

## Original Article

# Demographic influences on perception of aging, appearance-related consciousness, and negative self-perception among young and middle-aged adult women

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**Citation:** Akram S, Ashraf R, Nouman S. Demographic influences on perception of aging, appearance-related consciousness, and negative self-perception among young and middle-aged adult women. *J Soc Health Sci.* 2023;2:43-50.

**Received:** 21 November 2023**Revised:** 18 December 2023**Accepted:** 26 December 2023**Published:** 31 December 2023

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## Abstract

With global life expectancy increasing, societal views on aging—especially its negative impact on women's self-image, intensified by social media—demand urgent attention. These norms affect self-perception and overall well-being. Therefore, this demographic study was conducted with the objective of exploring the relationships between age perceptions, appearance-related social media consciousness (ASMC), and self-perception. This pilot study, carried out in Lahore, Pakistan, involved 100 women either engaged in academic or professional work who were selected through purposive sampling. The data were collected via face-to-face interviews utilizing a questionnaire in English, comprising the Brief Aging Perceptions Questionnaire (B-APQ), the ASMC scale, and the Rosenberg Self-Esteem Scale (RSES), to evaluate the participants' perceptions and self-view. Our study revealed a significant positive correlation between perceptions of aging and negative self-perception ( $r = 0.98, p < 0.01$ ), indicating that concerns about aging contribute to more negative self-views, a trend mainly attributed to middle-aged women. Moreover, marital status notably affected appearance-related consciousness, with married women exhibiting greater concerns ( $p = 0.03$ ). The findings underscore the nuanced effect of education on appearance concerns—postgraduates showed greater concern (mean =  $57.24 \pm 16.45$ ) than those with lower educational levels (mean =  $47.94 \pm 19.73, p = 0.04$ ). Despite this, education did not significantly impact perceptions of aging or overall negative self-perception, indicating its selective influence on aspects of self-perception. Our study reveals the multifaceted relationship between perceptions of aging, appearance consciousness, and self-perception in women, emphasizing the substantial role of social media. It shows that social media exposure and engagement intensify appearance concerns and aging anxieties, especially among middle-aged and married women, concluding in more pronounced negative self-views. While the influence of educational background remains mixed, the findings support initiatives for educational and awareness campaigns to redefine aging and appearance perceptions, advocating for diverse beauty representations to improve women's self-image and counteract negative stereotypes.

## Keywords

Aging perception; Self-concept; Body image; Social media; Middle-aged women

## 1. Introduction

Life expectancy has increased swiftly in many regions of the world, leading to a globally aging population [1,2]. Aging is a biologically inevitable process, yet it is also shaped by societal understandings of and attitudes toward old age [3]. Today's society generally does not consider aging positively, supporting the belief that getting older implies a de-

cline in physical, mental, and overall health [4,5]. Ageism affects both young and older individuals but primarily affects elderly individuals, leading to negative stereotypes and discrimination. This type of prejudice may lead individuals to assume these negative perceptions, influencing their self-view and behavior [6].

The perception of aging covers various aspects, including timeline chronicity, which reflects how age affects everyday activities [7]; positive consequences, highlighting the wisdom gained with age; negative control, concerning doubts about problem-solving abilities in older age; positive control, regarding the impact of aging on managing social interactions; and emotional representation, which focuses on feelings about aging [8,9]. Self-perception of aging involves individuals' assessments of their aging process, influenced by lifelong expectations and daily experiences, and is measured through attributes such as perceived energy, happiness, and usefulness compared to one's past [9,10].

Social media dramatically influences how women feel about their looks, a concept known as appearance-related social media consciousness (ASMC) [11,12]. This concern about looking attractive on platforms such as Instagram and Facebook affects women's self-confidence and how they view themselves and others [13,14,15,16,17]. Today, with the rise of social media, young and middle-aged adult women are especially conscious of their appearance and how they age [18]. This digital age blurs the line between real life and online presentations, increasing worries about how one looks online [19]. These concerns go beyond self-esteem; they connect with more extensive societal views on aging, showing how deeply social media impacts one's feelings about aging and attractiveness.

