Perceived Influence of Self-Cognition on Self-Esteem among Undergraduate Students

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Abstract

Body image comprises an individual's self-perceptions and self-attitudes, further linked to self-esteem, interpersonal confidence, eating and exercise behaviours, sexual experiences, and emotional stability. Mainly, self-cognition and self-esteem concern undergraduate students because they are keen on how they look and because the media gives the impression that there is a perfect body image. The study sought to establish the perceived influence of selfcognition on self-esteem among undergraduate students of Kabarak University, Nakuru County, Kenya. The study was guided by Psychosocial Theory by Erik Erikson, which focuses on ways individuals are shaped by and react to their social environment. Questionnaires were administered to undergraduate students, a Focused Group Discussion guide for peer counsellors and an interview schedule for university counsellors. The research findings indicated that self-cognition influences self-esteem among undergraduate students. The study recommends that university counsellors strategise addressing concerns regarding self-cognition and self-esteem. The research strengthens efforts by the university policymakers and management bodies to enhance the counselling departments by coming up with relevant policies and strategies. Finally, the study recommends increased awareness of self-cognition, thus helping students to appreciate their bodies, feel confident and comfortable, and embrace their worth that transcends physical appearance.

Keywords: Self-cognition, Self-Esteem, Body Image, Body Dissatisfaction

Introduction

Human beings have given a lot of importance to the beauty associated with their bodies, thus the term body image. Generally, human beings are more obsessed with their appearance. Throughout history, humankind has given a lot of importance to the beauty of the human body; there have been concerns about body image, and the focus is primarily on the weight,



skin, shape or size of certain body parts (Brazier, 2020). This is attested by the significant rise in referrals for cosmetic surgery, concerns about unhealthy eating and drugs designed to make men more muscular. For women, slimness is seen as a desirable attribute associated with self-control, elegance, social attractiveness and youth. Women prefer an "hourglass" shaped figure with an underweight body mass index, large breasts, and toned muscle (Grogan, 2016). Studies previously done showed that repeated exposure to idealised media images resulted in greater body dissatisfaction, body anxiety, and lower self-esteem (Ui-Jeen & Jaehee, 2018).

Pooja & Karrak (2020) argue that young people worry about their physical appearance and struggle to impress others and themselves. Studies indicate that attractive people have distinct advantages in our society. In some cases, attractive children are popular with their teachers and classmates; attractive applicants have a better chance of getting jobs and receiving higher salaries, and attractive people are found guilty less often in court; when found guilty, they receive less severe sentences (Kate Fox, 2019). Many people do many things to improve their body image, including extremes like having plastic surgeries and extreme makeovers in their bid to change their appearance and personal character by trying to impress the public. The media is replete with images of perfection, perfect lives, perfect bodies and perfect children (Caradan, 2019). In all these, young people are the most affected by the trends influencing body image perceptions since it affects their self-esteem and social adjustment (Gatti et al., 2014).

Self refers to a warm feeling that something is "about me" or "about us." It is an "I" that thinks and a "me" that is the content of those thoughts (Leary & Tangney, 2012). The self is a social construct which is formed through our interactions. It is constructed, maintained, and changed by interacting with others (Morf & Koole, 2018). The self is our home base that guides all our actions. Self colours how we interpret the world, the interaction, the partners we choose and how we present ourselves to others. It is a social product; we learn who we are through our interaction with others, but at the same time, we influence how these others react to us by behaving toward them in certain ways (Morf & Koole, 2018).

Body image is the dynamic perception of one's body, how it looks, feels and moves. It is shaped by perception, emotions, and physical sensation and is not static but can change in relation to mood, physical experience and environment (Shetty, 2018). Similarly, Pelegrini et al. (2014) posit that body image is characterised by one's mental perception of measures, contours and shapes of the body and parts of it and feelings associated with characteristics. Body image development is very critical for young people. Cristina Georgiana Voicu (2014) defines body image as the self-representation of the body psyche in terms of its potential



presence and effectiveness in front of others. The study further points out that body image and self-esteem are the fundamental elements of self-image (Voicu, 2014). The changes channel individuals' attention towards their developing bodies; thus, body image (self-cognition) and self-esteem are variables to be studied in this study. Further, body image encompasses an individual's body, which is related to self-perceptions and self-attitudes and is linked to self-esteem, interpersonal confidence, eating and exercise behaviours, sexual experiences and emotional stability (Shetty 2018). Self-perception about appearance is vital in developing self-esteem, especially during a youthful stage. Research has shown that inappropriate perceptions of body image and dissatisfaction can lead to physical and psychic problems among the youth. Adolescents and young adults try to lose or gain weight to get a perfect body (Virk & Singh, 2020). Today, society is grappling with the ever-increasing sense of ideal body image.

