UNIVERSITY OF CAPE COAST

BODY IMAGE, SELF-ESTEEM AND HEALTH BEHAVIOUR AMONG SENIOR HIGH SCHOOL STUDENTS IN OFFINSO MUNICIPALITY

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BY

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Thesis Submitted to the Department of Health, Physical Education and Recreation of the Faculty of Science and Technology Education, College of Education Studies, University of Cape Coast, in Partial Fulfilment of the Requirements for the Award of Master of Philosophy Degree in Health Education

JULY 2019

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature…… Date……..

Name: Rilwan Yahaya

Supervisor's Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast

Principal Supervisor's Signature……. Date……

Name: Dr. Daniel Apaak

Co-Supervisor's Signature…… Date……...

Name: Dr. Thomas Hormenu

ABSTRACT

Body image is a subjective picture of one's own physical appearance established both by self-observation and by noting the reactions of others. Research stipulates that body dissatisfaction is linked to critical mental health problems, including eating disorders, low self-esteem and depression. This study investigated body image, self-esteem and health behaviour and explored factors affecting body image perception among senior high school students in Offinso Municipality of Ashanti Region. The population for this study encompassed all students (N=5725) in the three senior high schools in Offinso Municipality. A sample of 561 students responded to answer the Rosenberg self-esteem scale (RSE), Body shape questionnaire (BSQ) and Health Behaviour Questionnaire for Adolescents (HBQA). Majority (75%) of senior high school students have body image concerns ranging from mild to serious concerns. Correlation results showed that there was a moderate positive relationship between body image and self-esteem (r=.587) and a weak positive relationship was found between self-esteem and health behaviour (r = .057). Regression results indicated that family influence (β =.361, p =.000).was the strongest predictor of body image. Female students have higher body image concerns, higher self-esteem and more positive health behaviours than the male students. Male students are more likely to engage in negative health behaviours than their female counterparts. The Municipal Education Directorate should organise school-based preventive educational intervention for students who have body image concerns to reduce the risks of developing body image dissatisfaction and to improve their self-esteem.

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DEDICATION

In honour of the late Professor Joseph Kwesi Ogah.

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LIST OF ABBREVIATONS / ACRONYMS

APA - American Psychological Associations

AN - Anorexia Nervosa

BIC – Body Image Concern

BIP – Body Image Perception

BN – Bulimia Nervosa

BID – Body Image Dissatisfaction

BMI –Body Mass Index

BSQ - Body Shape Questionnaire

HBQA - Health Behaviour Questionnaire for Adolescents

HRQL - Health-Related Quality of Life

HICs - High Income Countries

RSES - Rosenberg Self-Esteem Scale

SDT – Self Determination Theory

SCT - Social Cognitive Theory

OBC - Objectified Body Consciousness

CHAPTER ONE

INTRODUCTION

Background to the Study

The idea of body image is used in many disciplines, including psychology, medicine, psychiatry, psychoanalysis, philosophy, cultural, and feminist studies. Body image is a subjective picture of one's own physical appearance established both by self-observation and by noting the reactions of others (Firdevs & Sevil, 2015). Body image is a multidimensional construct broadly describing internal, subjective representations of physical appearance and bodily experience, our attitude towards body, in particular, size, shape and aesthetics (Tylka & Wood-Barcalow, 2015). It is the mental representation we create of what we think we look like which may or may not bear a close relation to how others actually see us (Cash & Smolak, 2011). It has been noted that many women experience a discrepancy between their actual and perceived body shape (Markham, Thompson & Bowling, 2005).

The way a person perceives his/her body is influenced by a variety of factors including the degree of importance their physical appearance has to their overall sense of self (Spurgas, 2005). An individual can either be satisfied or dissatisfied with his or her body. When you are dissatisfied with your body or specific parts of it, it is termed as having a negative body image. It can extend to your weight, hair, skin colour or facial features (Tylka, 2013). People may perform actions to hide or change the body without regard to health implications and this can result in body image disturbance. It is usually caused by a feeling of

inadequacy in comparison to a benchmark of the perfect or ideal body, whether real or imagined (Clay, Vignoles, & Dittmar, 2005).

Studies have shown that adolescents have a negative body image due to the media, family influence, peer influence, and the changes experienced during adolescence (Furnham, Badmin, & Sneade, 2002; Frost & McKelvie, 2005; Davidson & McCabe, 2006). Body image can be negatively affected by past experiences of physical, verbal or sexual abuse, or if a person has been teased, bullied or harassed based on body size, gender, skin colour or physical disabilities (Kremer, Orbach, & Rosenbloom, 2013). Body image can have serious implications for people's emotional and physical well-being and it is a critical part of adolescent development (Markey, 2010). Research stipulates that body dissatisfaction is linked to critical mental health problems, including eating disorders, low self-esteem and depression (Grabe, Wade & Hyde, 2008)

About 1.3 million adolescent girls in the United State are believed to have anorexia (Rosen & the committee on adolescents, 2010). This disorder has one of the highest suicide rates than any psychiatric condition (Novotney, 2009). Anorexia is an eating disorder characterized by low weight, fear of gaining weight, and a strong desire to be thin, resulting in food restriction (Arcelus, Witcomb, & Mitchell, 2014). Many people with anorexia see themselves as overweight even though they are in fact underweight (Arcelus et al., 2014). The way a person views his or her body is important as it can impact on overall quality of life. Studies in Africa have shown that leanness among black Africans is not

necessarily perceived as beautiful, but rather being plump (overweight) signifies beauty, health and higher social status (Mvo, Dick, & Steyn, 1999).

Another variable of importance to this study is self-esteem. The term self-esteem is a psychological construct used to describe a person's overall sense of self-worth or personal value and is often seen as a personality trait, which means that it tends to be stable and enduring (Croll, 2005). Self-esteem can be defined as an evaluative element of how a person values, supports, approves or disapproves him or herself (Frost, & McKelvie, 2005). Self-esteem can involve a variety of beliefs about the self, such as the appraisal of one's own appearance, beliefs, emotions, and behaviours. Brown and Marshall (2006) view self-esteem as a capacity to construe events in ways that promote, maintain, and protect feelings of self-worth. Thus implying that persons with high self-esteem have a strong love for themselves which makes them dwell on their positive qualities and react to events in such a way as to maintain feelings of self-worth.

Self-esteem can be intellectualised as a whole construct separable into three main parts – social self-esteem, performance self-esteem and physical self-esteem (Heatherton & Polivy, 1991). Social self-esteem refers to how people believe others perceive them (Heatherton & Wyland, 2005). Though not always objective, these perceptions of value and admiration by significant others in particular result in high social self-esteem. Persons with low social self-esteem are often high self-monitors especially in public. They are people who more readily modify the way they present themselves in a social setting in response to social cues. High self-monitors worry more about how appropriate their behaviour is in

a given social setting. Feelings of general sense of competence in several domains, example, confidence, intellectual abilities, self-efficacy etc. depict performance self-esteem. High performance self-esteem individuals trust in their abilities. Lastly, physical self-esteem reflects how individuals evaluate their physical bodies and it includes such dimensions as physical attractiveness, talents/skills, body image, as well as race and ethnic affects (Heatherton & Wyland).

Low self-esteem has been found to be predictive of increased vulnerability to body image dissatisfaction (Markham, Thompson & Bowling, 2005) and lower levels of self-esteem are associated with disturbance in eating attitudes (Ba, Aci, Karabudak & Kiziltan, 2004). In Ghana, low self-esteem has been associated with some social maladaptive behaviour such as armed robbery and suicide/suicide ideations (Baafi, 2013). The Chief Executive of the Ghana Mental Health Authority, Dr Akwasi Osei revealed that, Ghana records about 1,500 suicide cases annually. According to him, in every single reported case of suicide, there were four unreported cases, bringing the number of unreported cases to about 6,000 annually. He stated that the leading cause of suicide was depression (Osei, 2015).

Research findings suggest that high self-esteem is important for good mental health, academic achievement among other important elements for healthy personality development which is crucial for the development of every nation (Solomon, 2006; Tangney, Baumeister & Boone, 2004).

It is good to have higher self-esteem because it comes with a lot of positive attributes but it can also cause psychological problems when it goes beyond a certain threshold. Higher self-esteem can lead to Narcissism and Narcissistic Personality Disorder. Narcissism is the pursuit of gratification from vanity or egotistic admiration of one's own attributes (van der Linden, & Rosenthal, 2016). Narcissism is excessive self-involvement, vanity, egocentrism, and lack of regard for others. While most people display narcissistic behaviour from time to time, when narcissism is a person's primary method for coping with the world, he or she may be diagnosed with Narcissistic Personality Disorder. Narcissism is named after the Greek myth of Narcissus. This man was so vain that he spent his life staring at his own reflection in a pool of water (Karterud, 2011).

Health behaviour is also one of the crucial variables as far as this study is concerned. As far as this study is concerned health behaviour is defined as an action taken by a person to maintain, attain, or regain good health and to prevent illness. Health behaviour reflects a person's health beliefs. Some common health behaviours are exercising regularly, eating a balanced diet, and obtaining necessary inoculations (Gochman, 1997). World Health Organisation (WHO, 2004) defined health behaviour as any activity undertaken by an individual, regardless of actual or perceived health status, for the purpose of promoting, protecting or maintaining health, whether or not such behaviour is objectively effective towards that end.

The study of health behaviour in both healthy and unhealthy populations is an important area where health psychology can and has made important

contributions to improving health (Conner & Norman, 2017). Health behaviour encompasses a large field of study that cuts across various fields, including psychology, education, sociology, public health, epidemiology, and anthropology. Conner and Norman stipulated that, health behaviour is any activity undertaken for the purpose of preventing or detecting disease or for improving health and well-being.

Health behaviour can also be seen as behaviour patterns, actions and habits that relate to health maintenance, to health restoration and to health improvement. Behaviours within this context include medical service usage for example, physician visits, vaccination, screening; compliance with medical regimens for example, dietary, diabetic, antihypertensive regimens; and self-directed health behaviours for example, diet, exercise, smoking and alcohol consumption (Gochman, 1997).

Statement of the Problem

It is unhealthy to have a body image dissatisfaction as it is most likely going to lead to eating disorders, psychological distress and most importantly, low self-esteem (Stice, Telch & Rizvi, 2000; Ackard, Croll, & Keaney-Crooke, 2002). This is because people tend to use unhealthy weight-control behaviours such as skipping meals to slim down and wish to have the same body image as the model portrayed in media. Research on body image satisfaction has shown that dissatisfaction with body image can have an impact on an individual's quality of life including an individual's self-esteem, interpersonal confidence, and eating and exercise behaviours (McCabe & Riccardelli, 2004).

The development of body image dissatisfaction is more pronounced during adolescence (Taylor, et al, 1998). Majority of students in the senior high schools are in the adolescent bracket and body image is central to their self-definition, because they have been socialized to believe that appearance is an important basis for self-evaluation and for evaluation by others (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Adolescents experience significant physical changes in their bodies during puberty and they are likely to experience highly dynamic perceptions of body image and self- esteem (Clay, Vignoles, & Dittmar, 2005).

There is adequate literature on body image and self-esteem in the developed countries (Cash, & Smolak, 2011; Frost, & McKelvie, 2005; Heatherton, & Wyland, 2005; Hudson, 2008; Markey, 2010) but same cannot be said about Ghana which is a developing country despite its significance on the health of the individual and public health.

Most of the studies conducted in Ghana are on predominately female college or university students for example, Ntim, and Sarfo (2015) investigated on body image and eating disorders of female students of University of Ghana; whiles Asumeng (2015) also studied on relationship between body image satisfaction and psychological well-being in nine African countries; Asumadu-Sarkodie, and Owusu (2015) on the other hand investigated media impact on students' body image in University for Development Studies. All these previous studies neglected the most vulnerable group, that is, the youth in the senior high schools. Again, none of the studies conducted in Ghana examined these three

variables among senior high school students in a single study. The current study therefore sought to fill that gap by investigating the body image, self-esteem and health behaviour among senior high school students.

According to the Ghana statistical service (2014), the population of Offinso Municipality like many other parts of the country, is generally a youthful one. This situation demonstrates the "Young Bulge" phenomenon (Heinsohn, 2003) with youthful energy that could be harnessed and directed into productive ventures. Therefore efforts should be directed towards addressing any problem that could be confronting young people within this age bracket. This has necessitated this current study and which sought to investigate body image, self-esteem and health behaviour of students in senior high schools within the Offinso Municipality of the Ashanti Region, Ghana.

Purpose of the Study

The purpose of the study was to examine body image, self-esteem and health behaviour and explore factors affecting body image among senior high school students in the Offinso Municipality of the Ashanti Region. The study specifically sought to:

1. Find out the body image perception of students in senior high schools within the Offinso Municipality.
2. Investigate the relationship between body image, self-esteem and heath behaviour among students in senior high schools within the Offinso Municipality.

3. Determine whether or not there are any gender differences in body image, self-esteem and health behaviour among students in senior high schools within the Offinso Municipality
4. Establish how body image and self-esteem influences the health behaviour of students in senior high schools within the Offinso Municipality..
5. Identify factors that predict body image perception of students in senior high schools within the Offinso Municipality.

Research Questions

The following research questions have been formulated to guide this study:

1. What is the body image perception of students in the senior high schools within the Offinso Municipality?
2. What is the relationship body image, self-esteem and heath behaviour among students in the senior high schools within the Offinso Municipality?
3. Are there any gender differences in body image, self-esteem and health behaviour among students in the senior high schools?
4. How do body image and self-esteem influence the health behaviour of students in the senior high schools?
5. Which factors influence body image perception of students in the senior high schools in Offinso Municipality?

Significance of the Study

The study of body image, self-esteem and health behaviour has the potential to make an important contribution to efforts to improving health. The

findings of this study would serve as a guide for students in senior high schools within the Offinso municipality to appreciate their body image, enhance their self-esteem and improve their health. The study would help to explain the role of early adolescent Body Image Disturbance on mental health and provide insights for further prevention and intervention programmes in school and community mental health settings within the Offinso Municipality and Ghana at large. This study would have implications for students, parents, teachers, counsellors and educational policy makers for the development of healthy and successful adolescents.

Parents need to successfully meet all the needs such as physical, emotional, intellectual, etc. of their child so that they would grow up to have a healthy body image and positive self-esteem. Parents need to understand the importance of modelling healthy eating habits during childhood and the findings of this study would guide parents in that direction. This study would assist both parents and teachers within the Offinso Municipal Area to address issues regarding body image and self-esteem as soon as they see it coming and not to brush it off as "part of growing up".

School is an important place for the social development of students. The goal of education is not only to teach the curriculum but to help the students cope with their social and psychological problems. Schools need to build young citizens who will contribute positively to the society and become comfortable with who they are and not what the society wants them to be and the findings of this research has the potential to help accomplish this.

It is crucial for school counsellors to have a comprehensive understanding of body image and impart this knowledge to the students so they can develop a positive body image. School counsellors need to bear in mind that body image dissatisfaction is associated with poor self-esteem, onset of eating disorders, obsessive thinking about one's weight and appearance, self-mutilation, onset of poor life style such as smoking and drinking and many more social problems. All of these could lead to poor academic behaviours, low grades, and eventually early school dropout. The findings would guide school counsellors to develop preventative strategies to promote positive body image satisfaction and high self-esteem among students.

The study is also a contribution to knowledge on relationship between body image, self-esteem and heath behaviour among senior high school students. Researchers who want to know more about this topic in the country and within the Offinso Municipality in particular, can use this study as a source of reference. Enhancing the understanding of self-esteem and body image may help researchers and practitioners develop more effective interventions.

Delimitation

The study was delimited to students in the three public senior high schools in Offinso Municipality namely Dwamena Akenten Senior High School, Namong Sec. Tech. Senior High School and ST. Jerome Senior High School. Only students within the ages of 12-20 were included in the study.

Limitation

There were other multifaceted factors that influence health behaviour and self-esteem apart from body image. Attempt to control these factors was not successful. Secondly, students were not comfortable providing answers that present themselves in an unfavourable manner even though they were assured of their privacy and confidentiality**.**

Definition of Terms

The following terms need to be defined for clarity and understanding of the study.

Anorexia Nervosa - is an eating disorder, characterized by low weight, food restriction, fear of gaining weight, and a strong desire to be thin (Arcelus, Witcomb, & Mitchell, 2014).

BMI - is defined as the body mass divided by the square of the body height, and is universally expressed in units of kg/m2, resulting from mass in kilograms and height in metres (WHO, 2004).

Body Image - It is a subjective picture of one's own physical appearance established both by self-observation and by noting the reactions of others (Firdevs, & Sevil, 2015).

Bulimia Nervosa -An emotional disorder involving disturbance of body image and an obsessive desire to lose weight, in which bouts of extreme overeating are followed by depression and self-induced vomiting, purging, or fasting (Arcelus, Witcomb, & Mitchell, 2014).

Health behaviour - is any activity undertaken for the purpose of preventing or detecting disease or for improving health and well-being (Conner and Norman, 2017). As far as this study is concerned health behaviour is defined as an action taken by a person to maintain, attain, or regain good health and to prevent illness.

Narcissism - It is excessive self-involvement, vanity, egocentrism, and lack of regard for others (Horton, Bleau, & Drwecki, 2006).

Self-esteem is an evaluative element of how a person values, supports, approves or disapproves him or herself (Frost, & McKelvie, 2005).

