

ASSOCIATION BETWEEN BODY IMAGE  
DISSATISFACTION AND SELF-ESTEEM  
AMONG BREAST CANCER PATIENTS IN  
RAWALPINDI/ISLAMABAD



By

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BSP193013

Faculty of Management and Social Sciences  
Capital University of Science & Technology,  
Islamabad  
July, 2023

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DEPARTMENT OF PSYCHOLOGY

JULY, 2023

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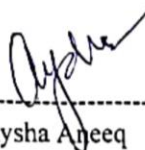
A Research Thesis submitted to the  
DEPARTMENT OF PSYCHOLOGY  
in partial fulfillment of the requirements for the degree of  
BACHELOR OF SCIENCE IN PSYCHOLOGY

Faculty of Management and Social Sciences  
Capital University of Science & Technology,  
Islamabad  
July, 2023

## CERTIFICATE OF APPROVAL

It is certified that the Research Thesis titled "Association between body image dissatisfaction and self-esteem among breast cancer patients in Rawalpindi/Islamabad" carried out by Menahil Ashfaq, Reg. No. BSP193013, under the supervision of Ms. Aysha Aneeq, Capital University of Science & Technology, Islamabad, is fully adequate, in scope and in quality, as a Research Thesis for the degree of BS Psychology.

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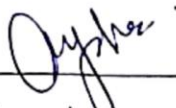
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By

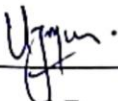
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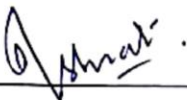
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## **DEDICATION**

### ***To my parents***

*I dedicate this research to my parents for their boundless love and the countless sacrifices they have made to provide me with the opportunities and resources necessary for my education. Your tireless efforts have allowed me to pursue my passions and have shaped the person I am today.*

### ***To my siblings***

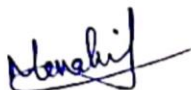
*I dedicate this research to my siblings, who have been my role models and a constant source of inspiration. Your own pursuit of knowledge, personal achievements, and unique talents have set remarkable examples for me to follow. Your unwavering commitment to excellence and your passion for continuous learning have motivated me to push my boundaries and strive for greatness.*

### ***To my friends***

*Thank you, dear friends, for being my emotional anchors and for being there for me through thick and thin. Your unwavering support, understanding, and encouragement have uplifted my spirits and kept me motivated throughout this research journey. Your diverse perspectives, insightful feedback, and thought-provoking discussions have enriched the quality and depth of my work. This research is dedicated to you, with deep appreciation and gratitude.*

## DECLARATION

It is declared that this is an original piece of my own work, except where otherwise acknowledged in text and references. This work has not been submitted in any form for another degree or diploma at any university or other institution for tertiary education and shall not be submitted by me in future for obtaining any degree from this or any other University or Institution.



**Menahil Ashfaq**

**BSP193013**

**June, 2023**

## ACKNOWLEDGMENT

I am immensely grateful to *ALLAH SUBHANAHU WA TA'ALA*, the Lord of the universe, the Most Gracious and the Most Merciful, for bestowing upon me the strength and capability to comprehend, learn, and successfully complete this report. I extend countless Darood-O-Salam to *HAZRAT MUHAMMAD (SAWW)*, who serves as an eternal embodiment of guidance and knowledge for all of humanity.

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### **Abstract**

This study is intended to find out the relationship between body image dissatisfaction and self-esteem among breast cancer patients in Rawalpindi/Islamabad using cross-sectional research design with correlational analysis. Literature suggests that breast cancer patients experience body dissatisfaction and low self-esteem after physical changes which can negatively affect the treatment process as well. As the onset of breast cancer in Pakistani women is increasing rapidly, it is important to highlight the psychological concerns which can serve as a baseline in developing intervention in this area and plan strategies to help these patients manage their body image concerns. Female participants ( $n = 150$ ) were selected through purposive sampling from government and private hospitals within Rawalpindi and Islamabad. After voluntary consent, Urdu versions of Rosenberg Self-esteem Scale and Appearance Anxiety Inventory were administered on this sample. The results were then analyzed using SPSS version 26. The results showed that there is a negative and significant relationship between body image dissatisfaction and self-esteem. Demographic variable of marital status is shown to produce a significant difference in self-esteem but other demographics such as age and socio-economic status do not affect it.

*Keywords;* breast cancer patients, body image dissatisfaction, self-esteem, purposive sampling, breast cancer in Rawalpindi/Islamabad

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**List of Abbreviations**

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<b>GCO</b>	Global Cancer Observatory
<b>BDD</b>	Body Dysmorphic Disorder
<b>WHO</b>	World Health Organization
<b>AAI</b>	Appearance Anxiety Inventory
<b>URSES</b>	Urdu Rosenberg Self-Esteem Scale
<b>K-S</b>	Kolmogorov-Smirnov
<b>SD</b>	Standard Deviation
<b>df</b>	Degree of freedom
<b>N</b>	Number of participants

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## **Chapter 1**

### **Introduction**

Cancer is a global illness which can affect any individual in any part of the world but the type and rate differs from region to region (Abbas et al., 2020). This can be because of cultural differences like promotion of dietary fat or smoking. Because it can occur at random times and can affect at any age, the fear of cancer because of its uncertain nature grows in every individual (Brandão et al., 2017). The development of cancer can start from a single cell in any part of the tissue when a group of abnormal cells, known as tumors, mutate, multiply abnormally and grow out of control. There are two types of tumors; a benign tumor that has the ability to expand and damage the nearby tissues but does not spread to other parts of the body. Whereas, a malignant tumor has the ability to grow faster, spreads to other parts of the body and is potentially life threatening (Sharma et al., 2010).

According to Global Cancer Observatory (GCO) as of 2022, breast cancer accounts for 14.5% of all new cancer cases in the country (Global Cancer Observatory, 2022). This indicates that approximately 25,928 new cases of breast cancer are diagnosed in Pakistan each year. Moreover, breast cancer is responsible for a substantial number of cancer-related deaths in the country. It accounts for 75.6% of all cancer deaths in Pakistan, resulting in approximately 56,366 deaths annually (Global Cancer Observatory, 2022).

The prevalence and mortality rates of breast cancer in Pakistan are considerably higher than the global average. The global average prevalence rate for breast cancer is 6.9%, indicating that breast cancer is more prevalent in Pakistan than in many other countries (Global Cancer Observatory, 2022). Similarly, the global average mortality

rate for breast cancer is 41.4%, which is significantly lower than the mortality rate in Pakistan (Global Cancer Observatory, 2022). These statistics highlight the urgent need for effective breast cancer prevention, detection, and treatment strategies in Pakistan.

## **Breast Cancer**

Breast cancer is the type of cancer that originates in the breast tissue. When the cancer develops in the inner lining of milk ducts, it is called as ductal cancer, and when in glands supplying ducts with milk, it is referred to as lobular cancer (Weinberg, 1996).

### **Types of Breast cancer**

According to Sharma et al., (2010) the type of breast cancer depends on the locality of the cancer being originated at. Some of the types are:

#### ***Non-Invasive Breast Cancer***

This is stage 0 breast cancer in which ductal cells change into cancer cells but do not yet spread to other parts of fatty and connective tissues.

#### ***Invasive Breast Cancer***

This ranges from stage I to stage IV in which invasive breast cancer cells invade the nearby surrounding fatty and connective tissues.

#### ***Infiltrating Lobular Carcinoma***

This is an invasive type of breast cancer in which abnormal cancer cells in the milk glands develop and spread to other parts of the body.

#### ***Ductal Carcinoma in situ***

Ductal Carcinoma is the type of non-invasive breast cancer in which abnormal cells develop in milk ducts of breast but has not spread to other parts of breast.

### ***Infiltrating Ductal Carcinoma***

This is the type of invasive breast cancer in which abnormal cancer cells develop in milk ducts and then spread to nearby fatty and connective tissues.

### **Self-Esteem**

Self-esteem is defined as the positive or negative subjective evaluation of one's self. It is a psychological construct that includes beliefs about one's self and emotional states associated with that belief and how confident one feels about his worth (Rosenberg, 1965).

### **Theories on Self-Esteem**

Humanistic theorists like Maslow and Rogers have included the concept of self-esteem in their theories and consider it to be an important motivator for success and well-being. Maslow (1987) included the concept of self-esteem in his need's hierarchy by differentiating between two different types; one type is respect from others that includes praise and admiration, the second type is self-respect that includes self-love and self-confidence (Maslow, 1987). Rogers (1960) also talked about self-esteem in terms of unconditional positive regard which can improve self-esteem. According to him, if an individual considers himself worthless, problems such as low self-esteem starts to develop for him (Rogers, 1960).

### **Types of Self-Esteem**

There are different types of self-esteem defined by Hamachek (1978).

#### ***High Self-Esteem***

Individuals with high self-esteem have a healthy relationship with their self-concept. They fully believe in to their protentional, think they are second to none, give

equal respect and importance to their ideas, values and capability, and do not blame themselves for any inconvenience in their lives.

### ***Low Self-Esteem***

Low self-esteem can be a result of external events like poor academic performance, weight gain, bully or inner states like guilt, shame, pessimism, self-criticism and hypersensitivity.

Such individuals are often self-critical and depend on other's approval for everything they do because they do not believe in their qualities.

### **Components of Self-Esteem**

There are four main components of self-esteem defined by (Brown & Marshall, 2006).

#### ***Self-Confidence***

Self-confidence involves feelings of security. A person develops a high self-esteem with self-confidence if he has positive familial relationships, feels secure in his environment and feels loved.

#### ***Feeling of Belonging***

As a human, we associate to different groups. These groups help us define our identity by the experiences and relationships we form with the members of these groups. Positive relationships with high solidarity and communication help develop high self-esteem.

#### ***Feeling of Competence***

When an individual is met with success and achieves his desired goal, he feels competent and this gives a boost to his self-esteem. Similarly, when he is met with

failure, he develops feelings of incompetence and this lowers his self-esteem. So, the feelings of competence determine self-esteem.

### ***Identity***

Identity is defined as a person's self of self and the knowledge one has about himself related to his ideas, needs, characteristics, abilities and social roles. This sense of identity distinguishes a person from others and helps in forming self-esteem which can be high if there is strong sense of identity and low self-esteem in case of weak sense of identity.

### **Body Image Dissatisfaction**

Body image dissatisfaction is a persistent perceived discrepancy between real and ideal-self and negative feelings towards one's body. Since this is a subjective negative evaluation of one's self, it contributes towards negative psychological and emotional health leadings to negative emotions. It is an internal cognitive process but is heavily influenced and shaped by external events like bullying or appearance concerns (Hamamoto et al., 2022).

### **Components of Body Image Dissatisfaction**

Research shows that there are two components of body image dissatisfaction (Hamamoto et al., 2022).

#### ***Perceptual Component***

In the perceptual component, individuals are unable to perceive their bodies accurately. Such individuals tend to over-estimate their original body size their actual bodies and create a discrepancy in their actual and perceived selves.

### ***Affective Component***

In the affective component, individuals exhibit a discrepancy in their ideal and perceived body image. Due to this discrepancy, they experience negative feelings and emotions associated with their bodies, leading towards dissatisfaction.

