Research Paper

Correlation Between Body Image and Quality of Life: A Quantitative Study on Women Homemakers in Ahmedabad

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ABSTRACT

Body image refers to the perception an individual holds about their body (appearance, size, shape, weight, etc.). Individuals can have a negative or a positive body image. This research was conducted to investigate the association between body image and quality of life of women homemakers, between the age range 30-60 years, a group that often faces unique challenges owing to physiological changes, roles and responsibilities, residing in the city Ahmedabad, the seventh largest metropolis in India, providing a sample of 103 participants from the diversified population. **Aim:** To identify the correlation between body image and quality of life of women homemakers in Ahmedabad. **Methodology:** A face-to-face survey was administered using convenience sampling method and the data was collected in google forms. To measure the body image and quality of life, World Health Quality of Life-BREF (WHOQOL-BREF) and Body Self Image Questionnaire-Short Form (BSIQ-SF) were implemented respectively. Correlation between the subscales of BSIQ-SF and WHOQOL-BREF was assessed using Pearson's Correlation. Data was analysed using tools such as excel sheet and statistical software called Jamovi. **Result:** The current findings suggests that for the sample of the study, although, most of the participants were satisfied with their overall quality of life (physical, social, psychological and environmental domains) and body image, a significant correlation between body image and quality of life was not observed.

I n India, a homemaker's role entails a complex set of responsibilities and duties, especially for women who are frequently expected to fulfil traditional gender roles. Homemakers may be responsible for childcare and emotional support to their family members in addition to managing household chores such as cooking, cleaning, and laundry, etc. This emotional labour can be especially burdensome because it frequently entails mediating conflicts, providing comfort and reassurance, and managing the emotional well-being of multiple family members. Furthermore, many homemakers may manage the family's finances and budget, as well as maintain social relationships with extended family members and their community. Homemakers may face additional challenges as a result of their role, such as a lack of autonomy and control over their lives; social, economic, and cultural barriers that

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limit their opportunities for personal growth and development, and undermining their well-being. Despite the difficulties, homemakers play an important role in the functioning of families and society as a whole. Their work is frequently undervalued and unappreciated, especially when compared to paid work outside the home. As per the **Times Use Survey conducted by National Statistical Office (NSO)**, women are more likely than men to be homemakers as 82% of women in the 1.38 lakh surveyed households reported undertaking unpaid domestic services. In comparison, only 27% of men were found to perform the same work. This study is focused on understanding the relationship between body image and quality of life of women homemakers in Ahmedabad **(Singh, 2022).**

Because of its diversified population and a high number of women residents, Ahmedabad, the largest city in Gujarat and the seventh largest metropolis in India, is an important place for study on women homemakers. Because Ahmedabad is a melting pot of cultures, it offers a unique chance to study the experiences of women homemakers from various backgrounds and acquire a thorough understanding of the issues they confront and how they handle them. The fact that most of Ahmedabad's population is female (about 47%, according to the **2011 Census**) is especially important for study on women homemakers. This vast group of women homemakers gives researchers with a big sample size to study and evaluate. Researchers can investigate how these women manage numerous roles and responsibilities, such as housework, child rearing, and managing family money, with other elements of their lives. Furthermore, Ahmedabad's metropolitan milieu makes it an ideal venue for researching women's experiences in cities. Access to resources such as healthcare and education, as well as how women's roles and duties differ differing in urban versus rural settings, can be studied. Overall, Ahmedabad's diversified population and a large number of women homemakers make it an excellent setting for study on women's experiences and well-being.

According to **Ryff and Keyes' (1995)** model of psychological well-being, health consists of six dimensions or aspects: self-acceptance, positive interpersonal relationships, autonomy, environmental mastery, life purpose, and personal progress. Self-acceptance and strong interactions with others are critical for homemakers' general well-being. It is also crucial to have a sense of autonomy, or the ability to make choices and feel in charge of one's life. Homemakers who have a sense of power over their environment and daily activities tend to be happier. Furthermore, having a feeling of purpose and pursuing personal improvement might be beneficial to homemakers' well-being. Women homemakers contribute to the home in various ways which cannot be quantified, however, it is critical to recognise and promote the complex and valuable role of housewives, particularly women, in the family.

> ➢ **Understanding Body image**
One of the many factors that can be considered as a source of stress and concern for women homemakers is how they assess the positive and negative emotion of their own body parts and characteristics. Body image refers to an individual's subjective perceptions and attitudes toward their own body **(Cash, 2004)**. It is a multidimensional construct with aspects of attitude, perception, behaviour, and affect. The cognitive aspect refers to the perception about body such as appearance, size, and shape. How the individual reacts to their body emotions such as feelings of satisfaction, dissatisfaction, or shame are included in the affective aspect and the actions taken with relation to the perception and feelings towards the body, such as grooming, dieting or exercising are included in the behavioural aspect. Individuals can have a positive or negative body image, various studies show that a negative body image increases the risk of developing various disorders such as Body Dysmorphic Disorder (BDD) and

eating disorders, depression, anxiety and low self-esteem, preoccupation or excessive thinking about weight, shape, or size. One's body image can be developed and influenced by various factors, which are: "parents influence a child's own thoughts and opinions in a variety of ways. The expectation, language, and actions of parents can greatly influence their children's body image; peers; past experiences of physical or sexual abuse or by experiences of being teased, bullied, or harassed based on body size, gender, skin colour or physical abilities; Cultural ideals of bodies can heavily influence body image; and media often reflects the body ideals" **(Burmeister, 2019).** Culture includes shared ideologies, customs and traditions which shape an individual, society, and a particular country **(Kalpana Raman, 2015)**. An explanatory regression analysis by **Stormer and Thompson (1995)** demonstrated that the majority of variance in body image disturbances and eating disorders can be explained by the tendency to compare one's own body to others, and to internalize societal norms which promote thinness and attractiveness. Most researchers seem to agree that the strongest influences on the development of body image and its disturbances are culturewide social ideals and expectations **(Heinberg, 1995)**. Women's desire to be thinner has repeatedly been demonstrated in studies on body image **(Cohn & Alder, 1992; Fallon & Rozin, 1985)**. A negative body image is a pervasive phenomenon that affects individuals across various age groups and genders, but it is especially prevalent among women.

