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Narcissistic Personality Traits and Social Appearance Anxiety in Pregnant Women: An Exploratory Cross-Sectional Study

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Research Article

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Additional Declarations: No competing interests reported.

Abstract

Purpose: This study aimed to examine the relationship between narcissistic personality traits and social appearance anxiety in pregnant women and to identify associated sociodemographic and pregnancy-related factors.
Design and Methods: A descriptive cross-sectional design was used. The sample consisted of 370 pregnant women who attended the obstetrics outpatient clinics of Aydin Maternity and Children's Hospital between November 2022 and February 2023. Data were collected using a structured questionnaire including a sociodemographic form, the Social Appearance Anxiety Scale (SAAS), and the Narcissistic Personality Inventory (NPI). Descriptive statistics, independent t-tests, ANOVA, Spearman correlations, and linear regression analyses were used for data analysis.
Findings: Women with four or more pregnancies had significantly higher SAAS scores compared to those with fewer pregnancies. Participants who shared photos during pregnancy had higher NPI scores than those who did not. Women who perceived themselves as "neither beautiful nor ugly" reported higher social appearance anxiety compared to those who saw themselves as beautiful. Additionally, women who had maternity photoshoots had significantly lower SAAS scores.
Practice Implications: These findings suggest the relevance of integrating mental health screening, including personality traits and appearance-related concerns, into antenatal care. Healthcare professionals should consider sociodemographic and psychosocial factors when planning prenatal interventions.

1. Introduction

Pregnancy is a unique and transformative period characterized by significant physical, emotional, and psychological changes. For many women, this process can heighten self-awareness and body consciousness, sometimes resulting in increased psychological vulnerability (Duncombe et al., 2008). Among the psychosocial issues observed during pregnancy, changes in body image and social appearance anxiety are particularly prominent (Potur, 2003; Smith & Hulsey, 2008). These factors can be exacerbated by the complex interplay of hormonal fluctuations, social expectations, and internalized body ideals, especially within cultures influenced by media representations of beauty (Levinson & Rodebaugh, 2012).

Narcissistic personality traits, ranging from healthy self-esteem to pathological grandiosity, may also play a significant role in how pregnant women experience bodily changes. While normal narcissism may serve adaptive functions such as resilience and confidence, pathological narcissism can be associated with interpersonal difficulties and heightened vulnerability to external validation (Rozenblatt, 2002; Raskin & Terry, 1988).

The intersection of narcissistic traits and appearance anxiety in pregnancy has received limited attention in mental health literature. Understanding this relationship is crucial for informing holistic maternal care. This study, therefore, aims to explore the association between narcissistic personality traits and social

appearance anxiety in a sample of pregnant women, and to identify relevant sociodemographic and obstetric predictors.

2. Methods

Design and Participants: This descriptive cross-sectional study was conducted between November 2022 and February 2023 at the obstetrics outpatient clinics of Aydin Maternity and Children's Hospital. The study population consisted of pregnant women who presented for routine prenatal care. Using a convenience sampling method, 370 women who met the inclusion criteria participated voluntarily.

Inclusion and Exclusion Criteria: Inclusion criteria were: being pregnant, aged 18 years or older, able to speak and understand Turkish, and providing informed consent. Exclusion criteria included psychiatric diagnoses prior to pregnancy or any current psychiatric treatment.

Data Collection Instruments: Data were collected through a self-report survey including three sections: (1) A sociodemographic and obstetric characteristics form developed by the researchers, (2) The Social Appearance Anxiety Scale (SAAS), developed by Hart et al. (2008), validated in Turkish by Doğan (2010), which measures anxiety regarding appearance, and (3) The Narcissistic Personality Inventory (NPI), developed by Raskin and Hall (1979), adapted to Turkish by Atay (2009).

Procedure: Participants were informed about the purpose of the study and provided written informed consent. Data collection was conducted in a private setting at the hospital by the primary researcher.