### **Body Image Dissatisfaction and Low Self-Esteem in Oncology**

In oncology, changed body image is a psychological dimension of the experience of cancer which also leads to low self-esteem. Because of the vigorous cancer treatment, women undergo changed bodies (Alhusban, 2019). As society has always objectified women based on appearance and has set standards of beauty, hence appearance is considered to be the most important factor affecting self-esteem (Choi & Choi, 2016). If women do not fall in to the standard criteria of beauty, they start losing their self-worth ultimately developing low self-esteem and being unsatisfied with their own bodies. Low self-esteem contributes towards body image dissatisfaction which is a perceived discrepancy between real and ideal-self and negative feelings towards one's body (Leite et al., 2015; Jafar et al., 2020; Uchôa et al., 2020).

### **Literature Review**

Breast cancer can have significant physical impacts on women, affecting various aspects of their overall health and well-being. The diagnosis and treatment of breast cancer often involve invasive procedures, such as surgery, chemotherapy, and radiation therapy, which can lead to a range of physical changes and challenges. These physical impacts can include pain, fatigue, lymphedema, changes in body weight, and alterations in physical functioning (Olasehinde et al., 2019).

One of the most common physical impacts of breast cancer is pain. Breast cancer-related surgeries, such as mastectomy or breast-conserving surgery, can cause

post-operative pain and discomfort. Additionally, some women may experience persistent pain or discomfort as a result of nerve damage or scar tissue formation. The intensity and duration of pain can vary among individuals and may affect daily activities and quality of life (Montazeri et al., 2016).

Fatigue is another significant physical impact experienced by women with breast cancer. Cancer-related fatigue is a persistent and overwhelming sense of tiredness that is not relieved by rest or sleep. It can significantly interfere with a woman's ability to carry out daily activities and may persist long after treatment completion. Fatigue can have a profound impact on overall functioning, including physical, cognitive, and emotional aspects (Bower et al., 2014).

Changes in body weight are also observed in women with breast cancer. Some women may experience weight gain as a result of hormonal changes, chemotherapy, or lifestyle factors. Weight gain can impact body image and self-esteem and may have implications for long-term health outcomes. On the other hand, some women may experience weight loss due to the side effects of treatment, loss of appetite, or emotional distress. Weight loss can lead to muscle wasting, weakness, and decreased energy levels (Vitolins et al., 2016).

Not only does breast cancer affect women physically by posing long-term harmful side-effects of the treatments, but also disturbs their psychological well-being by inducing in them stress and negative thought patterns (Mohd-Sidik et al., 2018).

Breast cancer has a profound psychological impact on women in Pakistan, influenced by cultural factors such as modesty, traditional gender roles, and the stigma surrounding the disease which further influences the psychological experiences of women with breast cancer. The diagnosis and treatment of breast cancer can evoke a



range of emotions, including fear, anxiety, sadness, and anger. These emotional responses may be intensified by cultural factors such as modesty, the importance of maintaining traditional gender roles, and the stigma surrounding the disease. Research by Raza et al. (2019) highlights the prevalence of psychological distress among Pakistani breast cancer patients, with symptoms of anxiety, depression, and distress being commonly reported. The cultural emphasis on modesty in Pakistan can contribute to unique psychological challenges for women with breast cancer. The physical changes resulting from breast cancer treatment, such as mastectomy and hair loss, can challenge traditional notions of modesty and femininity. Pakistani women may experience feelings of shame, embarrassment, and fear of social judgment due to changes in their physical appearance. The struggle to preserve modesty while coping with these changes can lead to body image dissatisfaction and negatively impact self-esteem (Raza et al., 2019).

In addition to the influence of modesty, Pakistani society places a strong emphasis on traditional gender roles and societal expectations for women. Breast cancer-related physical changes can disrupt these expectations, leading to a loss of femininity and a negative impact on body image and self-esteem. A study conducted by Ali et al. (2017) highlighted that Pakistani breast cancer survivors perceived a loss of femininity due to mastectomy and reported lower self-esteem as a result. The pressure to conform to societal ideals of femininity can intensify the psychological distress experienced by Pakistani women with breast cancer.

Furthermore, the stigma surrounding breast cancer in Pakistani culture can significantly impact the psychological well-being of women. Breast cancer is often associated with misconceptions, fear, and shame, leading to isolation and limited social

support for affected women. The reluctance to openly discuss the disease and the cultural taboo surrounding health-related discussions can further compound the psychological impact. Research by Ahmed et al. (2018) emphasizes the negative influence of stigma on body image dissatisfaction and self-esteem among Pakistani breast cancer survivors. The stigma associated with breast cancer can lead to feelings of shame, isolation, and a lack of social support, which can further exacerbate psychological distress and affect women's overall well-being.

The common treatment to fight cancer includes chemotherapy, with side effects such as nausea or vomiting, weight changes, feeling lethargic and hair loss. In addition to chemotherapy, mastectomy is also performed on such patients which is surgical removal of one or both breasts (Leite et al., 2015; Mohd-Sidik et al., 2018). Breasts hold significant cultural and social significance in Pakistani culture, representing femininity, beauty, and motherhood. It is seen as the eroticized body organ and embodiment of femininity and considered an essential aspect of a woman's identity and play a vital role in her sense of self and societal acceptance. The loss of one or both breasts due to breast cancer and subsequent mastectomy causing disfigurement in the breasts such as size or skin texture can have the women question their attractiveness and may damage their physical structure which can lead to low self-esteem and body image dissatisfaction (Prates et al., 2017; Guedes et al., 2018; Jafar et al., 2020; Manot & Halder, 2020). This can have a profound impact on Pakistani women, both physically and psychologically, as it challenges societal expectations and deeply ingrained cultural beliefs.

In Pakistani culture, the breast is not only associated with physical attractiveness but also plays a crucial role in reproductive and maternal roles. Breastfeeding is highly

valued and considered essential for the health and well-being of infants. The breast serves as a symbol of nurturing and motherhood, and its absence can create a sense of inadequacy and failure to fulfill these roles. This cultural emphasis on the breast's significance adds complexity to the experience of breast cancer patients after mastectomy. After undergoing mastectomy, Pakistani women may experience a range of emotional and psychological challenges. The loss of a breast can lead to body image dissatisfaction, self-esteem issues, and a sense of diminished femininity. Pakistani breast cancer survivors may feel a sense of shame, embarrassment, and fear of social judgment due to the altered physical appearance. A study by Raza et al. (2019) emphasized the concerns expressed by Pakistani breast cancer survivors regarding preserving their modesty and the struggles they faced with body image dissatisfaction due to these cultural expectations.

The impact of mastectomy on body image in Pakistani culture is further exacerbated by societal norms and the pressure to conform to traditional gender roles (Jafar et al., 2020). Pakistani society places a strong emphasis on women's appearance, and societal expectations for women to embody femininity and maintain their physical attractiveness can be burdensome (Ali et al., 2017; Khan et al., 2017; Raza et al., 2019). The loss of a breast can be perceived as a disruption to these expectations, leading to a sense of loss of femininity and attractiveness. A study conducted by Ali et al. (2017) highlighted that Pakistani breast cancer survivors perceived a loss of femininity due to mastectomy and reported lower self-esteem as a result.

The cultural significance of breasts in Pakistani society can also influence the social interactions and relationships of breast cancer survivors. The altered physical appearance may lead to social isolation and difficulties in maintaining healthy

relationships. Pakistani women may fear judgment or rejection by their spouses, families, and communities due to the perceived loss of attractiveness or inability to fulfill cultural expectations. This can further impact their self-esteem and overall well-being. A study by Khan et al. (2017) revealed that Pakistani breast cancer survivors faced challenges in maintaining healthy relationships due to body image concerns, which further affected their self-esteem.

The body image comprises of their own self-perceptions, thoughts and feelings towards their own bodies. These self-perceptions of their own attractiveness guides how attractive they think others perceive them to be (Manot & Halder, 2020; Uchôa et al., 2020). Women undergoing chemotherapy and mastectomy go through changed appearance including hair loss and weight changes which contributes to them growing less satisfied with their appearances and developing negative body image (Mohd-Sidik et al., 2018). The more a woman values her breasts and associates it with beauty, the more harmful psychological effects are left after mastectomy, contributing to low self-esteem and fear of rejection by the opposite gender. Such an individual feels like she has lost her sexuality, sense of identity and femininity and no longer falls in the category of physical beauty as standards set by society (Türk & Yılmaz, 2018).

This negative body image can be a result of post-treatment side effects such as hair, eyebrows and eyelashes loss, weight loss, perception of loss of femininity after mastectomy and over-all negative evaluations of their bodies because of self-consciousness (van Oers, 2020).

According to research, body dissatisfaction appears in breast cancer patients after the diagnosis stage when they are undergoing treatment and now have to deal with their changed appearances as a result of treatment (van Oers, 2020). Their cancer

journey can cause sensitivity to their new and altered appearance, triggering them to develop dissatisfaction with their bodies (Alhusban, 2019). Such women can make assumptions and misperceptions about how they are being perceived by others based on their physical appearance (Uchôa et al., 2020). Due to the obvious hair loss and weight change, women often feel exposed in front of others and get more self-conscious. This induces in them fear of negative evaluation and stigmatization (Türk & Yılmaz, 2018). These women perceive their new altered physical bodies as a source of danger because of loss of sense of identity and inability to manage their relationship with their loved ones. They then form a new injured “self” that they don’t relate with after the oncological experience (Sebri et al., 2022). The misperception can also influence their self-esteem and develop in them a feeling of inferiority due to changed appearance during/after treatment which contributes to psychological imbalance and can negatively affect the treatment process and pose difficulty in adjusting back to their lives hence damaging their interpersonal relationships (Prates et al., 2017). Studies have revealed that if body image of breast cancer patient is negative, such a patient does not respond well to treatment and cannot cope up well with this illness. They also exhibit more psychological stress as posed by breast cancer (Oers & Schlebusch, 2020). Research also indicates that breast cancer patients with negative perceptions about their bodies exhibited greater levels of dissatisfaction, were reluctant to see themselves naked in the mirror, showed lack of interest in sexual activities and were overall self-conscious (Paterson et al., 2016).

Research suggests that age also plays a major role in development of low self-esteem. Younger women tend to have a more negative body image and poor self-esteem as compared to older women with breast cancer because younger women are more

concerned about their body image. The breast cancer diagnosis and treatment side-effects come as a more shock because these patients think they are no more attractive to society and must fall on the beauty standards set by society (Davis et al., 2020). They also experience greater levels of psychological discomfort and emotional instability after going through mastectomy surgery as they associate their beauty and sexuality to their bodies especially the breasts more than older women (Davis et al., 2020; van Oers, 2020). According to research, body image satisfaction and self-esteem of women who were able to participate in breast reconstruction surgeries after mastectomy were higher than those women who did not have the means to, suggesting that socio-economic status also plays a significant role in self-esteem by providing such patients with power to have control over their bodies again (Prates et al., 2017).

In the light of the above literature, the current study aims to find out the association between body image dissatisfaction and self-esteem of patients with breast cancer in Rawalpindi/Islamabad.

### **Theoretical Framework**

Self-discrepancy theory was developed by psychologist Higgins (1987) to explain the relationship that exists between different domains of self and affect (Higgins, 1987).

According to Self-discrepancy theory, individuals use self-perceptions to compare themselves to integrated opinions of others into their identities (Higgins, 1987). Due to the inconsistency between their actual self and other's integrated opinions, self-discrepancies are created which can cause such person to experience psychological distress. Thus, others contribute to an individual's self-perception, of what others perceive him/her to be (Phillips & Silvia, 2005).

According to this theory, the ideas about “selves” contribute to our self-concept.