Due to the various physiological changes that occur with the aging process, one's perception about their body is likely to alter, resulting in a discrepancy between their desired and actual images. This perception can have important consequences on their health and quality of life, being associated with conditions such as depression, eating disorders, low self-esteem, and self-confidence. **(Medeiros de Morais et al., 2017).** Hence body image affects various aspects in an individual's life including wellbeing. Negative body image can have a significant impact on a person's overall quality of life, reducing their ability to participate in activities, pursue goals, and feel fulfilled. Therefore, it is important to study body image in the context of quality of life.

> ➢ **Understanding Quality of life**

Quality of life is defined as "overall subjective feelings of well-being that are closely related to morale, happiness, and satisfaction **(Bennett, Garrad, and McDowell, 1987),** whether of a population or an individual, regarding both positive and negative elements within the entirety of their existence at a specific point in time **(Teoli & Bhardwaj, 2022)**. Quality of Life (QoL) is a complex concept with numerous definitions and debate over how it should be defined, but one widely accepted definition provided by the World Health Organisation states it as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns" **(The World Health Organization Quality of Life Assessment (WHOQOL): Position Paper from the World Health Organization, 2000).**

"It primarily refers to a person's physical health, psychological state, personal views, social interactions, and relationship to the conspicuous elements of their surroundings." Overall, quality of life is an important concept in psychology because it provides a comprehensive view of an individual's well-being and is an important component of mental health treatment and research. Quality of life is related to both the adequacy of material circumstances and personal feelings about these circumstances. It is influenced by the individuals' experiences and beliefs as well as perception of body image." **(Yarmohammadi et al., 2020; Testa & Simonson, 1996)**. Women's economic well-being is often improved when they have

independent sources of income, which leads to increased self-esteem, better household conditions, and a higher degree of development in their communities. The major contribution to the gender disparity in economic well-being, social standing, and women's empowerment is the gender gap in property ownership and control (**Andal, 2002**).

Homemakers, in particular, often set aside their own ambitions, personal goals, and dreams in order to prioritize their families in order to fulfil their roles and duties assigned due to cultural norms. This can lead to a neglect of their own needs and desires, and ultimately impact their overall well-being and quality of life.

➢ **Research design**

The current study aims to better understand the association between body image and quality of life among women homemakers in Ahmedabad, India. The research will look into how body image affects the well-being of women who have complex responsibilities and duties as homemakers, such as managing household chores, child raising, emotional support, and finances. It is a cross-sectional study, using a convenience sampling method. A survey was conducted to accomplish this goal. A sample of 103 homemakers in Ahmedabad was collected. The WHOQOL-BREF and Body Self Image Questionnaire Short Form (BSIQ-SF) scales were used in the questionnaires.

REVIEW OF LITERATURE

The concepts of Body Image and Quality of Life are relatively recent concepts in the history of psychology and medicine. It was not until mid- twentieth century that the study of body image as well as quality of life became formal areas of research.

In the **1920s, Paul Schilder's** book ***The Image and Appearance of the Human Body***, first published in 1935, sparked interest in the psychology and sociology of body image, stating that *"body image is the picture of our own body we form in our minds, that is to say the way in which the body appears to ourselves."* Body image research was almost entirely limited to the study of distorted body impressions induced by brain damage prior to Schilder's work. **Schilder** developed this work to investigate the larger psychological and societal structures within which body image perceptions and experiences occur (**Grogan, 2021**). Most psychological studies of body image were undertaken with young women until the 1980s, owing to the fact that body image research in psychology had its roots in clinical psychology and psychiatric work focusing on eating disorders. Unfortunately, this reinforced the notion that body image psychology was only relevant to young women and that the construct only included weight and shape concerns. Despite the importance of these issues, body image and its implications are relevant to men and women of all ages, and the idea encompasses more than just concerns about shape and weight. Since the 1980s, there has been a significant shift in emphasis towards broadening the participant population in body image studies to include boys, men, girls, older women and men, as well as the expansion of "body image" into a multifaceted construct that includes much more than weight and shape concerns. There has also been a significant increase in interest in body image research among psychologists (**Grogan, 2021**).

Shontz (1969) was perhaps the first to recognise that body image cannot be measured in a single dimension, but should rather be tested in accordance with many features of body image in a battery of tests chosen so that each test assesses a distinct aspect of body image; as a result, both body image measurement and body image construct are multidimensional.

a) *The Impact of Body Image Experiences: Development of The Body Image Quality of Life Inventory by Thomas F. Cash, Emily C. Fleming (2002)*

"Development of the body image quality of life inventory" focuses on the relationship between body image experiences and quality of life, reporting on the development of the Body Image Quality of Life Inventory (BIQLI) which is a measure of the impact of body image on quality of life. Some of the key points that the article present are that Body image experiences, such as satisfaction with appearance, investment in appearance, and appearance-related anxiety, were found to be significantly associated with the quality-of-life outcomes such as overall life satisfaction, physical health, psychological well-being, and social functioning, according to the study.

