopted to manage weight were the useof diet pills, laxatives or diuretics to control body size, adopted by 94.5% participants that were conscious about weight loss. In this same category,77.7% engaged in exercise to alter body shape or weight and 75.3% restricted their diet in order to improve on or reduce weight.Finally, asked about body shape ideals in their society, 74.8% felt that chubby bodies were most disliked in favour of lean bodies. In this regard, 81.2% reported that their society rated slender skinny women as very attractive.

These data were further used to verify links between body image perception and psychological distress among university students. We verified whether or not there was any explanatory power of eating disorders, body dissatisfaction, avoidance behaviour and thin-ideal internalization and psychological distress. Of all the measures of body image perception checked, significant positive relationshipswere shown between body image perception and psychological distress among university students.

Table 3: Summary of findings

Hypotheses	Statistical test	Comments
There is no significant relationship between eating disorders andthe psychological distress of students.	Spearman rho test P=0.000<0.05 r=.610**	Statistically, there was a significant positive relationship between eating disorders and psychological distress (P-value=0.000<0.05). The positive correlation (r=.610**) implied that psychological distress was more likely when students portray the eating disorders that were studied. The null hypothesis was rejected and the alternative retained.
There is no significant relationship between body dissatisfaction and the psychological distress of students.	Spearman rho test P=0.000<0.05 r=0.701**	There was a significant positive relationship between body dissatisfaction and psychological distress (P-value=0.000<0.05); and the positive correlation (r=0.701**) implied that psychological distress was more likely when students were dissatisfied with their bodies. The null was rejected and the alternative retained.
There is no significant relationship between avoidance behaviour and the psychological distress of students	Spearman rho test P=0.000<0.05 r=0.684**	There was a significant positive relationship between avoidance behaviour and psychological distress (P-value=0.000<0.05) with the positive correlation (r=0.684**) implying that psychological distress is more likely when students display avoidance behaviour in reaction to their bodies. The null hypothesis was rejected and the alternative retained.
There is no significant relationship between thin-ideal internalization and the psychological distress of students	Spearman rho test P=0.000<0.05 R=0.669**	Statistically, there was a significant positive relationship between thin-ideal internalization and psychological distress (P-value=0.000<0.05); andthe positive correlation (r=0.669**) meant that psychological distress isgiven by an individual's extent of thin-ideal internalization. The null hypothesis was rejected and the alternative retained

Discussions

Findings were consistent with those in the literature showingsignificant explanatory power of eating disordersover student psychological distress(r=.610**; P=0.000<0.05; r=.610**).The findings showed that psychological distress was more likely among students witheating disordersas a response to their body image.Descriptively, as evidence of eating disorders, participants worried about their eating patterns and nutritional habits and reported being disturbed about them and wanting to eat less in order to improve upon their bodies.Some were uncomfortable at eating and became unnecessarily conscious about weight gain while others becameguilty each time, they ate certain types of food. These findings are similar to many others in the literature which equally found predictive relationships between eating disorders and psychological distress among people with body image concerns. For example, Isham (2022) found that people who suffer from eating disorders usually develop obesophobia or procrescophobia, an intense fear of gaining weight.They see themselves as overweight, even though they may be severely underweight, and have an overbearing preoccupation with food, eating, and physical appearance.People with obesophobia go to extremes such as undereating, starving, over-exercising, or avoiding activities involving food.

According to Sticeet al (2012), they may display eating disorders such as anorexia nervosa, bulimia nervosa, binge-eating disorder, and avoidance/restrictive food intake disorder; with implicating power on psychological distressing conditions such as depression, substance abuse, or anxiety disorders.

Data showed that anorexia nervosa, bulimia nervosa, binge-eating disorder, and avoidance/restrictive food intake disorder were common distressing conditions among university students who reported body image concerns. Among them, 75.5% were concerned about eating patterns and werepersistently disturbed by their eating habits. They displayed a range of characteristics that depict the presence of different forms of eating disorders.Of the 71.4% who were striving to lose weight and slim down, 60% showed symptoms of bulimia nervosa, repeatedly using self-induced vomiting to manage their weight.