Ethical Considerations: The study was approved by the Ethics Committee of Aydın Adnan Menderes University (Approval Date: October 2022, No: 2022/174) and institutional permission was obtained from the hospital. Participation was voluntary and confidentiality was ensured throughout the study.

Statistical Analysis: Data were analyzed using IBM SPSS Statistics Version 25.0. Descriptive statistics (mean, standard deviation, frequencies) were calculated. Independent sample t-tests and ANOVA were used to compare group means. Spearman's rank correlation assessed relationships between continuous variables, and linear regression was used to identify predictors of social appearance anxiety and narcissistic traits.

3. Results

The mean age of participants was 28.6 ± 5.1 years. Most were in the second or third trimester of pregnancy. Approximately 52% had high school or lower education, and 60% were unemployed.

(Table 1)

Table 1
Distribution of Selected Sociodemographic Characteristics of Pregnant Women

Variable	n	%
Age < 25	92	24.9
Age 25–34	201	54.3
Age ≥ 35	77	20.8
High School or Lower	193	52.2
University or Higher	177	47.8

- Pregnant women who had experienced four or more pregnancies reported significantly higher SAAS scores compared to those with fewer pregnancies ($p < 0.05$).

(Table 2)

Table 2
Pregnancy-related Characteristics

Characteristic	n	%
Primigravida	120	32.4
2nd-3rd Pregnancy	158	42.7
≥ 4 Pregnancies	92	24.9

- Participants who shared pregnancy photos on social media had significantly higher NPI scores ($p < 0.05$).

(Table 3)

Table 3
Mean Scores of SAAS and NPI

Scale	Mean	SD
SAAS	48.2	12.3
NPI	18.7	5.9

- Those who described themselves as "neither beautiful nor ugly" had significantly higher SAAS scores compared to those who described themselves as "beautiful" ($p < 0.05$).

(Table 4)

Table 4
Correlation between SAAS and NPI

Variable 1	Variable 2	r	p-value
SAAS	NPI	0.41	< 0.01

- Women who had maternity photoshoots exhibited significantly lower SAAS scores ($p < 0.05$).

(Table 5)

Table 5
Regression Analysis Predicting SAAS

Predictor	B	SE	Beta	p-value
Education Level	-1.58	0.65	-0.12	0.02
Photo Shoot	-3.20	0.95	-0.18	< 0.01
Self-Perception	2.46	0.78	0.21	< 0.01

- Regression analysis revealed that photo sharing, family structure, education level, and self-perception of appearance were significant predictors of SAAS and NPI scores.

(Table 6)

Table 6
Regression Analysis Predicting NPI

Predictor	B	SE	Beta	p-value
Photo Sharing	2.10	0.52	0.25	< 0.01
Family Type	1.35	0.60	0.13	0.03

4. Discussion

This study provides insights into the psychosocial profiles of pregnant women in relation to narcissistic traits and appearance-related anxiety. Our findings suggest that narcissistic personality traits may be more pronounced in women who engage in self-promotional behaviors such as social media sharing, consistent with existing literature on narcissism and online behavior (Bergman et al., 2011).

Increased social appearance anxiety among women with higher parity and lower education may reflect both internalized beauty standards and socioeconomic stressors. These findings align with theories of objectification and impression management, which emphasize the psychological burden of appearance monitoring, particularly in vulnerable populations (Fredrickson & Roberts, 1997).

Furthermore, the inverse relationship between maternity photoshoots and anxiety scores may suggest that intentional body-image affirming behaviors buffer appearance-related distress. This highlights the potential value of psychosocial interventions targeting body image and self-esteem in prenatal care.

5. Conclusion

Narcissistic personality traits and social appearance anxiety are intertwined psychosocial constructs that can significantly impact maternal well-being. Given their association with sociodemographic and behavioral variables, these traits should be assessed as part of routine prenatal psychological screening. Interventions that foster self-acceptance and promote positive body image could contribute to better mental health outcomes in pregnant populations.