Society's long-standing focus on youth and beauty, now even more highlighted by social media, influences how women see their aging process and value themselves [20]. This concern emphasizes why it is essential to study these views and their effects. By examining how societal and social media beauty ideals affect women of different ages, we can better understand the complex ways aging occurs today. This research can uncover how these standards impact women's mental health and help create strategies to increase women's confidence in their appearance. This approach not only fills a notable gap in research on ageism and the influence of media but also aims to support women in developing a more positive self-image.

This study investigated the interplay between demographic factors—age, marital status, working status, and education level—and perceptions of aging, appearance-related consciousness, and negative self-perception among young and middle-aged adult women. This study seeks to explain the significant influence of societal norms and social media on women's views of aging. Furthermore, by identifying vulnerable demographics, this research aims to facilitate the development of targeted interventions to mitigate the adverse effects of societal and digital beauty standards.

## 2. Materials and methods

### 2.1. Study design and ethical approval

This pilot study spanned over three months, from May to July 2022, and received ethical clearance from the Departmental Doctoral Program Committee at Fazaia College of Education for Women, Lahore.

### 2.2. Study Settings

The research was undertaken in Lahore, the capital city of Punjab Province, which accommodates a population of more than 10 million people, including a substantial proportion of young and middle-aged women from various sociodemographic backgrounds [21].

### 2.3. Sampling technique

For this pilot study, 100 participants were recruited, divided equally between young adult women and middle-aged adult women. Data collection was conducted using a purposive sampling, a method appropriately chosen as participant selection was based on personal judgment, aligning with the study's inclusion and exclusion criteria [22].

### 2.4. Participant recruitment

We recruited women aged 18 to 55 who were either engaged in academic or professional work and who were active on social media, aiming to explore the impact of social media on self-perception and aging. However, we excluded individuals who did not provide written informed consent, those without formal education to ensure comprehension of the study scope, and those diagnosed with mental health conditions to minimize confounding variables.

### 2.5. Study instrument

The study used standardized questionnaires to determine perceptions of aging, appearance-related social media consciousness, and negative self-perception.

#### 2.5.1. Brief Aging Perception Questionnaire (B-APQ)

The B-APQ is a concise and multidimensional tool designed to measure aging perceptions and has been validated for individuals aged 50 years and older. It encompasses five dimensions: timeline-chronic, consequences-positive, emotional representations, consequences and control negative, and control positive. The reliability of the B-APQ, as indicated by Cronbach's alpha, exceeded 0.70 for all subscales, ensuring internal consistency [23]. In this study, the B-APQ demonstrated good reliability, with a Cronbach's alpha of 0.74.

#### 2.5.2. Appearance-related social media consciousness (ASMC)

This measures the extent to which a woman's thoughts and behaviors are influenced by her awareness of how attractive she is to an online audience. The ASMC scores achieved a Cronbach's alpha of 0.95 in the total sample, indicating excellent reliability [12]. In our research, the ASMC showed outstanding reliability, with a Cronbach's alpha of 0.92.

#### 2.5.3. Negative self-perception

The Rosenberg Self-Esteem Scale (RSES), a 10-item measure of self-worth, was used to assess both positive and negative feelings about oneself. Responses were recorded on a 4-point Likert scale. Historically, the Rosenberg Scale has shown reliability, with a Cronbach's alpha of 0.77 [24]. However, the current study demonstrated fair reliability, with a Cronbach's alpha of 0.64.

### 2.6. Data collection procedure

Data collection was carried out through face-to-face interviews with participants utilizing standardized questionnaires in English and conducted either at their educational institution or workplace.

## 2.7. Statistical analysis

The data were analyzed using SPSS version 25.00. Pearson product-moment correlation analysis was used to explore the relationships between demographic factors, perceptions of aging, social media consciousness, and self-perception. Independent samples *t* tests were conducted to examine differences in perceptions based on age, marital status, and education level. Effect sizes for these comparisons were quantified using Cohen's *d*, calculated as the difference between two means divided by the pooled standard deviation.

## 3. Results

Table 1 shows the relationships among demographic variables, perception of aging, ARSMC, and NSP for 100 participants. A significant but modest correlation between ARSMC and NSP ( $r = 0.20$ ,  $p < 0.05$ ) suggests that increased attention to appearance on social media is associated with more negative self-perceptions. A strong correlation between age and negative self-perception ( $r = 0.98$ ,  $p < 0.01$ ) highlighted a significant impact of age, with education level inversely relating to appearance concerns and negative self-view ( $r = -0.25$ ,  $p < 0.05$ ).