Self-esteem entails beliefs and emotions. It is viewed as "a feeling of self-appreciation," while ethical and philosophical conventionally view it as "the awareness of the absolute value of one's own personality or dignity." Thus, self-esteem is the feeling of self-appreciation, and it's an indispensable emotion for people to adapt to society and live their lives (Hosugi, Okada, Fujii, Noguchi & Watanabe, 2012). For this study, body image would refer to self-perception, self-affection, self-cognition and appearance management behaviours, and self-esteem will be a dependent variable of the study.

Much literature on body image and self-esteem has been published, but most of it is from the Western world. There are some studies which have been done in the African continent, but many of the studies have focused on HIV/AIDS, reproductive health and early marriages. Studies on body image have also been carried out in Kenya; for instance, the United States International University- Africa (Nairobi) study analysed factors that impact body image dissatisfaction among young adults in Kenya (Evelyne et al., 1991). Another study (Waswa, 2018) revealed that individuals with body image dissatisfaction might affect their eating behaviour, and if the issue is not addressed, then it may affect their self-esteem; hence, academic performance is affected. Yager et al., 2012 point out that government schools and curriculum authorities increasingly recognise that body image for young adults is a public health issue that warrants attention in learning settings. Against this background, this study sought to determine the influence of self-assessed body image on self-esteem among undergraduate students of Kabarak University, Nakuru County, Kenya.

Body image issues affect people of all ages, especially youth and middle-aged adults. The most influenced are undergraduate students. The media gives the impression that there is



a perfect body image, which makes many young people try all possible means to fit into that expectation. Models, the fashion industry, and celebrities have pressured young people, making them bow to these pressures. Females are more conscious of their body image as manifested in their dressing style, makeup application, and dieting. Males also put more effort into achieving a positive outlook by engaging in the same routines as their female counterparts. All these activities aim to portray a desirable body image propagated by the media. The problem of self-cognition, if not addressed, can lead to low self-esteem, which in turn manifests itself in aggressive behaviours, eating disorders, engaging in risky sexual behaviours and even delinquency.

Literature Review

This section reviews relevant literature on the overview of the perceived influence of self-cognition on self-esteem among undergraduate students of Kabarak University, Nakuru County, Kenya. Body image is a multidimensional construct encompassing a behavioural component involving body-related behaviours, a perceptual component and a cognitive-affective component (Quittkat et al.., 2019). One's mental perception of measures can characterise it, counters and shapes of the body and parts of it and the feelings associated with characteristics (Pellegrini et al., 2014). Body image concerns affect all people; body dissatisfaction and its consequences are relevant to men and women of all ages (MacNeill et al., 2017).

Cognition refers to the mental processes involved in gaining knowledge and comprehension. It includes all the conscious and unconscious processes involved in thinking, perceiving and reasoning (Cherry Kendra, 2023). Self-cognition affects every aspect of life; it impacts everything from our daily life to our overall health. The media places a lot of emphasis on appearance advertisements; magazines, TV, and the fashion industry tell us how we "should" look to be beautiful. Gupta (2011) highlights that today's society portrays a twisted image of beauty for women and men of all ages. When adolescents view these images, they get torn between their own actual body image and the perceived body image; thus, it challenges the feeling of competence among adolescents. The images portrayed by the media are unrealistic and do not represent real healthy people (Gattario & Frisen, 2019). therefore, they send the wrong message that beauty is an ideal many cannot achieve. Many images are touched up and slimmed down using computer technology. Social pressure and unrealistic expectations from media, peers, and society lead adolescents to believe that they



must go through hurdles to make themselves look like what the media wants them to look like and not what they already are (Gupta, 2011).