According to the authors, the impact of body image on quality of life is complicated and diverse, and different components of body image experiences may have varied effects on the Quality-of-Life outcomes. The BIQLI is a reliable and valid measure of the impact of body image on quality of life, with clinical and research applications. The authors also highlight the importance of addressing body image concerns in interventions aiming at improving quality of life, and they speculate that efforts to promote positive body image and diminish negative body image experiences may have significant implications for general well-being. Overall, this study emphasises the importance of taking into account the impact of body image experiences on Quality of Life outcomes, and it implies that addressing body image issues may be an essential avenue for increasing overall well-being.

There is strong evidence that body image has an impact on an individual's mental and physical health, some of the theories that support the influence of body image on individuals' mental health and well-being are:

- Thin -ideal internalization: A Thin-ideal internalization refers to the extent to which an individual cognitively invests in socially and culturally defined ideals of attractiveness or thinness and incorporates into their behaviours to achieve the ideal standards (**Thompson et al., 1999**). "Recent research has provided support for the relationship between the internalization of thin-ideal body standards and weight bias" (**Nutter et al., 2016; Klaczynski et al., 2009**).
- Social Comparison Theory: Leon Festinger, a psychologist, proposed social comparison theory in 1954, claiming that humans have an inbuilt desire to evaluate themselves, typically in relation to others (**Festinger, 1954**). It can be 'upward-social comparison' which takes place when individuals compare themselves with those who are better than them, while 'downward-social comparison' when individuals compare themselves who are worse than them and feel better for themselves.
- Self- Objectification theory: Self-objectification was identified by Fredrickson and Roberts to emerge among girls and women as a result of living in a sexually objectifying cultural milieu. It has also been linked to negative body image, body dissatisfaction and eating disorders (**Calogero, 2012**).

b) *Cross Cultural Variations in Adult Female Perceived and Ideal Body Image, By Kalpana Raman, December 25, 2015*

The study "Cross Cultural Variations in Adult Female Perceived and Ideal Body Image," by Kalpana Raman, investigates differences in body image perceptions and ideals among adult women from various cultural backgrounds. Women have always been under pressure to conform to society's ideal notion of being attractive. Studies have shown that having a

negative body image can lead to lower self-esteem, social isolation, and major health problems such as depression (**Australian Government Youth Website, 2010**). Furthermore, women tend to be more dissatisfied with their bodies than men (**Katz, 2005**). This study, which used the WHOQOL-BREF questionnaire to assess the quality of life of married working women and housewives, found that working women had a better quality of life in the psychological, social, and environmental domains compared to housewives. However, there was no significant difference between the physical domain of the two groups (**Kalpana Raman, 2015**). This study's findings are consistent with previous research conducted by **Nathawat & Mathur (1993), Hashmi, Khurshid & Hassan (2007), Revati et al.**, and **Akbari (2012)**. These studies have shown that working women tend to have better mental health, self-esteem, and life satisfaction compared to non-working women.

The study's results imply that married working women's education and exposure to professional interpersonal relationships may contribute to their better quality of life in the social and environmental domains. However, the study has some limitations, such as a small sample size and being conducted in a specific region of India. Therefore, further research is necessary to generalize these findings to other populations and regions. This study emphasizes the need to pay attention to the quality of life of married working women and housewives, as their employment status can have a significant impact on their well-being.

c) *Quality Of Life Among Married Working Women and Housewives, By Mehfooz Ahmad. July 2018*

This study investigates the quality of life of women in India, with a particular emphasis on comparing working women and homemakers. The authors explore how stress, family life, and self-esteem can have an impact on a woman's quality of life. **Ojha and Rani (2004)** found that excessive levels of stress can have a negative impact on a woman's self-perception and overall well-being, regardless of whether she works or stays at home. In terms of body image and quality of life, research reveals that homemakers may have lower self-esteem and a negative body image as a result of societal pressures and expectations. Non-working women may also have less opportunity to indulge in physical activity, which may lead to weight gain and other health problems. This can have a further effect on a woman's quality of life, as bad health can have a detrimental impact on one's emotional well-being and overall sense of fulfilment. While the study largely focuses on the experiences of women in India, the findings may be applicable to women in other cultural contexts as well. To improve homemakers' quality of life, it is critical to address the societal influences that contribute to negative body image and low self-esteem. Encouraging physical exercise and supporting healthy lifestyles can also help this population's general health and well-being.

In summary, the literature demonstrates that stress levels, family relationships, and societal pressures connected to body image all have an impact on a woman's quality of life.

Addressing these issues can improve the quality of life for both housewives and working women, supporting a healthier and more meaningful way of life (**Ojha and Rani, 2004**).

A **2007** report by the **American Psychological Association** found that a culture-wide sexualization of girls and women was contributing to increased female anxiety associated with body image. According to one of the Dove research projects, only 4% of women thought they were beautiful, whereas 70% of women and girls in the UK said the media's representation of unrealistic beauty standards drove their appearance fears (**Dove's Largest**

Ever Body Image Report Proves the Media Needs to up Its Game, 2016). According to Griffiths et al. (2017), a study on sex differences in Quality of Life (QoL) impairment associated with body dissatisfaction in adolescents suggests that the negative impact of body dissatisfaction on quality of life is similar for boys and girls, and which is associated with impairment in both physical health as well as psychosocial domains of quality of life.

