

Master of Science in Public Health



*Association of perceived body image and self-esteem among undergraduate nursing students of Rawalpindi and Islamabad*

By

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(2022-2023)**

*(Association of perceived body image and self-esteem among undergraduate nursing students of Rawalpindi and Islamabad)*

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**(MSPH-IRB/14-01)**

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This dissertation is the result of an independent investigation. Where my work is indebted to others, I have made acknowledgments.

I declare that this work has not been accepted in substance for any other degree, nor is it currently being submitted in candidature for any other degree.

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## ABSTRACT

**Background:** The nurse-patient ratio in Pakistan is 1:40, which is much higher than the global average of 1.5. This contributes to low self-esteem among undergraduate nursing students, but there is limited research on the topic. Most existing research on body image focuses on its negative aspects, but positive body image (PBI), defined as complete acceptance of one's body, is an important component that should also be studied. Self-esteem is a personality trait that is linked to emotional and mental well-being.

**Objectives:** 1. To find out perceived body image among undergraduate nursing students of Rawalpindi and Islamabad. 2. To assess self-esteem among undergraduate nursing students of Rawalpindi and Islamabad. 3. To determine the association of perceived self-image body and self-esteem among undergraduate nursing students of Rawalpindi and Islamabad.

**Methodology:** A cross-sectional study design was carried out. A simple random sampling technique was used to collect data from 400 undergraduate nursing students from different colleges in Rawalpindi and Islamabad. The data were collected through a questionnaire, which was divided into four sections. The section contains a consent form as well as demographic questions for respondents. "Rosenberg's (1996) Self-Esteem Scale, a 10-item Likert Scale, and the Body Shape Questionnaire (BSQ)—14 Modified Version" (Cooper, Taylor, Cooper, & Fairburn, 1987). The collected data were analyzed in SPSS 26 using demographic analysis, response frequency distribution, P-tests, and Chi-square tests.

**Results:** In total, 121 (30.3%) of the respondents were male, while 279 (69.8%) were female. There is no relationship between sociodemographic and nursing students' perceived body image ( $P$ -value  $> 0.05$ ), but on the Rosenberg self-esteem scale, we have a relationship between family (Nuclear family)  $P$ -value results of 0.0336, less than 0.05, and institute (Public)  $P$ -value results of 0.047, less than 0.05.

**Conclusion:** The study found that there was a significant association between family and perceived body image, as measured by the Rosenberg self-esteem scale. However, no significant associations were found for other sociodemographic variables. Based on these findings, it is recommended to focus on improving the family and institutional environment to provide better support for nursing students.

**Keywords:** Body image, Self-esteem, Nursing students, Rawalpindi, Islamabad.

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## **CHAPTER I: INTRODUCTION:**

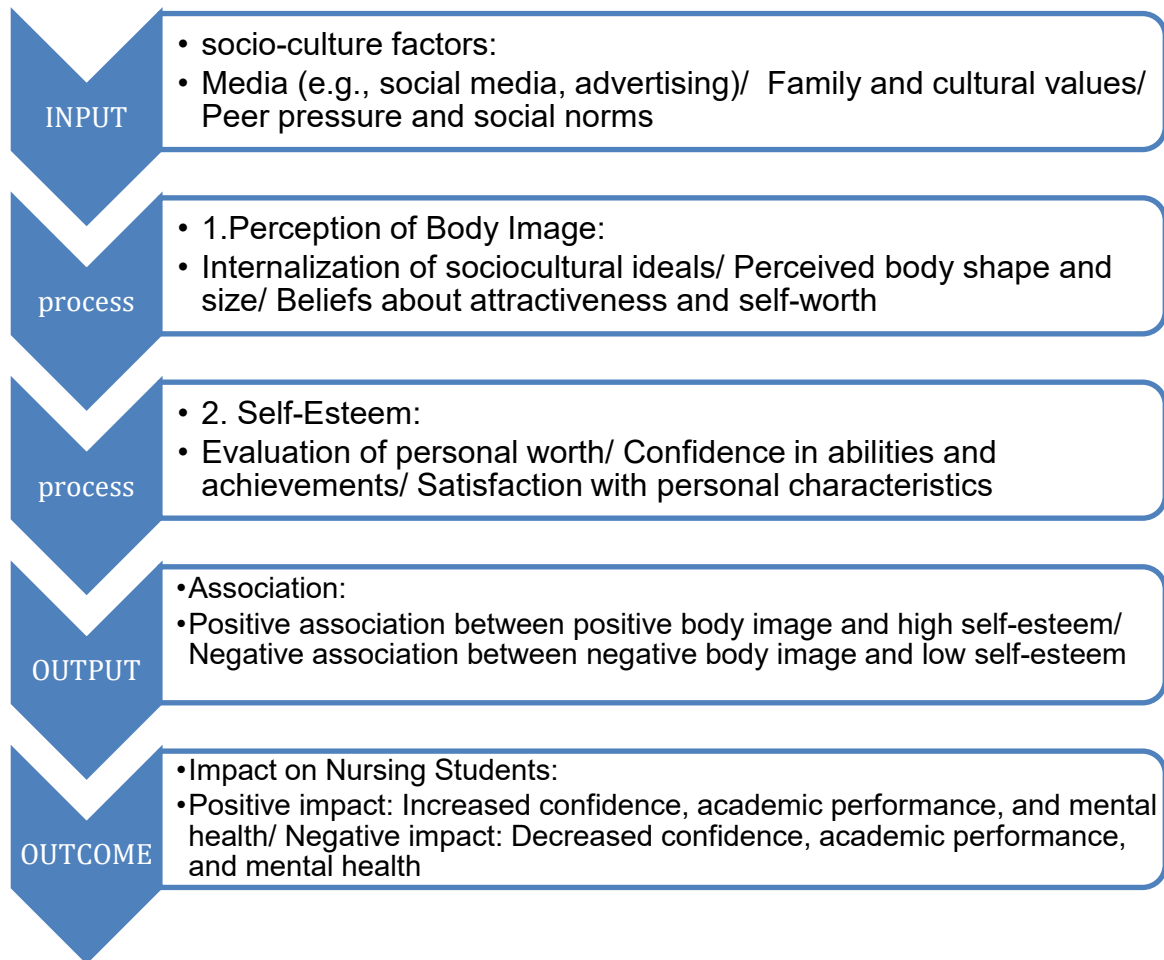
Perceived body image and self-esteem are widely recognized as significant concerns among adolescent girls, as indicated in existing literature (Croll, 2005; Marcotte et al., 2002; Women's Health, 2007). This chapter aims to explore the relationship between self-esteem and body image, while focusing on four areas of adolescence that influence their development. The first area discussed is the impact of physical and emotional development on self-esteem and body image. Both body image and self-esteem play crucial roles in healthy development from childhood to adulthood. Self-esteem can be defined as an individual's overall sense of self-worth or the positive feelings they have about themselves (Rosenberg, 1965). It is a component of self-concept, which encompasses an individual's beliefs and knowledge about their personal attributes (Mann et al., 2004), along with other constructs such as self-efficacy, internal locus of control, and self-compassion (Bolger & Patterson, 2001; Lamoreaux et al., 2012; Neff, 2003). These constructs, when combined, contribute to healthy functioning and resilience in the face of life stressors. However, some researchers have raised questions about the role of self-esteem in development, arguing that it is influenced by external factors and can be volatile (Baumeister et al., 2003; Neff & Vonk, 2009). To address these concerns, it is important to distinguish between fragile and true self-esteem (Deci & Ryan, 1995; Kernis, 2003). True self-esteem, characterized by stability and intrinsic motivation, is not dependent on external sources for self-worth. It is this kind of self-esteem that promotes healthy development and functioning. Self-esteem has a profound impact on emotional, physical, and spiritual self-care. It is closely intertwined with body image, where a healthy body image reflects comfort and proper care of one's body. Conversely, individuals who dislike their bodies may experience lower self-esteem and neglect self-care, leading to adverse consequences such as insufficient sleep, social withdrawal, and decreased enjoyment in activities. Cultivating a positive environment, where friends and family are supportive and accepting of each other's appearance, is vital for fostering healthy self-esteem and body image.

According to (Rosenberg (1965a), self-esteem is one's positive or negative attitude toward oneself and one's evaluation of one's own thoughts and feelings overall in relation to oneself. Self-esteem is regarded as a personal psychological characteristic relating to self-judgment based on one's values about humans (Alesi et al., 2012). Self-esteem implies an awareness of one's value system and one's emotional evaluation of one's self-worth (Schunk, 1985). High self-esteem indicates a high level of social adjustment (Martin et al., 2014). An individual with high self-esteem and an individual with low self-esteem may respond similarly to positive input, but they could exhibit different responses to negative input. Specifically, people with low self-esteem tend to exhibit negative responses, while those with high self-esteem tend to be less affected, as they are inclined to reject or restrict the scope of negative feedback (Brown and Mankowski, 1993). Because self-esteem affects an individual's success in social adaptation, reduced self-esteem can eventually lead to social maladjustment. The relationship between low self-esteem and social adjustment could create a vicious cycle that negatively affects the overall quality of life (Konrad et al., 2012). In addition, self-esteem is a critical factor in personal well-being because an individual's self-esteem has a positive relationship with their psychological health, social adjustment, and quality of life (Boyd et al., 2014). Self-esteem has also been reported to have a significant association with body image and has been used as a criterion to confirm the validity of other measures (Alesi and Pepi, 2016). As such, self-esteem is important on both personal and social axes in a social environment in which people live alongside others. In order to conceptualize body image avoidance behaviors, a previous study investigated the relationship between self-esteem, self-compassion, and appearance contingent self-worth in a previous study. The association between self-esteem and body image avoidance behaviors were shown to be partially mediated by self-compassion and appearance contingent self-worth. Youngsters use the internet to gain access to various internet-based media such as social media (among which social networking sites. Our findings show how idealized social media models shape youngsters body attitudes, particularly skinny girls for female and heavily muscled models for male (Hendrickse et al.,2017). Nevertheless, the effects of social media pressure on male's body image issues need to be examined further in both samples of hospital groups. Females, at any age, may suffer from body

dissatisfaction, which can be a major source of pain. Self-perception and self-love are one aspect that has the capability to minimize body dissatisfaction while also promoting a good body image and mental well-being (Aparicio-Martinez et al., 2020).