Body image is an essential component of the individual self-concept that allows one to reach a healthier physical and mental state. Body image affects self-esteem; individuals with high self-esteem are characterised by high satisfaction with their life, independence and optimism. In most cases, females achieve their self-esteem through the attractiveness and beauty of their bodies, while males do that through authority and position. Individuals who are satisfied with their body image have competence, which is reflected in self-trust (Lama, 2016)

A study was done among first-year nursing students in a medical college in Yantai City that used stratified random sampling to conduct a questionnaire survey which showed that the students held relatively positive body self-esteem, physical health, appearance, obesity, flexibility and whole body while holding relatively negative body self-cognition in coordination, strength, endurance, athletic ability and physical actions (Han & Qu, 2019), thus self-cognition. This study sought to examine the influence of self-cognition among undergraduate students of Kabarak University.

Another study done in Bahauddin Zakariya University, Multan, investigated the association between self-concept and self-esteem among university students. The results revealed a slightly significant positive correlation between self-concept and self-esteem among university students. The study further showed a significant difference between the scores of self-concepts but no significant difference between the scores of self-esteem. The study concluded that self-concept and self-esteem have a positive relationship (Batool et al., 2018). The present study examines the influence of self-cognition among undergraduate students of Kabarak University.

Further, a study from a public university in Sao Paulo sought to identify the prevalence of distortion and dissatisfaction with the body size of Brazilian university students and establish their relationship with the demographic and academic characteristics and the anthropometric nutritional status. The study found a high prevalence of body size distortion among low-weight individuals. Students who distorted their body size underestimated their body size. The research further showed that students dissatisfied with their bodies wished to reduce their body size. The prevalence of body size underestimation was higher among men, students who practice physical activity, those using dietary supplements and underweight individuals. The wish to decrease body size was higher among women and overweight individuals (Dos Santos, Da Silva, Santana & Bonini, 2020).



The present study focused on establishing the influence of self-cognition on self-esteem among Kabarak University Nakuru County undergraduate students. It was guided by Erik Erikson's psychosocial theory, which focused on how individuals are shaped by and react to their social environment. This theory helped the researcher understand and explain the developmental stage of human beings. Each developmental stage is crucial in influencing how human beings grow; thus, it contributes much to how people respond to various life issues, including body image and self-esteem. This theory is relevant because it focuses on stages of development, stage six, about intimacy and isolation. The stage covers the early adulthood period, where people explore personal relationships. Success leads to strong relationships, while failure results in aloneness and isolation. Erikson believed a strong sense of personal identity was necessary to develop intimate relationships. Poor sense of self tends to have less committed relationships and are more likely to have emotional isolation, loneliness and depression.

Cognitive Behavioral Theory by Aaron Beck is a short-term, goal-oriented therapeutic approach to problem-solving; CBT approaches encourage clients to recognise how what they think and how they behave impact their feelings. CBT helps people distinguish between problems that can and cannot be resolved and develop better coping skills. CBT has been known to be efficacious in the treatment of conditions from anxiety and depression to pain, low self-esteem and insomnia. It is helpful across the lifespan, and it is flexible. By changing these thoughts, the behaviours change, as do emotional responses. The respondents of this study were young people who had a distorted cognition of their body image, which in turn was perceived to influence self-esteem and confidence.

Methodology

The description of research methods and procedures used to achieve the purpose of the study has been divided into seven sections: the research design, location of the study, target population, sampling procedure, instrumentation, data analysis procedures and ethical consideration.

The researcher applied a survey design to obtain the respondents' quantitative and qualitative data on the perceived influence of self-cognition on self-esteem. The targeted population was 8225 undergraduate students of Kabarak University. The third-year students were targeted because they had already adjusted to university life and were experiencing self-esteem issues due to body image. The peer counsellors and University counsellors were



sampled because of their experience in offering counselling services to students who may have experienced body image and self-esteem-related issues. Thus, the involvement of undergraduate students, peer counsellors and student counsellors' contributions added value to this study.

The study used simple random sampling to select the third-year students. The university counsellors and peer counsellors were selected using purposive sampling. The study's sample size for third-year students was determined using the formula developed by Krejcie and Morgan (1970). The sample size for an accessible population of 8225 undergraduate students is 333. The researcher used a simple random sampling technique to select the respondents for the study. The researcher interviewed two university counsellors and had ten peer counsellors for the FGD. Thus, the total respondents were 345. The researcher used both questionnaires, Focused Group Discussion (FGD) and Interview Schedule. The researcher adapted the Body Image –Acceptance and Action Questionnaire (BI-AAQ) developed by Sandoz and Wilson (2013).