The self can be divided into three domains:

### *Actual-Self*

As the name indicates, actual-self is the actual and real self. It includes the perception of attributes or characteristics that the individual actually believes to possess.

### *Ideal-Self*

Ideal-self is defined by the attributes or characteristics that the individual wishes or would like to possess. It is the protentional self that comprises of the wishes, wants and hopes on an individual.

### *Ought-Self*

All those attributes and characteristics fall under the ought-self that the individual believes he has an obligation towards and should possess. It comprises of the duties and responsibilities of an individual.

The actual-self is the self-concept while the ideal and ought-selves are referred to as self-guides. These three domains of selves are in constant conflict with each-other and discrepancies rise when there is a conflict between the “actual-self” and the “ideal or ought-self” because we are motivated to reach a state of equilibrium where our self-concept matches with our self-guide. Failing to achieve this state of equilibrium leads to discrepancies and negative psychological affect like disappointment, dissatisfaction or depression.

### **Standpoints on the Self**

Self-discrepancy theory proposes two types of stand-points according to which the individual perceives the self. Standpoint is defined as the view point that the individual uses as a self-guide for his attitude and values.

### ***Own Standpoint***

This includes an individual's own personal standpoint through which he judges and perceives his self, attitudes and values.

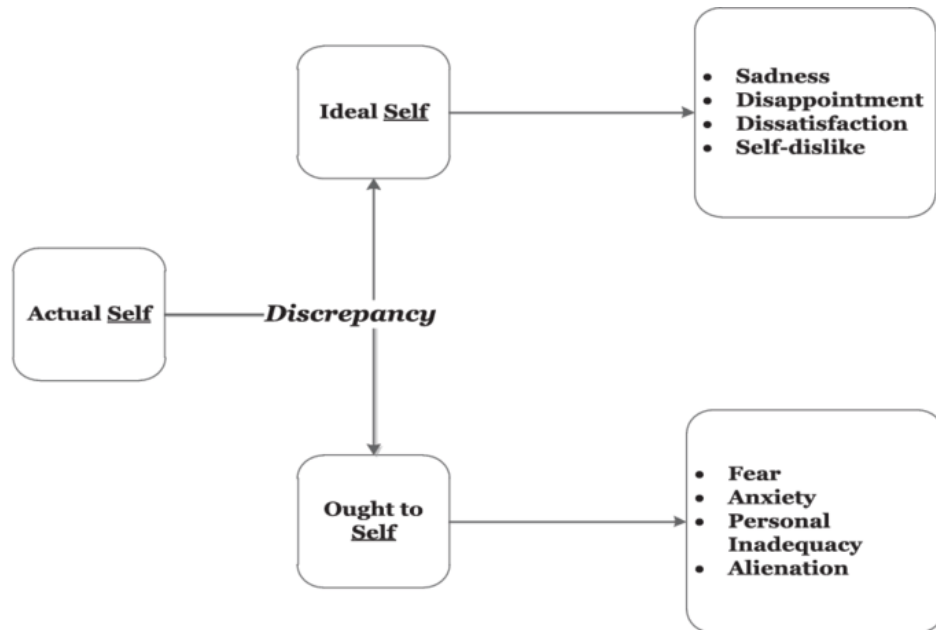
### ***Others Standpoint***

Others standpoint includes the viewpoint of significant others like parents, siblings, spouses and close friends. It involves the self's beliefs about attitudes and characteristics that others would want the individual to possess.

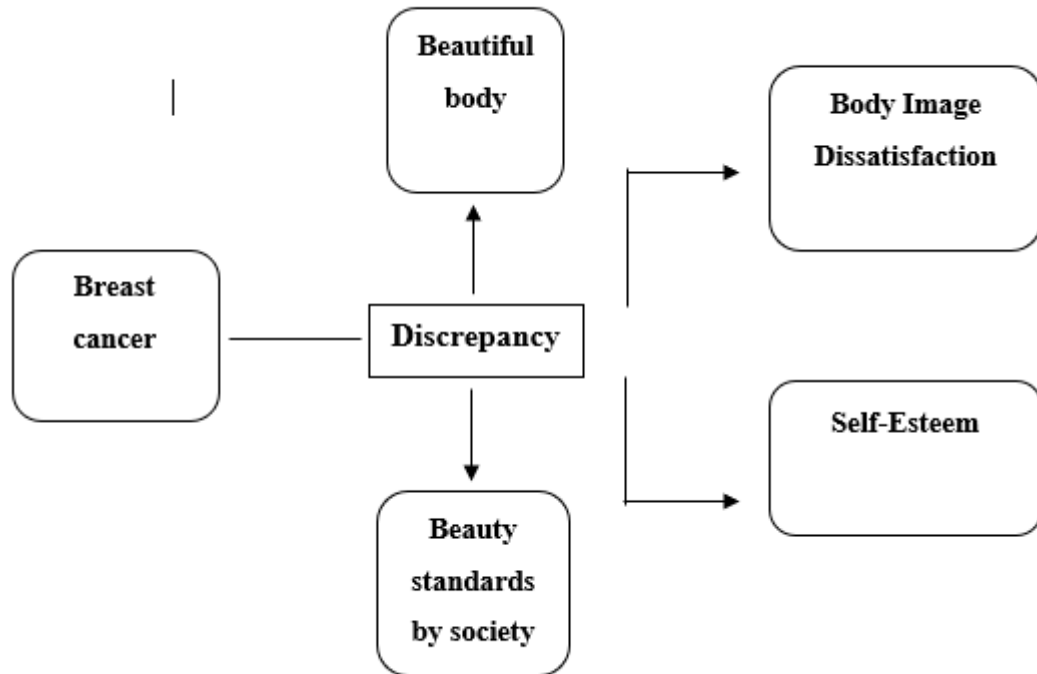
Society's standards of beauty, particularly those centered around a feminine and thin body, can exert significant pressure on women. This pressure to conform to societal beauty ideals often leads to the development of body-related self-discrepancy, where women perceive a gap between their actual bodies and the idealized standards imposed by society (Sebri et al., 2022). For breast cancer patients, this pressure is further complicated by the physical changes they experience as a result of the disease and its treatment. Breast cancer patients often struggle with self-perception, perceiving their bodies as disfigured or dysmorphic due to the changes caused by the disease and its treatments. These changes may include mastectomy, hair loss, and other physical alterations. The perception of their bodies as falling short of societal and cultural beauty norms can profoundly impact their body image and overall self-esteem (Prates et al., 2017). Post-treatment physical changes in breast cancer patients create a discrepancy between their actual selves and their ideal selves, which are shaped by societal and



cultural standards of beauty. This discrepancy can give rise to body dissatisfaction and negative emotional affect, leading to lower levels of self-esteem (Sebri et al., 2022). Breast cancer survivors may compare their post-treatment bodies to the societal expectations of beauty and experience feelings of inadequacy and self-consciousness. The experience of body dissatisfaction and low self-esteem among breast cancer patients is a complex issue. It arises from the intersection of cultural beauty standards, societal pressures, and the physical changes caused by breast cancer and its treatments. The impact of these factors on body image and self-esteem can be profound, influencing the overall well-being and quality of life of breast cancer survivors.

**Figure 1:** *Original Model*

**Figure 2:** *Theoretical model of the study*



## **Rationale**

Breast cancer in Pakistani women is spreading rapidly with 25,928 new cases of breast cancer annually in various hospitals in Pakistan (Global Cancer Observatory, 2022), but literature shows very less research is conducted yet (Abbas et al., 2020). Because of lack of awareness in Pakistan regarding breast cancer, women show up late with enlarged tumor that is invasive in nature, and leave doctors with no choice to preserve the breast (Akram et.al., 2017). Because of this, mastectomy is mostly performed in Pakistan if breast cancer progresses from being non-invasive to invasive. Media and Pakistan society also play a huge role in women developing body dissatisfaction and low self-esteem, as they portray models with seductive figures as feminine and liked by the opposite gender, which leaves the breast cancer patients with emotional burden of being dissatisfied, depressed and unworthy as they feel short on this standard criterion.

So, it is important to highlight this emotional burden breast cancer can cause in females as it can change the way women feel about themselves causing them to develop body dissatisfaction with low self-esteem (Leite et al., 2015; Jafar et al., 2020; Uchôa et al., 2020). This emotional distress can have profound impacts on patients and seriously harm their mental wellbeing and treatment outcomes (Prates et al., 2017). Post-treatment psychological issues resulting from breast cancer have gotten very little attention in Pakistan, so this study will focus on serving as the baseline for the development of intervention and ways to manage body dissatisfaction after breast cancer experience for this vulnerable population by investigating the relationship between body dissatisfaction and self-esteem using tools of social sciences.

**Objectives**

1. To find out the relationship that exists between body image dissatisfaction and self-esteem among breast cancer patients.
2. To find out the role of age, marital status and socio-economic status on self-esteem among breast cancer patients.

**Hypotheses**

1. There will be a negative relationship between body image dissatisfaction and self-esteem among breast cancer patients.
2. There will be significant differences of age, marital status and socio-economic status in self-esteem among breast cancer patients.

## **Chapter 2**

### **Methods**

#### **Research Design**

This quantitative study is intended to find out the relationship between the two variables: body image dissatisfaction and self-esteem among breast cancer patients. Hence, cross-sectional study design is used and data has been analyzed using correlational analysis.

#### **Ethical Considerations**

A permission letter from Psychology department of Capital University of Science and Technology, CUST was obtained to conduct the study. Permission from the oncology department of the selected hospitals (NORI Hospital, Al-Shifa Hospital and Fauji Foundation Hospital) was also obtained to collect the data from the patients currently admitted in the hospital facility. The breast cancer patients were selected, were given an informed consent and also debriefed about the purpose of the study and how their voluntary participation in this study will benefit the future potential victims of breast cancer. Participants were also provided with the right to withdrawal without any penalty from research in case of any emotional, physical or psychological distress posed by the study or scale items. The two selected scales; Appearance Anxiety Inventory to measure body image concerns and Rosenberg Self-esteem Scale to measure self-esteem were used with author's permission. Lastly, confidentiality of data and privacy of the participants was ensured and the ethical guidelines such as informed consent, confidentiality, and right to withdrawal without penalty provided by American Psychological Association with respect to research were strictly followed.

## **Population and Sample**

G-power software version 3.1 was used to calculate the exact sample size which is a statistical software used to calculate sample size using statistical tests. A sample of 150 females having breast cancer with the age range of 25 and above was selected.

### ***Inclusion Criteria***

In the study, female patients meeting specific criteria were included as participants. The criteria for selection were as follows: Firstly, women at any stage of breast cancer were eligible to participate according to their current health status ensured by the hospital administration. This ensured that the study would encompass a diverse range of patients, representing different stages and severity of the disease. Secondly, women who were undergoing various forms of treatment, including radiotherapy, chemotherapy, and mastectomy surgery, were included in the study. This allowed for an examination of the experiences and challenges faced by women undergoing different treatment modalities. Thirdly, the age range for inclusion in the study was set at 25 and above. This ensured that the participants were adults and that the study focused on the experiences of women in the adult population. Lastly, women of all marital statuses who had been diagnosed with breast cancer were considered for inclusion. This allowed for a comprehensive understanding of the experiences of women with different marital statuses, including single, married, divorced, or widowed individuals. By including participants who met these specific criteria, the study aimed to capture a wide range of perspectives and experiences related to breast cancer among women.

### ***Exclusion Criteria***

In order to ensure the effectiveness and meaningful participation of the selected participants, female patients with breast cancer but having any other physical disability

or having severity of the current disease that could potentially hinder their involvement in the study were excluded.