The term "self-esteem" (self-concept) comes from a Greek word meaning "reverence for oneself." The "self" part of self-esteem pertains to the values, beliefs, and attitudes that we hold about ourselves. Simply put, self-esteem is the acceptance of oneself for who and what one is at any given time in one's life. Self-esteem is a positive or negative orientation towards oneself, an overall evaluation of one's worth or value. Self-esteem is a widely used concept both in popular language and in psychology. (Preeti Sharma, 2021).

## 1.1. CONCEPTUAL FRAMEWORK:



## 1.2. OBJECTIVES/RESEARCH QUESTIONS:

1. To find out perceived body image among undergraduate nursing students of Rawalpindi and Islamabad.
2. To assess self-esteem among undergraduate nursing students of Rawalpindi and Islamabad.
3. To determine the association of perceived self-image body and self-esteem among undergraduate nursing students of Rawalpindi and Islamabad.

## **CHAPTER: 2. LITERATURE REVIEW:**

The concept of "self-esteem" is a well-recognized term that applies to people of all ages and is associated with a sense of worth and value. People who have high self-esteem have a positive perspective of themselves and their talents, whereas those who have low self-esteem may experience insecurity and self-doubt. Self-esteem is a dynamic construct that can change over time and can be influenced by a variety of factors such as family, culture, and personal experiences. "Who am I?," "What is my worth?," "What is my identity?," and "What do I want to achieve?"(Arosen, E., Open Textbook, 1<sup>st</sup> H5P Edition, 1992).

Self-esteem is the overall evaluation of oneself, based on a cognitive process of assessing one's abilities, values, knowledge, and overall capacity. It plays a significant role in an individual's sense of identity, as it defines them as a unique person. Positive self-esteem is characterized by confidence, self-direction, personal strength, optimism, problem-solving ability, and emotional regulation, among other signs. These indicators contribute to greater resilience and better mental health outcomes. It is important to note that self-esteem is not fixed and can change over time due to internal and external factors (Coles, R.,1970).

Self-esteem influences the link between stress and negative feelings about one's body (Murrey et al., 2013), as well as the link between poor body image and disordered eating behavior (Brechan & Kvalem, 2015). Furthermore, self-esteem mitigates the negative effects of bulimic symptomatology as well as the negative effects of internalization on body dissatisfaction (Brannan & Petrie, 2011), The purpose of this study was to investigated and discussed the relationship between perceived body image and self-esteem among Twin Cities undergraduate nursing students. The study's findings will have an impact on parents, educators, and counsellors, as well as the development of programs to help pre-adolescents and adolescents be healthy and successful. According to recent research, 68% of undergraduate nursing students have a positive body image and self-esteem (Goswami, S., Sachdeva, S., & Sachdeva, R., 2012). The age groups in this study are extremely diverse because the study's target population is undergraduate nursing students. As a result, the findings of this study will aid in the development of an intervention for a large population.

If effective interventions for different age groups are to be developed, a better understanding of how these variables interact with one another is required. It is critical to investigate self-esteem and perceived body image. Self-esteem has a significant influence on people's choices and decisions. In other words, self-esteem motivates people by determining whether they will take care of themselves and reach their full potential. People who have high self-esteem are motivated to look after themselves and work hard to achieve their personal goals and ambitions. People with low self-esteem do not believe they are deserving of or capable of achieving joyful outcomes. As a result, they are more likely to neglect important tasks and to be less tenacious and resilient. They may have the same goals as people with higher self-esteem, but they are less motivated to see them through. Self-esteem is similar, with the exception that you love, care for, and are proud of yourself, Henderson, D. A., & Milstein, J. B. (1996)

Self-esteem is how we value and perceive ourselves. It's based on our opinions and beliefs about ourselves, which can feel difficult to change. We might also think of this as self-confidence. Your self-esteem can affect whether you: Like and value yourself as a person. There are 4 components that define the esteem you might feel for yourself: self-confidence, identity, feeling of belonging, and feeling of competence. Self-esteem refers to self-judgments of personal worth and global feelings of competence and self-acceptance. Recently, Guindon, M. H. (2002), integrated the several definitions of self-esteem and defined it as "the attitudinal, evaluative component of the self; the affective judgements placed on the self-concept consisting of feelings of worth and acceptance, which are developed and maintained as a consequence of awareness of competence, sense of achievement, and feedback from the external world."

## **2.1. LIFE SPAN ON SELF-ESTEEM(DEVELOPMENT):**

After decades of debate, a consensus is emerging about the way self-esteem develops across the lifespan. On average, self-esteem is relatively high in childhood, drops during adolescence (particularly for girls), rises gradually throughout adulthood, and then declines sharply in old age Robins, R. W., & Trzesniewski, K. H. (2005). Despite these general age

differences, individuals tend to maintain their ordering relative to one another: Individuals who have relatively high self-esteem at one point in time tend to have relatively high self-esteem years later. This type of stability (i.e., rank-order stability) is somewhat lower during childhood and old age than during adulthood, but the overall level of stability is comparable to that found for other personality characteristics. Directions for further research include (a) replication of the basic trajectory using more sophisticated longitudinal designs, (b) identification of the mediating mechanisms underlying self-esteem change, (c) the development of an integrative theoretical model of the life-course trajectory of self-esteem (Robins, R.W,2005).

Banappagoudar, S., et al. (2022) conducted research to examine the self-esteem of undergraduate nursing students. The majority of students in the present research were female (81.9%), which is typical of most nursing programs across the globe. The findings of this research may be explained by the fact that nursing is not highly regarded in Indian culture, and the health-care system and patients do not support them, as shown by the ideals of fidelity, privacy, secrecy, and respect. That self-esteem motivates nurses to act as patient advocates in the face of value conflict, balancing personal and organizational values within the framework of professional identity. The sample size for the study was 210 people, with 28.6% in the first year, 17.6% in the second year, 22.9% in the third year, and 31.0% in the fourth year of the Basic B.sc nursing course. The table depicts the socio-demographic profile received from students. This shows that 81.9 percent of the participants were girls, and the bulk of them were between the ages of 19 and 20. (61 percent). The bulk of the participants (91%) said they were from urban regions, with rural areas coming in second (33.3 percent). At the time of the survey, 50% of the participants said they were residing in a university hostel, while 66% said they were staying at their own home. The majority of participants had a household income of less than one lakh rupees (75.2 percent). The majority (64.8 percent) came from a nuclear family, while 33.8 percent came from a combined family. Mild (42.4%), Moderate (43.8%), and Severe (43.8%) stress levels were reported by the subjects (13.8 percent). The majority of participants (45.3%) communicated their concern with their parents, (37.2%) with friends, and 17.6% did not



disclose their problem with anybody. 93.8 percent of those who took part in the study said they had no suicidal thoughts. Suicidal inclinations were mentioned by 6.2 percent of the participants. Maximum participants 67.1% had no health problems and 32.9 % had some health issues.

The literature review underlines the significance and relevance of self-esteem and self-concept in all aspects of students' academic and personal life. According to the review, self-esteem is strongly linked to favorable psychological consequences for both individuals and society, such as psychological adjustment, positive feeling, and academic success. The existing body of research suggests that self-esteem and self-concept are important factors that contribute to the overall well-being and success of students. The study also aims to assessing levels of self-esteem in the study sample, and to determine the relationship between self-esteem and the following variables: age, gender, academic year, residency place, father job, mother job, family's monthly income, and interest of attending the nursing college. A non-probability, convenience, sampling of (600) undergraduate nursing students were selected from four nursing colleges located in Middle Eporates region. A two parts questionnaire was used to fulfil the study objectives. The first part includes student's sociodemographic information. The second part is the Rosenberg self-esteem scale to measure levels of self-esteem. The finding indicates that in majority of nursing students had a self-esteem levels range between average (52.2%) to high level (44.8%).