Organisation of the Study

This study was put into five major chapters. The first chapter covered the introduction of the study, background to the study, statement of the problem, purpose of the study, research questions, significance of the study, delimitation, limitations and organisation of the study. Chapter two was devoted to the review of related literature that covered the topic under investigation. Chapter three focused on the research design, study area, population, sampling procedure, data collection instrument, data collection procedure, data processing and analysis. Chapter four touched on the results and discussion of findings. Chapter five dealt with summary of the study, conclusion and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The purpose of the study was to investigate the relationship between body image, self-esteem and health behaviour of senior high school students in the Offinso municipality. The literature review was conducted under the following sub-headings:

i. Definitions of Body Image
ii. Body Image Satisfaction
iii. Body Image Dissatisfaction
iv. Body Image Dissatisfaction in Africa
v. The Measurement of Body Image Dissatisfaction
vi. Effect of Body Image Dissatisfaction on Health
vii. Definitions of Self Esteem
viii. Factors that Influence Self-Esteem
ix. Definitions of Health Behaviour
x. Eating Attitudes and Body Mass Index
xi. Eating Attitudes and Eating Disorders
xii. Body Image and Self-esteem
xiii. Review of Related Studies
xiv. Theories Explaining Body Image
xv. Theories Explaining Self Esteem
xvi. Theories Explaining Health Behaviour
xvii. Summary

Definitions of Body Image

Body image has been defined by different people from a wide range of discipline and from different perspective. A review of these definitions is therefore appropriate. The concept of body image combines all elements of people's mental self-image (including perception, thought, feelings, and attitudes), evaluation of their physical image and the effect of this image on their behaviour (Digiaocchino, Sargent, & Topping, 2001). Body image is a multidimensional construct broadly describing internal, subjective representations of physical appearance and bodily experience, our attitude towards body, in particular, size, shape and aesthetics (Cash, 2012; Tylka & Wood-Barcalow, 2015). According to Firdevs and Sevil (2015), body image is a subjective picture of one's own physical appearance established both by self-observation and by noting the reactions of others. Body image has also been defined as the perception of overall physical appearance and considered as a major component of global self-esteem (Pokrajac-Bulian & Zivcic-Becirevic, 2005).

Grogan (2008) asserts that body image is subjective and can be open to change through social influence. Again, Body image has also been defined as a multidimensional construct that encompasses self-perceptions and attitudes (Cash, Jakatdar & Williams, 2004). Body image has been described as including the following components: affective [feelings towards ones appearance], cognitive [thoughts and beliefs about this appearance], behavioural [involvement in body or weight change behaviours], and perceptual [the accuracy of perceptions concerning ones appearance] (Banfield, & McCabe, 2002).

Body image has again been defined as a person's mental image and evaluation of his or her physical appearance and the effect of these perceptions and attitudes on the behaviour of the individual (De Panfilis, Rabbaglio, Rossi, Zita, & Maggini, 2003). The way a person perceives his/her body is influenced by a variety of factors including the degree of importance their physical appearance has to their overall sense of self (Spurgas, 2005). Body image can also be defined as a person's perceptions, thoughts, and feelings about his or her body (Grogan, 2008). Body image is a multidimensional construct with attitudinal, perceptual and also behavioural components covering various attributes like muscularity, leanness and body weight (Verplanken, & Velsvik, 2008). Body image is a perception formed from experiences we have with parents, role models, and peers who give us an idea of what it is like to love and value a body.

The body encompasses physical appearance, size, and shape. The image is formed by positive or negative feedback given by people whose opinions are important to us. Body image can impact the way an individual perceives their body, attitudes and feelings towards their body, and the behaviours that affect their body. Body image is regarded as multi-dimensional self-attitudes towards one's body particularly focusing on appearance (Cash, & Pruzinsky, 1990). The body image construct is comprised of at least two independent modalities including perceptual (size estimations) and attitudinal (body-related affects and cognitions [Cash, 1989]). Body image has been defined in numerous ways because it is multidimensional and includes physiological, psychological, and sociological components (Hoyt, & Kogan, 2001). Some examples of the

dimensions encompassing body image are: perception, attitude, cognition, behaviour, affect, fear of fatness, body distortion, body dissatisfaction, cognitive-behavioural investment, evaluation, preference for thinness, and restrictive eating (Brown, Cash, & Mikulla, 1990).

Body image is viewed as a loose mental representation of body shape, size, and form which is influenced by a multiplicity of historical, cultural, and social, individual, and biological factors, that function over varying time spans (Slade, 1994). In general, body image is one's attitude towards one's body, particularly size, shape, and aesthetics (Cash, 1990); it also refers to an individual's evaluations and affective experiences regarding their physical attributes. As a result of body image being based on feelings, our behaviour is directly governed by our perceptions, feelings, and beliefs and is the result of our decision-making

Body Image Satisfaction

Previously, body image studies focused on girls and adult females because body image disturbances were pronounced in this gender. This has however, changed over the past 15 years since recent research has observed an increase in the number of boys and men presenting with progressing preoccupation with body dissatisfaction, and eating disturbances (Cafri, & Thompson, 2004; Hargreaves, & Tiggemann, 2006). While girls and women might feel pressurized to conform to an ideal level of thinness, males are more likely to adhere to pressure to be muscular, strong and broad (Smolak, & Stein, 2006; Pinheiro, & Guigliani, 2004).

Studies have shown that the drive for body shape change, whether to

obtain muscularity or thinness, for aesthetic or athletic reasons, has resulted in negative physical and psychological effects on the adolescent (Cafri & Thompson, 2004; McCabe & Ricciardelli, 2004). In pursuit of an ideal body, female and male adolescents are engaging in inappropriate weight management strategies such as dieting (Franco & Striegel-Moore, 2002), engaging in strenuous physical exercise, and using steroids and laxatives.

Body Image Dissatisfaction

When a person has negative thoughts and feelings about his or her own body, body dissatisfaction can develop. Body image dissatisfaction is a discrepancy between the individual's perception of their body size and their real body size, a discrepancy between their perception of their actual size and ideal size/shape, or as feelings of discontent with their body size and shape (Thapa, 2016). According to Stice and Shaw (2002), body image dissatisfaction refers to a negative subjective evaluation of one's physical body, such as figure, weight, stomach, chest and hips. Grogan (2008) stipulated that body dissatisfaction is a person's negative thoughts and feelings about his or her body. Again, he explained that body dissatisfaction is an internal process but can be influenced by several external factors. For example, family, friends, acquaintances, teachers and the media all have an impact on how a person sees and feels about themselves and their appearance. Individuals in appearance oriented environments or those who receive negative feedback about their appearance are at an increased risk of body dissatisfaction.

One of the most common external contributors to body dissatisfaction is the media. People of all ages are bombarded with images through TV, magazines, internet and advertising (Brown, 2017). These images often promote unrealistic, unobtainable and highly stylised appearance ideals which have been fabricated by stylists, art teams and digital manipulation and cannot be achieved in real life (Brown). Those who feel they don't measure up in comparison to these images can experience intense body dissatisfaction which is damaging to their psychological and physical wellbeing and heath behaviour.

The development of body image dissatisfaction is more pronounced during adolescence (Taylor et al., 1998), however some studies have traced body dissatisfaction back to childhood (Schur, Sanders, & Steiner, 2000; Robinson, chang, Haydel, & Killen, 2001). A number of factors are associated with the development of body image disturbance, including pubertal weight gain and associated body changes (Killen et al., 1994), high BMI (Teinboon, Rutishauser, & Walhqvist, 1994), and increased social challenges (Franco, & Striegel-Moore, 2002). During adolescence, parental, peer and media attitudes towards overweight and obesity, as well as socioeconomic status and cultural influences, affect the adolescents' perception and evaluation of the "societal ideal". Other factors that influence body image during adolescence include low self-esteem, and negative affect and depression (Mond et al., 2011).

Body dissatisfaction is the top ranked issue of concern for young people (Mission Australia, 2009). Body image issues have increased worldwide over the last 30 years and do not only concern young people but affect people of all ages

(Mission Australia). This pervasive problem is worrying because overvaluing body image in defining ones self-worth is one of the risk factors which make some people less resilient to eating disorders than others. People experiencing body dissatisfaction can become fixated on trying to change their body shape, which could lead to unhealthy practices with food and exercise (Kearney-Cooke, & Tieger, 2015). These practices don't usually achieve the desired outcome (physically or emotionally) and could result in intense feelings of disappointment, shame and guilt and, ultimately, increase the risk of developing an eating disorder (Kearney-Cooke, & Tieger).

Studies have shown that, media, weight-related teasing, high BMI and social support deficit play a major role in influencing body dissatisfaction which strongly predicts the development of disordered eating among adolescents (Stice, 2001; Wertheim, Koener, & Paxton, 2001). A community-based study by Teinboon, et al., (1994) revealed that more than half of adolescent boys and girls (age 14-15 years) had tried to change their weight by eating less and exercising more. Of these participants 70% of the girls and 34% of the boys associated weight loss with overall wellbeing (feel better), 42% of girls who had normal body weight perceived themselves to be overweight, and 73% of the girls had tried losing weight. A study by Button, Sonuga-Barke, Davies and Thompson (1996) that assessed 15-16 year old adolescent girls revealed that approximately half of the adolescents had dieted to lose weight, almost 40% had exercised to lose weight, 9% had vomited to lose weight and 6.8% had used diuretics and laxatives.

Another study that was conducted in Israel on early adolescents in grade 3 to 11 (8-16 years), reported that, - 43% of the participants wanted to lose weight and 41.6% exhibited weight control behaviours (Sasson, Lewin & Roth, 1995). Schur, Sanders and Steiner (2000) conducted a study in the U.S among 8-13 year old adolescents, and found out that - 50% of them wanted to weigh less and 16% had attempted losing weight. According to Duncan, Al-Nakeeb and Nevill (2004) in the UK, a study among 11-14 year old boys and girls, found that boys had a better body image compared to girls. Body dissatisfaction was also found to be predominant in China among obese children and adolescents (Li et al., 2005). In a study by Fear, Bulik and Sullivan (1996), found that 70-76% of adolescent girls chose a thinner figure than their ideal and over half indicated that they had tried to lose weight. Another study by Paxton, Schurtz, Wertheim and Muir (1999) reported that a third of adolescent boys wished to be thinner while over a third of them desired to be larger than their current size.

Body Image Dissatisfaction in Africa

A study conducted in Cameroon showed that females from rural areas desired to be "fat", those from the poor urban areas desired to be "a little bit fat" while those from rich urban areas desired to be "normal" (Dapi et al., 2007). A study in Nigeria by Kolawole, Otuyemi and Adeosun (2009) which examined nicknames and factors associated with name calling revealed that 26.7% of adolescents in secondary school got their nicknames based on their physical appearance and more specifically their body weight, suggesting that African

cultures tend to emphasize physical appearance which may result in children and adolescents striving to meet the "societal ideal" figure.

Previous research has shown that body image is mainly influenced by social norms and culture (Kuchler, & Variyam, 2003; Lynch et al., 2007). Research carried out in South Africa shows that leanness among black South Africans is not necessarily perceived as beautiful, but rather being plump (overweight) signifies beauty, health and higher social status (Mvo, Dick, & Steyn, 1999). A study by Quick and Byrd-Bredbenner (2014) involving 44 black women (aged 28-60 years) from Khayelitsha, South Africa revealed that being overweight was associated with happiness, affluence, and the absence of disease (such as HIV/AIDS).

In addition, having overweight children was seen as a measure of 'good' parental care (Mvo et al., 1999). Mchiza et al. (2005) developed and validated culturally sensitive body silhouettes for use in South African studies. In their study of measuring body image and body weight dissatisfaction among South African mothers and their daughters, black girls were found to have less body image concerns and had a better body image compared to white girls. Their findings also showed that black adolescents received less pressure from family and peers to change their current body shape. Overweight participants had greater body image dissatisfaction compared to those with a normal BMI. (Mirza, Davis, & Yanovski, 2005). In addition, 33%, 26% and 20% of whites, blacks and mixed ancestry participants, respectively reported body image dissatisfaction (Caradas,

Lambert, & Charlton , 2001), suggesting that body image dissatisfaction is ethnic bound in South Africa.

As much as the ideal for heavier body image protects black females from developing anorexia nervosa (Powell & Kahn, 1995), it increases their risk of being overweight (Flynn & Fitzgibbon, 1998). However, as Africa goes through epidemiological transition, adolescent boys and girls are exposed to "Western" ideals. This has resulted in cultural interaction that creates additional conflict between traditional beliefs and new Western ideals.

Measurement of Body Image Dissatisfaction

Body image dissatisfaction can be measured in three ways and these are discussed below.

Distorted body size estimation

Body dissatisfaction is conceptualized as a distortion of body size estimation, and a perception that the body is larger than it really is. Studies which have used this approach have shown that anorexic patients overestimate their size and individuals with clinical eating disorders display greater perception distortion than non-clinical participants (Odgen, Carrol, Kit & Flegal, 2012).

Discrepancy from the ideal

This approach emphasizes the discrepancy between reality and the ideal body shape and size. Individuals internalize a culturally determined body ideal and realize that there is a discrepancy between their own body and that of the ideal (Odgen, Carrol, & Flegal, 2012; Dunkley, Wertheim, & Paxton 2001). Body silhouette pictures of varying sizes are used in this approach and the participant is

asked to state which of the silhouettes is closest to how they look now and which one best illustrates how they would like to look. Several studies have used this approach with normal participants (Alipour, Abbasalizad, Dehghan, & Alipour, 2015) including pre-adolescents and as well as subjects with eating disorders (Almatsier, 2013).

Negative response to the body

This approach measures one's negative feelings and cognitions regarding the body (Odgen, Carrol, & Flegal, 2003). This approach defines body dissatisfaction as negative subjective evaluations of the body (Stice & Shaw, 2002), referring to discontent with the stomach, hips, muscles, chest, thighs and buttocks. Negative responses to the body have been assessed using several questionnaires e.g. Body Shape Questionnaire (Cooper, Taylor, Cooper & Fairburn, 1987) the Body Areas Satisfaction Scale (Brown, Cash, & Mikulka, 1990), the Body Attitudes Questionnaire, and the Body Esteem Scale (Franzoi, & Shields, 1984).

Effect of Body Image Dissatisfaction on Health

Body image dissatisfaction (BID) has been associated with low self-esteem (Presnell, Bearman & Stice, 2004) and a higher BMI (Paxton, Eisenberg & Neumark-Sztainer, 2006). Depressive symptoms in adolescents have been associated with a perception of not being the appropriate weight (Daniels, 2005). Girls tend to report more depressive symptoms associated with weight than boys (MartynNemeth et al., 2009). In fact, girls report more depression and low self-esteem than boys, regardless of their weight (Swallen Reither, Haas, & Meier.

2005). Hispanic adolescents report higher rates of poor general health, depression, and low self-esteem than their white counterparts (Swallen et al., 2005). Asian adolescents are also more likely than whites to report higher levels of depression and low self-esteem. However, black adolescents are less likely than their white counterparts to report low self-esteem (Swallen et al.).

The desire to control weight can escalate to dangerous levels when adolescents engage in other health-compromising behaviours while engaging in unhealthy weight control behaviours. One study found a significant relationship between unhealthy weight control behaviours and suicidal ideation in the adolescent population (Neumark-Sztainer, Story, Dixon, & Murray, 1998). In a national longitudinal study of adolescent health, a significant relationship was found between being overweight or obese and higher reporting of a poorer level of general but not emotional health (Swallen et al., 2005). When stratified by gender, the differences in reported general health disappeared for overweight and obese girls, but remained for overweight and obese boys. Age alone did not prove to be a predictor of health-related quality of life. The 15-17 year-olds reported the highest levels of depression and lowest self-esteem (Swallen et al.). In contrast, a study conducted at a university in Hawaii found a significant positive correlation between BMI and body dissatisfaction and self-dissatisfaction for both male and female students (Yates, Edman, & Aruguete, 2004).

Definitions of Self Esteem

In psychology, the term self-esteem is used to describe a person's overall sense of self-worth or personal value. In other words, how much you appreciate

and like yourself. Self-esteem can involve a variety of beliefs about an individual, such as the appraisal of his/her own appearance, beliefs, emotions, and behaviours (Frost, & McKelvie, 2005). Self-esteem reflects an individual's overall subjective emotional evaluation of his or her own worth. It is the decision made by an individual as an attitude towards the self. Self-esteem encompasses beliefs about oneself, as well as emotional states, such as triumph, despair, pride, and shame (Hewitt, 2005). Smith and Mackie (2007) defined it by saying what we think about the self; self-esteem is the positive or negative evaluations of the self, as in how we feel about it.

Self-esteem refers to the evaluative and affective sense of one's self (Wang & Ollendick, 2001), and is one component of an individual's self-concept, which includes their mental and physical characteristics and self-evaluation. Self Esteem is the discrepancy between what an individual is (self-image) and what an individual would like to be (self-ideal) (Baumeister, 1995). Self-esteem during adolescence is affected by an individual's judgment of self-competence in areas of greater value, such as physical attractiveness and acceptance by peers.

Self-esteem generally depicts feelings of self-regard; a deeply felt appreciation of oneself and one's natural being, a trust of one's abilities – the degree to which an individual feels good about themselves (Twenge, 2006). Conventionally, self-esteem is defined as an individual's evaluation of his/her self-worth (Brown, Cai, Oakes & Deng, 2009; Twenge, 2006). Purkey (1988) defined self-concept as the totality of a complex, organized, and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about

his or her personal existence. 'Self' here is used to represent a sense of 'identity', a mindful reflection of one's own being as an object distinct from others or from the environment (Brown et al., 2009)

Brown and Marshall (2006) view self-esteem as an ability to understand events in ways that promote, maintain, and protect feelings of self-worth. Thus implying that persons with high self-esteem have a strong love for themselves which makes them dwell on their positive qualities and react to events in such a way as to maintain feelings of self-worth. Mruk (2006) on the other hand observed self-esteem as a complex phenomenon that involves the dynamic relationship between competence and worthiness. They argue that while self-esteem comprises worthiness, worthiness must be earned through competent action; similarly, competence involves actions that are worthy not meaningless successes.