Meanwhile61.3% showed symptoms of anorexia nervosa and reportedly generally disliked food as a consequence of their body image perception, habitually eating very little. Some 70.3% of those with anorexia nervosa were guilty each time they ate certain types of food. These findings were similar to other literature which suggested that individuals with negative body image aretypically unhappy with their bodies and as a result often engage in behaviours like calorie counting, food avoidance, or extreme dieting, in an attempt todeal with their body dissatisfaction (e.g., King, 2013; Mash & Wolfe, 2016).In particular, Gorrell& Murray's (2019)earlier findings did not only link anorexia nervosa to psychological and emotional effects such as depression, anxiety, social withdrawal, irritability, and cognitive distortions related to the body and food but also to severe physical health complications, such as malnutrition, electrolyte imbalances, heart problems, weakened bones, and damage to various organ systems. Meanwhile, King (2013) found that those with bulimia nervosa displayedrecurrent episodes of binge eating followed by compensatory behavioursthat are driven by anxiety and aimed at dealing with or preventing weight gain. Anxiety-driven compensatory behaviours may include self-induced vomiting, misuse of laxatives, excessive exercise, or strict dieting in an attempt to control body weight or deal with psychological distressing conditions such as guilt or shame. In line with these, Tan et al (2023) recently linked eating disorders with anxiety, attention-deficit hyperactivity disorder (ADHD), depression, self-harm or suicide, arguing that these individuals have serious problems with impulse control, have destructive eating habits, and are likely to experience damaged personal relationships.

When body dissatisfactionwas investigated, 73.2% disliked their bodies and physical appearance with 62.1% feeling that they were physically repulsive and unattractive. Of this category, a significant proportion was making some kind of effort to work on their bodies and improve upon their physical appearance. Meanwhile, others showed signs of body dysmorphic disorder, compulsively drawn to the mirror, checking it to ease their fears about how they look or to see if their self-perceived deformity is still there or has become worse. While 76.4% participants suffered body-shame and felt that their physical appearance was embarrassing to others, 69% of them further showed signs of gravitophobia, the scale anxiety that came with their fear of stepping on the scale. It was also apparent thatstudents who were dissatisfied with their bodies were shy and uncomfortable in the presence of others and often displayed psychologically and emotionally handicapping conditions such as social withdrawal, anxiety, depression, irritability and cognitive distortions related to the body that made them feel guilty or develop body shame.These findings revealed significant positive relationshipsbetween body dissatisfaction and psychological distress (P-value=0.000<0.05; r=0.701**), implying that psychological distress was more likely when students were dissatisfied with their bodies. Majority of the students with body dissatisfaction disliked their physical appearance when compared to others and this made them feel ashamed, guilty, anxious, angry with their bodies and depressed. Thesefindings are similar to those ofKnausset al. (2008) who found that body shame and dissatisfaction are related to the kind and level of self-worth and self-esteem individuals build in themselves. Grant & Phillips (2005) also earlier observed that people who experience high levels of body dissatisfaction feel their bodies are flawed and become more likely to suffer from self-image issues such as depression, isolation, low self-esteem, and eating disorders. Meanwhile, Aparicio-Martinez et al. (2019) found that body dissatisfaction could have far-reaching consequences on the individual, affecting among others, self-confidence, social interactions, academic performance, and overall mental health. Asked about how they felt about their bodies, many with body image issues disliked their physical appearance,many of whom felt that they were physically unattractive. As a result, they either suffered body dysmorphic disorder and frequently look up themselves in the mirror or eisoptrophobiain which they dread viewing themselves in the mirror.