Sasat, S. et al.(2018), conducted a study to investigate the relationship between self-esteem and year of study in two groups of student nurses, one in Thailand and one in the UK. The study utilized the Culture-Free Self-Esteem Inventory (CFSEI-2) to assess the reported self-esteem levels of 120 Thai students and 101 UK undergraduate nursing students who were selected through purposive sampling. The study found no differences in overall or subscale mean scores of self-esteems with year of study in both samples. The study highlights the importance of self-esteem as a key feature in a person's perception of their own worth. The CFSEI-2 is a self-reported inventory, which measures an individual's perception of self. The findings of the study indicate that the perceptions of own self-

esteem in undergraduate student nurses in the UK and in Thailand were comparable to the normal ranges of self-esteem as assessed by the instrument. An independent sample t-test revealed that there were no significant differences in mean overall and subscale self-esteem scores between UK and Thai nursing students. There were no indications of differences in levels of self-esteem for UK and Thai nursing students experiencing different parts of their training.

Belsiyal, C. X.(2015), used a descriptive research design to examine the self-esteem of 35 B.Sc. (Nursing) students from a selected nursing college in Bangalore in 2015. To obtain data, simple random sampling was done, and the subjects were evaluated using Rosenberg's self-esteem measure. The study's aims were to analyse the participants' socio-demographic profile, estimate their degree of self-esteem, and research the relationship between self-esteem and chosen socio-demographic characteristics.. Majority i.e. 24(68.6%) of the subjects reported to have normal level of self-esteem; while, 11(31.4%) of them have low self-esteem. None of the subjects demonstrated to have high self-esteem. The total scores of self-esteems among the nursing students ranged from minimum score of 12 to a maximum of 18. The mean score of total Rosenberg's self-esteem scale was  $15.08 \pm 1.462$ . The domain wise scores on the Rosenberg's self-esteem scale varied from 15-18 with mean score of  $15.76 \pm 0.759$  in normal range of self-esteem, 12-14 with mean score of  $13.27 \pm 0.749$  in low self-esteem. There was significant association was found between subjects' self-esteem and father's and mother's education with the p value of 0.04 and 0.015 respectively. There was also significant association noted between subjects' self-esteem and parents' occupation with  $p < 0.01$ . The results of the study can be useful to nursing educators whose efforts are focused on promoting professional identity development of future nurses.

## **2.2. OPERATIONAL DEFINITIONS:**

**Body Image:** According to Fardouly, J., & Diedrichs, P. C. (2021)., body image involves "the cognitive and affective processes that reflect individuals' perceptions, attitudes, and emotions related to their own body and its appearance"

**Self-Esteem:** According to the American Psychological Association (APA), self-esteem is "the degree to which individuals feel positively or negatively about themselves and their overall worth as a person" (APA, 2021).

**Nursing Students:** According to the American Association of Colleges of Nursing (AACN), nursing students are "individuals who are currently enrolled in a nursing education program that prepares them to become a licensed registered nurse or licensed practical nurse" (AACN, 2022).

## **CHAPTER 03: METHODOLOGY**

### **3.1. STUDY DESIGN:**

A descriptive, cross-sectional study design was used to conduct this study.

### **3.2. STUDY SETTING AND DURATION:**

This study was conducted between September 2022 to February 2023 in public nursing colleges in Rawalpindi and Islamabad. the objective of the study was to explore the connection between self-esteem and perceived body image in undergraduate nursing students.

### **3.4. SAMPLE SIZE:**

The researcher's calculated a sample size of 400 using a specific formula for sample size calculation base on the prevalence taken from a similar study.

Formula:  $N=(Z)^2 * pq / e^2$

Z (at confidence interval of 95%, standard value) = 1.96

P(prevalence)=68 (Gupta,2013)

e (margin of error) =5

sample size = 386

collected Sample:386

### **3.5. SAMPLE TECHNIQUE:**

To ensure unbiased representation, a simple random sampling technique was employed to gather data from all publicly identified nursing colleges in Rawalpindi and Islamabad. The researchers compiled a comprehensive list of nursing colleges and selected students who met the inclusion criteria, thus providing an equal opportunity for everyone to participate in the study. The data collected from eligible participants was subsequently utilized for further analysis.

### **3.6. STUDY PARTICIPANTS:**

The participants of this study were undergraduate nursing students from Rawalpindi and Islamabad.

#### **3.6.1. Inclusion Criteria**

**The inclusion criteria of the study were:**

Participants must be at least nineteen years old & above.

- Nursing students from public sector colleges.
- Both genders were included in the study.
- Those nursing students who enrolled in undergraduate Nursing Program.

#### **3.6.2 Exclusion Criteria**

**Respondents falling in the exclusion criteria were:**

- Students who refused to participate were marked as absent. However, those who were unable to participate due to a physical disability or a visual impairment were excluded from the study.
- Nursing students were absent on the day of data collection.

### **3.7. DATA COLLECTION INSTRUMENTS:**

The data collection instruments in this study were a self-administered questionnaire comprising three sections. The first section comprised a consent form that participants were required to sign after reading the research details. It also included questions about the socio-demographics of the respondents, such as age, height, weight, and socioeconomic status, as these factors can impact the study's outcomes. The second section used two validated scales-the Rosenberg (1996) Self-esteem Scale and the Body shape Questionnaire (BSQ)-modified version (Cooper, Taylor, and Fairburn, 1987)-to collect data.

### **3.8. RELIABILITY AND VALIDITY:**

The reliability of the association between perceived body image and self-esteem among undergraduate nursing students at nursing colleges in Rawalpindi and Islamabad was tested using SPSS Version 26 software.

### **3.9. DATA COLLECTION PROCEDURE:**

The administrative authorities of the public health nursing colleges were contacted, and permission to collect data from nursing students was granted. 10% of the population was subjected to pilot testing. Those who were eligible and willing to participate in the study were notified, and the consent form was signed first. To ensure that all aspects of the study were understood by the participants, the questionnaire and study were explained orally.

### **3.10. DATA ANALYSIS PROCEDURE:**

The independent variables of this study are Age, gender, height, weight, marital status, and socioeconomic. The dependent variables are association of Perceived body image and self-esteem. Statistical analysis was performed using Statistical Package for Social Sciences SPSS (26). The outcome was reported in terms of frequency (percentages). The BMI of the participants was determined using the (body image index) formula ( $BMI = \text{kg/m}^2$ ). The correlation test is used to determine whether there is a link between perceived body image and self-esteem. The chi-square test was also used to determine whether there was a relationship between perceived body image and self-esteem categorical variables. When the P-value was 0.05 or less, the results were considered significant. Following the application of the tests, the results are presented in the form of table variables along with the value of significant association. The independent categorical demographic variables are presented in tables with percentages, whereas the independent quantitative variables are presented with mean and standard deviation.

### **1.11. ETHICAL CONSIDERATION:**

I obtained an IRB (internal review board) approval letter before beginning the research process. The data collection process began after the nursing colleges of Rawalpindi and Islamabad gave their approval. Subjects were briefed on all aspects of the study process, and those willing to participate in the study signed informed consent. There will be no collection of personally identifiable information, and anonymity and confidentiality will always be maintained. The information will only be accessible to authorized personnel and used for this investigation.

## CHAPTER 04: RESULTS

### 4.1. DESCRIPTIVE ANALYSIS:

#### 4.1.1. SOCIO-DEMOGRAPHIC CHARACTERISTICS:

**Table 1: Demographic characteristics: (Mean and Standard Deviation)**

<b>Demographics Characteristics</b>	<b>Respondent (N)</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age	400	20.31	1.69
Height (Meters)	400	1.61	0.91
Weight (Kg)	400	52.49	9.57

Table 1: There were a total of 400 participants out of 400 respondents 121 (30.3%) of the respondents were male, while 279 (69.8%) were female. 400 respondents' height in meters (mean: 1.61 meters; standard deviation: 0.91); and 400 respondents' weight in kg (mean: 52.49; standard deviation: 9.57)

**Table 2: Demographic characteristics:( Frequency)**

<b>Demographics Characteristics</b>	<b>Category</b>	<b>Respondent (N)</b>	<b>Percentage</b>
Gender	Male	121	30.3%
	Female	279	69.8%
Types of Family	Joint	172	43.0%
	Nuclear	228	57.0%
Marital Status	Single	380	95.0%
	Married	11	2.8%
	Divorced	9	2.3%
Belongs to	Rural	226	56.5%
	Urban	174	43.5%



Family monthly income	<50000	267	66.8%
	51000-80000	56	14.0%
	>80000	77	19.3%
Institute	Public	344	86.0%
	Private	56	14.0%
Stipend	Stipend 20000	63	15.8%
	Stipend >30000	201	50.8%
	Non-stipend	136	34.0%
Complexion	deep brown	103	25.8%
	Fair or Light,	271	67.8%
	Ebony or Black	14	3.5%
	Olive	12	3.0%
Residence	Hostel	287	71.8%
	Day-scholar	92	23.0%
	Others	21	5.3%