Self-esteem can be conceptualized as a whole construct divisible into three major parts – social self-esteem, performance self-esteem and physical self-esteem – each of which can be further separated into subcomponents (Heatherton & Polivy, 1991). Social self-esteem refers to how people believe others perceive them (Heatherton, & Wyland, 2005). Though not always objective, these perceptions of value and admiration by significant others in particular result in high social self-esteem (Heatherton & Wyland).

Persons with low social self-esteem are often high self-monitors especially in public. Feelings of general sense of competence in several domains, example, confidence, intellectual abilities, self-efficacy etc. depict performance self-esteem.

High performance self-esteem individuals trust in their abilities. Lastly, physical self-esteem reflects how individuals evaluate their physical bodies and it includes such dimensions as physical attractiveness, talents/skills, body image, as well as race and ethnic affects (Heatherton & Wyland).

Some perspectives have further identified what is termed as two-dimensional self-esteem (Kernis, 2006). Jordan, Logel, Spencer and Zanna (2005) stressed on the significance of distinguishing between explicit and implicit self-esteem for a better understanding of how self-views influence behaviour. Explicit self-esteem has been conceptualized as a conscious, reasoned self-evaluation of global self-worth and it has been assessed traditionally using direct, self-report procedures (Karpinski & Steinberg, 2006). Implicit self-esteem on the other hand is that side of self-esteem that functions "outside of conscious awareness and control" (Greenwald & Banaji, 1995 p.164). Research has shown that development of a high self-esteem requires experiences of success within fields perceived to be of importance in someone's life (Whitesell, Mitchel & Spicer, 2009).

Previous research has shown that for a good sense of self-esteem to develop it is important to have a caregiver's guidance and support during childhood and adolescence (Shisslack et al, 1999). During childhood, self-esteem develops in response to the rejection or acceptance obtained from caregivers or significant others. During adolescence, positive and warm interaction with caregivers has been found to be associated with positive representation of self and a high self-esteem (Arbona & Power, 2003).

Research by Button, Sonuga-Barke, Davies and Thompson, (1996) has shown a strong association between low Self-esteem and increased eating disturbance and concerns about fatness among adolescents. High self-esteem has also been shown to be protective against disordered eating habits (Pesa, 1999), and patients presenting with eating disorders have been found to have lower levels of self-esteem compared to controls (Griffiths, Wolke, Page, & Horwood, 2006; Baid & Sights, 1986). Self-esteem during childhood has been shown to be slightly different between boys and girls (Harter, 1999), girls being more dissatisfied with their body weight and have a poorer body images than boys (O'Dea & Heard, 1996). According to Robins and Tzesniewski (2005), self-esteem declines during adolescence because of body image dissatisfaction and puberty associated issues, and increases again during adulthood. Other studies (Latner, Knight, & Illingworth, 2011; (Krishen & Worthen, 2011) have shown low self-esteem, in males and females, to be associated with increased levels of body image dissatisfaction.

A significant association between muscle dissatisfaction in men and poor self-esteem has also been demonstrated (Galioto & Crawther, 2013). The majority of adolescent males who use steroids have low self-esteem as compared to those with high self-esteem (Irving, Wall, Neumark-Sztainer & Story, 2002). According to a study by Kelly and Duckitt, (1995) that measured association between racial preferences and self-esteem in black children, self-esteem and overall ethnocentrism were found to be high among older children (age 10-12 years) compared to younger ones (age 6-8 years). Self-esteem has also been reported to

be significantly associated with at least one risk behaviour in both female and male adolescents in grade 8 and 11 (Wild, Flisher & Bhana, 2004).

Self-esteem levels at the extreme high and low ends of the spectrum can be harmful, so ideally, it's best to strike a balance somewhere in the middle (Hewitt, 2005). A realistic yet positive view of yourself is generally considered the ideal. Self-esteem can play a significant role in your motivation and success throughout your life. Low self-esteem may hold you back from succeeding at school or work because you don't believe yourself to be capable of success. By contrast, having a healthy self-esteem can help you achieve because you navigate life with a positive, assertive attitude and believe you can accomplish your goals (Hewitt).

Factors that Influence Self-Esteem

As you might imagine, there are different factors that can influence self-esteem. Genetic factors that help shape overall personality can play a role, but it is often our experiences that form the basis for overall self-esteem (Bastianello, Pacico & Hutz, 2014). Those who consistently receive overly critical or negative assessments from caregivers, family members, and friends, for example, will likely experience problems with low self-esteem (Chang & Suttikun, 2017). Additionally, your inner thinking, age, any potential illnesses, disabilities, or physical limitations, and your job can affect your self-esteem (Bastianello, et al., 2014). The individual may need to work on how they perceive themselves if they exhibit any of these signs of poor self-esteem: negative outlook, lack of confidence, inability to express your needs, focus on your weaknesses, feelings of

shame, depression, or anxiety, belief that others are better than you, trouble accepting positive feedback and fear of failure (Maslow, 1987).

Definitions of Health Behaviour

Health Behaviour is any activity undertaken by an individual, regardless of actual or perceived health status, for the purpose of promoting, protecting or maintaining health, whether or not such behaviour is objectively effective towards that end (WHO, 2004). It is possible to argue that almost every behaviour or activity by an individual has an impact on health status. In this context it is useful to distinguish between behaviours which are purposefully adopted to promote or protect health (as in the definition above), and those which may be adopted regardless of consequences to health (Mann & Ward, 2007). In the broadest sense, health behaviour refers to the actions of individuals, groups, and organizations, as well as their determinants, correlates, and consequences, including social change, policy development and implementation, improved coping skills, and enhanced quality of life (Parkerson et al., 1995).

A working definition of health behaviour has been proposed by Gochman (1997), which includes not only observable, overt actions but also the mental events and emotional states that can be reported and measured. Gochman defined health behaviour as those personal attributes such as beliefs, expectations, motives, values, perceptions, and other cognitive elements; personality characteristics, including affective and emotional states and traits; and overt behaviour patterns, actions, and habits that relate to health maintenance, to health

restoration, and to health improvement. Interestingly, this definition emphasizes the actions and the health of individuals.

A public health perspective, in contrast, is concerned with individuals as part of a larger community (Arah, 2009). These perspectives are interrelated, as the behaviours of individuals determine many of the social conditions that affect all people's health. Conner and Norman (1996) stipulated that, health behaviour is any activity undertaken for the purpose of preventing or detecting disease or for improving health and well-being. Health behaviour can also be seen as behaviour patterns, actions and habits that relate to health maintenance, to health restoration and to health improvement (Sutton, 2002). Health behaviour denotes those actions undertaken by persons who believe they are well, and who are not experiencing any signs or symptoms of illness, for the purpose of remaining well (Kasl & Cobb, 1966)

Positive Health Behaviour

Health behaviours are influenced by the social, cultural and physical environments in which we live and work (Short, & Mollborn, 2015). They are shaped by individual choices and external constraints. Positive health behaviours help promote health and prevent disease. They are actions taken by individuals to maintain, attain, or regain good health and to prevent illness. Some common positive health behaviours are exercising regularly, eating a balanced diet; avoid smoking and obtaining necessary inoculations (Glanz, & Rimer, 1997).

Negative Health Behaviour

Negative health behaviours are things that you do which are likely to result in negative health outcomes, for example eating junk food (by which I mean very sugary or fatty food like you get from a take away shop or vendor) every day - occasionally as a treat is fine; smoking; not taking regular exercise; eating a diet which doesn't balance protein, fat and carbohydrates and does not include your required nutrients; not eating sufficient fibre (Lazzer et al., 2014).

Eating Attitudes and Body Mass Index

Most studies that assess the relationship between BMI and eating attitudes do so in the context of the connection between body image and BMI. Several studies have found a direct link between BMI and eating attitudes. Studies in both adolescent and college samples have explored the association between BMI and eating attitudes (Yates, Edman, & Aruguete, 2004). Elevated BMI has been strongly and positively associated with greater food preoccupation in a female adolescent sample which included Native American and Caucasian individuals. In another female adolescent sample a potential link was found between disordered eating attitudes and being overweight (Jones et al., 2001).

In contrast, in a Malaysian population, the link between BMI and eating attitudes was found to be through self-dissatisfaction, which was also referred to as self-loathing (Yates, Edman, & Aruguete, 2004). It was concluded that having low self-satisfaction was a better indicator of disordered eating attitudes than actual physical size. The study examined a young adult sample with a mean age of 21.46 years, including two ethnic groups, Malay and Chinese. In Vander Wal

and Thomas's (2004) study of grade 4 and 5 girls, body image dissatisfaction predicted disturbed eating attitudes. A direct link was also found between eating attitudes and BMI as having a higher weight was linked to disturbed eating habits. A large sample of females students across all BMI categories were found to experience a high drive for thinness (Kenny, & Adams, 1994), suggesting that women's eating attitudes are influenced by a desire to be thinner.

Eating Attitudes and Eating Disorders

Eating attitudes are defined to include thoughts about dieting, striving for thinness and preoccupation with food (Zhuoli, & Yuhan, 2015). Abnormal eating attitudes are attitudes surrounding food that are unhealthy or different from that of the general population (Fairburn & Harrison, 2003). A study conducted in Nigerian on black, urban secondary school pupils and university students, using the EAT-26 questionnaire, reported abnormal eating attitude prevalence of 18.6% (Oyewumi & Kazarian, 1992). Another study carried out in Egypt by Nasser; (1994), at a secondary school (15-16 years) in Cairo, reported a prevalence rate for abnormal eating attitudes as 11.4% using the EAT-40. The prevalence of abnormal eating attitudes among adolescents living in high income countries (HICs) as defined by the EAT-26 ranges from 5%-30% (Tam, Ng, Yu, & Young, 2007).

Eating disorders are of great interest to the public, of perplexity to researchers and a challenge to clinicians (Fairburn & Harrison, 2003). The etiology of eating disorders is complex, and its associated risk and protective factors are not fully understood (Wade, Neale, Lake, & Martin, 1999). Although

most studies attribute eating disorders to socio-cultural influences, biological, psychological, sociological and familial factors are associated with their development (Goodman, 2002). The prevalence of eating disorders in female adolescents and adult women ranges between 0.5-1% for anorexia nervosa (AN) and 1-3% for bulimia nervosa (BN) (Woodside et al., 2001). Slightly lower percentages have been reported in males, with 1.08 % for BN and 0.92% for AN (Woodside et al.).

Social, environmental, cultural, familial and psychological norms are responsible for moulding children and adolescents' beliefs about fatness and their awareness of the societal "ideal" body shape as dictated by the dominant culture in their society (Gitau, Micklesfield, Pettifor, & Norris, 2014). Historically, eating disorders have been shown to occur in white adolescents and young adult females of upper socioeconomic status who lived in socially competitive environments (Garner, 1996). Studies have observed an increase in the prevalence of eating disorders, and disturbed eating attitudes and behaviours not only among women in western cultures but also amongst adolescents and young adults of both genders, and across cultural and racial boundaries (Crago & Shisslak, 2003; Fairburn, Cooper, Doll, Norman & O'Connor, 2000; Lewinsohn, Stiegel-Moore, & Seeley, 2000).

Moreover, studies have noted that the age of onset of eating disorders is decreasing and significantly contributing to the increased prevalence of disturbed eating attitudes (Jones, Bennette, Olmsted, Lawson & Rodin, 2001; Sherwood & Neumark-Sztainer, 2001). Furthermore, binge eating is socially acceptable for

men than females (McCabe, & Ricciardelli, 2004). According to Striegel-Moore and Franko (2002) preadolescents and adolescents are at greater risk of developing eating disorders due to their increasing concern with their body shape thereby resulting in body image dissatisfaction.

Body Image and Self-esteem

McCabe and Ricciardelli (2005) write that physical appearance is critical for the adolescent boy or girl's development of self-confidence. Harter (1999) stipulates that, the perceptions of physical appearance and self-worth are inextricably related, such that perceived appearance consistently surfaces as the strongest single predictor of self-esteem among both male and female children and adolescents. This link, according to Harter is remarkably strong, with an average correlation of .65 in the US and .62 in other countries such as England, Canada, Italy, Japan, Holland, Ireland, Australia, and Greece. Physical appearance was found to be of great importance among popularity and self-confidence of girls whiles athletic abilities was of more importance for the popularity and self-confidence of boys (Coyl, 2009).

Body satisfaction is positively correlated with self-esteem among boys (Cohane & Pope, 2001). Thus, it comes as no great amazement that adolescent girls, unlike boys, who are not subjected to such unrealistic ideals show a marked decline in perceptions of their physical attractiveness from about 11 years onward (Harter). The U.S. Department of Health and Human Services (2008) indicated that being overweight negatively affects children's psychological and social wellbeing. Body image dissatisfaction is also associated with negative or low self-

esteem (Fabian & Thompson, 1989; Lawrence & Thelen, 1995; Clay, Vignoles & Dittmar, 2005; Folk, Pedersen, & Cullari, 1993).

A study conducted in the United Kingdom reported that in girls aged 11-16 years, experimental exposure to either ultra-thin or average size magazine models lowered body image satisfaction and consequently, self-esteem (Clay, Vignoles & Dittmar, 2005). Self-esteem is defined as a positive or negative attitude toward a particular object, to be precise, the self and makes the person feel that he is a person of worth (Rosenberg, 1965). Rosenberg further describes a person of high self-esteem as an individual, who respects himself, considers himself worthy and not better than others, recognizes his limitations, and expects to grow and improve. According to Park and Park (2014), the important aspects of self-esteem are a feeling of belonging or of being needed, a sense of being accepted, and a feeling of being a competent person.

On the other hand, a person with a low self-esteem shows self-rejection, self-dissatisfaction, and self-contempt, lacks self-respect, and paints a disagreeable self-picture (Park & Park). Once the youth reach adolescence with a negative self-image, they grow a feeling of "being stuck" (Morganett, 2005). This is because self-esteem is especially vulnerable during the period from 12 to 14 years; therefore early adolescence is the ideal time for intervention (Masselink, Van Roekel, & Oldehinkel, 2018).

A meta-analysis of self-esteem studies conducted in Western nations has confirmed that women's self-esteem is moderately, but significantly, lower than that of men and the average gender difference is greatest during middle

adolescence peaking at around 16 years of age (Kling, Hyde, Showers, & Buswell, 1999). Clay, Vignoles and Dittmar (2005) says in their research that controlling for family cohesion and stressful life event showed a pronounced and progressive drop in girls' self-esteem from 12 to 17 years of age. Razali (2013) in his research revealed that parental involvement and willingness to give adolescents autonomy and freedom were positively correlated to high self-esteem in adolescents.

The perception of appearance and self-worth are linked and perceived appearance is a strong single predictor of self-esteem among both male and female adolescents (Clay, Vignoles & Dittmar). According to Erickson's theory, issues of self-worth become prominent in adolescence when the major developmental task is to establish identity and coherent sense of self (Seligman, 2006). Crocker's Contingencies of Self-Worth Theory proposes that satisfaction with body impacts on global self-esteem especially among women than for men and has been supported in young adults as well (Crocker, Luhtanen, Cooper, & Bouvrette, 2003).

Self-esteem may be another relevant variable with regards to eating disorders, thus leading to body image dissatisfaction (Lawerence & Thelen, 1995). Studies done by Kelly and Brown (1999) found that, preadolescent girl who report higher levels of body dissatisfaction and dieting also reported poorer self-esteem. Other studies by Tiggemann (2005) and Fabian, & Thompson (1989) found that adolescent girls who were heavier, perceived themselves as being overweight, and were dissatisfied with their weight might be vulnerable to

developing low self-esteem. Even though self-esteem is something that cannot be touched or seen but it is always there following you like your shadow or the reflection in the mirror (Pyszcynski, Greenberg, Solomon, Arndt, & Schimel, 2004). Adolescents with lower self-esteem have a lower worth about them and think about themselves as nobody. Once this feeling of worthlessness takes power over their body and self-esteem they start falling in this dark hole with few chances of coming out unless intervened at the right time (Hewitt, 2005).

Nnaemeka and Solomon (2014) investigated the relationship between body image and self-esteem among female undergraduate students of behavioural sciences in Nnamdi Azikiwe University and Enugu State University of Science And Technology, Nigeria. They found that body image was significantly related to self-esteem. Another study conducted by Qaisy (2016) indicated that the body image and self-esteem of Isra' University students were low. He indicated that females were found to be less satisfied with their body image, and there was a significant statistical difference in the relationship between body image and self-esteem, in favour of males.

Similarly, Amissah, Nyarko, Gyasi-gyamerah, and Anto-winne (2015) of University of Ghana, Department of Psychology, conducted a study to assess the relationships among body image, eating behaviour, and psychological health of University of Ghana students. They found that there was a significant relationship between body image and eating behaviour. There was no significant relationship between age and body image and no significant sex differences in body image, eating behaviour and psychological health. They also found out that culture had a

significant influence on body image and psychological health and they concluded by saying that, importing Western standards of thin body shapes for Africans is likely to generate problems with body image dissatisfaction.