### **Sampling Procedures/ Technique**

Purposive Sampling Technique which is also known as selective or judgmental sampling was used with researcher's judgement about selecting the sample in a non-random manner. As the goal of this study is to recruit a sample of breast cancer patients by focusing on particular characteristics in target population, according to the inclusion criteria mentioned, purposive sampling technique was the most suitable one to use.

### **Measures/ Instruments**

Following measures/instruments were used in the conduction of this study:

#### ***Informed Consent Form***

In the study, an informed consent form was utilized as a crucial component to ensure ethical conduct and protect the rights and welfare of the participants according to the guidelines by American Psychological Association.

The informed consent form provided participants with comprehensive information about various aspects of the research, ensuring that they were fully informed and able to make an informed decision regarding their participation. The form contained essential information about the researcher, including their name and contact details. This helped establish transparency and allowed participants to reach out for further clarification or assistance if needed. The form also clearly stated the topic of the research, outlining the specific area of study that the research aimed to address. Furthermore, the nature and purpose of the research were explained in the informed consent form. This involved providing a clear and concise description of the research design, methods, and procedures that would be employed. The purpose of the study,



whether it was to explore a specific phenomenon, test a hypothesis, or contribute to existing knowledge, was also outlined. This information aimed to provide participants with a comprehensive understanding of the research objectives and what their involvement would entail. The informed consent form also included a brief explanation of the scales or measures that would be used in the study. This helped participants gain an understanding of the tools or instruments that would be employed to collect data. This information was important to ensure transparency and allow participants to assess the validity and relevance of the measures being used. Confidentiality of data was emphasized in the informed consent form. Participants were informed about the steps taken to protect their privacy and the confidentiality of their responses. This included ensuring that their personal information would be kept confidential and that the data would be reported in a way that maintained anonymity. Lastly, the potential benefits of participation in the study for future research were mentioned in the informed consent form. This aimed to emphasize the broader significance of the study and how the findings could contribute to advancing knowledge in the field. Participants were made aware that their participation could have a positive impact beyond the immediate study and could potentially benefit future research endeavors.

By utilizing an informed consent form with these essential components, the study adhered to ethical guidelines and standards, ensuring that participants were fully informed and able to provide voluntary and informed consent. This form served as a crucial document to establish transparency, protect participant rights, and promote ethical conduct throughout the research process. Informed Consent Form is attached in Appendix C in the Appendices chapter.

### *Demographic Sheet*

In the study, a demographic sheet was administered to the participants to gather important data related to their background characteristics. This sheet included several key demographic variables that provided insights into the participants' socio-demographic profile and their breast cancer-related information.

The demographic sheet aimed to capture information such as age, education level, monthly income status, marital status, stage of cancer, year of diagnosis, whether mastectomy surgery was performed, and the current treatment being received. These variables were selected as they played significant roles in understanding the participant's socio-economic status, medical history, and current treatment trajectory. By collecting data on age, the study aimed to understand the distribution of participants across different age groups and explore potential age-related differences in experiences and outcomes. Education level served as an indicator of the participant's educational background, which could be related to their health literacy and understanding of the disease. Monthly income status provided insights into the economic circumstances of the participants, allowing for an examination of the potential influence of financial resources on access to healthcare and treatment options. Marital status data offered an understanding of the participant's social support systems and potential differences in experiences based on marital status. The stage of cancer, year of diagnosis and whether mastectomy surgery was performed helped categorize participants based on the severity of their condition and the timing of their diagnosis. This information could be relevant in exploring the impact of disease progression and treatment duration on various psychological and emotional factors. Lastly, collecting data on the current treatment being received provided insights into the participant's ongoing medical interventions

and potential variations in treatment modalities. By including these demographic variables, the study aimed to establish a comprehensive understanding of the participant's background characteristics, breast cancer-related information, and potential factors that may influence their experiences and outcomes. This information served as valuable contextual data for analyzing the study findings and drawing meaningful conclusions. Demographic sheet is attached in Appendix D in the Appendices chapter.

### **Scales used in study**

Two scales with the permission of authors were used to measure the variables of self-esteem and body image dissatisfaction respectively:

#### ***Rosenberg Self-Esteem Scale***

Urdu translated version of the original Rosenberg Self-Esteem Scale was used which was developed by Morris Rosenberg (1965) and published by Princeton University Press, Princeton, New Jersey, 1965 (Rosenberg, 1965). Urdu version is translated by Muhammad Rizwan in 2017 (Rizwan et. al., 2017). It is a 10 itemed self-report instrument and uses both positive and negative items to measure self-esteem. It uses a 4-point Likert scale ranging from strongly agree to strongly disagree.

Internal consistency of the Urdu translated scale was .773 and test-retest reliability for the 4-week interval was calculated at .808 (Rizwan et. al., 2017).

The scoring procedure for the positive and negative item differ. The scores are calculated as follows:

For items 1, 3, 4, 7, and 10 (Positive items):

- Strongly agree = 0
- Agree = 1

- Disagree = 2
- Strongly disagree = 3

For Negative items 2, 5, 6, 8, and 9 (which are reversed in valence)

- Strongly agree = 3
- Agree = 2
- Disagree = 1
- Strongly disagree = 0

The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem.

### ***Appearance Anxiety Inventory***

This scale was developed by Veale et al., (2014). It is a 10 question self-report scale that uses 5-point Likert Scale and measures the cognitive and behavioral aspects of distorted body image in general with adolescents and adults who have developed the concept of self (Veale et al., 2014).

The psychometric properties of this scale were established in a sample taken from UK that involved both clinical sample of BDD and non-clinical sample. AAI scale has a correlation of .55 with the YBOCS-BDD, and .58 with PHQ9. It has a high internal consistency, with a Cronbach's Alpha of .86 (Veale et al., 2014). After factor analysis, two subscales were further created: Avoidance (Subscale items 1, 3, 5, 7, 9, 10) and Threat Monitoring (items 2, 4, 6, 8).

Scoring for Avoidance subscale ranges from 0-24, and for Threat Monitoring score lies between 0-16. Total score for the scale is obtained by summing all the items (range is 0 to 40). Cut-off score is on 19 and above (Veale et al., 2014).

### **Scale translation for the current study**

This scale was translated in Urdu version using the forward-translation procedure guidelines provided by WHO Translation Protocol. First, a forward translation was carried out by 4 bilingual experts having Urdu as their first language, who translated the scale from English to Urdu language. This translation was then checked by a committee of bilingual experts to settle upon one agreed translation. Then, a backward translation was carried out by other 4 bilingual experts having English as their first language, who translated the scale from Urdu back to English language. This translated scale was also checked by a committee of bilingual experts to settle upon one agreed translation. The final selected translated scale was then used in pilot testing on a sample of 30 participants as recommended by Mooney & Duval (1993), Isaac & Michael (1995), Hill (1998) and Jhason & Brooke (2009). This translated version of the scale was compared against the original scale and the validity and reliability of the Urdu translated scale was calculated using SPSS.

### **Procedures**

A permission letter to conduct the study was obtained from Capital University of Science and Technology (CUST), which allowed them to proceed with the research. This step was crucial to ensure ethical considerations. The current study is carried out in two phases. Phase 1 is the pilot study and phase 2 is the actual cross-sectional study.

#### ***Pilot Testing***

To assess the reliability and validity of the translated scale of Appearance Anxiety Inventory, a pilot testing phase was conducted. A sample of 30 participants was chosen to participate from NORI Hospital, Islamabad, in this initial testing. The

purpose of the pilot testing was to evaluate the effectiveness and appropriateness of the translated scale in the context of the study population. The results obtained from the pilot testing were used to make necessary adjustments and improvements to the scale, ensuring its accuracy and relevance. Results of this pilot study are mentioned in the results section.

### ***Cross-sectional Study***

Following the successful completion of the pilot testing phase, the researcher selected government and private hospitals located in Rawalpindi and Islamabad through purposive sampling. This method was employed to specifically target hospitals with oncology departments, as they were expected to have a sufficient number of breast cancer patients who could participate in the study. The hospitals were contacted, and the administration was informed about the purpose and objectives of the research.

To ensure ethical considerations and obtain permission for the study, the researcher sought approval from the hospital administration. This step was crucial to ensure that the study adhered to ethical guidelines and had the necessary support from the healthcare institutions involved. The administration's permission indicated their agreement to allow the researcher access to breast cancer patients admitted to the oncology department for data collection purposes.

Before participating in the study, the recruited breast cancer patients were given a comprehensive briefing about the purpose and significance of the research. The potential benefits of their participation for future breast cancer patients were explained, highlighting the importance of their contribution to advancing knowledge in the field. Additionally, the participants were informed of their right to withdraw from the study at any time without facing any penalties or negative consequences.

In order to obtain informed consent, the participants were provided with a document that clearly outlined the purpose, procedure, risks, benefits, and confidentiality aspects of the study. This informed consent document aimed to ensure that the participants were fully aware of the implications of their participation and had the opportunity to make an informed decision.

After obtaining informed consent, the participants were asked to complete a demographic sheet, which included questions about their age, marital status, education level, monthly income status, as well as other relevant information about their cancer stage and ongoing treatment. This demographic information was important for characterizing the study sample and understanding the potential impact of these factors on the quality of life of breast cancer patients.

Following the completion of the demographic sheet, the participants were presented with the two scales that had been translated for this study. The scales were provided without any time constraints or pressure, ensuring that the participants had ample time to respond to the items and provide accurate and thoughtful answers. By employing this approach, the researchers aimed to gather reliable and valid data regarding the experiences by breast cancer patients.

### **Data Analyses Procedures**

For data analysis in the present study, the Statistical Package for the Social Sciences (SPSS) version 26 was utilized. This widely used software provides a range of statistical procedures and tools to explore and analyze data efficiently.

As discussed in the results section, in order to test the hypothesis and explore the relationships between variables, the researcher employed the Spearman rho correlation analysis. In addition to the correlation analysis, the researcher also

conducted additional analyses to investigate whether certain demographic variables had an impact on self-esteem scores. This was achieved through the utilization of the Kruskal Wallis test, which is a non-parametric alternative to the one-way analysis of variance (ANOVA). The Kruskal Wallis test allows for the comparison of multiple groups, typically based on a categorical independent variable, without assuming that the data follow a normal distribution.

In this context, the researcher was interested in examining whether demographic factors such as age, marital status, or socioeconomic status had any influence on self-esteem scores among the breast cancer patients. By employing the Kruskal Wallis test, the researcher could explore potential differences in self-esteem scores across these demographic groups.



## Chapter 3

### Results

This chapter focuses on the results and findings of the study.

#### Pilot study Results

Results of pilot testing to determine the psychometric properties of the translated scale on sample (N=30) are presented in the form of reliability analysis in Table 1 given below.

**Table 1**

*Reliabilities of translated scale in pilot testing (N=30)*

Scale	N	M	SD	$\alpha$	Range	
					Actual	Potential
<b>URSES</b>	10	16.48	5.04	.85	12-30	10-30
<b>AAI</b>	10	15.85	8.11	.94	2-38	0-40

*Note: N= no. of items, M= mean, SD= standard deviation,  $\alpha$ = alpha reliability,*

*URSES= Urdu Rosenberg Self-Esteem Scale, AAI= Appearance Anxiety Inventory.*

Table 1 shows number of items of the scales, their means along with standard deviation and alpha reliability. According to Nunnally and Bernstein's (1994) criteria, .70 and above alpha value means highly reliable, so both the scales are reliable with URSES ( $\alpha$ = .85, M= 16.48, SD= 5.04) and AAI ( $\alpha$ = .94, M=15.85, SD= 8.11).