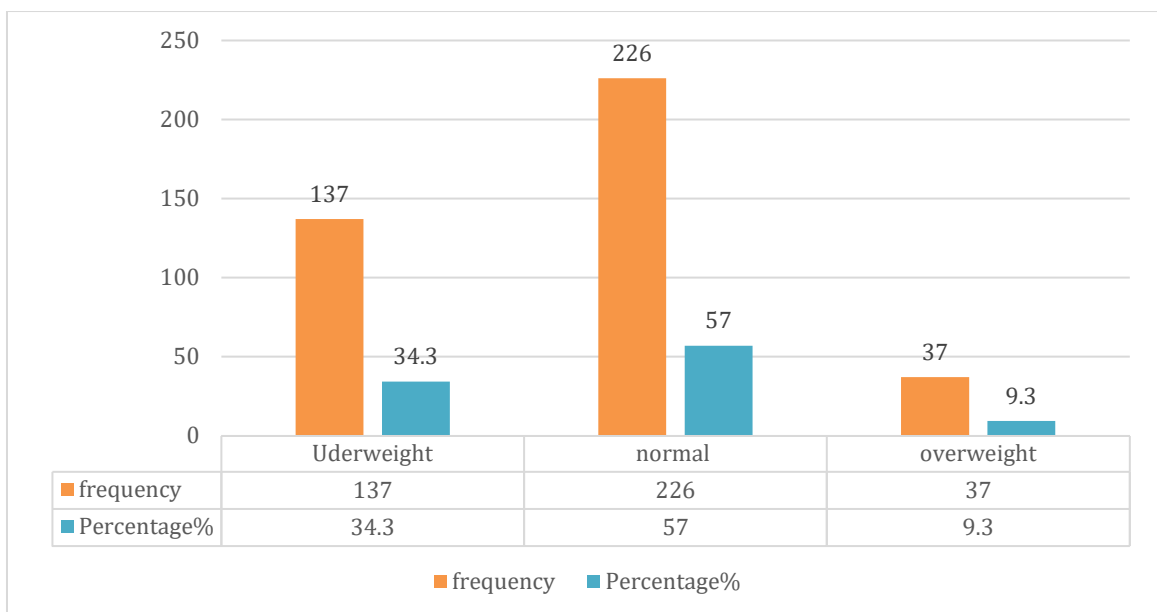
Table 2: There were a total of 400 participants .out of 400 respondents 121 (30.3%) of the respondents were male, while 279 (69.8%) were female. The majority of respondents were unmarried, making 380(95.0%). Designation of the majority of the respondents were nursing students from different nursing colleges of Rawalpindi and Islamabad. More than half of the respondents 228(57.0%) lived in a nuclear family setup. All 267 (66.8%) belong to a middle-class socioeconomic background. There are 344(86.0) of the respondents were from public sector and 56 (14.0) from private sector.201(50.8%) respondent taking stipend from public sector, rupees thirty thousand rupees per month and 63(15.8%) from public sector. More than half of the respondent's complexions were fair, 271(67.8%). Two eighty-seven respondents live in Government provided accommodation in hospital premises.

#### 4.1.2. BODY MASS INDEX:

**Table: 3: Classification of Body Mass Index:**

Categories	Frequency	Percentage	Valid %	Cumulative %
Underweight	137	34.3 %	34.3%	34.4%
Healthy weight	226	56.5%	56.5%	90.8%
Overweight	37	9.3%	9.3%	100.0%
Total	400	100.0	100.0	

Table 3 contains, body mass index using 400 samples for our analysis. BMI is an important measurement regarding fat based on height and weight for adult men and women. We have 4 categories in BMI: underweight (18.5), healthy weight (18.5-24.5), overweight (25-29.9), and obesity (>30).



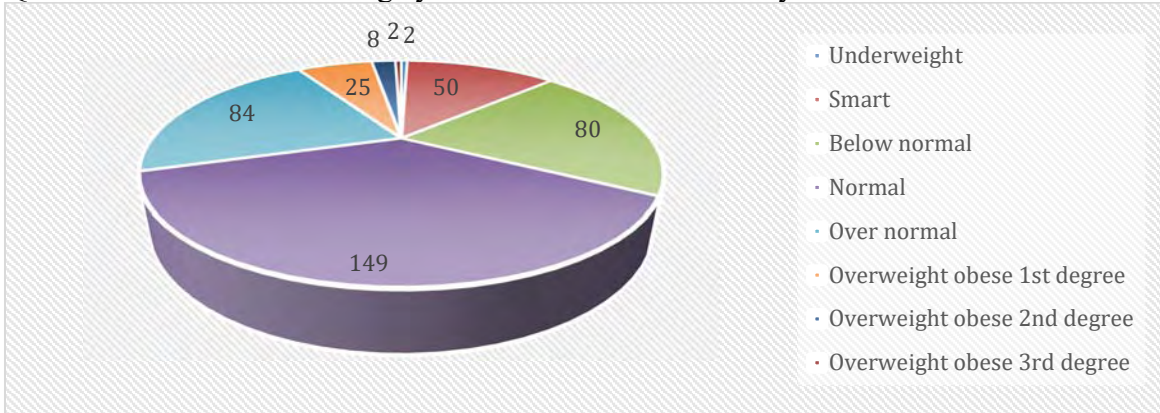
**FIGURE:1 BODY MASS INDEX:**

A total of 400 (%) of the sample fall into normal categories, which means they fit according to BMI (%) and are underweight (137, (34.3%), while a healthy weight of 226 (56.5%) is overweight (37, 9.3%). Only falls into the excessive weight category of obesity, indicating that excess fat is a health risk for that individual

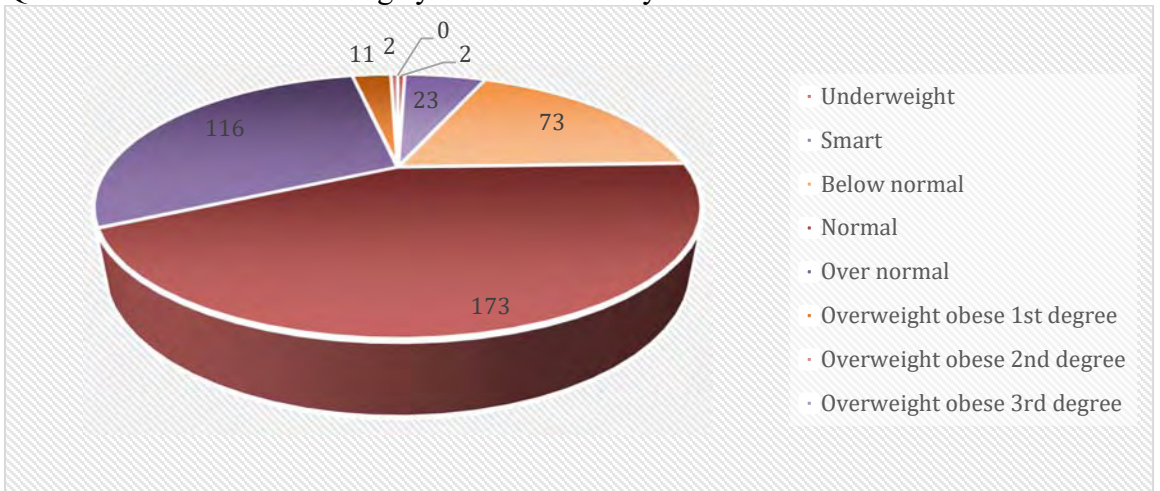
**Table 4: body image picture scale:**

<b>Body image</b>	<b>Categories</b>	<b>Frequencies</b>
Which of the above image you feel looks the most like you	Underweight	2 (.5 %)
	Smart	50 (12.5%)
	Below normal	80 (20.0%)
	Normal	149 (37.3%)
	Over normal	84 (21.0%)
	Overweight obese 1 <sup>st</sup> degree	25 (6.3%)
	Overweight obese 2 <sup>nd</sup> degree	8(2.0%)
	Overweight obese 3 <sup>rd</sup> degree	2(.5%)
Which of the above image you feel looks way would to look	Underweight	2(.5%)
	Smart	23(5.8%)
	Below normal	73(18.53%)
	Normal	173(43.3%)
	Over normal	116(2.8%)
	Overweight obese 1 <sup>st</sup> degree	11(2.8%)
	Overweight obese 2 <sup>nd</sup> degree	2(.5%)
	Overweight obese 3 <sup>rd</sup> degree	00.0%
Which of the above image you feel is the perfect image	Underweight	00.0%
	Smart	18(4.5%)
	Below normal	64(16.0%)
	Normal	181(45.3%)
	Over normal	123(30.8%)
	Overweight obese 1 <sup>st</sup> degree	12(3.0%)
	Overweight obese 2 <sup>nd</sup> degree	18(4.5%)
	Overweight obese 3 <sup>rd</sup> degree	2(.5%)

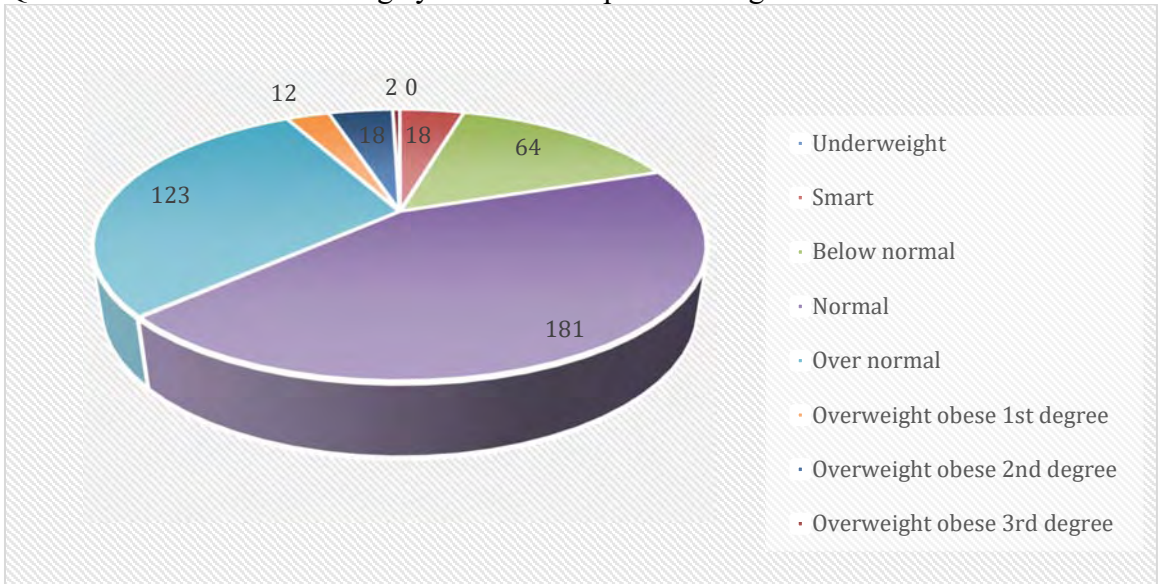
Q:1: Which of the above image you feel looks the most like you?