**Table 1.** Correlations among demographic variables, perception of aging, appearance-related consciousness, and negative self-perception ( $n = 100$ ).

Measures	1	2	3	4	5	Mean $\pm$ SD
	Age	Education	POA	ARSMC	NSP	
Age	-	-0.21 *	0.14	0.18	0.98 **	1.50 $\pm$ 0.50
Education	-	-	-0.19	-0.25 *	-0.25 *	1.37 $\pm$ 0.59
POA	-	-	-	0.35 **	0.36 *	54.84 $\pm$ 8.55
ARSMC	-	-	-	-	0.20 *	51.33 $\pm$ 18.63
NSP	-	-	-	-	-	14.92 $\pm$ 4.39

Note: The abbreviations used include POA for Perception of Aging, ARSMC for Appearance-Related Social Media Consciousness, and NSP for Negative Self-Perception. Significance levels are denoted as follows: \* indicates  $p < 0.05$ , \*\* indicates  $p < 0.01$ , and \*\*\* indicates  $p < 0.001$ , reflecting the strength of the relationships observed.

Table 2 shows a significant difference in negative self-perception between younger adults and middle-aged adults, with a large effect size (Cohen's  $d = 10.52$ ), indicating that age significantly affects self-perception. Unmarried women exhibited greater appearance-related consciousness than married women did ( $p = 0.03$ ). Married women reported more negative self-perception (mean = 16.70  $\pm$  4.76) than unmarried women (mean = 14.42  $\pm$  4.53,  $p = 0.01$ ), suggesting that marital status influences self-perception. Table 2 further shows that there were no significant differences in perceptions based on working status. Furthermore, postgraduates reported greater appearance-related consciousness (mean = 57.24  $\pm$  16.45) than did graduates or those below (mean = 47.94  $\pm$  19.73,  $p = 0.04$ ). However, no significant differences were found in aging perception or negative self-perception across education levels.

**Table 2.** Demographic influences on perceptions of aging, appearance-related consciousness, and negative self-perception in women (n = 100).

Scales	Perception of aging	Appearance related consciousness	Negative self-perception
	Mean ± SD	Mean ± SD	Mean ± SD
<i>Age (in years)</i>			
18 – 35	53.58 ± 7.10	47.94 ± 19.73	10.62 ± 0.92
Above 35 – 55	56.10 ± 9.69	54.72 ± 16.99	19.22 ± 0.70
t statistic	-1.48	-1.84	-52.2
p value	0.14	0.06	< 0.01 **
Confidence interval (LL – UL)	-5.89 – 0.85	-14.0 – 0.52	-8.92 – -8.27
Cohen's d	0.29	0.36	10.52
<i>Marital status</i>			
Married	53.58 ± 7.10	47.94 ± 19.73	16.70 ± 4.76
Unmarried	56.58 ± 9.38	55.66 ± 15.79	14.42 ± 4.53
t statistic	-1.80	-2.16	2.45
p Value	0.07	0.03 *	0.01 *
Confidence interval (LL – UL)	-6.30 – 0.30	-14.8 – -0.62	0.43 – 4.12
Cohen's d	0.36	0.43	0.49
<i>Working status</i>			
Working	56.93 ± 8.03	47.40 ± 18.12	15.16 ± 4.87
Nonworking	54.28 ± 8.50	53.68 ± 18.03	15.72 ± 4.74
t statistic	1.44	-1.59	-0.53
p Value	0.15	0.11	0.59
Confidence interval (LL – UL)	-0.97 – 6.27	-14.1 – 1.53	-20.1 – 1.51
Cohen's d	0.32	0.34	0.11
<i>Educational qualification</i>			
Graduate or below	53.58 ± 7.10	47.94 ± 19.73	16.70 ± 4.76
Postgraduate	57.40 ± 10.10	57.24 ± 16.45	15.52 ± 3.21
t statistic	-1.69	-2.02	1.11
p Value	0.09	0.04 *	0.26
Confidence interval (LL – UL)	-8.39 – 0.75	-18.4 – -0.15	-0.92 – 3.28
Cohen's d	0.44	0.51	0.29

Note: Significance levels are indicated as \*  $p < 0.05$ , and \*\*  $p < 0.01$ , indicating statistical significance at the 0.05, and 0.01 levels, respectively.