In this study, some participants felt that their bodies were embarrassing to others, and they were ashamed to let others know their weight. Some studentsshowed signs of body dysmorphic disorder or eisoptrophobia and were either compulsively drawn to or away from the mirror. While 76.4% participants suffered body-shame and felt that their physical appearance was embarrassing to others, 69% of them showed signs of gravitophobia, the scale anxiety.

Finally, some students with body dissatisfaction were generally ashamed and uncomfortable in the presence of others due to their bodies and successively displayed distorted behaviours such as social phobia, social anxiety disorder, social withdrawal, shyness, shame and guilt. In line with these, Stice& Shaw (2002) also foundindividualswho were obsessively preoccupied with their bodies and appearance, and were usually emotionally distressed. According to them, it was not uncommon for these affected personsto display an unnecessary desire for cosmetic surgery, poor eating habits, low self-esteem, anxiety and depression. In line with this,Paxton et al. (2006)also found students who were doing everything to improve on their physical appearance because they were dissatisfied with their body. According to them, some of these individuals who were dissatisfied with their bodies used steroids, laxatives, self-induced vomiting, diet pills and excessive exercising to control their size, weight and physical appearance.

Between boys and girls, while girls struggle to maintain their bodies to stay attractive, mostly striving towards the thin-ideal, since thin bodies than chubby ones appear most acceptable in their society, boys idealize a muscular body image and strive for the muscular ideal, with increased muscle mass,and a more muscular physique(e.g., Carlson, 2004).All of these have considerable impacts on the emotional and physical health of affected young people, some of whom display distorted perceptions of their body, anxiety, depression and low self-esteem, and associated dieting and binge eating habits.

Descriptive data also showed strong evidence of avoidance behaviour as a consequence of body image; and significant positive relationshipswere foundbetween avoidance behaviour and psychological distress (P-value=0.000<0.05; r=0.684**), implying that psychological distress is more likely when students display avoidance behaviour in reaction to their bodies.Participants were prone to avoiding party events and social gatherings, visiting public fitting or changing rooms, wearing swimming costumes at the beach and swimming pools,looking at their old photographs and looking in the mirror.In line with these, Maphis et al (2013) earlier noted that avoidance behaviour was common among women who show dissatisfaction with their bodies and physical appearance, and to them, women are more likely than men to avoid situationsin which their bodies are on display, such as wearing a swimsuit in public and visiting public fitting rooms. Meanwhile Walker et al. (2009) also argued that avoidance behaviours are common among people who are dissatisfied with their bodies, including their shape, weight, or size. Like in the present study, theynoted behaviourssuch as avoiding mirrors, not weighing oneself, wearing lose-fitted clothing, and avoidingany situations that revealing clothing may be required (e.g., the beach, swimming pools, etc.). Thompson et al. (1998)and Cash & Fleming (2002) also listed avoidingsocial events and gatherings,parks, pools, beaches and the dressing attires that go with these circumstances as typical avoidance behaviours among people with body dysmorphic disorder.

Data on thin ideal internalization showed that while 80.6% participants wanted to be like models on television, 88% feared or disliked being like the same television and magazinemodels. Many students were doing all that it takes to be thin and among the measures adopted were using diet pills, laxatives or diuretics to control body size, exercise to alter shape or weight and an effort to restrict diet and reduce weight. When checked against psychological distress, there was a significant positive relationship between thin-ideal internalization and psychological distress (P-value=0.000<0.05; r=0.669**) suggesting that psychological distress was largely determined by an individual's extent of thin-ideal internalization. With respect to body image, individuals tend to be more psychologically distressed by the nature of their body when they develop body image distortions and internalize conflicting perceptions, especially with regard to the thin-ideal. In this light, Hohlstain et al. (1998) argued that thin-ideal agents communicate expectations concerning the benefits of thinness, such as increased social acceptance, and these expectations play a key role in the propagation of the thin ideal. In this study, when participants were asked about body shape ideals in their society, a significant proportionsaid chubby bodies were most disliked in favour of lean bodies and as much as 81.2% reported that their society rated slender skinny women as very attractive. It therefore means that thin-ideal internalization is highly facilitated by contexts that valorize the thin-ideal. For instance, Pasavac et al. (1998) noted that thin-ideal internalization depends on social reinforcers, and family, peers, and media are thought to reinforce the thin-ideal body image for women through comments or actions that support and perpetuate this ideal. Meanwhile,Stice (2001) felt that thin-ideal internalization theoretically promotes dieting and psychological distress, increasing the risk of bulimic symptoms.Among some of the practices adopted by students in this study to manage weight were the useof diet pills, restricted their diet, laxatives or diuretics to control body size. Meanwhile, others engaged in some form of exercise to alter body shape or weight.