Asumeng (2015) conducted a study to investigate the influence of body image satisfaction on the psychological well-being of individuals within the African cultural context. Body image dimension was redefined and expanded to include four other components: facial appearance, appendage appearance, physical appearance, and complexion and body mass index. The findings revealed that there was a significant relationship between body image satisfaction and psychological well-being with Afrocentric values. Males were more satisfied with their body image than females. However, level of education had no significant effect on a person's body image satisfaction.

Wilson, Latner and Hayashi (2013) examine BMI and body image dissatisfaction as predictors of physical and mental health-related quality of life (HRQL) and psychosocial functioning in undergraduate students. They found out that, higher BMI correlated with body image dissatisfaction and physical HRQL. Whereas higher body image dissatisfaction was associated with poorer physical HRQL and psychosocial functioning. Furthermore, body image dissatisfaction was observed to mediate the relationship between BMI and physical HRQL in men and women. Interestingly, higher BMI predicted increased self-esteem. These findings suggest that body image dissatisfaction may be an important target for health interventions.

Similarly, Gillen (2015) conducted a study to examine associations between body image and various mental and physical health-related indicators in both men and women undergraduate students. He found out that individuals with greater positive body image reported less depression, higher self-esteem, fewer unhealthy dieting behaviours, lower drive for muscularity, and greater intentions to protect their skin from UV exposure and damage. Gender did not moderate these associations. Connections between positive body image and health-related indicators were similar for both women and men. The results suggest that positive body image has significant implications for health and well-being beyond objective body size. Health care providers should encourage positive body image because of its potential health benefits.

El Ansari, Dibba, Labeeb, and Stock (2014) conducted a related study to examine variables associated with body image concern (BIC) and whether these associations differed between female and male students in Egypt. They found out that about 40% of the female students and 25.6% of male students reported having mild to marked BIC. The correlates of BIC did not exhibit striking differences between male and female students. BIC was positively associated with BMI, body image perception as being too fat and with depressive symptoms. Self-rated health was inversely associated with BIC. These findings suggest that health promoting strategies should address the co-occurrence of depressive symptoms and BIC, and should furthermore pay due attention to higher prevalence of BIC among female students.

Wright (2012) conducted a study to identify the relationship between body image and healthy lifestyle behaviours among undergraduate university students. He found out that majority of students (71%) were satisfied with their body image, although many students (60.3%) wanted to alter it. Most students (65.1%) had a normal BMI. Sedentary activity was more than the recommended amount, with only 23.3% meeting physical activity guidelines. Body image was correlated with healthy lifestyle behaviours. There was a moderate correlation between physical activity and body image, and a negative correlation between sedentary activity and healthy lifestyle behaviours.

Another study was conducted on middle school students in Korea (Park, Kim, Park, Suh & Lee, 2016). The results of this study indicated that self-esteem was positively associated with satisfaction with school life and academic grades, and perceived health status. Suicidal ideation and satisfaction with peer relationships were significantly associated with self-esteem in the multivariate regression analysis conducted. These results should be considered in the establishment of health policies and the content of programmes to improve adolescents' health outcomes.

Korn, Gonen, Shaked and Golan (2013) conducted a study to examine health perceptions, self and body image, physical exercise and nutrition among undergraduate students in Israel. They found that, there is a high correlation between health perceptions, appropriate nutrition, and positive self and body image. The relationships between these variables differed between the subpopulation in the sample and the different genders. Engagement in physical

exercise contributed to positive body image and positive health perceptions more than engagement in healthy nutrition. Students offering nutrition reported higher frequencies of positive health perceptions, positive self and body image and higher engagement in physical exercise in comparison to all other students in the sample. This study suggests that successful health promotion policy should reflect collectivist rather than individualist ethos by providing health prerequisites through a public policy of health-promotion, where the academic settings support a healthy lifestyle policy, by increasing availability of a healthy, nutritious and varied menu in the cafeterias, and offering students various activities that enhance healthy eating and exercise.

Eivind, Siren and Hans-Johan (2007) also conducted a study to examine the relationship between perceived negative health and body image in early and mid-adolescence, focusing on age and gender differences. Analyses were based on Norwegian data from a World Health Organization cross national survey (Health Behaviour in School Aged Children) among 5026 pupils aged 11, 13 and 15 years. The results indicated that girls are more likely to report negative health than boys, and the probability of such reports increases with age. Girls and older age groups report dieting and dissatisfaction with weight and appearance more often than boys and younger age groups. Body dissatisfaction is associated with an increased risk of perceived negative health, also when controlling for the possible confounding effects of age and gender.

In 2016, a study was conducted in Nigeria, to assess body image perception (BIP) and its relationship with mental health of secondary school

adolescents (Otakpor & Ehimigbai, 2016). Out of six hundred respondents, two hundred and twenty three (36.7%) and two hundred and seventy seven (46.2%) of the respondents were dissatisfied with their appearance and discrete aspects of their bodies, respectively. The prevalence of probable psychiatric morbidity was 35.4%. BIP was significantly associated with psychiatric morbidity. Subjects who were less satisfied with their general appearance and discrete aspects of their body screened positive for general psychiatric morbidity.

Hudson (2008) conducted a study to examine how body image, Body Mass Index (BMI), self-esteem and eating attitudes were related in a non-clinical sample of New Zealand women. The study concluded that elevated BMI is associated with higher dissatisfaction with body image, and there is a positive correlation between body image and eating attitudes. Self-esteem and eating attitudes were significantly correlated with lower self-esteem being associated with increased disturbance in eating attitudes. Self-esteem and BMI were found to significantly contribute to eating attitudes on their own as well as together. Body image on its own also made a significant contribution to eating attitudes.

Gan, Mohamad and Law (2018) conducted a study to determine the risk factors associated with binge eating behaviour among adolescents in Malaysia. It was identified that high levels of depressive symptoms, high levels of body dissatisfaction, poor family cohesion, and low self-esteem significantly contributed to binge eating behaviour after controlling for sex. The findings suggest that improving the relationships between family members, along with

eliminating adolescents' negative emotions could help in the prevention of binge eating behaviour among adolescents.

Theories Explaining Body Image

A number of theories have been proposed to explain the development and causes of body image dissatisfaction. These theories include; the Self-discrepancy Theory, the Self-schema Theory, the Objectification Theory, the Feminist theory and the Cognitive-behavioural model

Self-discrepancy theory

This theory was originally developed in order to explain the social-cognitive process occurring during adolescence, and differences between the ideal and one's actual self (Moretti & Wiebe, 1999). The theory purports to explain the composition of the self, by distinguishing between the actual self (the own self), the ideal self (the wished for self) and the ought self (the self-expected from others, [Veale, 2004]). The ideal and ought self are known as self-guides or self-evaluation standards. As such, a difference between these self-guides and the actual self can contribute to low motivation, negative states of emotion, and behaviour such as dejection-related emotions, body image dissatisfaction and eating disturbances.

It has been reported that even though self-discrepancy is a cognitive process, it can also be affected by environmental factors (Strauman, Vookles, Berenstein, & Chaiken, 1991). For example, one study found that body image discrepancy can be influenced by an exposure to gender-stereotypical advertisements (Lavine, Sweeney, & Wagner, 1999).

Moreover, it has been found that the images depicted in the media can affect an individual's body image discrepancy differently. A thin body ideal could lead to a discrepancy between the current and ideal body image (ideal discrepancy), while fat images could affect a disparity between the current and expected body shape (ought discrepancy, [Cohen, 2006])

Self-schema theory

Self-schema theory examines the personal construction of a body shape model which makes one person distinctive from another. The body shape model builds from an individual's self-recognition of their own body, from others reactions to their body, and from the influence of society and the media (Leary & Tangney, 2012). Myers and Biocca, (1992) stated that body image is unstable and responsive to social cues. There are four types of the bodies postulated by self-schema theory: the socially represented ideal body (an ideal body represented in the culture), the internalized ideal body (a body which is influenced by both the objective and the cultural ideal body), the objective body (a real perception of one's body) and the current body (a body belonging to oneself).

Discrepancy between the objective body and the internalized ideal body may lead to self-criticism and poor self-esteem. It is believed that the media drive the internalized ideal body closer to the socially represented ideal body, which means that the personal ideal body image becomes thinner and comes to resemble the unrealistically thin body shape frequently depicted in the media (Grogan, 1999).

A key attribute of self-schema is appearance. Individuals who pay more attention to appearance are likely to focus on information related to appearance. This information will be employed to judge their personal appearance or for use as a general reference point. A US study of 168 female college students showed that high appearance self-schema can lead to lower self-esteem, poor body image and negative feelings (Leary & Tangney, 2012).

Objectification theory

Objectification theory suggests that society forces women to view themselves as objects based on their appearance (Morry & Staska, 2001). As our society publicises a thin body ideal for women, their bodies become more objectified, causing an increase in body dissatisfaction, eating disturbances and negative effects. Moreover, advertisements promoting specific body parts pressurise women to be viewed by themselves and by others as objects (Murnen, Smolak, Mills, & Good, 2003). In children, a study has shown that whereas girls view their bodies as an object, which needs to change in order to be more attractive, boys consider their bodies as a tool to control others.

Among women, being successful is linked with appearance, and consequently women use thin media images as a reference point to compare with their own bodies (Murnen et al., 2003). It should be noted that the evidence for men is not as clear as for women. However, emphasis upon an idealised male body has made objectification a problem among men, leading to an increase in body dissatisfaction, body dysmorphic disorders, and unhealthy weight gain behaviours (Murnen et al.).

Feminist theory

Women are taught to view their body as an object from a young age. It has been suggested that women who have striven to achieve intellectually, professionally or politically have confronted massive barriers as a result of being female (Frost, 2001). Moreover, women are viewed as victims of a society. For example, society emphasises the importance of being thin, considers women as in a lower position and associates femininity with being small and weak (Grogan, 1999). McKinskey (1994) has developed a new measurement called Objectified Body Consciousness (OBC) based on feminist theory in order to examine how society can affect women thoughts. Her theory involves three components: body surveillance (thorough self-scrutiny), internalization of cultural body standards (accepting these standards as ones ideal body image) and appearance control beliefs (assuring one's self that these standards can be achieved).

Body surveillance is considered as a predictor of negative body image among young women. Women with high levels of body surveillance may also experience high levels of body dissatisfaction, eating problems and low levels of psychological well

Theories Explaining Self Esteem

Under this section, theories that talks about the self and self-esteem are reviewed. These include; Abraham Maslow's Hierarchy of Needs Theory, the Sociometer Theory, the Social Acceptance Model, and the Competencies Model.

Abraham Maslow's hierarchy of needs theory suggested that self-esteem is a basic human need or motivation. The need for self-esteem plays an important

role in psychologist Abraham Maslow's hierarchy of needs, which depicts self-esteem as one of the basic human motivations. He described two different forms of esteem: the need for respect from others and the need for self-respect, or inner self-esteem (Maslow, 1987). Maslow suggested that people need both esteem from other people as well as inner self-respect. Both of these needs must be fulfilled in order for an individual to grow as a person and achieve self-actualization. It is important to note that self-esteem is a concept distinct from self-efficacy, which involves how well you believe you will handle future actions, performance or abilities.

Self-Determination Theory (SDT) states that man is born with an intrinsic motivation to explore, absorb and master his surroundings and that true high self-esteem (Ryan & Deci, 2004) is reported when the basic psychological nutrients, or needs, of life (relatedness, competency and autonomy) are in balance (Ryan & Deci).When social conditions provide support and opportunity to fulfil these basic needs, personal growth, vitality and well-being are enhanced (Chirkov, Ryan, Kim, & Kaplan, 2003). Relatedness was an addition to the original theory to account for people's inherent ability to make meaning and connect with others through the internalisation of cultural practices and values (Ryan & Deci)

Social Acceptance Model is axiomatic that acceptance by others (including the larger sociocultural environment) is important for self-esteem (Mead, 1934). The social acceptance theory proposes that self-esteem arises from others' acceptance. Indeed, regardless of who we are, we want to be accepted by others (DeWall, Twenge, Bushman, & Williams, 2010). The need to belong is

among the basic of all human needs (Baumeister & Leary, 1995). James (1890) delineated three dimensions of the self: the material self, spiritual self and the social self. The later, he postulated is hinged on one's relationships with significant others and groups. Embedded in this theory is the assertion that the typical Ghanaian will value the self-relative to how he/she not necessarily 'is' but rather 'feels' accepted (in terms of attitudes, behaviours and values) by the immediate and larger sociocultural environment. This sociocultural environment includes parents and significant others, the immediate community, ethnic group and even religious affiliation as well as the media.

This theory thus predicts that participants will evaluate self-worth based on how well he exhibits the upheld virtues, values, behaviours and attitudes that are deemed relevant and appropriate in all his relevant social environments. This theory therefore suggests some similarity (larger sociocultural environment) yet a disparity in the determinants of self-esteem among male and female adolescents and adults.

Theories Explaining Health Behaviour

A number of theories have been proposed to explain health behaviour. Four of the most frequently mentioned theories of health behaviour, the Health Belief Model, the Stages of Change Model, the Social Cognitive Theory (SCT) and the Bio-ecological Model have been explained in this review.

The health belief model was originally developed to explain why people did or did not take advantage of preventive services such as disease screening and immunizations. Its central thesis is that health behaviour is determined by two

interrelated factors: a person's perception both of the threat of a health problem and of his or her accompanying appraisal of a recommended behaviour for preventing or managing the problem (Becker, 1974). The model works well, especially for early detection or for some conditions, such as infectious diseases, that people might find frightening, especially if they are uncertain about the effects of treatment methods (Janz & Becker, 1984).

The stages of change model concern an individual's readiness to change, or to try to change, unhealthy behaviours. Its basic premise is that behaviour change is a process and not an event, and that individuals are at varying levels of motivation, or readiness, to change (Abrams, Herzog, Emmons, & Linnan, 2000). This means that people at different points in the process of change can benefit from different programmes for change, and the programmes work best if matched to their stage of readiness (Jones, 2003).

Social cognitive theory (SCT) is very complex. From this theory's perspective, people and their environments are thought to interact continuously. A basic premise of social cognitive theory is that people learn not only through their experiences, but also by watching the way other people act and the results they achieve (Bandura, 2002). SCT also takes the view that, while people are influenced by the world around them, they can also actively change that world. SCT provides a foundation for several strategies for behaviour change, for example the use of role models who carry out behaviour and achieve good results.

The Bio-ecological Model by Bronfenbrenner was adopted for this study. Bronfenbrenner named his emerging theory in the 1970s as an ecological model

of human development (Rosa & Tudge, 2013). He defined ecological theory as the study of human development in context or enduring environments (Bronfenbrenner, 1974). Ecology was defined as a fit between the individual and his/her environment. In order to develop, and not only survive, the fit between the individual and his/her environment must be even closer (Bronfenbrenner, 1975). In the earliest stage of the theory, Bronfenbrenner described the ecological environment as composed of systems at four different levels.

The microsystem's setting is the direct environment we have in our lives. Your family, friends, classmates, teachers, neighbours and other people who have a direct contact with you are included in your micro system. The micro system is the setting in which we have direct social interactions with these social agents. The theory states that we are not mere recipients of the experiences we have when socializing with these people in the micro system environment, but we are contributing to the construction of such environment. (Bronfenbrenner, 1977; Berk, 2000).

The meso-system involves the relationships between the microsystems in one's life. This means that your family experience may be related to your school experience. For example, if a child is neglected by his parents, he may have a low chance of developing positive attitude towards his teachers. Also, this child may feel awkward in the presence of peers and may resort to withdrawal from a group of classmates (Bronfenbrenner, 1977; Berk, 2000).

The exo-system is the setting in which there is a link between the context where in the person does not have any active role, and the context where he/she is

actively participating. Suppose a child is more attached to his father than his mother. If the father goes abroad to work for several months, there may be a conflict between the mother and the child's social relationship, or on the other hand, this event may result to a tighter bond between the mother and the child. (Bronfenbrenner, 1977; Bergen, 2008).

The macrosystem setting is the actual culture of an individual. The cultural contexts involve the socioeconomic status of the person and/or his family, his ethnicity or race and living in a still developing or a third world country. For example, being born to a poor family makes a person work harder every day. It also consists of the blueprints of a particular society such as laws and regulations but also unprinted rules and norms (Bronfenbrenner, 1978; Bergen, 2008)

Bronfenbrenner acknowledged the role that personal characteristics of individuals play in social interactions. This was established to indicate that the role the individual and their personal characteristics play in social interactions and their individual development was very crucial. These characteristics include age, sex, gender, physical or mental health, and others (Bronfenbrenner & Morris, 1998). Some of these characteristics are more visible than others (such as age) and as such, are more easily measured over time.

Process - person - context - time (PPCT) model

This model was later adapted to include the chronosystem, based on four establishing principles and their interactions which were Bronfenbrenner's original basis for the bioecological theory (Bronfenbrenner & Morris, 2006).

Process - the developmental processes that happen through the systematic interactions mentioned above. What Bronfenbrenner referred to as proximal processes functioned as the primary mechanism of an individual's development (Bronfenbrenner & Morris, 2006).

Person - this principle was established to indicate the role of the individual and their personal characteristics in social interactions and their individual development. These characteristics include age, sex, gender, physical or mental health, and others. Some of these characteristics are more visible than others (such as age) and as such, are more easily measured over time (Bronfenbrenner & Morris, 2006).

Context - the (now five) systems of the bioecological model serve as the context for an individual's development - the micro-, meso-, exo-, macro-, and chronosystems (Bronfenbrenner & Morris, 2006).