Results and Discussion

The quantitative data was analysed and presented using descriptive statistics and inferential statistics. The quantitative data was derived from the Likert scale as follows: Rosenberg Selfesteem scale Strongly Disagree (SD) Disagree (D) Neutral (N) Agree (A) Strongly Agree (SA) to measure perception of undergraduate students' perception on the influence of self-assessed body image on self-esteem among undergraduate student. The Body image Action and acceptance questionnaire also had a Likert scale: 1) Never true (2) Very seldom true (3) Seldom true (4) Sometimes true (5) frequently true (6) Almost true (7) Always true. The qualitative data was acquired from the university counsellors, and the Focus Group Discussions were summarised and presented thematically.

Response Rates of the Respondents

The number of questionnaires administered was three hundred and thirty-three (333), while the number returned was three hundred and twenty-one (321). The researcher obtained a high questionnaire rate of return. The response rate was 96.39%, and the female participants were 163 (50.8%) of the total respondents. The male respondents were 158 (49.2%) of the total respondents. The study indicated that there were slightly more female respondents than male respondents.



The Demographic Characteristics of the Respondents

This section discusses the demographic characteristics. The respondents were required to indicate both their age and gender. The information on the age and gender of the respondents was of great importance in that it helped the researcher obtain the respondents' characteristics. These characteristics of respondents help understand the findings, how to generalise the information, and how the data can be compared or replicated in other studies.

The study used the frequency and percentage to illustrate the demographic characteristics of the respondents.

Table 1Distribution of the Gender of the Respondents

	Gender	Frequency	Percent (%)
	Female	163	50.8
	Male	158	49.2
·	Total	321	100.0

The number of female participants was 163 (50.8%), while the number of male respondents was 158 (49.2%) of the total respondents. Therefore, the study indicated a larger proportion of female respondents than male respondents.

 Table 2

 Distribution of Age of the Respondents

Age		Frequency	Percent
			(%)
	below 18 years	4	1.2
	18-19 years	53	16.5
	20-21 years	142	44.2
	22 years and above	122	38.0
	Total	321	100.0

The number of respondents below 18 years was 4 (1.2%), ages 18 and 19 was 53 (16.5%), and ages between 20 and 21 years old was 142 (44.2%), and age of 22 years was 122 (38%) of the total respondents. Thus, most respondents were between 20 and 22.



Overview of Self-esteem Concerns among Undergraduate Students

The findings indicated that students' self-cognition boosts their self-esteem and self-worth and influences their feelings. Self-cognition affects undergraduate students positively and negatively; those "plus size" and undersize are affected.

Influence of Self-cognition on Self-esteem

Cognition refers to the mental processes involved in gaining knowledge and comprehension. It includes all the conscious and unconscious processes involved in thinking, perceiving and reasoning (Cherry Kendra, 2023). Self-cognition affects every aspect of life; it impacts everything from our daily lives to our overall health.

The respondents were tasked to respond to the Body Image- Action and Acceptance Questionnaire scale which was developed by Sandoz, E.K. and Wilson (2013). This is a 12-item questionnaire that assesses the acceptance of one's thoughts, feelings and emotions towards the body in the service engaging in behaviours that are important to the individual. The items are answered on a seven-point scale ranging from 1 (never true) to 7(always true). All items were reverse–coded so that higher scores reflected higher levels of body image flexibility.

The responses on the perceived influence of self-cognition on self-esteem are presented in the table. How does self-cognition influence self-esteem?

