

Personality Trait on Appearance Anxiety the Mediating Role on Social Comparison Orientation Among College Students

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ABSTRACT

The present study explored the relationship between college students' personality qualities, social comparison orientation, and appearance anxiety. 250 college students (ages 18 to 25) were given the Iowa–Netherlands Comparison Orientation Measure (INCOM), the Big Five Inventory (BFI), and the Appearance Anxiety Inventory (AAI).

According to the descriptive data, participants' average scores for appearance anxiety were 15.35 (SD = 7.481), social comparison was 31.88 (SD = 4.698), and personality traits were 133.37 (SD = 9.664). The findings indicated that neither appearance anxiety nor personality qualities were substantially correlated with social comparison ($r = .017$).

However, there were notable positive correlations found between some personality traits, including agreeableness, neuroticism, and openness ($p < .01$). The results imply that personality qualities and social comparison may not have a direct impact on appearance anxiety, highlighting the necessity to take into account additional psychological and environmental aspects in order to comprehend appearance-related issues.

Keywords: Social comparison orientation, appearance anxiety, and personality attributes

INTRODUCTION

Physical appearance has grown in importance as a component of self-evaluation in modern society, especially for college students and young people. A crucial developmental stage characterized by identity discovery, increased self-consciousness, and more exposure to peer evaluation is the move to college. In this situation, physical appearance-related worries frequently worsen and lead to a number of psychological issues, such as appearance anxiety, low self-esteem, social disengagement, and a lower quality of life.

In psychology research, appearance-related anxiety has drawn a lot of interest since it is associated with maladaptive behaviours and mental health problems.. In social environment People are always comparing their physical appearance to peers, celebrities , and socially idealized norms , both offline and online. When they belief these comparisons it leads to increase in anxiety and unhappiness with one's looks. College students are vulnerable because of peer competition, academic pressures, developmental sensitivity, and greater use of social media.

Personality qualities have greater impact people's perceptions, interpretations, and reactions to appearance-related stimuli. Characteristics including neuroticism, extraversion, conscientiousness, agreeableness, and openness have an impact on interpersonal behavior, emotional regulation, self-concept, and anxiety susceptibility. A growing body of research indicates that appearance anxiety is influenced by personality factors interacting with cognitive and social processes including social comparison orientation. The inclination to compare oneself to others in order to assess one's skills, beliefs, and personal qualities is known as social comparison orientation. People who have a high social comparison orientation are more likely to compare their appearance frequently which can worsen anxiety and low self-esteem. Social comparison processes are now crucial to comprehending appearance anxiety in the contemporary sociocultural environment, which is marked by continuous visual exposure and idealized body norms. In light of this, the current study aims to investigate the mediating function of social comparison orientation among college students as well as the association between personality factors and appearance anxiety. Developing focused psychological interventions to lessen appearance-related discomfort and enhance young adults' mental health requires an understanding of these linkages.

Definition of Personality Traits

The personality trait is defined as the relatively stable, long term consistent pattern of behaviour, thought and feeling that defines a individual's unique personality. These has characteristics such as kindness, extroversion or conscientiousness that influence how a person interacts with the world, acts in specific situations, and typically remains consistent over time. In this psychologists categorize personality into five dimensions they are:

1. **Openness to experience:** Reflects curiosity, creativity, and a preference for novelty and variety.
2. **Conscientiousness:** Measures self-discipline, organization, and a need for achievement and competence.
3. **Extraversion:** Characterized by sociability, energy, assertiveness, and positive emotionality.
4. **Agreeableness:** Reflects a tendency toward compassion, cooperation, and trusting others.
5. **Neuroticism:** Involves the frequency and intensity of negative emotions, emotional instability, and stress reactivity.

Definition of Appearance Anxiety

The appearance anxiety is defined as a the fear about their own physical appearance will be negatively evaluated by others developed by (Hart et al. (2008)). This often leading to body image disturbances, low self-esteem, and social withdrawal.

Social Comparison Orientation

Social comparison is the psychological process of evaluating one's own abilities, opinions, and worth by comparing them to others. This behaviour stems from a natural drive to assess oneself and reduce uncertainty. It can be done for self-evaluation, self-improvement, or self-enhancement Introduced by ([Leon Festinger](#) in 1954). There are three types of social comparison they are

Upward Comparison: comparing oneself with someone judged to be better than oneself (e.g., by having more wealth or material goods, higher social standing, greater physical attractiveness)

Downward Comparison: comparing oneself with someone judged to be not as good as oneself.