Q:2: Which of the above image you feel looks way would to look?



Q:3: Which of the above image you feel is the perfect image?



**Table 5: Body Image Satisfaction (Perceived)**

		<b>Never</b>	<b>Sometime</b>	<b>Often</b>	<b>always</b>
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1	I am proud of my body	21(5.3%)	66(16.5%)	69(17.3%)	244(61.0%)
2	I am proud of the way I look	21(5.3%)	43(10.8%)	92(23.0%)	244(61.0%)
3	I like myself when I look in the mirror	11(2.8%)	53(13.3%)	109(27.3%)	227(56.8%)
4	I feel I weigh the right amount for my height	78(19.5%)	68(17.0%)	102(25.5%)	152(38.0%)
5	I feel I need to lose weight	238(59.5%)	63(15.8%)	50(12.5%)	49(12.3%)
6	I think of changing my weight	117(29.3%)	88(22.0%)	105(26.3%)	90(22.5%)
7	I think my looks would help me get smarter	69(17.3%)	78(19.5%)	102(25.3%)	151(37.8%)
8	I wish I looked like someone else	199(49.8%)	74(18.5%)	58(14.5%)	69(17.3%)
9	My friends think that I am good	133(33.3%)	69(17.3%)	82(20.5%)	116(29.0%)
10	My weight make me feel un happy	00	90(22.5%)	124(31.0%)	186(46.5%)
11	I feel ashamed of how I look	245(61.3%)	72(18.3%)	31(7.8%)	51(12.8%)
12	My friends think that I am too thin	311(77.8%)	47(11.8%)	21(5.3%)	21(5.3%)
13	My parents think I am too thin	209(52.3%)	86(21.5%)	55(13.8%)	50(12.3%)
14	My parents think I am too fat	20(5.0%)	29(7.2%)	56(14.0%)	297(73.8%)

There were 400 participants, with 121 (30.3%) male and 279 (69.8%) female participants. The perceived body image scale questions ranged from "always" (scored as seven) to "never" (scored as one). I am proud of my body is always(244(61%), I am proud of the way I look 244(61%), I like myself when I look in the mirror 227(57%), I feel I weigh the right amount for my height 152(38%), (never) I feel I need to lose weight238(60), I think of changing my weight117(29.3%),(always) I think my looks would help me get smarter151(38%), (never) I wish I looked like someone else199(50%), My friends think that I am good 133(33.3%),(always) My weight make me feel un happy 186(47%),(never) I feel ashamed of how I look 245(61.3%), My friends think that I am too thin 311(78%), My parents think I am too thin 209(52.3%),(always) My parents think I am too fat297(74%)

**Table 6: Rosenberg Self-esteem**

<b>Strongly disagree (SD)</b>	<b>Disagree (D)</b>	<b>Agree (A)</b>	<b>Strongly Agree( SA)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

		<b>SD</b>	<b>D</b>	<b>A</b>	<b>SA</b>
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1	On the whole, I am satisfied with myself.	6(1.5%)	19(4.8%)	153(38.3%)	222(55.5%)
2	At times I think I am no good at all.	31(7.8%)	121(30.3%)	183(45.8%)	65(16.3%)
3	I feel that I have a number of good qualities	3(.8%)	24(6.0%)	202(50.5%)	171(42.8%)
4	I am able to do things as well as most other people	8(2.0%)	30(7.5%)	179(44.8%)	183(45.8%)

5	I feel I do not have much to be proud of.	53(13.3%)	107(26.8%)	166(41.5%)	74(18.5%)
6	I certainly feel useless at times.	34(8.5%)	111(27.8%)	160(40.0%)	95(23.8%)
7	I feel that I'm a person of worth, at least on an equal plane with others.	11(2.8%)	48(12.0%)	222(55.5%)	119(29.8%)
8	I wish I could have more respect for myself	165(41.3%)	155(38.8%)	52(13.0%)	28(7.0%)
9	All in all, I am inclined to feel that I am a failure.	44(11.0%)	55(13.8%)	160(40.0%)	141(35.3%)
10	I take a positive attitude toward myself	4(1.0%)	10(2.5%)	125(31.3%)	261(65.3%)

There were 400 participants, with 121 (30.3%) males and 279 (69.8%) females among them. The self-esteem scale questions by Rosenberg for respondents were: six agree, three strongly agree, and one strongly disagree. On the whole, I am satisfied with myself (Strongly Agree) 222(56%), At times I think I am no good at all(Agree) 183(46%), I feel that I have a number of good qualities(Agree)202(51%), I am able to do things as well as most other people(strongly agree) 183 (46%), I feel I do not have much to be proud of(agree) 166(42%), I certainly feel useless at times(agree) 160(40%), I feel that I'm a person of worth, at least on an equal plane with others(agree) 222(56%), I wish I could have more respect for myself(strongly disagree) 165(41.3%), All in all, I am inclined to feel that I am a failure(agree)160(40%), I take a positive attitude toward myself(strongly agree) 261(65.3).

## 4.2. INFERENCE ANALYSIS:

Correlation analysis was conducted to determine the significance of the association between perceived body image and self-esteem among undergraduate nursing students from Rawalpindi and Islamabad. Additionally, the Chi-square test was utilized to examine the relationship between perceived body image, self-esteem, and sociodemographic variables, such as age, gender, height, weight, marital status, family income, stipend, place of residence, and complexion. The results of the Chi-square test indicated a significant relationship between the perceived body image scale and the Rosenberg self-esteem scale ( $\chi^2 = 4.377$ ,  $df = 1$ ,  $P = .036$ ), with a p-value of 0.036, which is less than the significance level of  $<0.05$ .

**Table:7: Socio Demographic Characteristics association with perceived body image:**

Variable		Perceived body image		Chi square	Df	P value
		Negative body image	Positive body image			
Age	17-19	61 (52.6%)	55 (47.4%)	.730	2	.694
	20-22	148 (56.5%)	114 (43.5%)			
	23 above	11 (50.0%)	11 (50.0%)			
Gender	Male	59 (48.8%)	62 (51.2%)	2.729	1	.099
	Female	161 (57.7%)	118 (42.3%)			
Family	Joint	92 (53.5%)	80 (46.5%)	.279	1	.598
	Nuclear	128 (56.1%)	100 (43.9%)			
Marital status	Single	210 (55.3%)	170 (44.7%)	.417	2	.812
	Married	5 (45.5%)	6 (54.5%)			
	Others	5 (55.6%)	4 (44.4%)			
Belongs to	Rural	118 (52.2%)	108 (47.8%)	1.631	1	.202
	Urban	102 (58.6%)	72 (41.4%)			



BMI	Underweight	66 (48.2%)	71 (51.8%)	3.936	2	.140
	Healthy eight	132 (58.4%)	94 (41.6%)			
	Obese	22 (59.5%)	15 (40.5%)			
Family monthly income	less than 50 k	154 (57.7%)	113 (42.3%)	5.185	2	.075
	51-80 k	23 (41.1%)	33 (58.9%)			
	More than 80 k	43 (55.8%)	34 (44.2%)			
Institute	Public	191 (55.5%)	153 (44.5%)	.272	1	.602
	Private	29 (51.8%)	27 (48.2%)			
Stipend	20000	38 (60.3%)	25 (39.7%)	3.617	2	.164
	21-35 K	116 (57.7%)	85 (42.3%)			
	non-stipend	66 (48.5%)	70 (51.5%)			
Colour	deep brown	54 (52.4%)	49 (47.6%)	1.396	3	.706
	Fair or Light,	153 (56.5%)	118 (43.5%)			
	Ebony or Black	6 (42.9%)	8 (57.1%)			
	Olive	7 (58.3%)	5 (41.7%)			
Residence	Hostel	164 (57.1%)	123 (42.9%)	4.628	2	.099
	Day-scholar	49 (53.3%)	43 (46.7%)			
	Others	7 (33.3%)	14 (66.7%)			

Table: 7: The age groups of 17–19 years, 20–22 years, and 23 years and older had adequate body image satisfaction at 52.0%, 56.5%, and 50.0%, respectively, out of a total of 400 respondents. A chi-square test revealed no significant association between socio-demographic factors (age, gender, family, marital status, institute, residence, complexion, etc.) and perceived body image (df=2, P-value=0.730). These findings were consistent across all demographic groups and perceived body image levels, indicating no significant relationship between socio-demographic factors and body image scales.