There has been relatively little research on comprehending the image disturbances and quality of life in non-western communities, employing culture-specific techniques, which indicates a lack of evidence to re-establish the results in the context of Indian populations. As humans are constantly evolving physically, cognitively, emotionally, and socially, body image is a concern at all phases of growth. Every day, individuals learn and seek to conform to societal norms, among other things either consciously or unconsciously. Self-perception, social culture, tradition, stories, family, social group, and other factors impact our personality patterns, beliefs, and perceptions about oneself and the self in relation to others and the world, which shape our overall sense of body image. Overall, these studies emphasise the need of addressing body image concerns in interventions aiming at enhancing quality of life and encouraging good body image experiences, as well as the potential influence of such efforts on overall well-being.

RESEARCH METHODOLOGY

The rationale for researching the relationship between body image and quality of life in women homemakers arises from the possible impact of these variables on the well-being and health of this population. It can help to promote awareness of the issues that women homemakers face and contribute to a better understanding of their experiences and help us better grasp the complicated and multifaceted nature of body image and quality of life. Although there have been prior researches studying the association between body image and quality of life, this research focuses specifically on the relationship between the two variables- body image and quality of life, in the context of a specific population of the women home makers living in Ahmedabad.

Objective

The objective of this study is to identify whether there is any association between body image and quality of life among the women homemakers residing in Ahmedabad and whether there is a difference in the body image with age.

Aim

To identify the correlation between body image and quality of life of women homemakers in Ahmedabad.

To be eligible for participation in this study, individuals must meet the following **Inclusion criteria:**
- Gender: only female participants were included
- Age: Individuals between the age range of 30 to 60
- Homemakers
- Those individuals who gave informed consent both verbally and, in the questionnaire,
- Participants must be living in Ahmedabad

Exclusion criteria:
- Individuals who were unable to read and/or comprehend Gujarati/Hindi/English
- Individuals with additional paid employment or business

Hypothesis
Null hypothesis: There is no correlation between Body image and Quality of life. Alternate hypothesis: There is a positive correlation between body image and quality of life

In this study, a sample of 103 from the universe of women homemakers residing in Ahmedabad, Gujarat, between the age range of 30 to 60 years was collected using a convenience sampling method. The population included all the women homemakers who meet the inclusion criteria in the study.

Procedure
The data was collected using a survey, which is a quantitative research method that involves gathering information from a group of people by asking them a series of (standardised) questions. A questionnaire was used to collect data from participants in the study, which largely consisted of closed-ended items that could be quantified and statistically analysed. The survey was administered face to face but the data was collected using google forms to have. Face-to-face surveys ensured the reliability of the responses, and addition gave the participants an opportunity to elaborate and share insights into their experiences.

The first section of the questionnaire included questions regarding informed consent, while the second section included questions regarding demographic information such as date of birth, educational level, marital status, health condition, professional history, family type, number of children and socio-economic status. The third and fourth sections of the questionnaire consisted of a standardised scale- WHOQOL-BREF and BSIQ-SF.

The questionnaire used in the study was designed such that it was accessible to participants who spoke or understood either English or Gujarati. The WHOQOL-BREF was administered in both English and Gujarati, whereas the BSIQ-SF was only accessible in English. Because the BSIQ-SF was not available in Gujarati, an expert was consulted to translate the scale into Gujarati, ensuring that all participants understood the questionnaire. This technique was deemed appropriate given the assumption that the majority of the target group, i.e., women homemakers, would be Gujarati speakers. However, for individuals who could not speak Gujarati or English, the questions were orally translated into Hindi by the researchers throughout the data collection. This step was taken to ensure that language barriers did not prevent any eligible participants from taking part in the study.

- World Health Organization Quality of Life-BREF (WHOQOL-BREF)
  According to WHO, "The WHOQOL assesses individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (**WHOQOL - Measuring Quality of Life| the World Health Organization, 2012**)
  "The WHOQOL-BREF is a 26-item questionnaire with four domains: physical health (7 items), psychological health (6 items), social relationships (3 items), and environmental health (8 items), as well as QOL and general health questions. On a response scale stipulated as a five-point ordinal scale, each individual WHOQOL-BREF item is rated from 1 to 5. The ratings are then transformed linearly to a 0–100

scale. The physical health domain includes items on mobility, daily activities, functional capacity, energy, pain, and sleep. The psychological domain measures include self-image, negative thoughts, positive attitudes, self-esteem, mentality, learning ability, memory concentration, religion, and mental status. The social relationships domain contains questions on personal relationships, social support, and sex life. The environmental health domain covers issues related to financial resources, safety, health and social services, living physical environment, opportunities to acquire new skills and knowledge, recreation, general environment (noise, air pollution, etc.), and transportation" **(Vahedi, 2010)**. It is one of the most well-known instruments for cross-cultural comparisons of quality of life and is accessible in over 40 languages. It has been adopted in numerous countries, including the United States, the Netherlands, Poland, Bangladesh, Thailand, India, Australia, Japan, Croatia, and Zimbabwe.

A translated and culturally adapted version of the original WHOQOL-BREF in Gujarati language was also used in the study for the ease of individuals who could not read/comprehend English.

- Body Self Image Questionnaire- Short Form (BSIQ-SF)
  Body Self Image Questionnaire, makes it possible to obtain a multidimensional measure of body image of an individual. The BSIQ is a 51-item questionnaire that included 9- factors, which were Overall Appearance Evaluation (OAE); Health Fitness Influence (HFI); Investment in Ideals (II); Health-Fitness Evaluation (HFE); Attention to Grooming (AG); Height Dissatisfaction (HD); Fatness Evaluation (FE); Negative Affect (NA); Social Dependence.(SD), with internal consistency reliabilities for the subscales ranged from .68 to.92. BSIO-SF by **David Rowe (2015)** is a shorter version of the original 51-item scale. BSIQ-SF is comprised of 27 statement items, with 3 items in each of the 9 subscales, which are scored on a 1 to 5 point Likert Scale ranging from "Not at all true of myself" to "Completely true of myself" and reversely scoring the first item that is, "I think my body is unattractive". There were also 5 social desirability items that have been included in all prior research with BSIQ, but have not been included in the current study. All the item statements were translated in Gujarati to make it accessible for the individuals who could not read/comprehend English.