Table 3: Likert Scale of Perception of the Influence of Self- cognition on Self-esteem

Variable	Category	Frequency	Percentage	Chi-Square- Test
	Never true	117	36.4	
	Very seldom true Seldom true	22 21	6.9 6.5	
	Sometimes true	57	17.8	
	Frequently true	14	4.4	
	Almost true	14	4.4	
Body image 1	Always true	72	22.4	200.58
	Never true	70	21.8	
	Very seldom true	25	7.8	
	Seldom true	27	8.4	
	Sometimes true	52	16.2	
	Frequently true	20	6.2	
	Almost true	80	24.9	
Body image 2	Always true	43	13.4	71.798



	Never true	130	40.5	
	Very seldom true	18	5.6	
	Seldom true	21	6.5	
	Sometimes true	37	11.5	
	Frequently true	17	5.3	
	Almost true	20	6.2	
Body image 3	Always true	75	23.4	239.975
, ,	Never true	174	54.2	
	Very seldom true	23	7.2	
	Seldom true	21	6.5	
	Sometimes true	36	11.2	
	Frequently true	15	4.7	
	Almost true	16	5	
Body image 4	Always true	34	10.6	431.009
•	Never true	220	68.5	
	Very seldom true	33	10.3	
	Seldom true	16	5	
	Sometimes true	26	8.1	
	Frequently true	5	1.6	
	Almost true	6	1.9	
Body image 5	Always true	10	3.1	804.487
	Never true	202	62.9	
	Very seldom true	28	8.7	
	Seldom true	25	7.8	
	Sometimes true	27	8.4	
	Frequently true	12	3.7	
	Almost true	8	2.5	
Body image 6	Always true	12	3.7	784.556
	Never true	183	57	
	Very seldom true	24	7.5	
	Seldom true	16	5	
	Sometimes true	40	12.5	
	Frequently true	19	5.9	
	Almost true	18	5.6	
Body image 7	Always true	18	5.6	494.925
	Never true	155	48.3	
	Very seldom true	19	5.9	



	Seldom true	24	7.5	
	Sometimes true	29	9	
	Frequently true	22	6.9	
	Almost true	23	7.2	
Body image 8	Always true	46	14.3	318.868
	Never true	191	59.5	
	Very seldom true	31	9.7	
	Seldom true	20	6.2	
	Sometimes true	27	8.4	
	Frequently true	15	4.7	
	Almost true	17	5.3	
Body image 9	Always true	14	4.4	557.911
	Never true	202	62.9	
	Very seldom true	28	8.7	
	Seldom true	17	5.3	
	Sometimes true	23	7.2	
	Frequently true	22	6.9	
	Almost true	12	3.7	
Body image 10	Always true	13	4.0	637.009
	Never true	231	72	
	Very seldom true	27	8.4	
	Seldom true	17	5.3	
	Sometimes true	14	4.4	
	Frequently true	12	3.7	
	Almost true	10	3.1	
Body image 11	Always true	8	2.5	885.521
	Never true	218	67.9	
	Very seldom true	18	5.6	
	Seldom true	13	4.0	
	Sometimes true	21	6.5	
	Frequently true	18	5.6	
	Almost true	13	4.0	
	Always true	17	5.3	765.899

The researcher used the above statements to test undergraduate student's perceived influence of self-cognition on self-esteem. On the statement, "Worrying about my weight makes it difficult for me to live a life that I value," the response was: Always true and sometimes true,



72 (22.4%) and 52 (16.29%) in that order, never true and seldom true 70 (21.8%), almost true and very seldom true 80 (24.9%) and 25 (7.8%) and frequently true 20 (6.2%). The response shows that the majority of undergraduate students worry about their weight, and thus, it affects their self-esteem. The statement's results had a chi-square = 200.580, with a p-value = 0.000<0.05 significance level. This means that the student's self-cognition of weight makes it difficult to live a life they value, thus affecting their self-esteem.

The respondents variedly responded to the statement, "I care too much about my weight and shape." Nearly half of the respondents cared too much about their weight and shape. At the same time, slightly over half did not care too much about their weight and shape, as seen in their responses: always true 43 (13.4%), almost true 20 (6.2%), never true 130 (40.5%), sometimes true 37 (11.5%), seldom true 21(6.5%) and very seldom true 18 (5.6%), and frequently true 17 (5.3%). The results of this statement had a chi-square = 71.798, with a p-value = 0.000< 0.05 significance level. This means the self-cognition of caring too much about weight and shape influences self-esteem.

The peer counsellors pointed out that their peers care too much about their weight and shape. PC 5 affirmed that their female peers are so concerned about their body shape and weight; he quoted a case of a girl who had a broken relationship because the boyfriend felt that she had put on more weight. The girl was traumatised because of the opinion of her boyfriend, yet she relatively wasn't.