Abbreviations

SAAS
Social Apperance Anxiety Scale
NPI
Narcissistic Personality Inventory
APA
American Psychiatric Association
ASÖ
Ahmet Salim Özkaya
MK
Mehtap Kızılkaya

Declarations

Ethics approval and consent to participate

T.C.
AYDIN ADNAN MENDERES UNIVERSITY RECTORATE
Institute of Health Sciences Directorate
Non-Interventional Research Ethics Committee

Document No: E-21347915-050.04.04-260703
Subject: Ethics Committee Application No. 2022/047

To: Dr. Mehtap KIZILKAYA
Lecturer

The Non-Interventional Research Ethics Committee of the Institute of Health Sciences has approved

your study at the 15th regular meeting held on October 14, 2022. The second decision taken regarding your study is presented below for your information.

DECISION: II
Protocol No: 2022/047
Principal Investigator: Dr. Mehtap KIZILKAYA

The research titled “Narcissistic Personality Traits, Social Appearance Anxiety, and Related Factors in Pregnant Women” by Dr. Mehtap KIZILKAYA was reviewed at the Ethics Committee meeting on October 14, 2022, based on the correction submitted following the previous meeting dated September 16, 2022. The purpose, rationale, scope, and methods of the study were re-evaluated and it was found appropriate on the condition that permission to use measurement tools during the research process is obtained by the responsible researcher.

It has been unanimously decided that the study can be conducted ethically and scientifically provided that it is carried out at the center specified in the application file (on the condition that institutional permission is obtained and the file is submitted).

It was also emphasized once again that the principal investigator must ensure that after the study is completed, the final report, Informed Voluntary Consent Form (to be handwritten and signed by the volunteers themselves including full name and address), and the Data Collection Forms/Surveys are delivered to the committee without exception.

Prof. Dr. Turhan DOST
Chair, Ethics Committee

This document has been electronically signed.

Our study complies with the Helsinki Declaration, and ethical committee approval has been obtained accordingly.

Consent for publication

Republic of Turkey

Aydın Adnan Menderes University

Institute of Health Sciences

To the Chairperson of the Non-Interventional Research Ethics Committee

I, the responsible researcher, plan to conduct my Master's thesis entitled "Narcissistic Personality Traits, Social Appearance Anxiety and Related Factors in Pregnant Women" at Aydın Women's and Children's Hospital between November 1, 2022 and February 28, 2023. Formal permission correspondence for data collection will be conducted after obtaining prior approval from your committee. I undertake to inform you when the OFFICIAL PERMISSION is received.

Responsible Researcher

Dr. Lecturer Member Mehtap Kızılkaya

Signature

ADDRESS: Aydın Adnan Menderes University, Faculty of Nursing, Department of Mental Health and Psychiatric Nursing, Efeler/AYDIN

Availability of data and materials

Research data was collected using a SURVEY form consisting of Demographic Questions, the Social Appearance Anxiety Scale (SAAS), and the Narcissistic Personality Inventory. The data obtained in the study were analyzed using SPSS (Statistical Package for Social Sciences) for Windows 26.0 program. Descriptive statistics of the data included mean, standard deviation, median, minimum, maximum, frequency, and ratio values. The distribution of the variables was evaluated using the Kolmogorov-Smirnov test, and it was determined that they showed a normal distribution. The variables were analyzed using independent t-test and ANOVA test. Spearman correlation and linear regression analyses were used to determine the relationship and strength of the relationship between the variables. The findings were evaluated at a 95% confidence interval and a 5% significance level.

The datasets generated and/or analysed during the current study are not publicly available due to the inclusion of sensitive personal data and ethical restrictions but are available from the corresponding author on reasonable request.

Researchers who wish to access the data should contact the corresponding author:

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Data will be shared in an anonymized form upon reasonable request and with permission of the relevant ethics committee.

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Authors' contributions

ASÖ contributed to the design of the study and data collection. Statistical analysis was performed by MK and ASÖ, and drafting of the paper was conducted by MK and ASÖ, based on a master's thesis drafted by ASÖ with MK as the supervisor. Both authors have read and approved the final manuscript.

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