### Cross-sectional Study Results

Next, results of the cross-sectional study on (N=150) are presented in the tables given below. Table 2 shows the reliability analysis of the study after pilot testing.

**Table 2**

*Reliabilities of translated scale in cross-sectional study (N=150)*

Scale	N	M	SD	$\alpha$	Range	
					Actual	Potential
URSES	10	16.81	4.66	.84	10-30	10-30
AAI	10	16.55	7.66	.94	2-38	0-40

*Note: N= no. of items, M= mean, SD= standard deviation,  $\alpha$ = alpha reliability,*

*URSES= Urdu Rosenberg Self-Esteem Scale, AAI= Appearance Anxiety Inventory.*

Table 2 also show that according to Nunnally and Bernstein's (1994) criteria, both the scales are reliable with URSES ( $\alpha$ = .84, M= 16.81, SD= 4.66) and AAI ( $\alpha$ = .94, M=16.55, SD= 7.66).

**Table 3***Descriptive analysis of demographic variables of the study participants**(N=150)*

<b>Demographic variables</b>	<i>f</i>	<b>%</b>
<b>Age</b>		
25-35	43	28.7
36-46	38	25.3
47-57	33	22.0
58-68	16	10.7
69-79	20	13.3
<b>Education Level</b>		
Uneducated	18	12.0
Matric	29	19.3
Intermediate	36	24.0
Bachelors	46	30.7
Masters	21	14.0
<b>Marital Status</b>		
Unmarried	26	17.3
Married	80	53.3
Divorced	13	9.3
Widow	40	20.0
<b>Job Status</b>		
Unemployed	108	72.0

Employed	42	28.0
<b>Monthly income status</b>		
Below Rs. 60,000	47	31.3
Rs.60,001- Rs.180,000	73	48.7
Above Rs. 180,000	30	20.0
<b>Current treatment</b>		
Radiotherapy	39	26.0
Chemotherapy	51	34.0
Follow ups	60	40.0
<b>Stage of breast cancer</b>		
1	37	24.7
2	59	39.3
3	46	30.7
4	8	5.3
<b>Mastectomy surgery performed</b>		
Yes	124	82.7
No	26	17.3

---

*Note: f= frequency, %= percentage*

Table 3 displays the frequencies along with percentages of the demographic variables. Considering the total participants (N=150), majority of the participants lied in the age group of 25-35 with ( $f= 43$ ,  $\%= 28.7$ ). Age group (36-46) shows ( $f= 38$ ,  $\%= 25.3$ ), age group (47-57) shows ( $f= 33$ ,  $\%= 22.0$ ), age group (58-68) shows ( $f= 10.7$ ,  $\%= 16$ ), and lastly the age (69-79) shows ( $f=20$ ,  $\%= 13.3$ ). In education level, uneducated women are ( $f= 18$ ,  $\%= 12.0$ ), women done with matric are ( $f= 29$ ,  $\%= 19.3$ ),

intermediate shows ( $f= 36, \%= 24.0$ ), women having bachelor's degree are ( $f= 46, \%= 30.7$ ), and lastly masters show ( $f= 21, \%= 14.0$ ). In marital status, unmarried women are ( $f= 26, \%= 17.3$ ), married women are ( $f= 80, \%= 53.3$ ), divorced women are ( $f= 13, \%= 9.3$ ), and widow are ( $f= 40, \%= 20.0$ ). Job status shows that unemployed women are ( $f= 108, \%= 72.0$ ), and employed women are ( $f= 42, \%= 28.0$ ) respectively. Monthly income status shows that women below Rs. 60,000 are ( $f= 47, \%= 31.3$ ), those between Rs. 60,001 to Rs. 180,000 are ( $f= 73, \%= 48.7$ ), and those above Rs. 180,000 are ( $f= 30, \%= 20.0$ ). In current treatment, ( $f= 39, \%= 26.0$ ) are undergoing radiotherapy, ( $f= 51, \%= 34.0$ ) are undergoing chemotherapy and ( $f= 60, \%= 40.0$ ) are having follow ups. Stage of breast cancer shows that ( $f= 37, \%= 24.7$ ) are at stage 1, ( $f= 59, \%= 39.3$ ) are at stage 2, ( $f= 46, \%= 30.7$ ) are at stage 3 and ( $f= 8, \%= 5.3$ ) are at stage 4 of breast cancer. Mastectomy surgery statistics show that ( $f= 124, \%= 82.7$ ) have performed mastectomy surgery while ( $f= 26, \%= 17.3$ ) have not performed it.

**Table 4**

*Descriptive statistics: Mean, Median, Mode, SD, Skewness, Kurtosis, KS*

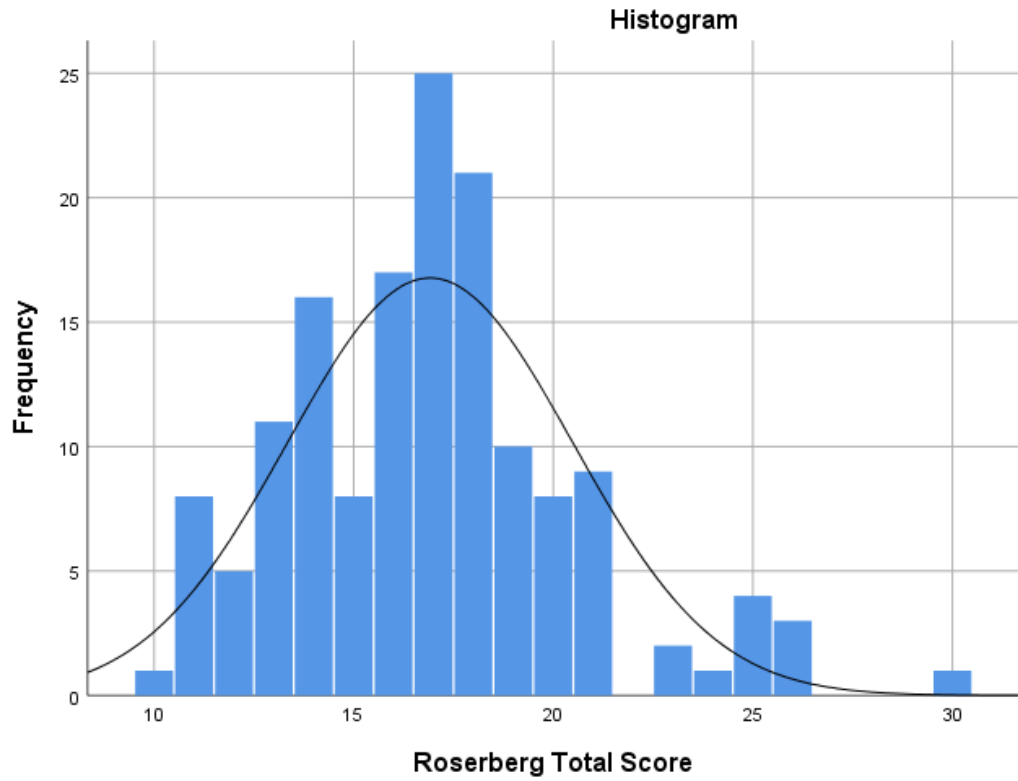
	<b>M</b>	<b>Median</b>	<b>Mode</b>	<b>SD</b>	<b>Skewness</b>	<b>Kurtosis</b>	<b>KS</b>
<b>URSES</b>	16.91	17	17	3.56	.70	1.01	.000
<b>AAI</b>	16.55	16	20	7.66	.59	.52	.003

*Note: M= mean, SD= standard deviation, KS= Kolmogorov-Smirnov, URSES= Urdu Rosenberg Self-Esteem Scale, AAI= Appearance Anxiety Inventory*

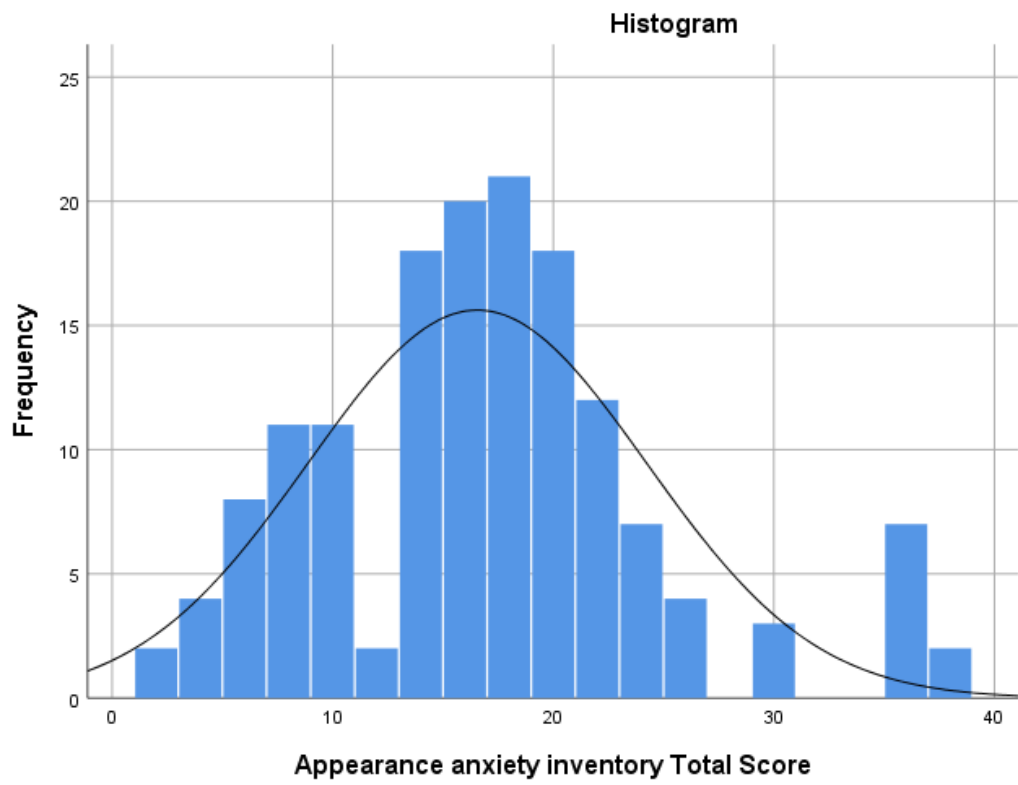
Table 4 presents the descriptive statistics of URSES and AAI. URSES shows (mean= 16.91, SD= 3.56) and AAI shows (mean= 16.55, SD= 7.66). AAI scale shows normal distribution with respect to (skewness= .59) and (kurtosis= .52) values respectively. While URSES show non-normal distribution with respect to (skewness= .70) and (kurtosis= 1.01) values. KS value shows non-normal distribution ( $p > .05$ ) for both scales.

### Distribution curve

Histograms showing the distribution curves for Urdu Rosenberg Self-Esteem Scale and Appearance Anxiety Inventory for (N=150) are represented below.