**Table 8: Socio Demographic Characteristics association with Rosenberg Scale:**

Variable		Self - esteem		Chi square	Df	P value
		Low self esteem	High self esteem			
Age	17-19	60 (51.7%)	56 (48.3%)	1.885	2	.390
	20-22	124 (47.3%)	138 (52.7%)			
	23 above	8 (36.4%)	14 (63.6%)			
Gender	Male	56 (46.3%)	65 (53.7%)	.205	1	.650
	Female	136 (48.7%)	143 (51.3%)			
Family	Joint	72 (41.9%)	100 (58.1%)	4.557	1	.033
	Nuclear	120 (52.6%)	108 (47.4%)			
Marital status	Single	182 (47.9%)	198 (52.1%)	1.855	2	.396
	Married	7 (63.6%)	4 (36.4%)			
	Others	3 (33.3%)	6 (66.7%)			
Belongs to	Rural	111 (49.1%)	115 (50.9%)	.259	1	.611
	Urban	81 (46.6%)	93 (53.4%)			
BMI	Underweight	69 (50.4%)	68 (49.6%)	.528	2	.768
	Healthy weight	105 (46.5%)	121 (53.5%)			
	Obese	18 (48.6%)	19 (51.4%)			
Family monthly income	less than 50 k	137 (51.3%)	130 (48.7%)	4.102	2	.129
	51-80 k	21 (37.5%)	35 (62.5%)			
	More than 80 k	34(44.2%)	43 (55.8%)			
Institute	Public	172 (50.0%)	172 (50.0%)	3.938	1	.047
	Private	20 (35.7%)	36 (64.3%)			
Stipend	20000	25 (39.7%)	38 (60.3%)	2.080	2	.353
	21-35 K	100 (49.8%)	101 (50.2%)			
	non-stipend	67 (49.3%)	69 (50.7%)			

Color	deep brown	47(45.6%)	56 (54.4%)	2.250	3	.522
	Fair or Light,	129 (47.6%)	142(52.4%)			
	Ebony or Black	9 (64.3%)	5 (35.7%)			
	Olive	7(58.3%)	5 (41.7%)			
Residence	Hostel	145(50.5%)	142 (49.5%)	2.717	2	.257
	Day-scholar	39(42.4%)	53 (57.6%)			
	Others	8 (38.1%)	13 (61.9%)			

Table 8: Rosenberg's self-esteem was adequate in the age groups of 17–19 years, 20–22 years, and 23 years and older, with 51.0 percent, 52.7 percent, and 63.6 percent, respectively, out of a total of 400 respondents. A chi-square test finds a link between the family (The P-value is .032784. The result is significant at  $P < .05$ ), and Institute (The P-value is .047207. The result was significant at  $P < .05$ ). And Rosenberg self-esteem ( $df(1) = 3.938$ ,  $P\text{-value} = .047$ ). These findings were independent of demographics and Rosenberg self-esteem, i.e., there were associations between sociodemographic (family and institute) and Rosenberg self-esteem scale differences that were significant.

**Table:9: Correlation Matrix showing the relationship between perceived body image and Self-esteem (N=400).**

Variable	M	SD
Perceived body image	36.185	4.98
Self esteem	28.90	2.923

Note:  $P < .05$ ,  $P < .01$

**Table 10 : Bisfinal v/s rss final (chi square)**

		Rssfinal		Chi square	Df	P value
		Low self esteem	High self esteem			
Bisfinal	Negative body image	60.4%	50.0%	4.377	1	.036
	Positive body image	42.2%	57.8%			

**Result:** The chi-square test result for the association between the perceived body image scale and the Rosenberg self-esteem scale is 4.377 with 1 degree of freedom, and the corresponding p-value is .036427. Since the p-value is less than 0.05, the association between the final perceived body image scale and the final Rosenberg self-esteem scale is considered significant.

**Table :11: Rssfinal with figure**

	Rssfinal		Chi square	Df	P value
	Low self steem	Positive self esteem			
< 4 underweight	52.2%	47.8%	.390	2	.823
4 normal	56.9%	53.1%			
> Abnormal	47.8%	52.2%			

Result: The chi-square test result for the association between the perceived body image scale and the Rosenberg self-esteem scale is 4.377 with 1 degree of freedom, and the corresponding p-value is .036427. Since the p-value is less than 0.05, the association between the final perceived body image scale and the final Rosenberg self-esteem scale is considered significant.

**Table: 12: Bisfinal with figure**

	Bisfinal		Chi square	Df	P value
	Negative body image	Positive body image			
< 4 underweight	52.2%	47.8%	1.871	2	.392
4 normal	50.8%	49.2%			
>Abnormal	58.0%	42.0%			

Result: The chi-square test for the association between Rosenberg self-esteem (final) and Picture is 1.871 with 2 degrees of freedom, and the p-value is .392. The result is not significant at  $p < .05$ .

## CHAPTER 5: DISCUSSION

The presented data indicates that there is no significant relationship between sociodemographic factors and nursing students' perceived body image. However, there is a significant relationship between family type and institutional affiliation with nursing students' self-esteem, as evidenced by the P-values of 0.036 and 0.047, respectively. These findings suggest that family and institutional factors may be important predictors of nursing students' self-esteem.

The research discovered a connection between the measurement of body image and Rosenberg self-esteem. More specifically, among the students examined, 60.4% of those who reported a negative body image also experienced low self-esteem, whereas 42.2% of individuals with a positive body image displayed high self-esteem. This association is reinforced by a noteworthy P-value of 0.036.

These results highlight the importance of addressing both body image and self-esteem in nursing students, as they are interconnected and can impact students' mental health and overall well-being. Interventions that address both factors simultaneously may be more effective in promoting positive self-perception and improving mental health outcomes for nursing students.

This research offers valuable insights into the intricate connection among sociodemographic factors, body image, and self-esteem in nursing students. These insights can be utilized to develop interventions that focus on improving their mental health and overall well-being. Nonetheless, additional research is necessary to investigate the underlying mechanisms and factors that contribute to these associations.

Seth et al. (2022). The study found a negative correlation between body image and self-esteem among undergraduate dental students, with a correlation coefficient value (r value) of -0.373. However, there was no significant relationship between body image and self-

esteem among the study population. The authors suggest that future studies with middle-aged or elderly subjects could add to the knowledge on this topic. Other studies have found moderate to negative correlations between body image and self-esteem or interpersonal relationships, but a moderate but negative correlation between body image and healthy lifestyle behaviors was also found.

Divecha et al. (2022), conducted a study to examine body image perceptions, BMI, and body image dissatisfaction among medical students. The study found that body image dissatisfaction was high among the respondents, with 80% reporting dissatisfaction and 73.5% of those desiring to be thinner. The association between self-reported BMI with perceived BMI and body image dissatisfaction was significant ( $P < 0.001$ ). Only 18.2% of students felt "attractive," and the association between body image perception and body image dissatisfaction was statistically significant ( $P < 0.05$ ). The study concluded that there is a need to foster healthy body image perceptions among students of health sciences as they are the future in healthcare and can influence the health beliefs in our society.

In a study conducted by Virk & Singh (2020), it was revealed that 16.8% of the students reported experiencing dissatisfaction with their body image, while 21.6% exhibited low levels of self-esteem. The researchers further established a significant association between low body mass index and body image dissatisfaction. Moreover, a moderate positive correlation, with a correlation coefficient of 0.384 and a p-value below 0.001, was observed between self-esteem and satisfaction with body image.

Godse, M. S., & Thokchom, M. M. (2020) The study examined the self-esteem and self-efficacy levels among professional college students in Pune city. The majority of the students were male, from nuclear families, and had a high fluency in communication. The study found that most students had normal self-esteem and high self-efficacy, with a moderately positive correlation between the two. Significant variables for self-esteem were the education of the mother, while type of family and area of residence were significant for self-efficacy. The study recommends assessing students' self-esteem and self-efficacy to

identify those who may need guidance and counseling, and suggests seminars and group activities to improve these traits. The study also found that self-esteem was significantly associated with student attrition, and the results provide the basis for targeted interventions to decrease attrition rates in nursing programs.

A study by Kaur (2019) found a significant and positive relationship between perception of body image and self-esteem among college going girls. The study revealed that body shape is a significant predictor of self-esteem in this population. The results suggest that positive self-assessment of body and acceptance of one's physical characteristics can lead to high levels of confidence and self-respect, which in turn can have a positive impact on academic performance and mental health.

The study conducted by Yahaya (2019) found that there was a moderate positive correlation between body image and self-esteem ( $r=.587$ ) and a weak positive correlation between self-esteem and health behavior ( $r=.057$ ). The strongest predictor of body image was family influence. Female students had higher body image concerns, higher self-esteem, and more positive health behaviors than male students. Male students were more likely to engage in negative health behaviors than females. The author suggests that school-based preventive educational interventions should be organized for students with body image concerns to reduce the risks of developing body image dissatisfaction and improve self-esteem.