Time - the most essential element of the bioecological model. Because this model measures an individual's development, these interactions occur on a measurable, chronological scale. Time influences the systemic interactions within an individual's lifespan as well as across generations, such as in the case of "family values," a set of morals or beliefs that are passed down between generations and shape development. This would be an example of microsystem interaction over time (Bronfenbrenner & Morris, 2006).

Urie Bronfenbrenner's bioecological model was adopted for this study because the Bioecological theory in its current form specifies that researchers should study the settings in which a developing individual spends time and the

relations with others in the same settings, the personal characteristics of the individual (and those with whom he or she typically interacts), both development over time and the historical time in which these individuals live, and the mechanisms that drive development (Tudge et al. 2009).

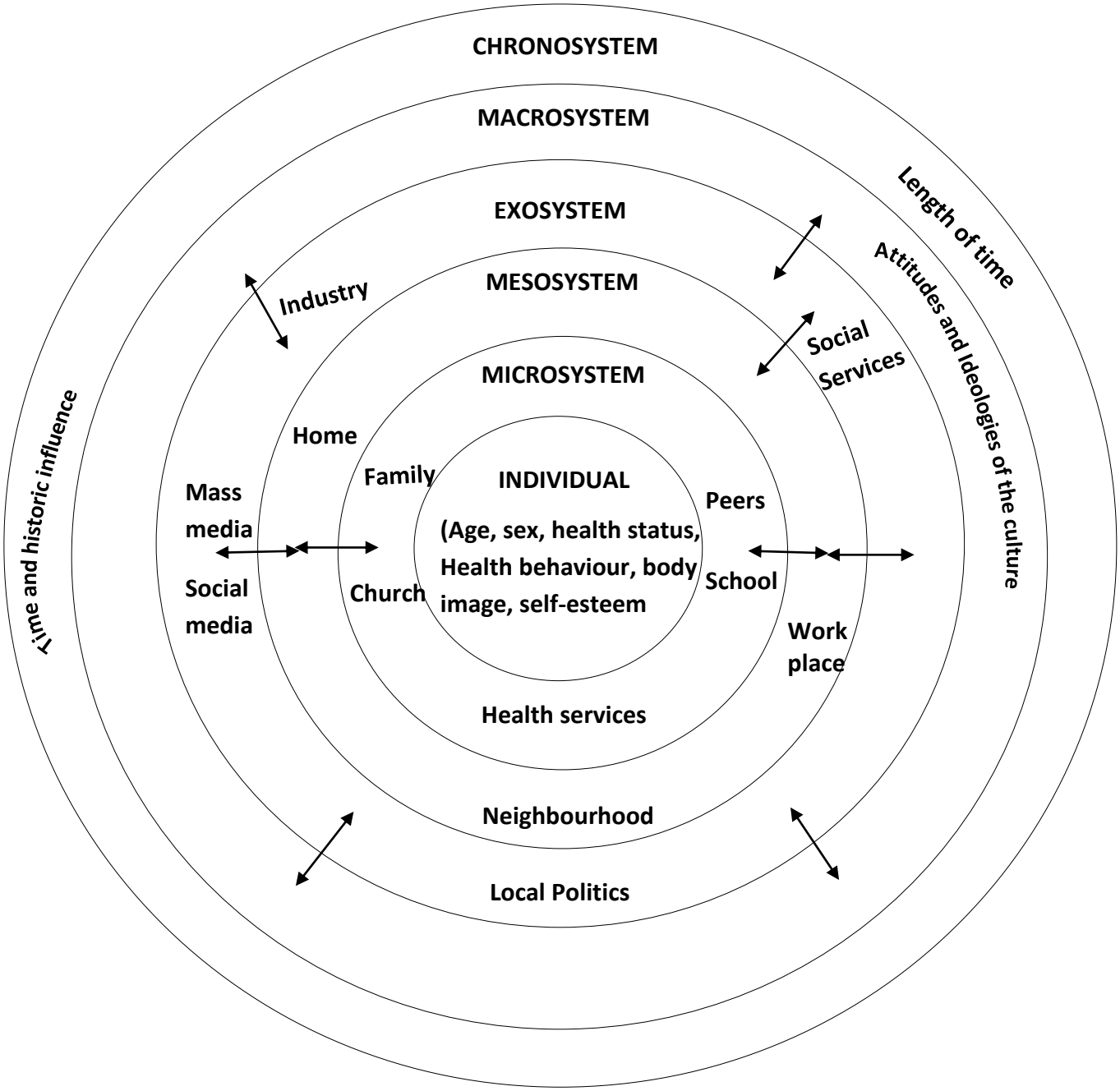

***Figure 1*:** Urie Bronfenbrenner's ecological systems theory (1979)

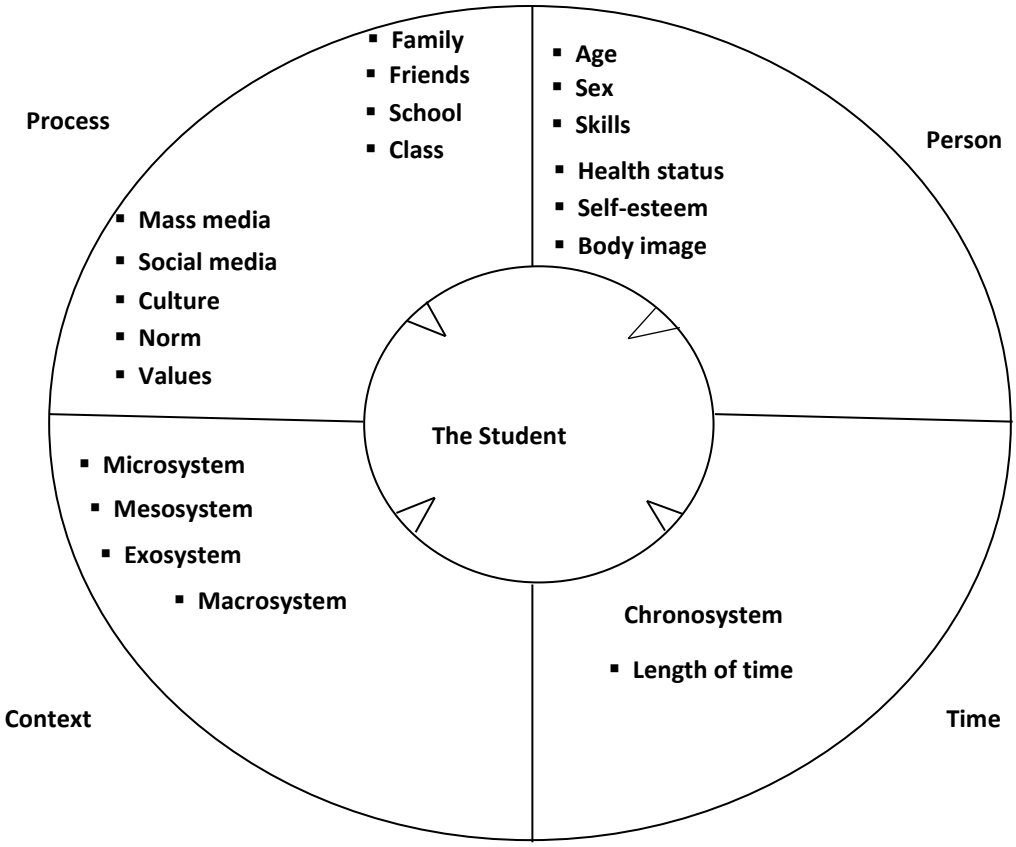

***Figure 2*:** Adopted from Urie Bronfenbrenner's bioecological model (1994)

The bioecological model, together with its corresponding research designs, is an evolving theoretical system for the scientific study of human development over time (Bronfenbrenner, 2005).

The individual's body image, self-esteem and health behaviour is influenced by biological and environmental factors. Individual's age, sex and health status is a major determinant of body image, self-esteem and health behaviour. The mass media the social media, family, peers, school, culture, norms and values have influence on body image, self-esteem and health behaviour.

Summary

Body image dissatisfaction has been associated with BMI. This is especially so in females and the link is evident in women as well as overweight individuals. Disturbed eating attitudes have been seen to be associated with body image dissatisfaction. Elevated BMI has been found to be associated with preoccupation with food and disordered eating attitudes. Self-esteem affects a person's attitudes to eating and their satisfaction with their body.

The negative impact these factors can have on individual's life has been shown to affect many areas of their life. Research on body image satisfaction has shown that dissatisfaction with body image can have an impact on an individual's quality of life including an individual's self-esteem, interpersonal confidence, and eating and health behaviours. Eating attitudes have also been found to have negative impact on individual's lives.

Finally, body image dissatisfaction has been related to a variety of negative weight control methods such as onset or frequency of smoking and excessive dieting. High self-esteem is important not just for how a person feels about themselves and whether they respect themselves but also their attitudes towards eating and the way they view their body. Some gender differences have been found in adolescent and child populations with males showing more effect of self-esteem on body image, but other adolescent studies have shown the effect of self-esteem on body image to be the same with females.

CHAPTER THREE

RESEARCH METHODS

The purpose of the study was to investigate the relationship between body image, self-esteem and health behaviour of senior high school students in the Offinso municipality. This chapter presents the method used in carrying out the research. It involves the research design, the study area, population, sampling procedures, data collection instrument, the procedure for data collection and the data processing and analysis plan.

Research Design

A descriptive cross-sectional design was employed for this study. A cross sectional design is the process of collecting the data in a specific period. The choice of a quantitative research design for this study was informed by its primary strengths because, according to Cohen, Manion, and Morrison (2007) "the findings are generalizable, and the data are objective". Creswell (2014) also defines the descriptive survey method as one which looks with intense accuracy at the phenomena of the moment and then describes precisely what the researcher sees.

The purpose of employing the descriptive method was to describe the nature of a condition, as it took place during the time of the study and to explore the cause or causes of the condition. It is suitable when the researcher attempts to describe some aspects of a population by selecting unbiased samples of individuals who are asked to complete questionnaire, interview and test (Silverman, 2013). Additionally, the descriptive cross-sectional design was used

because it provides the researcher the opportunity to acquire first hand data from the respondents to formulate rational and sound conclusions and recommendations for the study. However, it does not help determine cause and effect. The timing of the snapshot is not guaranteed to be representative. The findings can be flawed or skewed if there is a conflict of interest with the funding source.

Study Area

As one of the 30 municipalities in the Ashanti Region, Offinso Municipality was established by Legislative Instrument (L.I.) 1909 of 2007. It was carved out of the then Offinso Municipality and split into Offinso Municipal Area and the Offinso North District (GSS, 2014). The municipality is located in the extreme north-western part of the Ashanti Region. It has a total land area of 585.7 square kilometres which is 2.4% of total land size of the Ashanti Region. The municipality shares common boundaries with Offinso North in the north, Ejura-Sekyedumase Municipal in the east, Sekyere South in the south-east, Atwima Nwabiagya and Ahafo Ano South Municipals in the west (GSS). The area is almost symmetrically dissected by the main trunk road forming part of the Trans-African Highway, which serves as the main gateway to the Ashanti Region from the Northern and Brong-Ahafo Regions. The Municipal capital, Offinso New Town is only about a 30-minute drive from the central business district of Kumasi, the capital of Ashanti region.

The population of Offinso Municipality, according to the 2010 Population and Housing Census, is 76,895 representing 1.6% of the region's total population

with a population density of 131 persons per square kilometre. Males constitute 48.2% and females represent 51.8%. About 72% of the population is rural. The municipality has a sex ratio of 93.1. The population of the municipality is youthful (41.8%) depicting a broad base population pyramid which tapers off with a small number of elderly persons (4.6%) (GSS, 2014)

About thirty-seven (36.7%) of the population aged 12 years and older are married, 42.8% have never married,10.9% are in consensual unions, 5.0% are widowed, 3.2% are divorced, and 1.4% are separated. About 70.9% of the population aged 15 years and older are economically active while 29.1% are economically not active. Of the economically active population, 96.0% are employed while 4.0% are unemployed. For those who are economically not active, a larger proportion is students (53.3%), 21.4% perform household duties and 4.8% are disabled or too sick to work. Seven out of ten unemployed are seeking work for the first time (GSS, 2014). Of the employed population, about 50.1% are engaged as skilled agricultural, forestry and fishery workers, 20.3% in service and sales, 12.0% in craft and related trade, and 7.5% are engaged as managers, professionals, and technicians.

Population

A research population is generally a large collection of individuals or objects that is the main focus of a scientific query. It is for the benefit of the population that researches are done. According to Jackson (2008), a population is all the people about whom a study is meant to generalize. It involves all the individuals (or objects) with certain specified characteristics (Fraenkel & Wallen,

2000). They further noted that it is for the population that the researcher will generalize his/her results. In the view of Babbie and Rubin (2001), the population for a study is the theoretically specified aggregation of study elements. They identified the "study elements" as the unit of individuals or objects about which information is collected and that provides the basis of analysis.

The population for this study encompassed all students (both boys and girls) in the three senior high schools in the Offinso Municipality namely Dwamena Akenten SHS (2250 Students), Namong Secondary Technical SHS (1855 Students) and ST Jerome SHS (1620 Students). The three public senior high schools within the Offinso Municipality have a total of 5725 students with only 40% being boarders and 60% being day students. All the three senior high schools are mixed schools. A little over half of the students (56%) are boys and the rest (44%) are girls. There is variation by age, with 57% of the students between the ages of 14 and 16 years, 25% aged 17 years and above, and 18% aged 13 years or below. The average age of the girls in the Senior High Schools is 15 years, while the average age of boys is 16 years (GES Offinso Municipal, 2019).

The development of body image dissatisfaction is more pronounced during adolescence (Taylor et al., 1998). Majority of these students are in the adolescent bracket and body image is central to adolescent's self-definition, because they have been socialized to believe that appearance is an important basis for self-evaluation and for evaluation by others (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). The total population for the study was 5725 students (N =

5725) which is the total population of the three senior high schools in the Offinso Municiplity (GES Offinso Municipal, 2019).

Sampling Procedure

In research, population is generally a large collection of individuals or objects that is the main focus of a scientific query. However, due to the large sizes of populations, researchers often cannot test every individual in the population because it is too expensive and time-consuming. This is the reason why researchers rely on sampling techniques. The sample size for the study was estimated at 374 students out of the total student population with a 95% confidence level and a confidence interval of 5. This sample size was deduced using Miller and Brewer (2003) mathematical formula.

$n = N / [1 + N(\alpha)^2]$

$n = 5725/(1 + 5725)(0.05)^2$

$= 5725/15.3125$

$= 373.88$

Where, n is the sample size, N is the sample frame (i.e., target population), α is the error margin and 1 is the constant term

However, Ogah (2013) and Cohen, Mannion and Morrison (2007) have stipulated that the larger the sample size the better for a cross-sectional study. Therefore 50% of the estimated sample size was added to the sample size making it 561 students. This adjustment was done to cater for non-response of some questionnaires.

In order to get access to this sample, multistage sampling was used to select participants from the population. Stage one, the stratified sampling technique was employed to determine the number to be selected from each of the three senior high schools. Stratified sampling is used to ensure that important characteristics of the population are fairly represented in the sample and not left to chance (Ogah, 2013). The schools become the various strata from which the sample would be drawn. Stratified sampling is done to ensure that each stratum is represented according to its quantity in the population.

At stage two, the year groups (Year 1, 2, & 3) become the strata and therefore students would be selected from the various year groups in each of the schools. After the number for each year has been determined, gender is become the strata. The number of boys and girls is also determined based on their quantity in the population. This was achieved by adopting Babbie's (2005) formula which is given as; K/N x n

Where: K = Population of students in a school,

N = Total population of all three schools,

n = Sample size

Dwamena Akenten SHS – 2250/5725 x 561 = 220,

Namong Sec Tech SHS – 1855/5725 x 561 =182 and

St. Jerome SHS – 1620/5725 x 561 = 159.

The same formula (Babbie, 2005) was adopted to select the number of respondents in each school. The samples from the various schools are shown in Table 1.

Table 1: Number of students to be selected from the three senior high schools

Name of School	Gender	T. Population	Sample Size	Percentages
Dwamena Akenten	Boys	1200	117	21%
SHS	Girls	1050	103	18%
Total		**2250**	**220**	**39%**
Namong Sec Tech	Boys	1050	103	18%
SHS	Girls	805	79	15%
Total		**1855**	**182**	**32%**
St. Jerome SHS	Boys	950	95	17%
	Girls	670	66	11%
Total		**1620**	**159**	**28%**
Grand Total		**5725**	**561**	**100%**

School, year group and gender were all taken into consideration in the sampling procedure. Table 1 shows that, 117 boys and 103 girls were selected from Dwamena Akenten SHS, 103 boys and 79 girls selected from Namong Sec Tech SHS and 95 boys and 66 girls selected from St. Jerome SHS.

In addition to this, approximately equal number of students were selected from all the year groups (Year 1, 2, & 3) therefore, 73 students were selected from each of the forms (Year 1, 2, & 3) in Dwamena Akenten SHS. At Namong Sec Tech SHS, 61 students were selected from year 1, 61 students from year 2 and 60 from year 3. At St. Jerome SHS, 53 students were selected from each of the year groups (Year 1, 2, & 3).

At stage three, simple random sampling technique (The Fishbowl draw/ Lottery method) was used to select respondents in the various schools based on the number determined earlier.