**Figure 3:** Histogram for Urdu Rosenberg Self-Esteem Scale



**Figure 4:** *Histogram for Appearance Anxiety Inventory*



**Table 5***Relationship between URSES and AAI using Spearman's rho*

<b>Variables</b>	<b>n</b>	<b>M</b>	<b>SD</b>	<b>1</b>	<b>2</b>
<b>URSES</b>	150	16.91	3.56	-	-.490**
<b>AAI</b>	150	16.55	7.63	-.490**	-

*Note: \*\* $p < .01$ , correlation is significant at 0.01 level (1-tailed), n= no. of participants, M= mean, SD= Standard deviation*

Spearman's rho correlational analysis was used to analyze the relationship between a sample of (n=150) participants using Urdu Rosenberg Self-Esteem Scale and Appearance Anxiety Inventory as the data was non-normally distributed. Results show that URSES (M = 16.91, SD = 3.56) and AAI (M = 16.55, SD = 7.63) are negatively and moderately correlated ( $r = -.490^{**}$ ) with highly significant correlation at 0.01 level ( $p < .01$ ). Hence, hypothesis 1 is accepted which states that there will be a negative relationship between body image dissatisfaction and self-esteem in breast cancer patients.

**Table 6***Kruskal Wallis analysis for Marital status*

	Marital Status				$\chi^2$	<i>p</i>
	Unmarried	Married	Divorced	Widowed		
	(26)	(18)	(14)	(30)		
URSES	57.56	83.88	61.93	75.03	8.883	.031

*Note:  $\chi^2$ = chi-square, *p*= asymptomatic significance level, URSES= Urdu Rosenberg Self-Esteem Scale*

A Kruskal Wallis test was conducted to compare the differences of marital status groups on self-esteem. The results showed a significant difference among the groups, ( $\chi^2= 8.883$ ), *p* = .031. The results also revealed variations in the mean ranks across the groups. The unmarried group (N = 26) had a mean rank of 57.56, the married group (N = 80) had a higher mean rank of 83.88, the divorced group (N = 14) had a mean rank of 61.93, and the widow group (N = 30) had a mean rank of 75.03.

**Table 7***Kruskal Wallis analysis for Age range*

	Age Range					$\chi^2$	<i>p</i>
	25-35	36-46	47-57	58-68	69-79		
	(43)	(38)	(33)	(16)	(20)		
URSES	67.80	81.62	77.09	82.53	72.18	2.715	.607

*Note:  $\chi^2$ = chi-square, *p*= asymptomatic significance level, URSES= Urdu*

*Rosenberg Self-Esteem Scale*

A Kruskal Wallis test was conducted to examine the difference between age range and self-esteem. The mean ranks of self-esteem varied across the age range groups. Participants in the 36-46 age range had the highest mean rank of (n= 43, Mean rank= 81.62), followed by the 58-68 age range with a mean rank of (N= 16, Mean rank= 82.53). The 47-57 age range had a mean rank of (n= 33, Mean rank= 77.09), the 69-79 age range had a mean rank of (N= 20, Mean Rank= 72.18), and the 25-35 age range had the lowest mean rank of (N= 43, Mean rank= 67.80).

However, the Kruskal Wallis test did not yield a statistically significant difference in self-esteem across the age range groups, ( $\chi^2 = 2.715$ ), *p* = .607. These results indicate that there is no significant difference between age range and self-esteem.

**Table 8***Kruskal Wallis analysis for Socioeconomic status*

	Socioeconomic status			$\chi^2$	p
	Below Rs. 60,000	Rs.60,000- Rs.180,000	Above Rs.180,000		
	(47)	(73)	(30)		
URSES	77.22	70.77	84.32	2.201	.333

*Note:  $\chi^2$ = chi-square, p= asymptomatic significance level, URSES= Urdu Rosenberg Self-Esteem Scale*

A Kruskal Wallis test was conducted to examine the relationship between monthly income status and self-esteem. The mean ranks of self-esteem differed across the income status groups. Participants in the Below Rs. 60,000 group had a mean rank of (N= 47, Mean rank= 77.22), those in the Rs. 60,001 - Rs. 180,000 group had a mean rank of (N= 73, Mean rank= 70.77), and those in the Above Rs. 180,000 group had the highest mean rank of (N= 30, Mean rank= 84.32).

However, the Kruskal Wallis test did not reveal a statistically significant difference in self-esteem across the income status groups, ( $\chi^2= 2.201$ ),  $p = .333$ . These findings suggest that there is no significant association between monthly income status and self-esteem.

## **Chapter 4**

### **Discussion**

This chapter focuses on discussing the findings and results of the study we statistically analyzed using various analyses in SPSS. This study aimed at finding out the association between body image dissatisfaction and self-esteem among breast cancer patients.

A total sample of N=150 participants was recruited using purposive sampling from the oncology department of various hospitals of Rawalpindi and Islamabad. Complex cases as of physical disability were not included in this study. For this study, Urdu versions of two scales; Urdu Rosenberg Self-esteem Scale and Appearance Anxiety Inventory were used to measure self-esteem and body image dissatisfaction respectively.

The questionnaires used in this study included an informed consent form, a demographic sheet obtaining details about age, education, marital status, monthly income status to measure socioeconomic status, stage of cancer, mastectomy surgery performed and type of treatment received, along with the two said scales.

#### **Reliabilities of Scales**

The present study utilized two questionnaires, namely the Urdu Rosenberg Self-esteem Scale and the Appearance Anxiety Inventory, both of which were translated into Urdu. Permission was obtained from the author to use the Urdu version of the Rosenberg Self-esteem Scale, while the Appearance Anxiety Inventory was translated using the World Health Organization (WHO) Translation Protocol.

Reliability is a crucial aspect of questionnaire measures, as it indicates the consistency and stability of the instrument in measuring the intended constructs. In this study, the translated Appearance Anxiety Inventory demonstrated excellent reliability, with a coefficient alpha of .94. This high reliability coefficient suggests that the items in the inventory consistently assess body image concerns among the participants.

Similarly, the Urdu Rosenberg Self-esteem Scale also exhibited good reliability, with a coefficient alpha of .84. According to Nunnally and Bernstein's (1994) criteria, which recommend an alpha coefficient of .70 and above for high reliability, the Urdu Rosenberg Self-esteem Scale met the threshold for being a reliable measure of self-esteem in the present study.

The high reliability coefficients obtained for both scales provide confidence in the consistency and accuracy of the measurements. This implies that the translated questionnaires are internally reliable and can be considered suitable instruments for assessing self-esteem and body image concerns among Urdu-speaking participants.

Using established and reliable scales, such as the Urdu Rosenberg Self-esteem Scale and the Appearance Anxiety Inventory, enhances the validity and trustworthiness of the study findings. These questionnaires have been extensively used in previous research and have demonstrated robust psychometric properties (Rizwan et. al., 2017; (Veale et al., 2014).

It is important to acknowledge that the translation process of the Appearance Anxiety Inventory followed the WHO Translation Protocol, which is a standardized and systematic approach to ensure accurate translation and cultural adaptation of measurement instruments. This adherence to a rigorous translation protocol adds further credibility to the validity of the translated inventory.

In conclusion, the utilization of the Urdu versions of the Rosenberg Self-esteem Scale and the Appearance Anxiety Inventory in this study demonstrates the researchers' efforts to assess self-esteem and body image concerns accurately among Urdu-speaking participants. The high reliability coefficients obtained for both scales support the internal consistency and reliability of the measurements. The utilization of established and reliable measures strengthens the validity of the study's findings and enhances the understanding of self-esteem and body image in the specific cultural context of Urdu-speaking individuals.

### **Demographic characteristics of study sample**

The results provide a comprehensive overview of the demographic and clinical characteristics of the participants in the study.

In terms of age distribution, the majority of participants (28.7%) fell within the 25-35 age group, followed by the 36-46 age group (25.3%), the 47-57 age group (22.0%), the 58-68 age group (16.0%), and the 69-79 age group (13.3%). These findings highlight that the study included a diverse range of age groups, with the highest representation in the younger age categories.

Regarding education level, the results indicate that the majority of participants had completed at least a bachelor's degree (30.7%). This was followed by intermediate level education (24.0%), matriculation (19.3%), uneducated (12.0%), and master's degree (14.0%). These findings suggest a relatively high level of educational attainment among the participants, with a significant proportion having completed higher education.

In terms of marital status, the largest group of participants were married women (53.3%), followed by unmarried women (17.3%), widows (20.0%), and divorced

women (9.3%). These results reflect the diversity of marital statuses among the participants and provide insight into the representation of different relationship statuses within the study population.

The job status results reveal that a majority of the participants were unemployed (72.0%), while the remaining participants were employed (28.0%). This finding suggests that the study included a significant number of individuals who were not currently employed, which may have implications for their financial situation and overall well-being.

Regarding monthly income, the majority of participants (48.7%) fell within the income range of Rs. 60,001 to Rs. 180,000, followed by those below Rs. 60,000 (31.3%), and those above Rs. 180,000 (20.0%). These results provide an understanding of the income distribution among the participants and its potential influence on various aspects of their lives, including access to healthcare and socioeconomic status.

In terms of current treatment, the largest group of participants were undergoing follow-ups (40.0%), followed by those undergoing chemotherapy (34.0%), and those undergoing radiotherapy (26.0%). These findings indicate the various treatment modalities being utilized by the participants and provide insight into the current management strategies for breast cancer.

The stage of breast cancer results reveal that the majority of participants were at stage 2 (39.3%), followed by stage 3 (30.7%), stage 1 (24.7%), and stage 4 (5.3%). These findings provide information about the distribution of breast cancer stages within the study population and may have implications for the severity of the disease and treatment approaches.



Lastly, the mastectomy surgery statistics indicate that a majority of participants (82.7%) had undergone mastectomy surgery, while a smaller proportion (17.3%) had not undergone the procedure. This finding suggests that mastectomy is a common surgical intervention in the management of breast cancer among the study participants.

Overall, the results provide valuable insights into the demographic and clinical characteristics of the study participants, including age distribution, education level, marital status, job status, income status, current treatment, breast cancer stage, and mastectomy surgery. These findings contribute to a comprehensive understanding of the study population and may have implications for the interpretation of subsequent analyses and the generalizability of the study findings.

### **Hypotheses of study**

The first hypothesis of the study stated that there will be a negative relationship between body image dissatisfaction and self-esteem. As the data was non-normally distributed, Spearman's rho was chosen as a non-parametric measure of correlation.

The results of the correlation analysis revealed a significant negative correlation between URSES and AAI, with a moderate effect size ( $r = -.490^{**}$ ). This finding indicates that higher levels of body image dissatisfaction, as measured by the AAI, are associated with lower levels of self-esteem, as measured by the URSES, among breast cancer patients.

The significance of the correlation at the 0.01 level ( $p < .01$ ) indicates a highly significant relationship between body image dissatisfaction and self-esteem. The negative correlation suggests that as body image dissatisfaction increases, self-esteem tends to decrease. This finding supports the hypothesis (Hypothesis 1) put forth in the

study, which predicted a negative relationship between body image dissatisfaction and self-esteem in breast cancer patients.

The negative correlation between body image dissatisfaction and self-esteem aligns with previous research in the field. It is well-documented that individuals who experience body image dissatisfaction often have lower levels of self-esteem (Guedes et al., 2018). In the context of breast cancer patients, the impact of body image dissatisfaction on self-esteem can be particularly significant, as the physical changes resulting from breast cancer treatment may contribute to feelings of dissatisfaction and lowered self-esteem (Alhusban, 2019).