Elsherif and Abdelraof (2018) conducted a study at Tanta University on the relationship between body image satisfaction, self-esteem, and academic behaviour among first and fourth-year nursing students. In both first and fourth-year students, the study discovered a substantial negative association between body image dissatisfaction and self-esteem. Furthermore, in both groups of students, there was a substantial positive association between self-esteem and academic performance.

The study by El-etary and Zaki (2018) found a significant relationship between the self-esteem of participants and their age and marital status, but no significant relationship with university level, birth order, residence, parent education, family size, or income. Quality of life domains were significantly related to age, marital status, university level, birth order, parent education, family size, and income, but not residence. A large proportion of female nursing students had low self-esteem and poor body image perception, and there was a significant relationship between body image, self-esteem, and quality of life. The study suggests that counseling programs are needed to help nursing students develop a positive perception of their body image and enhance their self-esteem and overall quality of life.

Gupta et al. (2016) conducted a study with 139 students with a mean age of 14.9 +/- 1.3 years, and a slight male predominance (56.8% vs. 43.2%). The study found that 63.3% of the adolescent girls had negative body image compared to only 21.5% of boys ( $p < 0.01$ ). Additionally, 21% of the adolescents exhibited low self-esteem, with 65.5% of those having negative body image ( $p < 0.01$ ). The study also revealed that poor health, as assessed by the GHQ-28, was observed in 69.1% of adolescents, with 41.7% of those having negative body image ( $p < 0.01$ ).

Arshad et al. (2015) used Pearson's Product Moment and t-test to analyze the data and found that there was a significant positive relationship ( $r = 0.879$ ,  $p < .01$ ) between self-esteem and academic performance. They also found a significant difference between male and female students on self-esteem and academic performance scores. Specifically, female students had higher scores on academic performance compared to male students, while male students had higher scores on self-esteem compared to female students.

Pandey and Chalise (2015) conducted a study on Nepalese nursing students and found that the mean age of respondents was  $20.44 \pm 2.67$  years, with the majority (88%) receiving financial support of less than NRs 6000 per month and 64% having low perceived family support. The mean score of self-esteem and academic stress was 11.9 and 18.4, respectively, with 78% of students having low self-esteem and 74% having high academic stress. Lower age, education, perceived family support, and financial support were



significant variables for high academic stress and low self-esteem. The study suggests interventions to lower academic stress and increase self-esteem to improve student learning efficiency. The study found a negative correlation between academic stress and self-esteem, which is consistent with previous research, although some studies did not find a significant relationship between the two variables.

Chris, E., & Pais, M. (2012). The study found a significant positive correlation between grip strength (dominant and non-dominant) and various physical attributes such as height, weight, BMI, hand breadth, hand length, hand span, wrist circumference, and forearm girth in male participants. The overall self-esteem levels were low, with 52.3% of nursing students reporting low self-esteem. The study also revealed that female students and students from Institute-1 had higher scores on factor-2, which measures self-derogation. However, age and religion did not significantly affect the self-esteem levels of the participants.

Taha et al. (2011) conducted a study to assess and compare the levels of body image and self-esteem among female nursing students from three different Arab countries, namely Saudi Arabia, Yemen, and Egypt. A total of 300 female students (100 from each country) were recruited. The study found that a positive perception of body image was associated with high self-esteem in 85.9% of students from Saudi Arabia, 84.8% from Egypt, and 69.0% from Yemen. Conversely, a negative perception of body image was associated with low self-esteem in 13.6% of students from Saudi Arabia, 15.2% from Egypt, and 6.2% from Yemen.

## **5.1. CONCLUSION AND WAY FORWARD**

The purpose of this study was to look at the relationship between body image and self-esteem in undergraduate nursing students in Rawalpindi and Islamabad. The findings of the study are extremely useful in making theoretical and practical contributions. The study contributed to the body of knowledge by investigating the relationship between perceived

body image and self-esteem in undergraduate nursing students. This is one of Pakistan's first studies on the subject, focusing on nursing students.

In practice, the findings of this study are very useful in understanding the relationship between perceived body image and self-esteem among students in Twin cities of Pakistan's and can be used to develop policies for these students. Second, such knowledge can be used to assess nursing students, and appropriate training policies for students, parents, and administration can be developed.

**Strength:**

One strength of this study is that it provides insights into the relationship between body image and self-esteem among nursing students. The study used standardized instruments to measure both variables, which enhances the reliability and validity of the findings. Additionally, the study examined the influence of sociodemographic factors, such as gender, age, and family income, on body image and self-esteem, which provides a more nuanced understanding of the factors that contribute to these constructs. The study also provides recommendations for interventions aimed at improving body image and self-esteem among nursing students, which could have practical implications for promoting the well-being of this population.

**Limitations:**

One limitation of the study is that it focused only on nursing students, which limits the generalizability of the findings to other populations. The sample may not represent the diversity of sociodemographic backgrounds found in the broader nursing student population, which could affect the generalizability of the results.

Another limitation is that the study relied on self-reported measures for both body image and self-esteem. Self-report measures are subject to bias and may not always accurately reflect individuals' true experiences or perceptions. Social desirability bias or response bias could have influenced participants' responses, leading to potential inaccuracies in the data.

## **CHAPTER 6: RECOMMONDATIONS:**

Based on the findings of the study, here are some recommendations:

1. Educational institutions should create awareness programs about body image issues and promote positive body image among nursing students.
2. Mental health professionals should be involved in providing counseling and support services to nursing students who have negative body image and low self-esteem.
3. Institutions should consider providing support services to nursing students who come from non-nuclear families and attend private institutions to improve their self-esteem.
4. Future studies should investigate the factors that contribute to body image and self-esteem among nursing students, including cultural and societal factors.
5. Institutions should encourage students to participate in physical activity and healthy eating habits to promote a healthy body image.
6. Nursing schools should incorporate self-esteem building activities and training into their curriculum to help nursing students develop a positive self-image and self-confidence.

By implementing these recommendations, institutions can help promote positive body image and self-esteem among nursing students, which can have a positive impact on their overall mental health and well-being.

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## Appendix B-Consent Form:

### CONSENT FORM

I (Respondent Name) \_\_\_\_\_ hereby give my permission to ABDUL HAKIM student of Masters of Science in Public Health from School of Public Health Al-Shifa Trust Eye Hospital, Jhelum Road, Rawalpindi, Pakistan is affiliated with Quaid-e Azam University Islamabad. allow me to respond on a questionnaire and quote my response in a scholarly research paper. I understand that their work is for academic purposes.

The Title of research study is “*Association of perceived body image and self-esteem among undergraduate nursing students of Rawalpindi and Islamabad*”.

I also understand that the researcher, hereby name **ABDUL HAKIM**, will maintain my anonymity with regard to my responses to Questionnaire items.

I hereby give my permission in the form of my signature below:

Signature: \_\_\_\_\_

Date:

#### **Contacts of Researcher:**

ABDUL HAKIM ( [abdulhakeemabbasi@gmail.com](mailto:abdulhakeemabbasi@gmail.com))

+923215300769

**Association of perceived body image and self-esteem among  
undergraduate nursing students of Rawalpindi and Islamabad.**

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

**PART-A: Demographics**

	<b>Response</b>
Age	
Gender	1.Male 2. Female
Types of Family	1.Joint 2. Nuclear
Marital Status	1.Single 2. Married 3. Others (Plz Specify)
Belongs to	1.Rural 2. Urban
Height (cm)	
Wight (kg)	
Family monthly income	(Please specify)
Institute	1.Public 2. Private
Stipend	1.Stepend 2. Non-stipend
Stipend amount	(Rs)
Complexion	1. Fair or Light,2, deep brown,3. Ebony or Black
Residence	1.Hostel 2. Day-scholar 3. Other (Plz specify)

**Part B. Body Image Satisfaction (Perceived)**

	<b>Likert Scale</b>	<b>Never</b>	<b>Sometimes</b>	<b>Often</b>	<b>always</b>
		1	2	3	4
1	I am proud of my body				
2	I am proud of the way I look				
3	I like myself when I look in the mirror				

4	I feel I weigh the right amount for my height				
5	I feel I need to lose weight				
6	I think of changing my weight				
7	I think my looks would help me get smarter				
8	I wish I looked like someone else				
9	My friends think that I am good				
10	My weight makes me feel un happy				
11	I feel ashamed of how I look				
12	My friends think that I am too thin				
13	My parents think I am too thin				
14	My parents think I am too fat				