PC 6 gave a different opinion that she handled a case of a peer who also had a broken relationship where the boyfriend left the girl because she was allegedly too slim. Reportedly, the boy told her she needed to do exercise that could enhance some of her body parts. The girl admitted she felt depressed when her body was compared with other girls'. Counsellor 1 also pointed out that most of her clients had relationship issues which sprang from body image concerns. She said some take serious steps to achieve the desired body shape and weight, including extreme dieting and bleaching of their skin. Others take some tablets to add or reduce weight, but most take the bill to reduce body weight.

The findings of this study are similar to a survey done among Brazilian university students (Dos Santos, Da Silva, Santana & Bonini, 2020). The study sought to identify the prevalence of distortion and dissatisfaction with the body size of Brazilian university students and establish their relationship with the demographic and academic characteristics and the anthropometric nutritional status. There was a high prevalence of body size distortion among low-weight individuals. Students who distorted their body size underestimated their body size. The research further showed that students dissatisfied with their bodies wished to reduce



their body size. The prevalence of body size underestimation was higher among men, students who practice physical activity, those using dietary supplements and underweight individuals. The wish to decrease body size was higher among women and overweight individuals (Dos Santos, Da Silva, Santana & Bonini, 2020).

The present study also examined the influence of self-cognition on self-esteem from the statement, "I shut down when I feel bad about my body shape or weight." Always true was 75 (23.4%), almost true 16 (5%), never true was 174 (54.2%), very seldom true 23 (7.2%), seldom true 21 (6.5%), sometimes true was 36 (11.2%), and frequently true was 15(4.7%). Most undergraduate students do not shut down when they feel bad about their body shape and weight. Around 40% shut down when they feel bad about their body shape and weight, which means that self-cognition influences self-esteem among undergraduate students. These findings agree with what the peer counsellors and university counsellors shared during the FGD and interview. PC 3 remarked that most of their peers believe that what others say about their body shape and weight matters to them. He further pointed out that when young people are told their body shape and weight are good, they doubt whether the compliment is genuine.

The findings of this study are similar to a survey done among first-year nursing students in a medical college in Yantai City. They used a stratified random sampling to conduct a questionnaire survey. The results showed that the students held relatively positive body self-esteem, physical health, appearance, obesity, flexibility and the whole body while holding relatively negative body self-cognition in coordination, strength, endurance, athletic ability and physical actions (Han & Qu,2019), thus self-cognition.

Counsellor 2 pointed out some of his clients display antisocial behaviour due to their cognition of their body shape and weight. Those who are obese engage in maladaptive behaviours like eating disorders: anorexia nervosa (restricted intake of food), binge eating (eating large amounts of food in a short time) and anorexia bulimia (eating large amounts then trying to rid themselves of food).

Counsellor 1 pointed out that some students wear oversized or undersized clothes to enhance their body shape to fit into what their peers say/ think is the ideal body shape and weight. This concurs with what Gupta (2011) highlights: today's society portrays a twisted image of beauty for women and men of all ages. When adolescents view these images, they get torn between their own actual body image and the perceived body image; thus, it challenges the feeling of competence among adolescents. The images portrayed by the media



are unrealistic; therefore, they send the wrong message that beauty is an ideal many of us cannot achieve (Gattario & Frisen, 2019).

The statement "I shut down when I feel bad about my body shape or weight" had a chi-square = 239.97, with a p-value = 0.000<0.05 significance level. This means that there was significant evidence that student self-cognition influences their self-esteem, meaning they shut down when they feel bad about their body shape and weight.

Another statement used to test the influence of self-cognition on self-esteem was: "My thoughts and feelings about my body weight and shape must change before I can take important steps in my life." The responses indicated that most undergraduate students would take essential steps in life before their thoughts and feelings about body weight and shape change. At the same time, some of them cannot take necessary steps in life before their thoughts and feelings on body shape and weight change, as seen in their responses: always true 34 (10.6%), almost true 6 (1.9%), never true 220 (68.5%), sometimes true 26 (8.1%), seldom true 16 (5%), and very seldom true 33 (10.3%), and frequently true 5 (1.6%). The results indicate that the self-cognition of the student on this statement had a chi-square = 431.007, with a p-value = 0.000<0.05 significance level. This means that there was significant evidence that student self-cognition influences their self-esteem on feeling that their thought of their body weight and shape need to change before other steps in life.