Table 2: Samples from each year group

School	Population	S. Size	Form 1	Form 2	Form 3
Dwamena	2250	220	39 Boys	39 Boys	39 Boys
Akenten SHS			35 Girls	34 Girls	34 Girls
			74	**73**	**73**
Namong Sec	1855	182	35 Boys	34 Boys	34 Boys
Tech SHS			26 Girls	27 Girls	26 Girls
			61	**61**	**60**
St. Jerome SHS	1620	159	31 Boys	31 Boys	31 Boys
			22 Girls	22 Girls	22 Girls
			53	**53**	**53**
Total	**5725**	**561**	**188**	**187**	**186**

This probability sampling technique was appropriate in the sense that it will afforded each student an equal and calculable chance of being selected for the study. Students in the various year groups were selected using 'YES' or 'NO' written on pieces of papers, folded and placed in a bowl for students to pick. The number of 'YES' was equal to the number needed in each form. Students who picked YES in their various schools, year groups and gender were selected for the study.

Data Collection Instruments

Accurate and systematic data collection is critical to conducting scientific research. For the purpose of this research, questionnaire was used to obtain data on body image, self-esteem and health behaviour. According to Twumasi (2001), a questionnaire is a widely used tool for collecting data in educational research and it is very efficient for securing data about procedures and conditions and for

inquiring into the opinions and attitudes of the subjects. He again stated that it is a very effective method as many respondents could be reached within time limit.

The Body Shape Questionnaire (BSQ) scale for body image satisfaction (Cooper, Taylor, Cooper, & Fairburn, 1987) and The Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965) were used to collect data. These scales are widely used instruments. The researcher designed an instrument called the Health Behaviour Questionnaire for Adolescents (HBQA) from two existing questionnaires (Health-Related Behaviour Scale and Health Behaviour Inventory) to collect data on health behaviour.

I. **Body image satisfaction measure**

The Body Shape Questionnaire (BSQ) scale measure the concerns related to one's body shape and is based upon the notion that disturbed body image is a central feature of eating disorders. (Cooper et al., 1987). This scale consists of 34 items and is widely used to assess body dissatisfaction and treatment of eating disorders (Cooper et al.). A Brazilian study done by Di Pietro and Xavier da Silveira (2008) and a Spanish study done by Espina, Ortego, Ochoa de Alda, Aleman, and Juaniz (2002) found the internal consistency of BSQ measured by Cronbach alpha to be between 0.96 - 0.97, the same as that found by the instrument's authors Cooper et al. (1987).

For the purpose of this study, a modified version of the scale consisting of 16 items to measure concerns about body image dissatisfaction and the experience of "feeling fat" among adolescents was used. It was based on a on a six-point Likert scale ranging from never (1 point) to always (6 points). Dowson and

Henderson (2001) used the modified version for their study and found the internal reliability to be 0.93. Few questions from BSQ look like, “Have you noticed the shape of other people and felt that your own shape compared unfavorably?” and “Have you felt ashamed of your body?”

II. **Self-esteem measure**

The Rosenberg Self-Esteem Scale (RSES) is 10-item Likert scales with items answered on a four-point scale from strongly agree (3 points) to strongly disagree (0 point). Self-esteem was assessed through agreement with self-evaluative statements such as “On the whole I am satisfied with myself.” Rosenberg (1965) demonstrated that his scale was a Guttman scale by obtaining high enough reproducibility and scalability coefficients and had high reliability. Its test-retest correlations were typically in the range of .82 to .88, and Cronbach's alpha were in the range of .77 to .88. Clay, Vignoles & Dittmar, (2005) used the RSE scale for their study to study body image and self-esteem among adolescent girls and the internal consistency for their study was .84. Tiggemann (2005) used the same scale for her study with adolescent girls’ body image and the internal reliability reported was 0.88.

III. **Health behaviour measure**

Items were selected from two scales to design a questionnaire. These are the, Health-Related Behaviour Scale (Dosedlová, Slováčková, & Klimusová, 2013) and the Health Behaviour Inventory (Awabil, & Anane, 2018). This questionnaire was named the Health Behaviour Questionnaire for Adolescents (HBQA). The Health Behaviour Questionnaire for Adolescents (HBQA) scale

consists of 15 items that are measured by using a Likert scale that will range from Strongly Agree to Strongly Disagree (4 points).

Validity and reliability

A pre-test was conducted to ensure validity and reliability of the Health Behaviour Questionnaire for Adolescents (HBQA). This was a preliminary trial performed before the study. The test was conducted at the Akomadan Senior High School located in the Offinso North District. The school was chosen because students in senior high schools in both Offinso Municipal and Offinso North have similar socio-demographic characteristics. In addition, the whole questionnaire was also pre tested using 50 students from Akomadan Senior High School.

Validity of an instrument has to do with whether the instrument is measuring what it is intended to measure. Face validity refers to researchers' subjective assessments of the presentation and relevance of the measuring instrument as to whether the items in the instrument appear to be relevant, reasonable, and unambiguous and clear (Oluwatayo, 2012). In order to ensure face validity of the instrument, the researcher discussed the questionnaire with his colleagues MPhil students before giving to a friend in the Population and Health department for his input.

After that, it was then given to my supervisors to ensure that the items appear to measure what it supposed to measure. In the area of content validity, the instrument was sent to experts (my supervisors) to read through to make sure that the instrument sufficiently captures the construct with the smallest number of

items. They made significant input to the instrument to ensure that it measures exactly what it is meant to measure.

Reliability of an instrument is the consistency with which it measures a particular attribute, in order words the degree to which an instrument yields consistent results. Common measures of reliability include internal consistency, test-retest, split half, cronbach alpha and inter-rater reliabilities.

Test-retest which was used to test the reliability of the instrument, measures the correlation between scores from one administration of an instrument to another, usually within an interval of 2 to 3 weeks. There was no intervention between the first and second administrations of the instrument, in order to test-retest reliability. The second test occurred two weeks after the first administration of the instrument using the same student who sat for the first test. Finding a correlation coefficient for the two sets of data is one of the most common ways to determine reliability of the instrument. The Pearson Correlation Coefficient was used to find correlation between the two tests. A correlation Coefficient of .85(85%) was obtained indicating a high correlation between the two test.

Data Collection Procedure

Firstly, an approval was sort from the Institutional Review Board (IRB). After the approval had been given, introductory letters were obtained from the Department of Health, Physical Education and Recreation of the University of Cape Coast, which was presented to authorities of the three Senior High Schools. A suitable time for the research was arranged with each of the heads of the three Senior High Schools and that was in the morning, just after the first break.

Respondents were picked in every school through a simple random sampling technique. Students in each form were grouped into boys and girls and 'YES' or 'NO' was written on pieces of papers and folded for students to pick. The number of 'YES' was equal to the number needed in each form. Students who picked YES in their various schools, Forms and gender were selected for the study.

After the selection process, a vivid explanation was given to the students sampled for the study, the purpose of the research as well as their right to opt out of the study if they so wished and the need for them to answer the questions individually. The researcher also assured them of the confidentiality and promised not to release the data for any other purpose apart from the purpose it is meant for. Confidentiality protected the respondents in this study from unauthorized retrieval and disclosure of any sort of information from and about them without their informed consent. It also protected their privacy. After the explanation, the questionnaires were personally administered to the respondents. The questionnaires were collected personally by the researcher after they all completed it.

Ethical issues

The study conformed strictly to the American Psychological Associations (APA, 2009) and the University of Cape Coast ethical guidelines such as informed consent, anonymity and confidentiality. Introductory letters were obtained from the Department of Health, Physical Education and Recreation of the University of Cape Coast, which was presented to authorities of the three schools. This enabled the researcher to acquire approval from the selected schools

to conduct the study. It was imperative that respondents endorsed an informed consent form before they could participate in the study. The consent form contained information on the rights of the respondents which included the fact that they could withdraw from the study at any point or decide to leave questions which sought to infringe on their privacy unanswered. All information obtained from the participants was kept confidential. The names of respondents were also not associated with responses provided to ensure their anonymity.

Data Processing and Analysis

Data collected from the schools was computerized and processed using SPSS. Data collected from the field was screened thoroughly to remove missing data and also to make sure that they meet some statistical assumptions. Basic descriptive statistics such as percentage counts, frequencies, and means were used to present demographic information. Correlation was used for the purpose of investigating the relationships between health behaviour, self-esteem, and body image satisfaction. Regression analysis was also used to determine how body image satisfaction and self-esteem predicts health behaviour among adolescents in the senior high schools. The independent sample t-test was used to find out if there are any gender differences in body image, self-esteem and health behaviour of the students.

What is the body image perception of students in the senior high schools within the Offinso Municipality? The purpose of this research question was to find out the body image perception of students in the senior high schools within the Offinso Municipality. Basics descriptive statistics such as percentage counts,

frequencies, means and standard deviations were used to analyse the data for this question.

What is the relationship among body image, self-esteem and heath behaviour among students in the senior high schools within the Offinso Municipality? The purpose of this research question was to find relationship among body image, self-esteem and heath behaviour among students in the senior high schools within the Offinso Municipality. Data for this research question was analysed using the Pearson product moment correlation.

Are there any gender differences in body image, self-esteem and health behaviour among students in the senior high schools? The purpose of this research question was to determine whether or not there are any gender differences in body image, self-esteem and health behaviour among students in the senior high schools. The independent sample t-test was used to analyse data for this research question. The t-test assesses whether the means of two groups, or conditions, are statistically different from one other. They are reasonably powerful tests used on data that is parametric and normally distributed.

How does body image and self-esteem influence the health behaviour of students in the senior high schools? The purpose of this research question was to find out how body image and self-esteem influence the health behaviour of students in the senior high schools. Data for this research question was analysed using Logistic regression analysis.

What factors predict body image perception of students in the senior high schools in Offinso Municipality? The purpose of this research question was to

identify factors that affect body image concerns of students in the senior high schools in Offinso Municipality. Multiple regressions were used to analyse data for this research question.

Summary

A descriptive cross-sectional design was employed for this study. The population for this study encompassed all students (both boys and girls, N=5725) in the three public senior high schools in Offinso Municipality. Out of this, 561 students were sampled using the multistage sampling techniques for the study. Students sampled answered the Rosenberg self-esteem scale (RSE), Body shape questionnaire (BSQ) and Health Behaviour Questionnaire for Adolescents (HBQA). The data collection procedure took two weeks to be completed. SPSS was used to analysis the data.

CHAPTER FOUR

RESULTS AND DISCUSSION

The purpose of the study was to investigate body image, self-esteem and health behaviour and explore factors that influence body image perception among senior high school students in the Offinso Municipality of the Ashanti Region. The study addressed five research questions in determining the relationship between body image, self-esteem and health behaviour and factors influencing body image perception among senior high school students. This chapter presents the results and the discussion of the findings.

Initially, a total of 561 students were selected for the study but after administering the questionnaire, it was realized that 6 of the questionnaire was not completed properly and therefore were rejected. The analysis was done using a sample size of 555 students instead of 561 students indicating a response rate of 99%. 300 of the students were males representing 54.1% of the sample size while 255 of the students were females also representing 45.9% of the sample size.

Research Question One: What is the Body Image Perception of Students in the Senior High Schools within the Offinso Municipality?

The purpose of this research question was to find out the body image perception of students in the senior high schools within the Offinso Municipality. Basics descriptive statistics such as percentage counts, and frequencies, were used to analyse data for this question. The results showed that 10% (n=55) of the participants had serious body image concern, 40% (n=219) moderate concern, 25% (n=141) mild concern, and 25% (n=140) had no body image concern. The result is represented in Table 3.

Table 3: Frequency and percentage of body image perception of students

Level of Concern	*Frequency*	*Percentage*
No Concern	140	25.2
Mild Concern	141	25.4
Moderate Concern	219	39.5
Serious Concern	55	9.9
Total	**555**	**100**

Source: Field survey, 2019

The finding shows that approximately majority (75%) of senior high school students within the Offinso Municipality have body image concerns ranging from mild to serious concerns. This means that many students in the senior schools are not happy with their body image. To some extent, this finding supplements knowledge about the level of body image concern and dissatisfaction among adolescents in developing countries. With high body image concern and dissatisfaction, most of these students are more likely to have greater body image discrepancy and to engage in weight change behaviours. This concerns can lead to unhealthy preoccupations with body weight and eating behaviour; affecting self-esteem, health behaviour and general wellbeing (Asumadu-Sarkodie & Owusu, 2015). When preoccupations become serious, they can lead to significant health problems such as anorexia and bulimia nervosa (Thapa, 2016).

It is normal for students to be conscious of their body and want to look great and lead a healthy lifestyle. But when they focus too much on their bodies, it can lead to lots of anxiety and stress.

This finding is consistent with existing literature that the development of body image dissatisfaction is more pronounced during adolescence (Seo & Lee, 2013; Taylor et al, 1998) and majority (about 86%) of students who took part in this study were in the adolescence category. Furthermore, levels of body image dissatisfaction reach their peak during the adolescent period as a result of pubertal development (Seo & Lee, 2013; Striegel-Moore, & Franko, 2002). Again, according to Mission Australia (2011), body dissatisfaction is the top ranked issue of concern for young people. The possible reason for this consistency in existing literature is that adolescence is characterised by serious body image concerns. Other reasons could be that students want to appear better in front of their peers.

The finding also agrees with the findings of El Ansari, et al, (2014). They found out that about 66% of students reported having mild to marked body image concern (BIC). The finding of the study again supports a study conducted by Juli (2017), that among students aged between 10 and 15 years the concern for the body shape is already present. Student's body image (i.e., feelings and thoughts about their body and appearance) is central to their health and wellbeing.

According to the theories related to body image, the findings support the self-discrepancy theory which shows that greater discrepancy between the perceived current and the ideal body image predicts a high level of body image concern among students (Strauman et al., 1991). The result is also in line with Otakpor and Ehimigbai (2016) findings on body image perception (BIP) of secondary school adolescents where out of 600 respondents, 223, representing 37% were dissatisfied with their appearance.

The finding implies that body image concerns is no longer an issue for only advance countries, it is now increasing rapidly among the youth in Ghana and in many developing countries (Asumadu-Sarkodie & Owusu, 2015). Banat (2016) in her study found a high prevalence of body image dissatisfaction among senior high school students in the Cape Coast Metropolis. The pressure to fit into the ideal body image portrayed by the media could be attributed to this state of affair. The problem arises in the quest of the ideal body when students resort to unhealthy eating behaviours, dangerously excessive exercise, and destructive thought patterns (Krishen & Worthen, 2011). Technology is now more advanced in Ghana than it was 20 years ago and so students now, through social media, have access to many images of different body shapes and sizes from developed countries to compare their own with. This has culminated into high prevalence of body image concerns and dissatisfaction among the students.

Research Question Two: What is the Relationship between Body Image, Self-Esteem and Heath Behaviour among Students in the Senior High Schools within the Offinso Municipality?

The purpose of this research question was to find relationship between body image, self-esteem and heath behaviour among students in the Senior High Schools within the Offinso Municipality. Data for this research question was analysed using the Pearson product moment correlation ($\alpha = .05$). It was found that there was a moderate positive relationship between body image and self-esteem ($r=.587$). But a very weak negative relationship was found between body image and health behaviour ($r = -.002$). Moreover, there was a weak positive

relationship between self-esteem and health behaviour but the correlation was not statistically significant (r = .057). This is indicated in Table 4

Table 4: Correlations between Body Image, Self-Esteem and Health Behaviour

	Self Esteem	*Health Behaviour*	*Body Image*
Body Image	.587		
Self Esteem		.057	
Health Behaviour			-.002

P < 0.01, N = 555

The finding indicated a moderate positive relationship between body image and self-esteem. Body image develops and grows through human growth stages, and it is an essential component of the personality. Body image has some effects on students' self-esteem; this means that if students are satisfied with their body image, it will be reflected on their self- trust and self-esteem. This will in turn lead to success and good life. The possible reason for this finding is that, self-esteem and self-confidence of students is partly influenced by their physical appearance. Moreover, Latha et al. (2006) stated that body image is closely connected to a person's self-esteem. The finding is in agreement with previous literature (Furnham, 2005; Dohnt & Tiggemann, 2006; Abdulnabi, 2014) that body image is associated self-esteem.

Body image has been found to have some effect on people's emotions, feelings and self-worth and recognition (Nnaemeka & Solomon, 2014). Khalaf and Khalaf, (2006) and Ashram, (2008) found a positive correlation between body image and self-esteem, and low self-esteem was associated with low body image satisfaction. Similar finding was also found by Banat (2016) in a study conducted

on the topic "Body Image Perceptions of Senior High School Students in Cape Coast Metropolis". She found a moderate positive correlation between body image and self-esteem among the senior high school students. In another study it was observed that body image is inversely related with self-esteem based on negative correlation (Nnaemeka & Solomon, 2014). It appears that low self-esteem significantly correlated with distorted body image. In a study conducted in Iran, body image was found to correlate significantly with self-esteem but in a negative direction (Shahyad, Pakdaman, & Shokri, 2016).

The finding also revealed that the relationship between body image and health behaviour was a weak positive relationship. This implies that no relationship was found between body image and health behaviour and this is due to the fact that health behaviour is a multifactorial construct that depends on many factors other than body image. Although this finding did not meet the researchers' expectation of positive relationship between body image and health behaviour, it has been established in other studies that poor body image can have a negative effect on healthy lifestyle behaviours (Wilkosz et al., 2011).

Research suggests that people with positive body image shows respect for the body by attending to its needs, and thus engaging in health-promoting behaviours (Tylka, 2013). Moreover, another study found a moderate but statistically significant correlation between body image and healthy lifestyle behaviours including physical activity (Moustafa et al., 2018). Wright, (2012) also revealed that, there is a significant positive correlation between body image and healthy lifestyle profile. This means that as the scores for body image increase,

the frequency of performing healthy behaviours increases. A similar study found a significant though weak negative relationship between body image and mental health of the study subjects (Otakpor & Ehimigbai, 2016). All of these findings however differ from what the current study revealed among the students in Offinso Municipality.