Lateral Comparison: comparing oneself with another who is considered to be more or less equal. Traditionally, social comparison

Review of literature

Duyan, M., et al. (2022) Investigated how social appearance anxiety affected psychological health: a study on ladies who regularly do Pilates. This study examined the connection between women who frequently practice Pilates and psychological well-being in relation to social appearance concerns. The study included a sample of 382 women from different Turkish districts. Social appearance anxiety and psychological well-being were found to be significantly correlated negatively ($r = -0.250$, $p < 0.01$). Social appearance anxiety has a considerable detrimental impact on psychological well-being, according to hierarchical regression analysis ($\beta = -0.253$, $p < 0.001$). The results indicate that among women who regularly practice Pilates, social appearance anxiety is a major predictor of psychological well-being.

Brosof, L. C., et al. (2017) Investigated the role of dietary restriction and social appearance anxiety as intermediaries between binge eating and perfectionism: This six-month, three-wave longitudinal study looked at the association between binge eating, social appearance anxiety, dietary restriction, and perfectionism in a sample of 300 women. The findings demonstrated that binge eating at baseline was predicted by social appearance anxiety, food restriction, and perfectionism-related worry over errors. After adjusting for all other factors, the only one that prospectively predicted binge eating was social appearance concern. Additionally, throughout a six-month period, social appearance anxiety mediated the association between worry about mistakes and binge eating, but dietary constraint may be a crucial target for interventions meant to prevent and cure binge eating.

Sanobar Golshani et al. (2019) Research on the psychological and personality elements of cosmetic surgery was examined by Sanobar Golshani et al. (2019). Two validated and trustworthy questionnaires were administered to a sample of 274 patients seeking various cosmetic procedures as part of this prospective observational study. Symptom Checklist-90-Revised (SCL-90-R) and Global Severity Index (GSI) Extraversion, neuroticism, and openness NEO-FFI stands for Five Factor inventory. The results showed that interpersonal sensitivity was the most prevalent mental disorder among individuals, with a high prevalence rate of 51%. The personality traits of agreeableness and extroversion had the greatest mean scores, while openness had the lowest. To decrease needless procedures and improve satisfaction with surgical outcomes, a psychological assessment is required prior to surgery.

(Fardouly & Vartanian, 2016) College students' social comparison processes have become even more intense due to the involvement of social media. The continual exposure to idealized photos on social media sites like Instagram and Snapchat increases the likelihood of appearance-based comparisons. According to research, students with high SCO are more prone to internalize unattainable beauty ideals, which can result in increased unhappiness and anxiety related to appearance

Research Methodology:

Research question:

Personality trait on appearance anxiety: The mediating role of social comparison orientation among young adults

Objective:

To examine the relationship between personality traits and appearance anxiety a mediating role of social

comparison among college students.

Hypothesis:

H1: There will be a significant relationship between personality traits and appearance anxiety

H2: Social comparison orientation will be significantly related to appearance anxiety

H3: Personality traits will be significantly interrelated

Research Design:

In order to investigate the connections between personality traits, appearance anxiety, and social comparison orientation among college students, the current study used a quantitative, cross-sectional correlational research methodology. Because it permits the evaluation of correlations between variables as they naturally arise without the need for experimental modification, this design is suitable. Finding patterns and strengths in the connections between personality qualities and appearance anxiety is made easier by the correlational approach. Furthermore, this design can be used to evaluate the mediating function of social comparison orientation, which makes it possible to comprehend the psychological processes that underlie the relationship between personality traits and anxiety related to appearance. The design was effective and useful for examining a large sample because data were gathered all at once.

Sample technique:

Convenience sampling this technique is suitable for the present research as it allows the researcher to collect data efficiently from a large sample of college students and examine the relationship between personality traits, appearance anxiety, and social comparison orientation.

Data collection:

- Data will be collected through offline questionnaires distributed to the participants.
- Participants will provide demographic information, followed by responses to the three standardized scales.

Tool Description:

John, Donahue, and Kentle created the 44-item Big Five Inventory (BFI) in 1991 as a means of effectively evaluating the five aspects of personality. It avoids utilizing single adjectives by employing one or two prototype trait adjectives with additional context to enhance intelligibility. On a 5-point rating system, with 1 denoting "strongly disagree" and 5 denoting "strongly agree," participants score the questions.. The mean of the responses is used to determine the scores. The BFI is clear and simple to use while maintaining high psychometric qualities.