#### 4. Discussion

Our study provides valuable insights into the dynamics of aging perception, appearance-related consciousness, and self-perception among young and middle-aged adult women. The concern over appearance on social media platforms and the aging process are closely linked to women's self-perceptions, frequently resulting in a more negative view of oneself. Age emerges as a crucial factor, with middle-aged women displaying significantly more negative self-perceptions than their younger counterparts. Additionally, marital status significantly influences appearance-related consciousness and self-perception, affecting married and unmarried women in different ways. While educational qualification is associated with concerns about appearance, its impact on perceptions of aging and self-view does not follow a consistent pattern across different education levels. These results highlight the complex relationships between societal norms, individual life stages, and education in forming women's self-perception, emphasizing the importance of a detailed approach to understanding these effects.

Our study findings align with previously conducted research demonstrating that individuals' self-esteem is strongly related to their physical appearance, which can result in dissatisfaction or drive people to adopt extraordinary measures for external validation [25]. Various factors, including education level, income, and health status, in addition to psychological factors, contribute to self-perception and aging [26]. Another study showed that how older people feel about aging can be affected by health problems, feeling lonely, having sad thoughts, and having support from social circles [27]. Growing up in specific ways or becoming a grandparent at a young age can also influence how they feel about aging [28].

Our study revealed significant differences between age groups regarding negative self-perception, which aligns with a study focusing on middle-aged women that linked appearance anxiety, body esteem, surveillance, and shame to body changes and associated anxiety [29]. Similarly, dependency due to disability or advanced age has been associated with negative self-perception [30]. At the same time, an individual's health and long life are influenced by biological, environmental, and psychological factors, with religion and spirituality playing significant roles [31].

In our study, a notable difference was found in the marital status of women concerning appearance-related consciousness, supporting a study finding that married women exhibit greater body self-consciousness than single women [32]. Cultural norms, social roles, and stereotypes based on marital status contribute to this phenomenon; personal traits such as fragility often stereotype single women, while married women are characterized by gender roles and traits such as warmth and maturity [33]. The media's growing role and familial influence, especially from mothers, significantly affect body satisfaction among teenage girls and married women, who face societal pressure to maintain their appearance [34].

Furthermore, marital status significantly affects negative self-perception, as seen in a study on pregnant women where obesity was perceived as a barrier to physical and emotional intimacy [35]. Research on the impact of childbirth on self-esteem and relationship satisfaction revealed that self-esteem fluctuates before and after childbirth, with the first child having the most significant impact [36]. Emotional stability has also been linked to self-esteem levels among women [37].

This study addresses a critical yet overlooked aspect of women's psychology that can influence their mental health by utilizing various standardized tools and considering multiple variables, which underscores the strengths of our research. However, the study's limited sample size and lack of qualitative exploration into behavioral changes among affected women are limitations.

## 5. Conclusions

In conclusion, our research uncovers the complex dynamics between perceptions of aging, appearance consciousness, and self-perception among young and middle-aged women. Our findings underscore the significant role of social media in shaping these perceptions, with middle-aged and married women experiencing more acute negative self-views influenced by aging concerns and social media interactions. While the impact of educational background on these perceptions appears varied, suggesting a complex interplay, the insights support the need for educational and awareness initiatives. By promoting a more inclusive and diverse representation of beauty across all age groups, we can foster a healthier self-image among women and challenge the prevailing stereotypes that contribute to negative self-perception.



**Author contributions:** Conceptualization, SA, RA and SN; methodology, SA, RA and SN; software, RA; validation, SA, RA and SN; formal analysis, RA; investigation, SA, RA and SN; resources, SA; data curation, RA; writing—original draft preparation, SA, and SN; writing—review and editing, RA; visualization, RA; supervision, RA; project administration, SA. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no specific grant from the public, commercial, or not-for-profit funding agencies.

**Ethics statement:** This pilot study received ethical clearance from the Departmental Doctoral Program Committee at Fazaia College of Education for Women, Lahore.

**Consent to participate:** Informed consent was obtained from all individual participants included in the study.

**Data availability:** The data supporting this study's findings are available from the corresponding author, Rabbia, upon reasonable request.

**Acknowledgments:** None.

**Conflicts of interest:** The authors declare no conflicts of interest.

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