Again, there was a very weak negative relationship between self-esteem and health behaviour among students in the senior high schools in Offinso municipality. This implies that self-esteem of students does not influence their health behaviours. This again, could be due to the fact that health behaviour is a multifactorial construct that depends on many factors other than self-esteem. A Norwegian study that suggested that there was no direct association between self-esteem and perceived health (Meland, Haugland, & Breidablik, 2007) appears to support the findings of the current study. Kalbok, (1985) also found no relationship between self-esteem and health behaviour.

On the other hand, the results of a study conducted by (Park et al. (2016) indicated that perceived health status, satisfaction with school life and peer relationships, academic grades, and household economic status were positively related to self-esteem. Another study argued that low self-esteem was negatively associated with very good/excellent health in Canadians (Shields & Shooshtari, 2001). Seigley, (1999) stated that, a reciprocal relationship have been established between self-esteem and health behaviour, but mechanism by which health behaviour is influenced by self-esteem is not clearly defined. Additionally, Lowery et al. (2005) found that self-esteem was positively related to health-

related behaviours in general among first year college students and that, the more positive their health-related behaviours, the higher their self-esteem and their body control.

Research Question Three: Are There any Gender Differences in Body Image, Self-Esteem and Health Behaviour among Students in the Senior High Schools in Offinso Municipality?

The purpose of this research question was to determine whether any gender differences exist in body image, self-esteem and health behaviour among students in the Senior High Schools. The independent sample t test was used to analyse data for this research question. Independent–sample t-test was calculated to determine whether there was any difference in body image, self-esteem and health behaviour among senior high school students in Offinso Municipality. Levene's Test for equality of variance showed no violations, p= .836 (Appendix C).

Table 5: Independent Sample t-test Showing Gender Differences in Body Image, Self-esteem and Health Behaviour among Students in Senior High Schools in Offinso Municipality

	Gender	*N*	*Mean*	*Std Deviation*	*t*	*df*	*sig*
Body Image	Male	300	34.6500	12.23300			
	Female	255	40.2392	13.45222	-5.124	554	.000
Self-Esteem	Male	300	19.8600	4.13328			
	Female	255	21.8980	4.54347	-5.530	554	.000
Health Behaviour	Male	300	38.0767	4.40554			
	Female	255	38.8392	4.16888	-2.083	554	.038

P< .05, N = 555

Result in Table 5 revealed that, there was a statistically significant difference in body image scores between males and females students (t (553) = -5.124, p = .000, eta = .43). Female students (*M* = 40.24, *SD* = 13.45) scored higher on body image scores than their male counterparts (*M* = 34.65, *SD* = 12.23,) in the senior high schools in Offinso Municipality. This means that males and female differ in terms of their body image scores.

This finding implies that female students have higher body image concerns than the male students. The result could be explained by the fact that females are always seeking for beauty and attractiveness of body, so they concentrate more on their body, and they are more likely to be influenced by others view and cultural norms of body and beauty (Hammons, 2014).

The finding agrees with that of Thapa (2016), who found that females were more vulnerable for body image dissatisfaction and eating disorder than their male counterparts. Generally, female adolescents are more dissatisfied with their bodies than males (Chen, Fox, Haase & Ku, 2010; Field et al., 2001) and this was well supported in this study. Furthermore, Griffiths et al. (2017) and Matthiasdottir, Jonsson and Kristjansson (2012) have all indicated that body dissatisfaction was more common in female subjects and increased with age in adolescents (Liu et al., 2019). The results of a study also indicated that females were unsatisfied with their body image compared to the males (Qaisy, 2016). A study conducted in Lebanon revealed that, females were satisfied with their image more than males [65% females compared to 52% males being satisfied] (Moustafa et al., 2018).

Contrary to this finding, a study conducted in Ghana by Amissah, Nyarko, Gyasi-gyamerah and Anto-winne, (2015) has revealed that males and females do not differ on their views of body image. Whether or not one has positive or negative body image dissatisfaction does not depend on whether one is a male or female as it is noted in other literature. Another study in Ghana also found no gender difference in body image concerns (Asumadu-Sarkodie, & Owusu, 2015).

Table 5 also indicated that there was a statistically significant difference among males and females on self-esteem scores (t (553) = -5.530, p = .000, eta = .47). Females students (*M* = 21.90, *SD* = 4.54) reported significantly higher levels of self-esteem scores than males students (*M* = 19.86, *SD* = 4.13). Female students scored 0.47 standard deviations higher on self-esteem than the male students. This finding indicates that female students have higher levels of self-esteem than their male counterparts.

Generally, males tend to have higher self-esteem than females do, and both genders show age graded increases in self-esteem from late adolescence to middle adulthood (Bleidorn et al., 2010). The possible reason for this outcome could be because of their exposure to educational facilities, latest changing trends and social media. Parents have taken advantage of the Free Senior High School Policy to ensure that their girl children also study under similar conditions as boys and this is likely to influence self-confidence and self-esteem. Research stipulated that, the period of adolescence is important for the process of self-esteem formation and that, the formation of self-esteem can be stimulated and encouraged both by parents and teachers (Mogonea, & Mogonea, 2014).

The level of self-esteem is mirrored in the adolescent's attitude and behaviour, both at home and at school (Mogonea, & Mogonea, 2014). This finding agrees with that of Bhamani, Jamil, and Mohsin (2014) who conducted a study on young adolescents in Pakistan. They reported that, female adolescents scored higher on the variable of self-esteem than the males and this reflects that in the sample of the study female adolescents have shown higher self-esteem than males.

Contrary to this finding, the results of a study conducted in Jordan indicated that females had low self-esteem compared to the males (Qaisy, 2016). The study suggested that females are more vulnerable than males to physical changes; this vulnerability turns into a greater level of body and weight dissatisfaction, which reflects low self-esteem. Another study done across 48 nations concluded that, men had higher levels of self-esteem than women and both genders showed age-graded increases from late adolescence to middle adulthood (Bleidorn et al., 2010). Moreover, Zareh (1994) studied self-esteem in high school students and found that significant difference exists between the self-esteem of males and females.

Results in Table 5 further revealed that there was a significant difference in health behaviour scores among male and female students (t (553) = -2.083, p = .038, eta = .18). Female students (*M* = 38.84, *SD*= 4.17) scored higher than males (*M* = 38.08, *SD* = 4.41). Female students obtained 0.18 standard deviations higher on health behaviour score than the male students. Therefore female students showed more positive health behaviour than their male counterparts. This means

that female students in the senior high schools engage in more positive health behaviours than their male counterparts. The possible reason for this outcome could be that, females are much more attentive as to issue about their health and wellbeing than males.

Furthermore, when it comes to health, women seem to be more engaged, more involved, more attentive and apparently better informed decision-makers (Ek, 2015). Male students engage in more risky health-related behaviours to show strength, fearlessness, and manliness (Dawson, Schneider, Fletcher & Bryden, 2007). At the same time, males perceive their health status as excellent because they tend to consider themselves invulnerable to a number of potential health threats (Dawson et al.). This finding agrees with Ek (2015) who conducted a study in Finland and concluded that women were more interested in health-related information, reported much more active seeking of health-related information, paid more attention to potential worldwide pandemics. Fox, (2011) confirmed that females were significantly more likely to use the Internet to search for health information than males.

Contrary to this finding, a study conducted in Ghana among undergraduate students of University of Ghana showed that males and females do not differ on body image, and eating behaviour, and psychological health (Amissah, Nyarko, Gyasi-gyamerah & Anto-winne, 2015). Another study on health seeking behaviour found that treatment seeking behaviour was different among men and women, although their demographic and socio-economic profiles were similar (Kaur et al., 2013). More women than men had started with home remedies at the

onset of symptoms. On the other hand, most men started treatment from qualified private service providers that has implications on timely diagnosis (Kaur et al.).

Research Question Four: How do Body Image and Self-Esteem Influence the Health Behaviour of Students in the Senior High Schools?

The purpose of this research question was to find out how body image and self-esteem could influence the health behaviour of students in the senior high schools. Binary logistic regression was conducted to find out how body image and self-esteem predict health behaviour among students in the senior high schools. Health behaviour was grouped into positive and negative behaviours. Preliminary correlation analysis was conducted to find out the level of the correlation between self-esteem and health behaviour, and body image ($\alpha = .05$).

The results in Table 6 revealed that the overall logistic regression model was not significant (-2LogL = 747.333, $\chi 2$ =, 2.075, p = .354) as Nagelkerke R Square (R^2) of .005 explains 0.5% of variance in health behaviour among students in the senior high schools. With this percentage contribution to the entire model, the result showed the whole model was statistically significantly. But individually, body image and self-esteem did not predict health behaviour among students. . The result shows that body image (OR = .996, 95% CI = .980 – I.012, p = .636) and self-esteem (OR =1.034, 95% CI = 986 – 1.084, p = .169) as predictors of health behaviour were not statistically significant. The results therefore meant that health behaviour of students in the senior high schools in Offinso Municipality is not dependent on their body image and self-esteem but a combination of other factors.

Table 6: Influence of body image and self-esteem on health behaviour

	B	*Wald*	*df*	*Sig.*	*OR*	*95% CI*
Self Esteem	.033	1.896	1	.169	1.034	.986 - 1.084
Body Image	-.004	.224	1	.636	.996	.980 - 1.012
Constant	-.932	4.982	1	.026	.394	

Source: Field survey, 2019

The finding indicated that, body image and self-esteem have very little influence on the health behaviour of students in the senior high schools in Offinso Municipality. Both body image (*OR*= .996) have lower odds ratio while self-esteem (*OR*= 1.034) have higher odds ratio. An odds ratio of more than 1 means that there is a higher odds of a positive health behaviour happening with exposure to self-esteem. Thus, Students' with higher self-esteem are about 1.03 times more likely to engage in positive health behaviours as compare to students with lower self-esteem.

The results implies that student's perception about their physical appearance and how they value themselves have very little effect on how they behave towards their health. The result may be this way because there are multifactorial dynamics that influence health behaviour. This implies that, a combination of many factors predicts the health behaviour of the students of which body image and self-esteem may not be part. The finding agrees with that of Moustafa et al. (2018) who concluded that the relation between body satisfaction and healthy lifestyle behaviours was not strong due to the fact that health behaviour is a multifactorial construct that depends on many factors other

than body image and self-esteem. Park et al. (2016) also found that, high-risk behaviours, such as drinking, smoking, and gambling were not significantly associated with self-esteem.

On the contrary, Firdevs and Sevil (2015) found that self-esteem and body image variables together have a significant impact on adolescents' subjective well-being. Lowery et al. (2005) also found that for both men and women, stronger beliefs in personal control over one's appearance were related to higher self-esteem and positive health behaviours. Again, a study conducted in the USA to find predictors of health behaviours in college students found that, self-efficacy was the most significant predictor of all health behaviours examined. This means that the higher the perceived self- efficacy, the less likely students were to drink, and the more likely they were to engage in the health-promoting behaviours (Von Ah, Ebert, Ngamvitroj, Park, & Kang, 2004).

Body image and self-esteem directly influence each other and the individual's feelings, thoughts, and behaviours (Gatti, Ionio, Traficante, & Confalonieri, 2014). If you do not like your physical appearance, it would be very difficult to feel good about your whole self and the reverse is true. And all these have some influence on how people behave towards their health. Moreover, social and demographical dimensions play an essential role in predicting health-related behaviours (Ulla Díez & Pérez-Fortis, 2010). Hence, policy makers must take into account predicting factors of behaviour, so that the future health promotion programmes can be more effective in improving population health.

Research Question Five: What Factors Predict Body Image Perception of Students in the Senior High Schools in Offinso Municipality?

The purpose of this research question was to identify factors that influence body image perception of students in the senior high schools in Offinso Municipality. The factors that influence body image perception of students were grouped into five in this study. These are media influence, family/parental influence, friends/peers influence, community/society influence and role model influence. A Multiple linear regression was conducted to predict body image perception among students in the senior high schools from the municipality. Prior to that, initial correlation analysis was conducted to find the level of correlation between the independent variables and the dependent variable ($\alpha = .05$).

The result showed low to moderate correlation between the variables such that body image correlated significantly with media influence ($r = .660$), family/parental influence ($r = .668$), friends/peers influence ($r = .666$), model influence ($r = .701$) and community/society influence ($r = .101$). Media influence significantly correlated with family influence ($r = .545$), friends/peers ($r = .608$) and model influence ($r = .530$) except community/society influence ($r = .055$) (Appendix C). Shapiro-Wilk Test for normality was also conducted and all variables were normally distributed (Appendix D). Meanwhile, the Tolerance and Variance Inflation Factor (VIF) values in the collinearity diagnosis indicated allowable levels of multicollinearity between the correlated independent variables. Meeting the assumptions, all the independent variables were included in the analysis. Results in Table 7 revealed that the overall multiple regression model was significant ($F (5, 549) = 326.57$, $p = .000$, $R^2 = .748$.) as R Square (R^2)

of .748 explains 75% of variance in body image among students in the senior high schools. With this percentage contribution to the entire model, the result showed that the whole model significantly predicted body image perception among students.

However, individually, Table 4 showed that the most reliable predictor of body image perception among students in the senior high schools is Family/Parental influence (β =.361, p =.000). Model influence (β =.321, p = .000), media influence (β = .182, p = .000,) and Friends/peers influence (β =.160, p = .000), were all statistically significant predictors of body image. Community/society influence did not significantly predict body image among students in the senior schools (β = .029, p = .179). The results therefore meant that the body image perception of students in the senior high schools in Offinso Municipality is dependent on family/parental influence, media influence, friends/peer influence and model influence.

Table 7: Regression Coefficient of Variables from the Regression Results that Explain Body image

Variables	*B*	*β*	*t*	*Sig*	*R*	R^2	*F*
Body image	**-12.578**		**-8.944**	**.000**	**.865**	**.748**	**326.57**
Family/Parental influence	5.680	.361	11.015	.000			
Friends/peer influence	2.452	.160	5.286	.000			
Community influence	.360	.029	1.346	.179			
Role model influence	5.329	.321	10.876	.000			
Media influence	3.145	.182	6.267	.000			

Source: Field survey, Yahaya (2019)

The finding of the multiple regressions indicated that family/parental influence as a factor predicted body image among senior high school students in the municipality. The finding meant that parental nurturance is important throughout the developmental process and appears to be an especially significant factor in the development of young adolescents (Maccoby, 2007). The possible reason is that, family environment have been found to be a significant influence when it comes to young people's body image; both explicit weight-related comments and implicit parental modelling may have adverse effects on adolescents (Neumark-Sztainer et al., 2010).

On the contrary, Rieke et al. (2016) found that, friends, family, and colleagues, significant others, social class, and household living arrangements have no significant impact on body image satisfaction. Again, Judith, (2018) in her study did not find any significant contribution of media towards body image perceptions. In another study, it was found that media exposure may not affect body image dissatisfaction immediately but it is a dumb process that causes individuals to dissatisfaction (Asumadu-Sarkodie & Owusu, 2015).

This finding is consistent with previous research findings of (Alessandro & Chitty, 2011; Curtis & Loomans, 2014; Hardit & Hannum, 2012; Kichler & Crowther, 2009; Neumark-Sztainer et al., 2010) that family significantly influences body image of young people. This finding was suggested by Curtis and Loomans (2014) that families play considerable roles, and often unrecognised, influence on the body image of their young ones. This means that family comment on student's appearance more often than any other and all these have

several influences on their body image perception. Mothers in particular seemed to have an effect on how their daughters perceived their bodies. Hearing their mothers passing positive or negative comments about their own bodies caused the daughters to reflect on themselves (Curtis & Loomans). Undesirable communication regarding body image from family members, including critical comments, teasing, and encouragement to diet, have been associated with the development of BID and eating disorder symptomatology (Hardit & Hannum, 2012; Kichler & Crowther, 2009). Kluck, (2010) discussed that, a family who has a general tendency towards focusing on appearance and attractiveness can, in turn, cause their members to become focused on and concerned about their weight. Consequently, any intervention geared towards developing a healthy body image among students in the senior high schools should involve the family/parents.

Similarly, role model as factor was found to be a dependable predictor of body image among students in the senior high schools. This means that models do influence the body image perceptions of students in Offinso municipality. This implies that students copy from models, musicians and celebrities and would want to internalize the type of bodies they have. The possible reason is that students have been exposed to a lot of these figures in the social media through their phones and the power of social media nowadays is very pronounced and cannot be underestimated. This finding agrees with Green and Mccutcheon (2014) who stated that a strong attachment to celebrities, might lead to some appearance concerns. Shorter, Brown, Quinton and Hinton (2008) also found that one's

favourite celebrities influence his/her body image by serving as unrealistic targets of social comparison. Moreover, Ho, Lee, and Liao (2016) stipulated that, celebrity involvement on social network sites was positively associated with body image dissatisfaction.

Media influence was also found to be a predictor of body image among students in the Offinso Municipality. This means that media information, images of fashion and advertisements, have a number of silent influences on adolescents' body image perception (Cattarin et al., 2000). The finding also implies that advertisements, beauty contests, fashion shows, magazines, newspapers, music lyrics or videos, movies, T.V., have significant influence on how adolescents perceive their body. The possible reason is that, pictures in magazines and articles on weight control along with dieting techniques directly impact the body shape beliefs of these students. The media has gradually become a platform that reinforces cultural beliefs and projects strong views on how we should look, that we as individuals often unknowingly or knowingly validate and perpetuate.