The 10-item Appearance Anxiety Inventory (AAI), created by Veale et al. (2014), is intended to evaluate behaviors (such compulsive checking avoidance) and cognitive processes (like rumination and self-focused attention) linked to Body Dysmorphic Disorder (BDD). More appearance anxiety is indicated by higher ratings. A final score between 0 and 40 is obtained by having respondents rate their experiences on a 5-point Likert scale. A 40% drop in the AAI and a crucial clinical cutoff of 19 represent the best therapeutic response signal.. With a Cronbach's Alpha of 0.86, the AAI has shown strong convergent validity and the impact of appearance anxiety on day-to-day functioning.

Gibbons and Buunk (1999) created the Social Comparison Orientation Scale, sometimes called the Iowa–

Netherlands Comparison Orientation Measure (INCOM), to evaluate individual differences in the propensity to compare oneself with others. The degree to which people often compare their skills, beliefs, and personal traits to those of others is known as social comparison orientation.

The eleven items that make up the INCOM assess the two main aspects of social comparison: ability comparison and opinion comparison. A 5-point Likert scale, with 1 denoting "strongly disagree" and 5 denoting "strongly agree," is used to score the self-report items. Certain things are reverse-scored and have negative wording.

Higher scores indicate a larger propensity for social comparison. The overall score is calculated by adding the answers to each item. People who score higher on the scale are more likely to make frequent social comparisons, which may have an impact on issues linked to appearance, emotional health, and self-evaluation.

With stated internal consistency reliability values (Cronbach's alpha) typically ranging from 0.78 to 0.85 across several populations, the INCOM has shown strong psychometric qualities. Strong construct and convergent validity have been demonstrated by the scale, and measures of self-consciousness, body image issues, and social evaluative anxiety have been found to positively correlate with social comparison orientation.

Statistical Analysis:

- Descriptive statistics (mean, SD) for demographics and variables.
- Spearman’s correlation to examine associations among variables.

Inclusion Criteria

1. College students in the 18–25 age range.
2. Students, both male and female.
3. Learners with English reading and comprehension skills.
4. Students who consent to participate in the study after being told

Exclusion Criteria

1. People having serious mental illnesses.
2. People receiving psychiatric treatment for issues relating to body image.
3. Questionnaires that are incomplete or incorrectly completed.

Result:

This chapter presents the results and interpretation of the analysis conducted to examine the relationship between appearance anxiety, social comparison orientation, and personality traits among college students.

Table 1: Descriptive Statistic showing the mean and standard deviation of Appearance Anxiety, Social comparison orientation , Personality Trait among college students

Variables	Mean	Standard Deviation	N
Appearance Anxiety	15.35	7.481	250
Social Comparison Orientation	31.88	4.698	250
Personality Trait	133.37	9.664	250

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Discussion For Descriptive Statistic Table:

An overview of the distribution of the research variables is given by the descriptive statistics. The participants' total personality attributes are reflected in the mean score for personality traits (M = 133.37, SD = 9.664).

A moderate inclination to compare oneself to others is indicated by the mean score for social comparison orientation (M = 31.88, SD = 4.698).

The average appearance anxiety score (M = 15.35, SD = 7.481) indicates that participants worry about their physical appearance to varied degrees. There is discernible individual variation in appearance anxiety, as evidenced by the comparatively higher standard deviation.

Table 2: Correlation

Variables	Spearman correlation							
Appearance Anxiety	Correlation coefficient	1.000	.017	.035	-.122	.070	-.024	.010
	Sig. (2-tailed)	.	.795	.586	.053	.270	.706	.873
	N	250	250	250	250	250	250	250
Social Comparison	Correlation coefficient	.017	1.000	-.082	.013	-.055	.118	.062
	Sig. (2-tailed)	.795	.	.196	.837	.387	.063	.331
	N	250	250	250	250	250	250	250
Big Five -EX	Correlation coefficient	.035	-.082	1.000	.109	-.064	-.087	.116
	Sig. (2-tailed)	.586	.196	.	.085	.317	.171	.068
	N	250	250	250	250	250	250	250
Big Five-AG	Correlation coefficient	-.122	.013	.109	1.000	.083	.193**	.273**
	Sig. (2-tailed)	.053	.837	.085	.	.193	.002	.000
	N	250	250	250	250	250	250	250