**Part C: Rosenberg Self Esteem Scale**

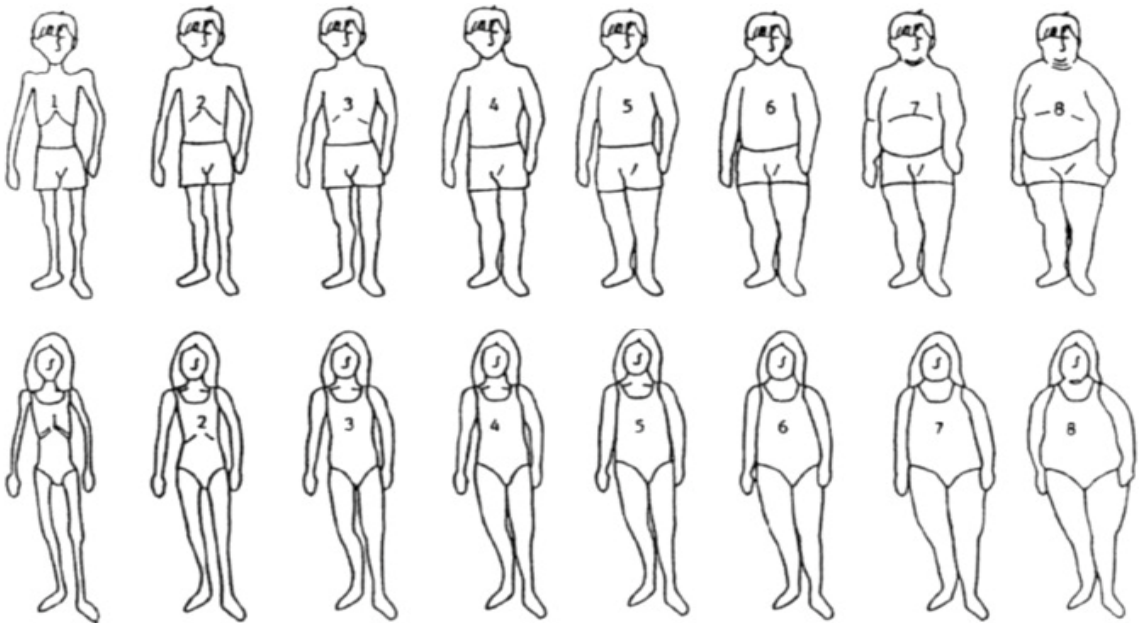
<b>Strongly agree (S.A)   Agree(A)   Disagree (DA)   Strongly Disagree(SD)</b>					
	<b>Likert Scale</b>	<b>S.A</b>	<b>A</b>	<b>DA</b>	<b>SD</b>
		4	3	2	1
1	On the whole, I am satisfied with myself.				
2	At times I think I am no good at all.				
3	I feel that I have a number of good qualities				
4	I am able to do things as well as most other people				
5	I feel I do not have much to be proud of.				
6	I certainly feel useless at times.				
7	I feel that I'm a person of worth, at least on an equal plane with others.				

8	I wish I could have more respect for myself				
9	All in all, I am inclined to feel that I am a failure.				
10	I take a positive attitude toward myself.				

**PART: D:**

Look at the picture below and answer the next 3 questions by looking at the picture.

Remember there is only one answer.



1. A. Which of the above image you feel looks the most like you? \_\_\_\_\_  
(Please write only the number)
2. B. Which of the above image you feel looks the way you would want to look? \_\_\_\_\_  
(Please write only the number)
3. C. Which of the above image you feel is the perfect image? \_\_\_\_\_  
(Please write only the number)



# WHAT'S YOUR SKIN TYPE?

## The Fitzpatrick Scale

Skin Type Skin Color	Eye Color	Hair Color	Tanning Ability	Sensitivity To Peels
<b>TYPE 1</b> Light, Fair Skin (Caucasian)	Light Blue Light Green Light Grey	Red Light Blonde	Always burns, never tans	Very Low
<b>TYPE 2</b> Fair	Blue Green Grey	Blonde	Skin will usually burn in the sun and tans with difficulty	Low
<b>TYPE 3</b> Fair To Bronze	Hazel Light Brown	Chestnut Dark Blonde	Skin will sometimes burn and will tan gradually	Mild
<b>TYPE 4</b> Light To Medium Brown, Olive	Brown	Light to Medium Brown	Skin rarely burns and tans easily	Sensitive
<b>TYPE 5</b> Dark Brown	Medium to Dark Brown	Dark Brown	Very rarely burns and tans very easily	Moderately Sensitive
<b>TYPE 6</b> Very Dark Brown, Black	Dark Brown	Black	Never burns, tans very easily, deeply pigmented	Very Sensitive



### Proposed Timeline (Gantt chart) May 2022 -February 2023

Activities	May	June	July	August	September	October	November	December	January	February
Area/Topic										
Supervisor										
Title Selection										
Literature Review										
Objectives/R.Questions										
Hypothesis										
Operational Definition										
Study Design										
Material & Methods										
Data Collection										
Data Analysis Procedure										
Write-up/Proposal										
Date of Submission										
Thesis Defend/IRB										

### Budget

#### Proposed Budget

Budget item	Transport	Stationery/Internet	Printing	Publishing
Pilot testing	500 Rs/-	6000 Rs/-	4000 Rs/-	-
Data collection	12,000 Rs/-	8,000 Rs/-	-	-
Thesis write-up	1,000 Rs/-	7,000 Rs/-	6,000 Rs/-	6,000 Rs/-
Total expenditure	13,500 Rs/-	19,000 Rs/-	10,000 Rs/-	6,000 Rs/-
Grand total	48,500 Rs/-			

**TOTAL NURSING COLLEGE OFFERING DIFFERENT DEGREE PROGRAM  
IN ISLAMABAD**

<b>Institute</b>	<b>City</b>	<b>Degree, Duration</b>
1. Shaheed Zulfiqar Ali Bhutto Medical University, PIMS	Islamabad	B.Sc. , 2 Years
	Islamabad	B.Sc. , 2 Years
2. Foundation University	Islamabad	BS , 4 Years
3. Shifa Tameer-e-millat University	Islamabad	BS , 4 Years
4. Isra University Islamabad	Islamabad	B.Sc. , 2 Years
5. Pakistan Institute Of Medical Sciences	Islamabad	BS , 4 Years
6. Al Wateen Institute Of Medical Sciences	Islamabad	B.Sc. , 4 Years
7. Edworld College Of Nursing & Allied Health Sciences	Islamabad	BS , 4 Years
8. Health Aid College Of Nursing	Islamabad	BS , 4 Years
9. Islamabad Medical & Dental College	Islamabad	B.Sc. , 2 Years
10. Pak Institute Of Health Sciences	Islamabad	B.Sc. , 2 Years
12. Shifa College Of Nursing	Islamabad	B.Sc. , 2 Years
13. College Of Nursing / Pims	Islamabad	B.NURS , 2 Years
14. College Of Nursing / Pims	Islamabad	B.Sc. , 2 Years
15. Aman Medical Institute	Islamabad	BS , 4 Years
16. Bashir Institute Of Health Sciences	Islamabad	BS , 4 Years
17. Bashir Institute Of Nursing	Islamabad	B.Sc. , 2 Years
18. Prime Institute Of Health Sciences	Islamabad	BS , 4 Years
19. Rawal Institute Of Health Sciences	Islamabad	B.Sc. , 2 Years
20. College of Nursing, Federal Government Polyclinic	Islamabad	BS , 4 Years

**TOTAL NURSING COLLEGE OFFERING DIFFERENT DEGREE  
PROGRAM IN RAWALPINDI**

<b>S No</b>	<b>Institute</b>	<b>City</b>	<b>Degree, Duration</b>
1	Armed Forces Institute of Pathology Rawalpindi	Rawalpindi	Nursing & Midwifery Council
2	National University of Medical Science Rawalpindi	Rawalpindi	Bsc Nursing 4years
3	Armed Forces Postgraduate Medical Institute Rawalpindi	Rawalpindi	BSc Nursing Diploma in Pediatric Nursing Diploma in Psy: Nursing Diploma in Oncology Nursing Diploma in Burn Care Nursing
4	Fuji Foundation Nursing School Rawalpindi	Rawalpindi	BS , 4 Years, B.Sc. , 2 Years
5	School of Nursing Holy Family Hospital Rawalpindi	Rawalpindi	BS , 4 Years, B.Sc. , 2 Years
6	College of Nursing, Benazir Bhutto Hospital	Rawalpindi	BS,4years
7	Pakistan Institute of Ophthalmology (PIO), Rawalpindi	Rawalpindi	Diploma in Ophthalmic Nursing Assistant
8	Pakistan Institute of Computer Sciences Rawalpindi	Rawalpindi	Certificate in nursing
10	Rawalpindi Medical College, Rawalpindi	Rawalpindi	Bs Nursing



**AL-SHIFA SCHOOL OF PUBLIC HEALTH  
PAKISTAN INSTITUTE OF OPHTHALMOLOGY  
AL-SHIFA TRUST, RAWALPINDI**

MSPH-IRB/14-01  
27<sup>th</sup> Sep, 2022

**TO WHOM IT MAY CONCERN**

This is to certify that **Abdul Hakim S/O Muhammad Hassan Kalhoro** is a student of Master of Science in Public Health (MSPH) final semester at Al-Shifa School of Public Health, PIO, Al-Shifa Trust Rawalpindi. He/she has to conduct a research project as part of curriculum & compulsory requirement for the award of degree by the Quaid-i-Azam University, Islamabad. His/her research topic which has already been approved by the Institutional Review Board (IRB) is **“Association of perceived body image and self-esteem among undergraduate nursing students of Rawalpindi and Islamabad”**.

Please provide his/her necessary help and support in completion of the research project. Thank you.

Sincerely,

**Dr. Ayesha Babar Kawish**  
Head  
Al-Shifa School of Public Health, PIO  
Al-Shifa Trust, Rawalpindi