The negative impact of body image dissatisfaction on self-esteem can be attributed to the cultural norms and expectations prevalent in Pakistani society. In Pakistani culture, the concept of beauty and physical appearance holds significant importance. Women are often expected to adhere to certain standards of beauty, which include having a feminine and attractive body (Ali et al., 2017; Raza et al., 2019). However, breast cancer and its related treatments, such as mastectomy, can result in physical changes that may challenge these cultural ideals of beauty. The altered physical appearance, scars, or loss of breasts can contribute to body image dissatisfaction among breast cancer patients in Pakistan (Ali et al., 2017). The cultural context of Pakistan places a strong emphasis on the external appearance and its connection to self-worth. Women may internalize these societal standards and develop a negative perception of themselves when their bodies deviate from the idealized image. Consequently, this negative body image perception can impact their self-esteem, leading to feelings of inadequacy, low self-worth, and decreased confidence (Prates et al., 2017). The negative relationship between body image dissatisfaction and self-

esteem among breast cancer patients in Pakistan has significant implications for their psychological well-being. Low self-esteem can adversely affect various aspects of a person's life, including relationships, work, and overall quality of life. It may lead to social withdrawal, reduced engagement in activities, and even symptoms of depression and anxiety (Sebri et al., 2022).

These findings have important implications for the psychological well-being and quality of life of breast cancer patients. Understanding the negative relationship between body image dissatisfaction and self-esteem can inform interventions and support services aimed at improving the mental health and self-perception of individuals undergoing breast cancer treatment. By addressing body image concerns and promoting positive self-esteem, healthcare professionals can contribute to the overall well-being and psychological adjustment of breast cancer patients.

### **Mean differences with the demographic characteristics**

The second hypothesis was tested using Kruskal Wallis H test to explore the mean differences in self-esteem scores using demographic characteristics of socioeconomic status, age and marital status.

The results of socioeconomic status on self-esteem scores in breast cancer patients indicated that there was no statistically significant difference in self-esteem scores among the different socioeconomic status groups, ( $\chi^2= 2.201$ ),  $p = .333$ . These findings suggest that socioeconomic status may not play a significant role in determining self-esteem levels in breast cancer patients.

A study by Guan Ng et al., (2015) examined the relationship between socioeconomic status and psychosocial well-being in breast cancer survivors. While their focus was not specifically on self-esteem, their findings revealed no significant

association between socioeconomic status and quality of life outcomes. These results are consistent with the present study's findings, suggesting that socioeconomic status may not be a major contributing factor to self-esteem in breast cancer patients.

Furthermore, a recent systematic review by K Janz et al., (2018) explored psychosocial factors influencing quality of life in breast cancer survivors. Although the review did not specifically focus on self-esteem, it highlighted that factors such as social support, coping strategies, and body image concerns were more strongly associated with psychological well-being. This supports the notion that socioeconomic status alone may not be a primary determinant of self-esteem in breast cancer patients.

The results of age on self-esteem scores also indicated that there was no statistically significant difference in self-esteem scores among the different age groups, ( $\chi^2= 2.715$ ),  $p = .607$ .

A study by (Brandão et al., 2017) examined psychosocial outcomes, including self-esteem, in breast cancer survivors of different age groups. The study found no significant differences in self-esteem scores among younger and older breast cancer survivors. These findings align with the present study's results, suggesting that age alone may not have a substantial impact on self-esteem in breast cancer patients.

Lastly, the results of marital status on self-esteem scores indicated a significant difference among the groups, ( $\chi^2= 8.883$ ),  $p = .031$ . Further analysis of the mean ranks revealed variations across the marital status groups, with the married group having the highest mean rank (83.88), followed by the widow group (75.03), the divorced group (61.93), and the unmarried group (57.56).

These findings highlight the potential influence of marital status on self-esteem levels in breast cancer patients. To support and contextualize these results, recent research conducted in similar populations will be discussed.

A study by Davis et al., (2020) explored the impact of marital status on psychological well-being in breast cancer survivors. The findings indicated that married individuals reported higher levels of psychological well-being, including self-esteem, compared to those who were divorced, separated, or widowed. These results align with the present study's findings, suggesting that being married may be associated with higher self-esteem in breast cancer patients.

Moreover, a study in 2015 examined the association between marital status and psychosocial outcomes in breast cancer survivors. The findings indicated that married individuals reported better psychological well-being, including higher self-esteem, compared to those who were unmarried. The study also highlighted the potential benefits of spousal support and the importance of social connections in influencing self-esteem in this population (Guan Ng et al., 2015)

It is important to consider that marital status is associated with various psychosocial and support-related factors that can impact self-esteem. For instance, married individuals may have access to emotional support, companionship, and tangible assistance from their partners, which can contribute to higher self-esteem levels (Shrout et al., 2021).

However, it is essential to note that individual experiences within each marital status group can vary significantly. For example, the divorced group in the present study had a lower mean rank in self-esteem scores compared to the married and widow groups. This finding suggests that factors related to divorce, such as the emotional and

practical challenges of the process, may contribute to lower self-esteem levels in this subgroup. The circumstances surrounding divorce, including post-divorce adjustment and support systems, can further influence the impact on self-esteem (Shrout et al., 2021).

In Pakistani culture, marital status holds great significance, and it is often associated with various social roles, responsibilities, and expectations. Being married may provide individuals with emotional support, companionship, and a sense of belonging, which can positively impact their self-esteem. Married breast cancer patients may receive more support from their spouses, family members, and the broader community, which may contribute to higher self-esteem compared to unmarried individuals (Khan et al., 2017). On the other hand, unmarried breast cancer patients may face unique challenges in terms of social support and emotional well-being. The lack of a marital partner or spouse may result in feelings of isolation and a limited support network, which can negatively impact self-esteem. These individuals may also experience difficulties in managing their illness and coping with the emotional and physical changes associated with breast cancer (Khan et al., 2017). Age and socio-economic status, however, did not show significant differences in self-esteem among breast cancer patients in the Pakistani cultural context. This suggests that the impact of age and socio-economic status on self-esteem may be less pronounced compared to marital status. Other factors, such as cultural beliefs, social support, and coping strategies, may play a more significant role in shaping self-esteem among breast cancer patients in Pakistan (Khan et al., 2017).

It is important to consider the cultural context of Pakistan when interpreting these findings. Pakistani society places considerable emphasis on marriage and family,

and marital status is intricately linked to social status and well-being. The influence of marital status on self-esteem among breast cancer patients highlights the need for comprehensive support systems and interventions that address the specific challenges faced by unmarried individuals.

These findings have implications for healthcare professionals and support services working with breast cancer patients in Pakistan. It is crucial to recognize the potential impact of marital status on self-esteem and tailor interventions accordingly. Providing emotional support, counseling, and resources that cater to the unique needs of unmarried individuals can help mitigate the negative effects on self-esteem and enhance overall well-being (Khan et al., 2017).

### **Conclusion**

In conclusion, the current study demonstrated a significant difference in self-esteem scores among marital status groups in breast cancer patients. Married individuals tended to have higher self-esteem compared to the divorced, unmarried, and widow groups. These findings are consistent with previous research emphasizing the positive influence of marriage on self-esteem and psychological well-being in breast cancer patients. The presence of a supportive partner and social connections within a marital relationship may contribute to higher self-esteem levels. Whereas, no significant differences were found in self-esteem scores based on age and socioeconomic status among breast cancer patients. These findings are supported by recent research, suggesting that other psychosocial factors, such as social support, psychological distress, and body image concerns, may be more influential in shaping self-esteem levels in breast cancer patients.

## **Limitations**

The present study acknowledges several limitations that should be considered when interpreting the findings. These limitations include the restricted geographical scope of the study, the small sample size, and the difficulty in conducting field research, which may limit the generalizability of the results.

One limitation of the study is the restricted geographical scope. The researchers indicated that due to limited resources and logistical constraints, only hospitals in Rawalpindi and Islamabad were included in the study. This may limit the diversity and representativeness of the sample, as participants from other regions of Pakistan may have different sociocultural backgrounds, access to healthcare, and support systems. Therefore, caution should be exercised when generalizing the results to the broader population of breast cancer patients in Pakistan.

Another limitation is the small sample size resulting from purposive sampling. Purposive sampling was chosen due to the sensitivity and nature of the topic, which may have limited the researcher's ability to recruit a larger and more diverse sample. A small sample size reduces statistical power and may limit the generalizability of the findings to the broader population. It is important to recognize that the characteristics and experiences of the participants in this study may not fully represent all breast cancer patients, and caution should be exercised when extrapolating the results to a larger population. Additionally, some patients refused to participate in the study, which further contributed to the small sample size.

Another limitation arose from the time-frame constraints and limited resources. Conducting research within a specific time-frame imposed limitations on the duration



and scope of data collection. The researchers had to work within a predetermined timeline, which might have affected the depth and comprehensiveness of the study.

Additionally, the hospital's refusal to conduct the study posed another limitation. The researchers faced challenges in gaining access to the desired study site or obtaining approval from the hospital administration. This limitation restricted the researchers' ability to collect data from a larger and more diverse patient population, potentially impacting the representativeness and external validity of the study.

### **Recommendations/ Implications**

The present study provides valuable insights into the relationship between body image dissatisfaction and self-esteem in breast cancer patients. However, there are several avenues for future research that can expand on these findings and contribute to a more comprehensive understanding of the topic.

Firstly, future researchers are encouraged to consider including additional variables in their investigations of self-esteem in breast cancer patients. While the current study focused on body image dissatisfaction as a factor influencing self-esteem, there are numerous other variables that may interact with or influence self-esteem in this population. For instance, variables such as social support, coping strategies, treatment regimens, and disease stage could all be explored to gain a more nuanced understanding of the factors that contribute to self-esteem in breast cancer patients. Examining the complex interplay between these variables could provide valuable insights into the unique challenges faced by individuals with breast cancer and inform the development of targeted interventions.

Moreover, it would be beneficial for future studies to expand their focus beyond breast cancer and include other types of cancers. Each cancer type presents distinct

challenges and experiences that may impact self-esteem differently. By including a wider range of cancer types, researchers can compare and contrast the influence of different diseases on self-esteem, allowing for a more comprehensive understanding of the topic.

Another recommendation for future research is to employ experimental designs to examine the impact of body dissatisfaction on self-esteem in breast cancer patients. Experimental designs would allow researchers to manipulate variables related to body dissatisfaction and assess their direct effects on self-esteem. By employing such designs, researchers can establish causal relationships and gain a deeper understanding of the specific mechanisms through which body dissatisfaction affects self-esteem in this population.

Future researchers are also encouraged to explore the topic further through qualitative research methods to complement and expand upon the findings of the current quantitative study. While the current quantitative study provided valuable insights into the relationship between the variables, a qualitative approach can offer a deeper understanding into the factors influencing body-related self-discrepancy and the impact on body image and self-esteem among breast cancer patients. It could explore the cultural, social, and personal factors that contribute to these experiences, shedding light on the complex interplay between societal beauty standards, cultural norms, and individual perceptions. This knowledge can then inform the development of targeted interventions aimed at addressing body image concerns and improving self-esteem in breast cancer patients.

Lastly, the study's findings hold promise for clinical applications. The results can be utilized in clinical settings to develop interventions and strategies that effectively

address the body image concerns and self-esteem of breast cancer patients. By implementing evidence-based interventions, healthcare professionals can provide support and guidance to help patients manage their body image concerns and enhance their overall well-being.

## Chapter 5

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## Chapter 6

### Appendices

#### Appendix A: Scales and permissions



muhammad rizwan  
to me

Fri, Nov 11, 6:56 PM (19 hours ago) ☆ ↶ ⋮

Aoa,

Thank you for approaching me. You have my permission to use the scales URSES in your research. The scale is attached along with its scoring, please don't forget to use proper citation whenever you publish your work.