	N							
Big Five - CON	Correlation coefficient	.070	-.055	-.064	.083	1.000	-.113	.054
	Sig. (2-tailed)	.270	.387	.317	.193	.	.074	.400
	N	250	250	250	250	250	250	250
Big Five-NEU	Correlation coefficient	-.024	.118	-.087	.193**	-.113	1.000	.277**
	Sig. (2-tailed)	.706	.063	.171	.002	.074	.	.000
	N	250	250	250	250	250	250	250
Big Five-Open	Correlation coefficient	.010	.062	.116	.273**	.054	.277**	1.000
	Sig. (2-tailed)	.873	.331	.068	.000	.400	.000	.
	N	250	250	250	250	250	250	250

Discussion For Correlation Table:

The associations between Appearance Anxiety, Social comparison and personality factor were evaluated by spearman’s correlations analysis. The results indicate a very weak and non-significant relationship between appearance anxiety and social comparison orientation ($r = .017$). Likewise, there were no discernible connections between appearance concern and any of the personality traits:

Extraversion ($r = .035$)

Agreeableness ($r = -.122$)

Conscientiousness ($r = .070$)

Neuroticism ($r = -.024$)

Openness ($r = .010$)

These findings imply that in this population, appearance anxiety is not significantly correlated with personality attributes.

There were several significant relationships between the personality traits themselves. Agreeableness was positively correlated with both neuroticism ($r = .193$, $p < .01$) and openness ($r = .273$, $p < .01$). Additionally, neuroticism also showed a positive relationship with openness ($r = .277$, $p < .01$).

Discussion:

This study revealed that there is no significant relationship between each variables. That is the appearance

anxiety is not significantly associated with social comparison or personality trait. This suggests that stable personality traits or comparison tendencies in this population may not have a direct impact on worries about physical appearance same as social comparison also does not have significant relationship with personality trait because the comparison behaviour occurs because of any situation or environmental factor rather than personality. In this there are significant positive correlations held within some personality traits. Agreeableness showed positive associations with neuroticism and openness, and neuroticism was also positively related to openness. These results show that these attributes share emotional and cognitive aspects. Overall, the findings point to the importance of other contributing factors including media exposure and cultural norms, suggesting that although personality traits are associated, appearance anxiety may not be directly predicted by them.

Summary:

The study examined the connections between young adults' social comparison, appearance anxiety, and personality factors. The findings showed that there were no meaningful connections between appearance anxiety and the other factors. Nonetheless, notable correlations between specific personality traits were found.

The results imply that social comparison and personality factors may not have an impact on appearance anxiety.

Conclusion:

The study comes to the conclusion that appearance anxiety in young adults is not significantly influenced by personality factors or social comparison orientation. Nonetheless, there are significant connections between personality traits.

These results show that comprehending appearance anxiety requires taking into account additional psychological and environmental aspects.

Limitations:

- The study was a self reported so, the responser maybe influenced or disturbed by external factors
- This sample was limited to college students only
- This was a cross-sectional design so cause and effect of the relationship cannot be established.
- Similar research could be done for other population and different ethnic group.
- Only few variables were taking into the study than other variables

Recommendation:

- Future researched should include more and larger sample to get more generalized findings
- Additional psychological variables can be added to gain more comprehensive results
- It is recommended to include the cultural and social impact of appearance anxiety

References:

1. Buunk, A. P., & Gibbons, F. X. (2007). Social comparison: The end of a theory and the emergence of a field. *Organizational Behavior and Human Decision Processes*, 102(1), 3–21. <https://doi.org/10.1016/j.obhdp.2006.09.007>