Other tools used:
- Microsoft Excel:
- Microsoft Excel is a spreadsheet software that enables users to enter, organise and analyse data. It is a useful tool as it also allows researchers to create tables, graphs, and infographics to efficiently present the research findings. Microsoft Excel was a useful tool throughout the course of the research. In the current study data collected was entered, organised and a certain part of the analysis was conducted using Microsoft Excel.
- Jamovi:
  For the purpose of analysing and interpreting the data collected in the study, Jamovi, which is a free, user-friendly, and open-source statistical software, which enabled the researcher to perform various analysis such as descriptive statistics and inferential statistics for better insights into the understanding between the variables of the study. Jamovi is based on the R programming language, which is widely used for statistical

analysis in the scientific research. The most recent version, that is, Version 2.3.21, which includes various features and improvements was used in this study.

Using above mentioned tools, the correlation between body image and quality of life of women homemakers residing in Ahmedabad was studied in the current research.

Ethics

It was ensured that the research was conducted in an ethical and responsible manner. The study included participants with voluntary participation, and were free to withdraw or quit the survey at any point in time. Participants were provided with the necessary information about the research, researcher, and the purpose of the study, followed by both verbal consent and consent in the questionnaire before going on with the survey. Participants were informed about the possible psychological harm that might be triggered by any sensitive question relating to their body image and quality of life. It was ensured that any sort of harm was minimised. It was guaranteed that the data will remain confidential, maintain anonymity and be used only for research purposes. It was made sure that no data was falsified, manipulated, misinterpreted or any other research misconduct. Hence these were the ethical guidelines followed while conducting the research.

RESULT & DATA ANALYSIS

Table no. 1 Demographic characteristics

Demographic Characteristics	Frequency (*n* = 103)	Percentage (%)
Age Range		
30-39	36	35
40-49	39	37
50-59	26	25.2
60	2	1.9
Highest level of Education		
None	0	0
Primary School	0	0
Secondary School	15	14.6
Tertiary School	88	85.4
Marital Status		
Single	1	0.97
Married	95	92.2
Living as married	2	1.9
Separated	1	0.97
Divorced	0	0
Widowed	4	3.9
Health Status		
Does not have any health issues	81	88.3
Have health issues	12	11.7
Previous Profession		
Yes	44	42.7
No	59	57.3
Family Type		
Nuclear family	45	43.7
Joint family	58	56.3
No. of Children		
0	10	10
1	45	43
2	43	42
3 or more	5	5

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- Data from the sample size of 103 was collected using the survey questionnaire method from women homemakers residing in Ahmedabad. All the participants were female and between the age of 30-60 years out of which, 39 participants (37%) belonged to the age range between 40-49 years, 36 participants (35%) were between 30-39 years, 26 participants (25.2%) belonged to 50-59, while only 2 participants (1.9%) were of age 60.

- Data was collected from areas of Ahmedabad: Jodhpur, Vejalpur, Gota, Paldi, and Navrangpura.

- It was observed that out of 103 participants, a significant majority of 88 participants (85.4%) had attained a tertiary level of education, while 15 participants (14.6%) had completed secondary education.

- A significant majority of the participants, 95 (92.2%) were married while only 2 were living as married, 1 participant was single, 1 is divorced, while 4 participants (3.9%) were widowed, while 2 individuals were living as married.

- In terms of health status, 91 participants (88.3%) were not currently ill, while only 12 participants (11.7%) were having health issues such as high blood pressure, diabetes, hyperthyroidism, constant worry or illness due to changes in weather

- Out of the total sample, 59 participants (57.3%) did not have any previous profession while 44 participants (42.7%) were previously engaged in various occupations or business. From 44 participants, 12 participants (27.9%) mentioned that left their profession after marriage, 9 participants (20.9%) quit due to disapproval from their in-laws,, while 8 participants (18.6%) left due to the responsibility of children, 6 participants (14%) left due to pregnancy while 3 participants (7%) left due family reasons. Only 3 participants (7%) quit due to dissatisfaction with the working environment and 2 participants (4.7%) quit to pursue higher studies.

- In terms of family structure, 58 participants (56.3%) belonged to joint families; 45 participants (43.7%) belonged to nuclear families.

- While in terms of number of children, 45 participants (43%) had 1 child, 43 (42%) had 2, 10 participants (10%) had no children and only 5 (5%) had 3 or more children.

- A significant majority of 85 participants (82.5%) belonged to middle-income group, 13 participants (12.6%) belonged to high-income group and the rest belonged to lower income group.

In this study, Quality of Life was assessed using the 26-item World Health Organization Brief Quality of Life Assessment Scale (WHOQOL-BREF) providing scores of an individual's subjective evaluation of each of the four domains namely, physical health, psychological functioning, social relationships and environmental health. Raw scores in each domain were transformed into a 4-20 scale and then a 0-100 scale. Descriptive statistics were done with the values of all domain scores within the range of 4-20 and inferential statistics were done with the values of all domain scores within the range 0-100.

Descriptive statistics for WHOQOL-BREF and BSIQ-SF are mentioned in table no. 2 and 3 respectively. All the domains and subscales are presented separately.