The role of mass media related to body dissatisfaction begins with young students reading fashion magazines, movies, T.V., music videos at school and try to internalize the ideal body (Brown, 2017). The media consistently delivers the message that thin body is good and acceptable but large body shape is bad and unacceptable (Asumadu-Sarkodie & Owusu, 2015). Computer technology enables the media to adjust pictures to make them look perfect but these pictures are unrealistic. Additionally, media consumption has been consistently associated with body dissatisfaction and eating disorders (Spettigue & Henderson 2004)

Friends/Peers influence was found to be the subsequent predictor of body image among senior high school students in the Offinso Municipality. This revelation means that students worry about what their peers' think of them and how they may be treated at school tend to have negative perceptions of themselves (Ata, Ludden & Lally 2006; Clark & Tiggemann 2006). The possible reason for this finding is that, friends play an important role in one's life and most people would want to go with what is approved by their peers (Judith, 2018). Friendships are particularly important in body image development because we place high value on them, spend lots of time with our friends and develop shared experiences, values and beliefs.

Research suggests that children and adolescents learn from their families and friends that they should be thin and that being overweight is unappealing (Dohnt & Tiggemann, 2006; Phares, Steinberg & Thompson, 2004). Friends promote the thin ideal through teasing, negative comments, and modelling of weight concerns (Curtis & Loomans, 2014). Moreover, messages from peers about the 'ideal' body, whether implicit or explicit, have severe impact on body image of students in the senior high schools.

However, community/society influence was not found to be a significant predictor of body image among the students. This means that the community through its tradition, customs and values does not exert any influence on the body image of student in the senior high schools in Offinso Municipality. The possible reason for this difference could be the population characteristics. This could be as a result of the Computer School Selection and Placement System (CSSPS) which

allows students from all over the country to be placed in senior high schools in Offinso Municipality. Students come from different regions with different cultures, custom, believes and values.

Contrary to this finding, society shapes us in many ways, possibly more than we realise from our interactions with each other to our personal development through to others' perception of our bodies as a reflection of self-worth (Cash, 2005). How society perceives our bodies affects us on many levels. Society gives us a number of reference points that shape our perceptions whether positive or negative.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study investigated body image, self-esteem and health behaviour and explored factors affecting body image perception among senior high school students in the Offinso Municipality of the Ashanti Region. This chapter summarizes the research process and major findings of the study. In addition, conclusions are drawn based on the findings. Recommendations are also made for policy and practice as well as for further research.

Summary

Body image is an important factor in self-esteem for women, men, adolescents and children. Body image is a subjective picture of one's own physical appearance established both by self-observation and by noting the reactions of others (Firdevs & Sevil, 2015). It affects how you feel about yourself, your appearance and your health. The contemporary world admires the perfect body. The pressure to fit into the ideal body image portrayed by the media can create problems for the youth. The problem arises in the quest of the ideal body when students resort to unhealthy eating behaviours, dangerously excessive exercise, and destructive thought patterns (Krishen & Worthen, 2011). Five research questions were raised to help address the objective of the study. Literature was reviewed based on the objective of the study. A descriptive cross-sectional design was employed for this study. The population for this study encompassed all students (boys and girls, N=5725) in the three senior high schools in the Offinso Municipality namely Dwamena Akenten SHS (2250

Students), Namong Secondary Technical SHS (1855 Students) and ST Jerome SHS (1620 Students). Out of this, 561 students were sampled using the multistage sampling technique for the study. Students sampled answered the Rosenberg Self-Esteem Scale (RSE), Body Shape Questionnaire (BSQ) and Health Behaviour Questionnaire for Adolescents (HBQA).

Data collected from the schools was analysed using SPSS. Data collected from the field was screened thoroughly to remove missing data and to make sure that they meet some statistical assumptions. Basic descriptive statistics such as percentage counts, frequencies, and means were used to present demographic information. Pearson Correlation was used for investigating the relationships between health behaviour, self-esteem, and body image satisfaction. Regression analysis was also used to determine how body image and self-esteem predict health behaviour among adolescents in the Senior High Schools. Moreover, independent t-test was used to determine gender difference in body image, self-esteem and health behaviour among students in the senior high schools.

Main Findings

The following findings were derived from the study:

1. Majority of the students have body image concern ranging from mild concern to serious concern.
2. There was a moderate positive relationship between body image and self-esteem and a weak positive relationship between body image and health behaviour among students. There was a very weak negative relationship between self-esteem and health behaviour.

3. Gender differences were found in body image, self-esteem and health behaviour scores among the students. Female students had higher scores on body image, self-esteem and health behaviour than their male counterparts.
4. Body image and self-esteem did not individually predict health behaviour among the students.
5. The strongest and most reliable predictors of body image among students were family/parental, role model, media and friends/peer influence.

Conclusions

The following conclusions were drawn based on the findings:

1. Students with body image can lead to body dissatisfaction and are more likely to have a greater body image discrepancy and low self-esteem.
2. Body image has some effect on people's emotions, feelings and self-worth and thus it influences self-esteem.
3. Female students are more likely to use unhealthy means to alter their body than their male counterparts. Male students are more likely to engage in negative health behaviours than their female counterparts
4. Body image and self-esteem does not directly affect health behaviour among senior high school students in Offinso Municipality.
5. Comments by family members on physical appearance could easily affect the body image perception of their young ones.

Recommendations

The following recommendations were made based on the findings arrived at, and conclusions drawn:

1. There is the need for the teachers in the senior high schools to teach body image and self-esteem to help improve the body image perception of students.
2. The Municipal Education Directorate should organise school-based preventive educational intervention for students who have body image concerns to reduce the risks of developing body image dissatisfaction and to improve their self-esteem
3. School counsellors need to assist students to achieve a realistic and positive perception of their body.
4. Health education interventions in the schools should be geared towards student's body image and self-esteem especially among the girls.
5. There is the need for School health coordinators to encourage healthy lifestyle especially among male students.
6. Family of students should be involved in all body image and self-esteem interventions to improve student body image and self-esteem. Since the family has been found to play a significant role in body image and self-esteem development.

Recommendations for Further Studies

The following could be explored by researchers in the field:

1. Further studies are required to understand factors that influence health behaviour and how body image influences self-esteem in diverse populations in the Ghanaian context.
2. Future studies should also employ the qualitative approach to fully understand individual views about their body image, self-esteem and health behaviour in Ghana.
3. Further studies are also required to validate the current results and their potential explanations in Ashanti Region and other parts of Ghana.

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APPENDICES

APPENDIX A: INFORMED CONSENT

UNIVERSITY OF CAPE COAST

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION

QUESTIONNAIRE FOR STUDENTS

Dear Student,

I am Yahaya, Rilwan an MPhil student from the above-mentioned department and conducting a research titled' 'Relationship between Body Image, Self-Esteem and Health Behaviour among Senior High School Students in Offinso Municipality''. The purpose of the study is to investigate the relationship between body image, self-esteem and health behaviour of Senior High School students within the Offinso municipality. The findings will serve as a guide for students in the senior high schools within the Offinso municipality to appreciate their body image, enhance their self-esteem and heath behaviour.

Thank you for availing yourself for this exercise, this is NOT an examination so feel free and treat it as such. All the questions are about your, body image, self-esteem and heath behaviour and school experiences related to these psychological constructs. It is not a test, please be sincere when choosing answers. Read instructions carefully before choosing any options. Kindly ask for explanation from the research assistant who is helping you do this exercise, of anything that you do not understand. No part of your answers would be shown or made known to any third party. Now, kindly respond to these questions. Submit all completed questionnaires to the research assistant.

For further information contact the Researcher; Rilwan Yahaya (Tel. 0544802122 / 0266739970), Email; ridcom@yahoo.com

Principal Supervisor, Dr. Daniel Apaak (Tel. 0208587866)

Co supervisor Dr. Thomas Hormenu (Tel. 0244213465)

Statement of Consent: I have read the above information and have received answers to any questions I asked. I consent to take part in the study.

Your Signature _____Date _____

APPENDIX B: QUESTIONNAIRE

Section A: Socio-Demographic Characteristics

1) Sex: Male [ ] Female [ ]

2) Age: _____

a) 9-12 years [ ] b) 13-16 years [ ]

c) 17-20 years [ ] d) Above 21 years [ ]

3) Weight: (kg) _____ Height: (m) _____

Body Shape Questionnaire

We would like to know how you have been feeling about your appearance over the PAST FOUR WEEKS. Please read each question and circle the appropriate number option. Please answer all the questions. Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

1. Have you been so worried about your shape that you have been feeling you ought to be on adiet?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

2. Have you been afraid that you might become fat (or fatter)?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

3. Has feeling full (e.g. after eating a large meal) made you feel fat?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

4. Have you noticed the shape of other people and felt that your own shape compared unfavourably?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

5. Has thinking about your shape interfered with your ability to concentrate (e.g. while watching television, reading, listening to conversations)?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

6. Has being naked, such as when taking a bath, made you feel fat?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

7. Have you imagined cutting off fleshy areas of your body?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

8. Have you not gone out to social occasions (e.g. parties) because you have felt bad about your shape?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

9. Have you felt excessively large and rounded?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

10. Have you thought that you are in the shape you are because you lack self-control?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

11. Have you worried about other people seeing rolls of fat around your waist or stomach?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

12. When in company have your worried about taking up too much room (e.g. sitting on a sofa, or a bus seat)?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

13. Has seeing your reflection (e.g. in a mirror or shop window) made you feel bad about your shape?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

14. Have you pinched areas of your body to see how much fat there is?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

15. Have you avoided situations where people could see your body (e.g. communal changing rooms or swimming baths)?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

16. Have you been particularly self-conscious about your shape when in the company of other people?

Never (1) Rarely (2) Sometimes (3) Often (4) Very often (5) Always (6)

Section B: Rosenberg Self Esteem Scale

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.

   Strongly Agree [1] Agree [2] Disagree [3] Strongly Disagree [4]

2. At times I think I am no good at all.

   Strongly Agree [4] Agree [3] Disagree[2] Strongly Disagree[1]

3. I feel that I have a number of good qualities.

   Strongly Agree [1] Agree [2] Disagree[3] Strongly Disagree[4]

4. I am able to do things as well as most other people.

   Strongly Agree [1] Agree [2] Disagree [3] Strongly Disagree [4]

5. I feel I do not have much to be proud of.

   Strongly Agree [4] Agree [3] Disagree[2] Strongly Disagree[1]

6. I certainly feel useless at times.

   Strongly Agree [4] Agree[3] Disagree[2] Strongly Disagree[1]

7. I feel that I'm a person of worth, at least on an equal plane with others.

   Strongly Agree [1] Agree [2] Disagree [3] Strongly Disagree [4]

8. I wish I could have more respect for myself.

   Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]

9. All in all, I am inclined to feel that I am a failure.

   Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]

10. I take a positive attitude toward myself.

    Strongly Agree [1] Agree [2] Disagree [3] Strongly Disagree [4]

Section C: Health Behaviour Questionnaire for Adolescence

Indicate whether you Strongly Disagree (SD), Disagree (D), Agree (A), or Strongly Agree (SA) to the statements by ticking (√) in the corresponding box

1. I feel am in a very good condition and shape.

   Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]

2. I feel like I have plenty of energy.

   Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]

3. I know that my weight is right about what it should be.

   Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]

4. I am able to play active games and sports without getting tired too quickly.

   Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]

5. I get better quickly whenever I am sick.

   Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]

6. I am able to keep myself healthy even if it takes some extra effort.
   Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]
7. I know that I am in excellent health.
   Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]
8. I have good health habits about eating and exercise.
   Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]
9. I eat fruits every day.
   Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]
10. I make a conscious effort to avoid eating foods that contain fat and cholesterol.
    Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]
11. I make a conscious effort to eat foods that are high in fibre.
    Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]
12. I am trying all means to lose weight.
    Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]
13. I consider myself to be underweight.
    Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]
14. I consider myself to be overweight.
    Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]
15. I have been exercising over the past 2 weeks (14 days) (eg sport, physically active pastime)

Strongly Agree [4] Agree [3] Disagree [2] Strongly Disagree [1]

Section D: Determinants of Body Image Perception

Indicate whether you Strongly Disagree (SD), Disagree (D), Agree (A), or Strongly Agree (SA) to the statements by ticking (√) in the corresponding box

Statement	**SD 1**	**D 2**	**A 3**	**SA 4**
1. Images portrayed in television/magazines put pressure on me to lose/increase my weight.				
2. My friends make fun of my body shape and size				
3. I feel pressure from my family because of my body shape and size				
4. In my community, people find my body shape and size attractive.				
5. In my community/society, people are regarded base on how attractive their bodies are.				

APPENDIX C: RESULTS OF CORRELATION ANALYSIS

	BODYIMAGE	FAMILY/PARENTAL INFLUENCE	FRIENDS/PEER INFLUENCE	COMMUNITY/SOCIETY INFLUENCE	ROLE MODEL INFLUENCE	MEDIA INFLUENCE
BODYIMAGE	1	.676**	.666**	.101*	.701**	.660**
		.000	.000	.018	.000	.000
	555	555	555	555	555	555
FAMILY/PARENTAL INFLUENCE	.776**	1	.623**	.105*	.655**	.556**
	.000		.000	.014	.000	.000
	555	555	555	555	555	555
FRIENDS/PEER INFLUENCE	.666**	.623**	1	-.010	.522**	.608**
	.000	.000		.807	.000	.000
	555	555	555	555	555	555
COMMUNITY/SOCIETY INFLUENCE	.101*	.105*	-.010	1	.075	.055
	.018	.014	.807		.078	.193
	555	555	555	555	555	555
ROLE MODEL INFLUENCE	.740**	.655**	.522**	.075	1	.530**
	.000	.000	.000	.078		.000
	555	555	555	555	555	555
MEDIA INFLUENCE	.660**	.556**	.608**	.055	.530**	1
	.000	.000	.000	.193	.000	
	555	555	555	555	555	555

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

*. Correlation is significant at the 0.05 level (2-tailed).

APPENDIX D: NORMALITY TEST RESULTS

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Bodyimage	.182	555	.000	.920	555	.000
Friends/Peer Influence	.199	555	.000	.846	555	.000
Family/Parental Influence	.233	555	.000	.805	555	.000
Role Model Influence	.223	555	.000	.840	555	.000
Media Influence	.247	555	.000	.837	555	.000
Community/Society Influence	.211	555	.000	.867	555	.000

a. Lilliefors Significance Correction

APPENDIX E INTRODUCTORY LETTERS

UNIVERSITY OF CAPE COAST
CAPE COAST, GHANA
COLLEGE OF EDUCATION STUDIES
FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF HEALTH, PHYSICAL EDUCATION & RECREATION

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TELEX: 2552, UCC, GH.
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Cables & Telegrams: UNIVERSITY, CAPE COAST

Our Ref: ED/MHE/16/0002/

25th January, 2019

The Chairman
Institutional Review Board
University of Cape Coast
Cape Coast

INTRODUCTORY LETTER:
MR. RILWAN YAHAYA (ED/MHE/16/0002)

The bearer, Mr. Rilwan Yahaya, is an MPhil student from the Department of Health, Physical Education and Recreation. He is conducting research for his thesis titled **"Relationship between Body Image, Self-Esteem and Health Behaviour among Senior High School Students in the Offinso Municipality"** as part of the requirements for obtaining a Master of Philosophy degree in Health Education. He has satisfied the conditions for data collection and we kindly request that he is granted ethical clearance to enable him conduct the research.

We count on your usual co-operation.

Thank you.

Yours faithfully,

Dr. Daniel Apaak
(Head of Department)
Tel.: +233 (0)208587866
Email: daniel.apaak@ucc.edu.gh

:

UNIVERSITY OF CAPE COAST

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Our Ref: ED/MHE/16/0002

Cables & Telegrams:
UNIVERSITY, CAPE COAST

4th February, 2019

TO WHOM IT MAY CONCERN

COVER LETTER: MR RILWAN YAHAYA

It is my pleasure to recommend Mr Rilwan Yahaya for ethical clearance from your office. He is an Mphil Health Education student of the above department and conducting a study into the topic; **Relationship between body image, self-esteem and health behaviour among Senior High School Students in the Offinso Municipality**. This study envisions to explore the extent to which body image as perceived by SHS students influence their health behaviour in Ghana.

I think Mr Rilwan Yahaya has the intellectual prowess to conduct this research and need your swift assistance as he has successfully defended his proposal. As one of his principal supervisor, I think we have observed all the necessary ethical considerations for the study.

For any further information, please do not hesitate to contact me.

Your faithfully,

Dr. Thomas Hormenu
thormenu@ucc.edu.gh

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309/ 0244207814
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C/O Directorate of Research, Innovation and Consultancy

OUR REF: UCC/IRB/A/2016/366
YOUR REF:
OMB NO: 0990-0279
IORG #: IORG0009096

25TH APRIL, 2019

Mr. Rilwan Yahaya
Department of Health, Physical Education & Recreation
University of Cape Coast

Dear Mr. Yahaya,

ETHICAL CLEARANCE – ID: (UCCIRB/CES/2019/08)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted **Provisional Approval** for the implementation of your research protocol titled **Relationship between body mass, self-esteem and health behaviour among senior high school students in Offinso Municipality**. This approval requires that you submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

Please note that any modification of the project must be submitted to the UCCIRB for review and approval before its implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Samuel Asiedu Owusu, PhD
UCCIRB Administrator

ADMINISTRATOR
ITUTIONAL REVIEW BOARD
NIVERSITY OF CAPE COAST
Date 30/04/19