2. Cash, T. F., & Smolak, L. (2011). *Body image: A handbook of science, practice, and prevention* (2nd ed.). Guilford Press.
3. Davis, C., Karvinen, K., & McCreary, D. R. (2005). Personality correlates of appearance anxiety in young men. *Personality and Individual Differences*, 38(2), 453–464. <https://doi.org/10.1016/j.paid.2004.05.015>
4. Duyan, M., et al. (2022). Social appearance anxiety and psychological well-being in women practicing Pilates. *International Journal of Sport and Exercise Psychology*, 20(3), 1–14. <https://doi.org/10.1080/1612197X.2021.1877324>
5. Fardouly, J., & Vartanian, L. R. (2016). Social media and body image concerns. *Current Opinion in Psychology*, 9, 1–5. <https://doi.org/10.1016/j.copsyc.2015.09.005>
6. Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140. <https://doi.org/10.1177/001872675400700202>
7. Gibbons, F. X., & Buunk, A. P. (1999). Individual differences in social comparison: Development of a scale of social comparison orientation. *Journal of Personality and Social Psychology*, 76(1), 129–142. <https://doi.org/10.1037/0022-3514.76.1.129>
8. Hughes, O., et al. (2022). A mixed methods investigation of stigma, social appearance anxiety, and coping in people with skin conditions. *Body Image*, 40, 190–201. <https://doi.org/10.1016/j.bodyim.2021.12.004>
9. John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory—Versions 4a and 54*. University of California, Berkeley.
10. John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102–138). Guilford Press.
11. Kraye, A., Ingledew, D. K., & Iphofen, R. (2008). Social comparison and body image in adolescence. *Journal of Community & Applied Social Psychology*, 18(2), 102–123. <https://doi.org/10.1002/casp.904>
12. McCrae, R. R., & Costa, P. T. (2008). The five-factor theory of personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 159–181). Guilford Press.
13. Monro, F., & Huon, G. (2005). Media-portrayed idealized images, body shame, and appearance anxiety. *International Journal of Eating Disorders*, 38(1), 85–90. <https://doi.org/10.1002/eat.20153>
14. Pecorari, G., et al. (2009). Self-esteem and personality traits in patients undergoing cosmetic surgery. *Acta Otorhinolaryngologica Italica*, 29(6), 346–352.
15. Sanobar Golshani, et al. (2019). Personality traits and psychological disorders in cosmetic surgery applicants. *World Journal of Plastic Surgery*, 8(2), 161–168.
16. Tiggemann, M. (2004). Body image across the adult life span. *Journal of Women & Aging*, 16(1–2), 1–14. https://doi.org/10.1300/J074v16n01_01
17. Veale, D., Eshkevari, E., Ellison, N., Costa, A., Robinson, D., & Kavouni, A. (2014). The appearance anxiety inventory: Validation of a measure of body dysmorphic disorder. *Behavioural and Cognitive Psychotherapy*, 42(5), 605–616. <https://doi.org/10.1017/S1352465813000556>
18. Vintilă, M. (2010). Personality traits and interest in cosmetic surgery: A meta-analysis. *Romanian Journal of Applied Psychology*, 12(2), 73–81.
19. Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, 3(4), 206–222. <https://doi.org/10.1037/ppm0000047>

20. Wagstaff, D. L. (2018). Personality, mating strategies, and cosmetic use in women. *Personality and Individual Differences*, 121, 142–147. <https://doi.org/10.1016/j.paid.2017.09.030>
21. Allport, G. W. (1937). *Personality: A psychological interpretation*. Holt.
22. Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Psychological Assessment Resources.
23. El-Etreby, R. R., et al. (2025). Personality traits, social appearance anxiety, and quality of life among university students. *Journal of Affective Disorders*, 340, 120–128.
24. Fardouly, J., & Vartanian, L. R. (2016). Social media and body image concerns: Current research and future directions. *Current Opinion in Psychology*, 9, 1–5. <https://doi.org/10.1016/j.copsyc.2015.09.005>
25. Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140. <https://doi.org/10.1177/001872675400700202>
26. Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21(2), 173–206. <https://doi.org/10.1111/j.1471-6402.1997.tb00108.x>
27. Gibbons, F. X., & Buunk, A. P. (1999). Individual differences in social comparison: Development of a scale of social comparison orientation. *Journal of Personality and Social Psychology*, 76(1), 129–142. <https://doi.org/10.1037/0022-3514.76.1.129>
28. Hart, T. A., Flora, D. B., Palyo, S. A., Fresco, D. M., Holle, C., & Heimberg, R. C. (2008). Development and examination of the Social Appearance Anxiety Scale. *Assessment*, 15(1), 48–59. <https://doi.org/10.1177/1073191107306673>
29. Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319–340. <https://doi.org/10.1037/0033-295X.94.3.319>
30. Tiggemann, M. (2011). Sociocultural perspectives on human appearance and body image. In T. F. Cash & L. Smolak (Eds.), *Body image: A handbook of science, practice, and prevention* (2nd ed., pp. 12–19). Guilford Press.