Table no.2 Descriptive Statistics for WHOQOL-BREF

	PHYSICAL	PSYCHOLOGICAL	SOCIAL	ENVIRONMENTAL
N	103	103	103	103
Missing	0	0	0	0
Mean	16.0	14.5	16.6	15.5
Standard deviation	2.03	2.71	2.24	2.06
Minimum	8	6	8	10
Maximum	20	20	20	20

There were 103 observations in each variable and 0 missing values, indicating that all the participants provided responses for all the four domains in the questionnaire. Scoring of each domain in the scale ranged from lowest 4 to highest 20. Higher scores indicate better quality of life. It can be observed that the Physical domain of QOL has an average mean score of 16.0, the Psychological domain of QOL has an average score of 14.5, the Social domain has an average mean score of 16.6 while the Environmental domain has an average mean score of 15.5; with standard deviation of 2.03, 2.71, 2,24 and 2,06 respectively. The highest mean score in the social domain indicates that overall participants perceive their social relationships of comparatively higher quality and the lowest mean scores in the psychological domain indicating that participants perceive their psychological health to be of lower quality as compared to other domains. The highest Standard deviation in the psychological domain (2.71), indicates a greater degree of variability in this domain while the lowest standard deviation in the physical domain indicates the lowest degree of variability in their responses in this domain.

Each domain had, a minimum score of 8, 6, 8 and 10 respectively with a maximum score of 20, maximum scores indicating higher quality of life in all domains, Lowest minimum score being in the psychological domain indicates that some of the participants report relatively lower quality of psychological health; highest minimum score being in the physical domain (10) indicates that the perceived physical health of the participants was comparatively higher than other domains.

Table no.3 Descriptive statistics for BSIQ-SF

	Overall Appearance Evaluation	Health Fitness Influence	Investment in Ideals	Health-Fitness Evaluation	Attention to Grooming	Height Dissatisfaction	Fatness Evaluation	Negative Affect	Social Dependence
N	103	103	103	103	103	103	103	103	103
Missing	0	0	0	0	0	0	0	0	0
Mean	9.43	10.2	9.53	10.4	8.99	4.66	6.34	4.35	6.32
Standard deviation	1.62	2.44	3.46	2.85	2.58	2.86	3.26	2.34	2.27
Minimum	5	3	3	3	3	3	3	3	3
Maximum	15	15	15	15	15	15	14	14	13

In case of BSIQ-SF, scores of each subscale ranging from lowest 3 to highest 15, average mean scores in the subscales of Overall Appearance Evaluation (OAE), Health Fitness Influence (HFI), Investment in Ideals (II), Health-Fitness Evaluation (HFE), Attention to Grooming (AG), Height Dissatisfaction (HD), Fatness Evaluation (HE), Negative Affect (NE) and Social Dependence (SD) are 9.43, 10.2, 9.53, 10.4, 8.99, 4.66, 6.34, 4.35 and 6.32 respectively. This indicates that the participants are moderately satisfied with all domains other than Negative affect and Social dependence as they show relatively lower satisfaction. The Standard deviation of 1.62, 2.44, 3.46, 2.85, 2.58, 2.86, 3.26, 2.34 and 2.27 respectively for each subscale. This indicates that there is a wide range of scores in each subscale which suggests that there are varying levels of satisfaction and dissatisfaction among the participants in this sample.

Subscale OAE observed a minimum score of 5 while subscales HFI, II, HFE, AG, HD, FE, NA, and SD observed minimum scores of 3 each, indicating lower levels of satisfaction among the participants in these subscales. Maximum scores for subscales OAE, HFI, II, HFE, AG, and HD were 15; FE and NA were 14 each; while SD was 13, highest scores in OAE, HFI, II, HFE, AG, and HD indicate a higher degree of satisfaction in these subscales.

The Cronbach's alpha value of 0.642 in the reliability analysis of BSIQ-SF suggests that the internal consistency reliability of the scale is moderate (a value of 0.6 or higher is usually considered acceptable). Cronbach's alpha value of 0.850 in the reliability analysis of WHOQOL-BREF suggests that the internal consistency reliability of the scale is high, and the items on the scales are highly related to each other and consistently measure the same construct.

In the study, to examine the Linear relationship between body image and quality of life, Pearson's Correlation between all four domains of the WHOQOL-BREF scale and all nine subscales of BSIQ-SF was calculated. To measure the strength and direction of a linear relationship between two variables, a correlation coefficient can be a useful method. Pearson's correlation coefficient, takes the value from range -1 to 1, with -1 representing perfectly negative correlation, 0 indicating no correlation while +1 indicating perfectly positive correlation between 2 variables.

The *p*- value associated with each coefficient indicates how probable are the results due to chance. $P < .05$ is conventionally considered as statistically significant and $p < .001$ is considered as statistically highly significant.