Conclusion

It has been revealed that body image perception is a possible determinant of psychological distress among university students. This study investigated eating disorders, body dissatisfaction, avoidance behaviour and thin-

ideal internalization as body image perceptions that are likely to lead to psychological distress. Participants with eating disorders, body dissatisfaction, avoidance behaviour and thin-ideal internalization are generally psychologically distressed displayingdistressing conditions such as somatic symptom disorder, anxiety, depression and emotional distress. When dissatisfied with their body,they tend to be generally ashamed and uncomfortable in the presence of others and typically display body image distorted behaviours such as social phobia, social anxiety disorder, social withdrawal, shyness, shame and guilt. As a result, they tend to limit or avoid social interactions and gatherings, public fitting rooms,beaches and swimming pools and the behaviours that are common in these locations.These avoidance behaviours maybe different between men and women as women are more likely than men to avoid situationsin which their bodies are on display(Maphis et al., 2013).

It was also common to have affected individuals display avoidance behaviourssuch asviewing themselves in the mirror, scale anxiety, wearing lose-fitted clothing, and avoidingevents in whichrevealing clothing may be required. Affected individuals not only reject their bodies but also suffer body dysmorphic disorder, with obsessive focus on self-perceived and self-constructed flaws on their body and physical appearance. Those who are dissatisfied with their bodies are unable to stop thinking about perceived defects or weaknesses in their bodies, and in the height of it, most people are embarrassed, ashamed and anxious about their physical presentation. That is why they present with social phobia, social anxiety disorder, social withdrawal, shyness, shame and guilt.

Body image is a significant developmental feature among young people who tend to be more concerned about their body and physical appearance. For some, body dissatisfaction becomes a risk factor for eating disorders, avoidance behaviours, social withdrawal, negative self-concept and low self-esteem. Whereas, positive body image or self-acceptance can become protective factorsfor psychological wellbeing, good and stable eating habits and self-love regardless of size, shape, skin tone, gender, physical appearance and abilities (Tylka, 2011). For many, any deviation from the ideal figure as a consequence of body image distortion can result in behavioural and emotional disturbances. According to Palumbo (2022), body positivity focuses less on physical appearance and more on the overall health of the human body; and a healthy body image means feeling good about looking and feeling comfortable in one's body.This paper has also found like others that negative body perceptions are more harmful to psychological and mental health functioning. For instance, it has aligned with findings which suggest that negative body perceptions are capable of affecting daily life, including one's work, family life and relationships. It can also lead to mental health conditions such depression, self-harm, and even suicide.These psychological distress conditions are interrelated, and one can exacerbate the symptoms of another. This interconnectedness is well-documented in the field of mental health, and underscores the importance of considering the whole person when diagnosing and treating mental health issues related to body image dissatisfaction. For example, chronic stress as a consequence of body dissatisfaction can contribute to the development of different forms of anxiety and depression. These conditions are treatable, and individuals experiencing them should seek help from mental health professionals. Treatment options may include psychotherapy, medication, lifestyle changes(e.g., exercise, stress management techniques), support from mental health professionals and support networks, and medication. Albeit their condition, early intervention is crucial for managing and alleviating distressing symptoms and improving an individual's mental health and overall quality of life.

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