The researcher used the statement, "Worrying about my body takes up too much of my time," to test the influence of self-cognition on self-esteem. The findings were: always true 10 (3.1%), almost true 8(2.5%), very seldom true 28 (8.7%), seldom true 25 (7.8%), never true and sometimes true 202 (62.9%) and frequently true 12 (3.7%). Most students do not take much time worrying about their bodies, while a percentage worry much about them. The study results indicate that the self-cognition of the student on "Worrying about my body takes up too much of my time" had a chi-square = 804.487, with a p-value = 0.000<0.05 significant level. This means there was substantial evidence that student self-cognition influences student self-esteem because worrying about their body takes too much time.

The findings of this study differed from a study done at Bahauddin Zakariya University, Multan, which aimed to investigate the association between self-concept and self-esteem among university students. The results revealed a slightly significant positive correlation between self-concept and self-esteem among university students. The study further showed a significant difference between the scores of self-concepts but no significant difference between the scores of self-concept and self-esteem have a positive relationship (Batool, Ajmal, Abid & Iqbal, 2018).



The researcher further tested this assertion: "If I start to feel fat, I try to think about something else." The responses were as follows: always true 12 (3.7%), almost true 18 (5.9%), sometimes true 40(12.5%), frequently true 19 (5.9%), seldom true 16 (5%), and very seldom true 24 (7.5%), and never true 183 (57%). When most undergraduate students "start to feel fat," they don't try to think about something else, while others try to think about something else. The study results indicate that the self-cognition of the student on "If I start to feel fat, I try to think about something else" had a chi-square = 784.556, with p-value = 0.000<0.05 significance level. This means that there was significant evidence that student self-cognition influences the student self-esteem as they start feeling fat, they need to think about something else."

The findings agree with the reviewed literature on body image, which states that body image is a crucial component of the individual self-concept that provides the opportunity to reach a healthier physical and mental state. Body image affects self-esteem; individuals with high self-esteem are characterised by high satisfaction with their life, independence and optimism. In most cases, females achieve their self-esteem through the attractiveness and beauty of their bodies, while males do that through authority and position. Individuals who are satisfied with their body image have competence, which is reflected in self-trust (Lama, 2016).

This study also interrogated the following statement: "Before I can make any serious plans, I have to feel better about my body." The undergraduate students who indicate always true 18(5.6%), almost true 23(7.2%), never true 155(48.3%), very seldom true 19(5.9%), sometimes true 29(9%), seldom true 24(7.5%) and frequently true 22(6.9%). Most students have to feel better about their bodies before they make serious plans. This statement had a chi-square = 494.925, with a p-value = 0.000<0.05 significance level. It implies that student self-cognition influences their self-esteem, as before they make serious plans, they must feel better about their body.

The statement, "I will have better control over my life if I can control my negative thoughts about my body," tested the perceived influence of self-cognition on self-esteem among undergraduate students. The responses were: Always true 46 (14.3%), never true 191 (59.5%), very seldom true 31 (9.7%), seldom 20 (6.2%), sometimes true 29 (9%), frequently true 22 (6.9%) and almost 23 (7.2%). The results had a chi-square = 318.868, with a p-value = 0.000<0.05 significant level. This means that there was significant evidence that student self-cognition influences the students' self-esteem on the feeling that they will have better control over their lives if they can control their negative thoughts about their bodies.



The study also tested the following statement to ascertain the perceived influence of self-cognition on self-esteem: "To control my life, I need to control my weight." Most undergraduate responses indicated they must control their weight to control their lives. Always true14 (4.4%), never true 202 (62.9%), very seldom true 28 (8.7%), seldom true 17 (5.3%), sometimes true 23 (7.2%), frequently true 22 (6.9%) and almost true 12 (3.7%). The results indicate that the self-cognition of the student on "To control my life, I need to control my weight" had a chi-square = 557.911, with p-value = 0.000<0.05 significance level. It signifies that there was significant evidence that student self-cognition influences their self-esteem on feeling that they need to control their weight to control their life. The scores on the following statement, "Feeling fat causes problems in my life," were as follows: always true13 (4.0%), never true 231 (72%), very seldom true 27 (8.4%), seldom true 17 (5.3%), sometimes true 14 (4.4%), frequently true 12 (3.7%) and almost true 10 (3.1%). The study results indicate a chi-square = 637.009, with p-value = 0.000<0.05 significance level. There was significant evidence that student self-cognition influences student self-esteem as they think feeling fat causes problems in life.