Rizwan, M., Malik, S., Malik, J. N., & Siddiqui, S. R. (2017). Urdu Rosenberg Self-Esteem Scale: An Analysis of Reliability and Validity in Pakistan. Sociol Int J. 1(2):00010. DOI: 10.15406/sij.2017.01.00010

Best Wishes for your academic success

**Muhammad Rizwan, PhD (Clinical Psychology) / Post-Doc (Switzerland)**

**Designation/Affiliation** Associate Professor, Department of Psychology, UoH

#### Permission for Urdu Rosenberg Self-Esteem Scale

کمل اتفاق	اتفاق	اختلاف	کمل اختلاف
-----------	-------	--------	------------

مثال کے طور پر:

اگر آپ محسوس کریں کہ درج ذیل بیان آپ کے احساسات کی کمل ترجمانی کرتا ہے تو آپ کمل اتفاق کے خانے میں درست (✓) کا نشان لگادیں۔

اگر آپ محسوس کریں کہ درج ذیل بیان آپ کے احساسات کی بالکل ترجمانی نہیں کرتا ہے تو آپ کمل اختلاف کے خانے میں درست (✓) کا نشان لگادیں۔

بیان نمبر	بیانات	کمل اتفاق	اتفاق	اختلاف	کمل اختلاف
۱-	مجموعی طور پر میں اپنے آپ سے مطمئن ہوں۔				
۲-	مجھے میں سوچتا رہتا ہوں کہ میں بالکل اچھا اور اچھی نہیں ہوں۔				
۳-	میں محسوس کرتا کرتی ہوں کہ مجھ میں کئی خوبیاں ہیں۔				
۴-	میں کاموں کو اتنی ہی اچھی طرح کر سکتا رہتی ہوں جیسا کہ زیادہ تر لوگ۔				
۵-	میں محسوس کرتا ہوں کہ میرے پاس اتنا کچھ نہیں ہے، جس پر میں فخر کروں۔				
۶-	مجھے میں اپنے آپ کو یقینی طور پر ناکارہ سمجھتا رہتی ہوں۔				
۷-	میں محسوس کرتا کرتی ہوں کہ میں ایک قابل قدر انسان ہوں، کم از کم دوسروں کے برابر۔				
۸-	کاش میں اپنے آپ کو اور زیادہ قابل احترام سمجھتا رہتی۔				
۹-	میں مجموعی طور پر یہ محسوس کرنے پر ناکل ہوں کہ میں ایک ناکام شخص ہوں۔				
۱۰-	میں اپنے متعلق مثبت رویہ رکھتا رہتی ہوں۔				

#### Urdu Rosenberg Self-Esteem Scale



**Veale, David**

to me ▾

Yes

**From:** Menahil Ashfaq <[menaashfaq@gmail.com](mailto:menaashfaq@gmail.com)>

**Date:** Sunday, 23 October 2022 at 14:12

**To:** "[david.veale@kcl.ac.uk](mailto:david.veale@kcl.ac.uk)" <[david.veale@kcl.ac.uk](mailto:david.veale@kcl.ac.uk)>

**Subject:** Permission to use your scale in my research

*Permission for Appearance Anxiety Inventory*

**Instructions:**

Please check the box that best describes the way you have felt about your appearance or a specific feature OVER THE PAST WEEK, INCLUDING TODAY.

		Not at all	A little	Often	A lot	All the time
1	I compare aspects of my appearance to others	0	1	2	3	4
2	I check my appearance (e.g. in mirrors, by touching with my fingers, or by taking photos of myself)	0	1	2	3	4
3	I avoid situations or people because of my appearance	0	1	2	3	4
4	I brood about past events or reasons to explain why I look the way I do	0	1	2	3	4
5	I THINK about how to camouflage or alter my appearance	0	1	2	3	4
6	I am focussed on how I feel I look, rather than on my surroundings	0	1	2	3	4
7	I avoid reflective surfaces, photos, or videos of myself	0	1	2	3	4
8	I discuss my appearance with others or question them about it	0	1	2	3	4
9	I try to camouflage or alter aspects of my appearance	0	1	2	3	4
10	I try to prevent people from seeing aspects of my appearance within particular situations (e.g., by changing my posture, avoiding bright lights)	0	1	2	3	4

*Appearance Anxiety Inventory*

## Appendix B: Approval Letter for Data Collection



Capital University of Science and Technology  
Islamabad

Islamabad Expressway, Kahuta Road,  
Zone - V, Islamabad, Pakistan  
Telephone : +92-(51)-111-555-666  
          : +92-51-4486700  
Fax: : +92-(51)-4486705  
Email: : info@cust.edu.pk  
Website: : www.cust.edu.pk

Ref. CUST/IBD/PSY/Thesis-337  
January 24, 2023

### TO WHOM IT MAY CONCERN

Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's, Master's and Doctorate level for a wide variety of programs.

**Ms. Menahil Ashfaq**, registration number **BSP193013** is a bona fide student in BS Psychology program at this University from Fall 2019 till date. In partial fulfillment of the degree, she is conducting research on "Association between body image dissatisfaction and self-esteem among breast cancer patients in Rawalpindi/Islamabad". In this continuation, the student is required to collect data from your institute.

Considering the forgoing, kindly allow the student to collect the requisite data from your institute. Your cooperation in this regard will be highly appreciated.

Please feel free to contact undersigned, if you have any query in this regard.

Best Wishes,

**Dr. Sabahat Haqqani**  
Head, Department of Psychology  
Ph no. 111-555-666 Ext: 178  
sabahat.haqqani@cust.edu.pk

## Appendix C: Informed Consent Form

### مطلع اظہار رضامندی کا فارم

میں کینیڈا یونیورسٹی آف سائنس اینڈ ٹیکنالوجی، اسلام آباد میں بی ایس نفیات (سائیکالوجی) کی طالبہ ہوں۔ میں آپ سے درخواست کرتی ہوں کہ آپ میری تحقیق کا حصہ بنیں۔ میرے تحقیقی مطالعہ کا عنوان ہے: "راولپنڈی / اسلام آباد میں چھاتی کے سرطان (کینسر) کے مریضوں میں جسمانی تصور میں بے اطمینانی اور خود توہین کے مابین تعلق"۔ تحقیق کا مقصد بی ایس ڈگری کے حصول کا جزوی حصہ ہے۔

آپ کو فراہم کردہ دو سوال نامے (پیانے / اسکیلز) پُر کرنا ہوں گے۔

اُردو روزبرگ سیلف ایٹیم اسکیل (اُردو روزبرگ پیانہ برائے خود توہین) ۱۰ جزئیات پر مشتمل ہے اور جانچتا ہے کہ کوئی شخص اپنی قدر و قیمت کو کس طرح دیکھتا ہے۔ ایپریٹس انکلیٹی انویٹری (ظاہری صورت میں تشویش کی فہرست) ۱۰ جزئیات پر مشتمل ہے اور کسی فرد کے جسمانی تشویش کو جانچتا ہے۔ آپ کو دونوں سوال نامے پُر کرنے کے لیے کافی وقت دیا جائیگا۔

میں آپ سے درخواست کرتی ہوں کہ میرے اس مقصد میں میرا ساتھ دیجئے اور اس تحقیقی مطالعہ کا حصہ بنیں۔ میں آپ کو یقین دلاتی ہوں کہ آپ کی فراہم کردہ معلومات کو ظاہر نہیں کیا جائیگا، اس کو خفیہ رکھا جائیگا اور صرف تحقیقی مقصد کیلئے ہی استعمال کیا جائیگا۔ اگر آپ کو کسی بھی مرحلے پر بے چینی / اضطراب محسوس ہو تو آپ اُسی لمحہ اس تحقیق سے دستبردار ہو سکتے ہیں اور آپ کی فراہم کردہ معلومات کو خارج کر دیا جائیگا۔ آپ کی مدد، حمایت اور شرکت کو بے حد سراہا جاتا ہے۔ شکریہ!

دستخط: \_\_\_\_\_

(میں اس تحقیق کا حصہ بننے کیلئے راضی ہوں۔)

تاریخ: \_\_\_\_\_

## Appendix D: Demographic sheet

### ضمیمہ سی: آبادیاتی معلومات کا اندراج

براہ مہربانی مندرجہ ذیل معلومات احتیاط سے فراہم کیجئے۔

عمر: -----

تعلیمی سطح: غیر تعلیم یافتہ / میٹرک / انٹرمیڈیٹ / بیچلر / ماسٹر

ازدواجی حیثیت: کنواری / شادی شدہ / طلاق شدہ / بیوہ

ملازمت کی حیثیت: بے روزگار / ملازمت پیشہ

ماہانہ آمدنی (ذاتی / والد / شوہر): -----

چھاتی کے سرطان کا مرحلہ: پہلا / دوسرا / تیسرا / چوتھا

تشخیص کا سال: -----

ماسکولی سرجری کی گئی: ہاں / نہیں

موجودہ علاج: -----

## Appendix E: Translated version of Appearance Anxiety Inventory

### Appearance Anxiety Inventory (URDU)

ہدایات

ہارے کرم اس پاکس کو تک لکھیں جو کہ گزشتہ مہنہ یا آج تک آپ کی اپنی شخصیت کے متعلق محسوس ہونے والے احساسات کو بہترین انداز میں بیان کرے

سوالات	بالکل نہیں	تھوڑا سا	اکثر	بہت زیادہ	ہر وقت
میں اپنی ظاہری حالت کے پہلوؤں کا دوسروں سے مقابلہ (موازنہ) کرتی ہوں	0	1	2	3	4
میں اپنی ظاہری شکل و صورت کو جانچی (تیک کرتی) ہوں جیسا کہ شیشہ دکھ کر، اپنی انگلیوں سے چھو کر یا اپنی تصاویر لے کر	0	1	2	3	4
میں اپنی ظاہری شکل و صورت کی وجہ سے حالات یا لوگوں سے گریز کرتی ہوں	0	1	2	3	4
میں ماضی کے واقعات یا وجوہات کے بارے میں سوچتی ہوں تاکہ میں یہ سمجھ سکوں کہ میں جیسی نظر آتی ہوں وہی کیوں ہوں	0	1	2	3	4
میں اپنی ظاہری شکل و صورت کو بھپالے یا تبدیل کرنے کے بارے میں سوچتی ہوں	0	1	2	3	4

میں اپنے اراکرو کے ماحول کی بجائے اس بات پر توجہ دیتی ہوں کہ میں کیسا محسوس کرتی ہوں یا میں کیسی لگ رہی ہوں	0	1	2	3	4
میں آئینہ دار سطحوں، اپنی تصاویر اور ویڈیوز سے گریز کرتی ہوں	0	1	2	3	4
میں اپنی ظاہری شکل و صورت کے بارے میں لوگوں سے بات کرتی ہوں اور ان سے سوال کرتی ہوں	0	1	2	3	4
میں اپنی ظاہری شکل کے پہلوؤں کو بھپالنے یا بدلنے کی کوشش کرتی ہوں	0	1	2	3	4
میں مخصوص حالت میں لوگوں سے اپنے چہرے کو بھپالنے کی کوشش کرتی ہوں جیسے کہ تیز رفتاری میں جاننے سے گریز کرنا یا اچھے بیٹھے ہونے اور احتیاط کرنا	0	1	2	3	4



## Menahil Ashfaq

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