Table no. 4 Pearson's correlation coefficient between BSIQ-SF and WHOQOL-BREF

DOM SUB		PHYSICAL	PSYCHOLOGICAL	SOCIAL	ENVIRONMENTAL
OAE	Pearson's r *p*-value	0.220 0.025*	0.314 0.001*	0.231 0.019	0.286 0.003*
HFI	Pearson's r *p*-value	-0.113 0.254	-0.107 0.283	0.009 0.982	-0.028 0.776

II	Pearson's r *p*-value	0.114 0.252	0.017 0.868	0.063 0.525	0.020 0.841
HFE	Pearson's r *p*-value	0.392 <.001*	0.384 <.001*	0.379 <.001*	0.320 <.001*
AG	Pearson's r *p*-value	0.151 0.129	0.238 0.016	0.148 0.134	0.293 0.003*
FE	Pearson's r *p*-value	-0.407 <.001*	-0.432 <.001*	-0.310 0.001*	-0.355 <.001*
HD	Pearson's r *p*-value	-0.170 0.087	-0.259 0.008*	-0.268 0.006*	-0.299 0.002*
NA	Pearson's r *p*-value	-0.452 <.001*	0.547 <.001*	-0.383 <.001*	-0.383 <.001*
SD	Pearson's r *p*-value	-0.162 0.101	-0.247 0.012*	-0.140 0.157	-0.206 0.037

P <.05*
df = 101
Confidence interval 95%

According to Table no. 4, The correlation coefficient (r) between the scores of subscale of BSIQ-SF and different domain scores of WHOQOL-BREF for the sample of 103 women homemakers, are as follows:

Overall Assessment Evaluation (OAE) with domains of QOL:
- There was a weakly positive and statistically significant correlation between OAE and physical domain scores, r(101) = .22, *p* = .025.
- There was a weakly positive and statistically significant relationship between OAE and Psychological domain scores, r(101) = .31, *p* = .001.
- There was a weakly positive but statistically significant relationship between OAE and Social domain scores, r(101) = .23, *p* = .019.
- There was a weakly positive but statistically significant relationship between OAE and Environmental domain scores, r(101) = .29, *p* = .003.

Health Fitness Influence (HFI) with domains of QOL:
- There was a very weakly negative (or no association) and statistically insignificant relationship between HFI and Physical domain scores, r(101) = -.11, *p* = .0.254.
- There was a very weakly negative (or no association) and statistically insignificant relationship between HFI and Psychological domain scores, r(101) = -.11, *p* = .283.
- There was a very weakly positive (or no association) and statistically insignificant relationship between HFI and Social domain scores, r(101) = .01, *p* = .982.
- There was a very weakly negative (or no association) and statistically insignificant relationship between HFI and Environmental domain scores, r(101) = -.03, *p* = .776.

Investment in Ideals with domains of QOL:
- There was a very weak positive (or no association) and statistically insignificant relationship between II and Physical domain scores, r(101) = .11, *p* = .252.
- There was a very weak positive (or no association) and statistically insignificant relationship between II and Psychological domain scores, r(101) = .02, *p* = .868.
- There was a very weak positive (or no association) and statistically insignificant relationship between II and Social domain scores, r(101) = .06, *p* = .525.
- There was a very weak positive (or no association) and statistically insignificant relationship between II and Environmental domain scores, r(101) = .02, *p* = .841.

Health-Fitness Evaluation (HFE) with domains of QOL:
- There was a weakly positive but statistically significant relationship between HFE and Physical domain scores, r(101) = .39, *p* < .001.
- There was a weakly positive but statistically significant relationship between HFE and Psychological domain scores, r(101) = .38, *p* < .001.
- There was a weakly positive but statistically significant relationship between HFE and Social domain scores, r(101) = .38, *p* < .001.
- There was a weakly positive but statistically significant relationship between HFE and Environmental domain scores, r(101) = .32, *p* < .001.

Attention to Grooming with domains of QOL:
- There was a very weakly positive (or no association) and statistically insignificant relationship between AG and Physical domain scores, r(101) = .15, *p* = .129.
- There was a weakly positive and statistically insignificant relationship between AG and Psychological domain scores, r(101) = .24, *p* = .016.
- There was a very weak positive (or no association) and statistically insignificant relationship between AG and Social domain scores, r(101) = .15, *p* = .134.
- There was a very weakly positive but statistically significant relationship between AG and Environmental domain scores, r(101) = .29, *p* = .003.

Fatness Evaluation with domains of QOL:
- There was a moderately negative and statistically significant relationship between FE and Physical domain scores, r(101) = -.40, *p* < .001.
- There was a moderately negative and statistically significant relationship between FE and Psychological domain scores, r(101) = -.43, *p* < .001.
- There was a weakly negative and statistically significant relationship between FE and Social domain scores, r(101) = -.31, *p* < .001.
- There was a weakly negative and statistically significant relationship between FE and Environmental domain scores, r(101) = -.35, *p* < .001.

Height Dissatisfaction with domains of QOL:
- There was a very weakly negative (or no association) and statistically insignificant relationship between HD and Physical domain scores, r(101) = -.17, *p* = .087.
- There was a weakly negative and statistically significant relationship between HD and Psychological domain scores, r(101) = -.26, *p* = .008.
- There was a weakly negative but statistically significant relationship between HD and Social domain scores, r(101) = -.27, *p* = .006.

- There was a weakly negative and statistically significant relationship between HD and Environmental domain scores, $r(101) = -.23$, $p = .002$.

Negative Affect with domains of QOL:
- There was a moderately negative and statistically significant relationship between NA and Physical domain scores, $r(101) = -.45$, $p < .001$.
- There was a moderately positive and statistically significant relationship between NA and Psychological domain scores, $r(101) = .55$, $p < .001$.
- There was a weakly negative but statistically significant relationship between NA and Social domain scores, $r(101) = -.38$, $p < .001$.
- There was a weakly negative and statistically significant relationship between NA and Environmental domain scores, $r(101) = -.38$, $p < .001$.

Social Dependence with domains of QOL:
- There was a very weakly negative (or no association) and statistically insignificant relationship between SD and Physical domain scores, $r(101) = -.16$, $p = .101$.
- There was a weakly negative (or no association) and statistically insignificant relationship between SD and Psychological domain scores, $r(101) = -.25$, $p = .012$.
- There was a very weakly negative (or no association) and statistically insignificant relationship between SD and Social domain scores, $r(101) = -.14$, $p = .157$.
- There was a very weakly negative (or no association) and statistically insignificant relationship between SD and environmental domain scores, $r(101) = -.16$, $p = 101$.