The study examined the influence of self-cognition on self-esteem through the responses majority of undergraduate students using the statement, "When I start thinking about the size and shape of my body, it's hard to do anything else": always true 8 (2.5%), never true 218 (67.9%), very seldom true 18 (5.6%), seldom true 13 (4.0%), sometimes true 21 (6.5%), frequently true 18 (5.6%) and almost true 13 (4.0%). The results had a chi-square = 885.329, with a p-value = 0.000<0.05 significance level. There was significant evidence that student self-cognition influences student self-esteem as they start thinking about the size and shape of their body; it becomes hard to do anything else.

The assertion "My relationships would be better if my body and or shape did not bother me" had a chi-square = 765.899, with p-value = 0.000<0.05 significance level. There was significant evidence that student self-cognition influences the student's self-esteem, as the relationships would be better if my body and shape did not bother me.

The cognitive behavioural theory by Aaron Beck, a short-term goal-oriented therapeutic approach to problem-solving, is useful in helping clients who struggle with body shape and weight issues. This theory encourages clients to recognise how their thoughts and behaviour impact their feelings. CBT helps people distinguish between problems that can and cannot be resolved and develop better coping skills. Changing these thoughts changes the behaviour, as does the emotional response. This theory was relevant in the study since the respondents were young people with a distorted cognition of their body image, which was



perceived to influence self-esteem and confidence. The findings of the study imply that undergraduate student's self-cognition influences self-esteem. Therefore, university counsellors, administrators and all stakeholders should empower undergraduate students to reduce the effects of low self-esteem, which is manifested in behaviours like aggressive behaviours, eating disorders, engaging in risky sexual behaviours and even delinquency. The study's findings agree with Lama (2016), who posits that body image is an essential component of the individual's self-concept that provides the opportunity to reach a healthier physical and mental state. Body image affects self-esteem; individuals with high self-esteem are characterised by high satisfaction with their lives, independence and optimism. In most cases, females achieve their self-esteem through the attractiveness and beauty of their bodies, while males do that through authority and position. Individuals who are satisfied with their body image have competence reflected in self-trust.

Conclusion

Self-cognition has a statistically significant influence on self-esteem among undergraduate students. The results show that most undergraduate students worry, care and think about their body weight and shape. Most undergraduate students think about their body shape and weight before taking significant steps in their lives; this implies that self-cognition affects their self-esteem. The findings indicated that many students shut down when they feel bad about their body shape and weight. The findings further indicated that most students feel they will have better control over their lives if they can control their negative thoughts about their bodies; this implies that self-cognition does influence self-esteem. The research findings show that self-cognition influences self-esteem because most students need to control their weight to control their lives. The peer counsellors and university counsellors' opinions agree that self-cognition influences self-esteem. The chi-square test results indicate that self-cognition has statistical significance on self-esteem.

Recommendations

Based on the findings of this study, the following recommendations were advanced:

 There should be a deliberate effort by all stakeholders in the university to empower undergraduate students on self-cognition in order to help students have positive selfesteem.



- ii. The key stakeholders in the counselling department include in the policies and strategies ways to address concerns about self-cognition and self-esteem.
- iii. The study recommends increasing awareness of self-cognition, thus helping students to appreciate their bodies, feel comfortable in their own skin, and know that there is more to their worth than just physical appearance.

The following are the policy recommendations based on the study findings: Based on the findings of this study:

- i. The Government of Kenya should enhance censorship of the kind of information being sent or received through social media platforms, especially on distorted body image-related messages and videos, in order to curb self-esteem concerns among undergraduate students.
- ii. The government of Kenya to regulate the use of cosmetics and beauty products in the market.
- iii. The university will introduce and empower peer counsellors to address concerns about self-cognition and self-esteem among their peers.

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