It can be examined that while many of the subscales of BSIQ-FF show a statistically significant relationship with various domains of quality of life, they are relatively weak, which indicates that the relationship between the variables in the current study is not very strong in this sample.

DISCUSSION

For many years, the topic of Body Image has been an area of interest in the field of psychology and neurology. It concerns not only the external and objective attributes but also subjective representations of physical appearance. While there has been little research on body image and quality of life among homemakers in India, it is clear that these issues are important and deserve more attention from researchers and mental health professionals.

On analysing the data, it was found that the results of the study were inconsistent with earlier literature in this area. While prior research has generally shown a positive correlation between body image and wellbeing, our results suggest that this may not be the case for certain populations, such as older adults. It is possible that the impact of body image on quality of life may be moderated by various factors such as age, gender, and cultural background, which were not taken into account in the present study, hence it is important to consider the multidimensional nature of body image, which includes not only physical appearance but also attitudes and beliefs about one's body. The findings of this study suggest a need of a more nuanced and individualized approach to investigate the relationship between body image and quality of life. Hence, we must go beyond the surface and acknowledge the multiple factors at work when it comes to body image and its impact on overall quality of life.

Strength & Limitation

Just like every research has some strengths and weaknesses, this study has some strengths and weaknesses too. One of the strengths presented is the relevant age group of the study which includes women from the age range of 30 to 60 years. This particular age group is not extensively studied especially in the context of relationship between body image and quality of life, in addition to this, women belonging to the above-mentioned age group, are more likely to face various challenges in their body image and quality of life due to factors like the physiological changes with age and more. Another strength of the study is the usage of standardized tool like WHOQOL-BREF and validated tool like BSIQ-SF, which enhances the reliability and validity of the study. The questionnaire comprised of each item in two languages- English and Gujarati, while a translated and culturally adapted version of the original WHOQOL-BREF in Gujarati language was used, an expert was consulted to translate the BSIQ-SF scale into Gujarati, as BSIQ-SF was only accessible in English, for the ease of individuals who could not read/comprehend. However, for individuals who could not read/understand Gujarati or English, the questions were orally translated into Hindi by the researchers throughout the data collection ensuing that language barriers were eliminated providing a variety of data. Although the data was collected through google forms, face to face survey was administered which allowed the participants to open to share about their experiences, giving deeper insights and comprehension.

While the study has its strengths, there were also many limitations which are likely to have affected the result of the study as well. As the data collection had to be completed within a limit, the study faced limitation of time constraint, which also limited the scope of the study, made the grounds for more limitations including studying a smaller sample of 103 participants, and not conducting a more comprehensive analysis, using a convenience sampling method and the sample did comprise every part of Ahmedabad. The data collection method used here, does not provide a representative result, often includes issues of under or over representation, the responses received were useful from an individual standpoint, but it might no be able to provide information about the entire population of the study. At some extent, the responses highly depend on the individuals' experiences of the day and environment. The reliability and validity of the Gujarati version of BSIQ-SF was not checked. Demographic variables such as body mass index, intake of nutrition, were not taken into account in this study which is possibly an important variable relating to body image and quality of life of an individual. The study used self-report measures, and was assumed that all the participants were honest about their responses, there might be the presence of social desirability bias and response bias the results depend on the introspective ability of the participants as well as the interpretation of the question. The study is also prone to researcher's bias that majority of women have a negative body image and lower levels of quality of life. BSIQ-SF was primarily validated on young adults in the US, therefore there is a gap between the validated population and the sample population in this study, in terms of age group, nationality and cultural differences, although the rigorous development and validation process underlying the BSIQ and BSIQ-SF make it more likely to validate across to different populations **(Personal communication, David Rowe, May 1, 2023)** Hence these were the possible strengths and weaknesses of the current research on the study of correlation between body image and quality of life of women home-makers in Ahmedabad.

CONCLUSION

The current study aimed at understanding the correlation between the dimensions of Body Image and the domains of Quality of Life. After analysing the data of 103 women homemakers in Ahmedabad, using Pearson's Product Moment Correlation Coefficient between WHOQOL-BREF and BSIQ-SF, it was found that different factors of body image had different levels of association with quality of life. Some of the factors such as Health-Fitness Evaluation (HFE) and Fatness Evaluation (FE) have a moderately negative and statistically significant relationship with Physical and Psychological domains of QOL. Negative Affect (NA) has a moderately negative relationship with the Physical domain but a moderately positive relationship with the Psychological domain of QOL. Other factors such as Overall Assessment Evaluation (OAE), Psychological domain scores, and Environmental domain scores have a weakly positive and statistically significant relationship with the domains of QOL. However, Health Fitness Influence (HFI), Investment in Ideals (II), and Attention to Grooming (AG) have very weak or no association with most domains of QOL. Overall, it can be concluded that factors such as HFE, FE, and NA have a stronger association. Very few research on this characteristic group have been done to produce conclusive results that can be generalised to the entire population of homemakers.

Future Scope

Since research has no end, and a bottom line cannot be drawn, here are some of the future scopes of the research. A study with a larger and inclusive sample size should be done which is representative of the entire population of women homemakers. Further studies must be done to explore the potential reasons behind the unexpected results by taking into account various demographic variables such as socio-economic status, number of children, family type, and more. Future studies might be done comparing the findings of this study and investigate whether these findings remain consistent with other population. Since it is important to improve an individual's overall quality of life, there is a need to promote positive body image.

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