



TO EXAMINE THE IMPACT OF VANITY, NEED FOR PRECISION AND PERSONALITY FACTORS ON BODY IMAGE CONCERN AMONG ADOLESCENTS

Dr. Noor Glory^{1*}, Anshika Mehta²

^{1*} Assistant Professor, Amity University Mohali, Punjab, India, Email: psy.noor.04@gmail.com

² Student (B.A. Psychology with Research), Amity University Mohali, Punjab, India,
Email: anshika.mehta1@s.amity.edu

***Corresponding Author:** Dr. Noor Glory

* Assistant Professor, Amity University Mohali, Punjab, India,
Email: psy.noor.04@gmail.com

Abstract:

Puberty brings significant physical changes during adolescence, often leading to heightened self-consciousness. Concern over one's body image is growing every day especially among teenagers who want to make an identity with their body in front of their peers. To understand this, the present investigation aimed to examine the impact of vanity, need for precision and personality factors on body image concern among adolescents. Sample is comprised of 123 adolescents (females=87; males=36). Standardized psychological measures were used to measure the variables of the study. Descriptive statistics, correlational analysis, ANOVA and step-wise multiple regression analysis were used to analyse the data. Results shows that personality factors like conscientiousness and extraversion impacted negatively on body image concern in female adolescents whereas, neuroticism impacted positively and conscientiousness impacted negatively on body image concern among male adolescents. It is suggested that interventions aimed at improving body image in adolescents could focus on enhancing conscientiousness and reducing neuroticism, particularly for females and males. Promoting emotional regulation and self-awareness may help reduce the negative effects of neuroticism and bolster protective traits like conscientiousness.

Keywords: Body image concern, vanity, need for precision, personality, gender, ANOVA, sept-wise multiple regression.

INTRODUCTION

Due to puberty, adolescence is a time when people undergo major physical changes that might affect how they feel about their bodies. Increased self-consciousness is frequently the result of these changes, particularly in adolescents who believe that their bodies deviate from ideals set by society. Research indicates that the early phases of puberty are more difficult for females since they are frequently the targets of stronger social expectations regarding weight and physical attractiveness (Grabe, Ward, & Hyde, 2008). Although they are less likely than girls to report body image dissatisfaction, boys also experience pressures linked to muscularity and body shape (Tylka, 2011).

In psychology, adolescents are forming their sense of self, and a major part of this process is body image. Adolescent body dissatisfaction is associated with mental health issues such anxiety and depression, emotional distress, and low self-esteem (Menzel et al., 2011). Adolescents who are

dissatisfied with their bodies are more prone to participate in maladaptive behaviours including disordered eating, excessive exercise, and dieting, which can exacerbate their poor body image (Neumark-Sztainer et al., 2006). These actions can have long-term effects on one's physical and mental well-being, which emphasises how critical it is to address body image issues in adolescence.

Teenagers' worries about their bodies are greatly influenced by the media. Ads, social media, and television frequently promote limited and unattainable ideals of beauty, which can cause teenagers to negatively compare themselves to these idealised representations. According to research by Tiggemann and Slater (2014), adolescent females who are exposed to media representations of the slender ideal are more likely to be dissatisfied with their bodies. By giving users a place to manage their physical appearance and obtain social reinforcement through likes and comments, social media sites in particular have made this problem worse. Due to their need for social comparison and peer acceptance, adolescents are particularly vulnerable to these influences (Fardouly et al., 2015).

Adolescent body dissatisfaction has also been connected to the process of "*self-objectification*", which is described as considering oneself primarily as an object to be examined and judged based on appearance. Teenagers who use social media extensively are more likely to internalise the thin ideal and feel more dissatisfied with their bodies (Tiggemann & Slater, 2014). Adolescents who are already susceptible to body image issues may develop eating disorders as a result of this ongoing exposure to idealised body types, which can alter their perception of themselves. Another important element that shapes body image issues in adolescence is peer pressure. Adolescents are more susceptible to peer pressure during this time and are prone to internalise appearance-related social demands. According to Grabe et al. (2008), teenagers' self-perceptions are significantly shaped by their family's and peers' opinions about beauty and body image. Teenagers who have unfavourable peer relationships because of their looks may be more likely to become dissatisfied with their bodies and take part in unhealthy habits like dieting and over-exercising.

Furthermore, the social comparison theory suggests that teenagers frequently assess themselves by contrasting themselves with others, which can result in body dissatisfaction if they believe they fall short of idealised standards. Teenagers are more likely to report having a poor body image if they compare their bodies to those of their peers or celebrities (Fardouly et al. 2015). If teenagers have irrational expectations about their bodies, this comparison can be especially harmful since it can cause feelings of inadequacy and a desire to alter their looks. Teenagers' experiences and coping mechanisms with body image issues are significantly influenced by their personalities. Characteristics like neuroticism, self-consciousness, and perfectionism can affect how much body image causes unhappiness. Teenagers who exhibit high levels of perfectionism, for instance, may be more likely to experience body dissatisfaction due to their excessive criticism of their physical appearance and unreasonable expectations for themselves. A persistent pursuit of perfection and an increased fear of failing are associated with perfectionism, which might worsen negative body image (Shafran & Mansell, 2001).

Body image issues are also linked to neuroticism. Teenagers with high scores on neuroticism can be more prone to body dissatisfaction due to anxiety over their looks. Body image problems can also be exacerbated by self-consciousness, which is characterised by an increased awareness of one's own appearance to others. High levels of self-consciousness in adolescents may make them more sensitive to perceived imperfections in their appearance and more prone to internalise criticism from others, making them more susceptible to body dissatisfaction. Teenagers' body image issues are greatly influenced by vanity (overwhelming sense of pride in one's appearance or achievements). Adolescents are vulnerable during this time to outside demands to live up to media-driven and cultural beauty standards, which frequently encourage unattainable ideals of muscularity or thinness. Teenagers who put an excessive amount of value on their appearance or who score higher on the vanity scale may be

more susceptible to body dissatisfaction. People with high levels of vanity are more likely to internalise cultural beauty standards and judge themselves more on their outward appearance than their inner traits (Tiggemann & Slater, 2014). Adolescents with high levels of vanity may consider their physical appearance to be a major factor in determining their value, which can lead to a distorted body image. The prevalence of social media, where idealised depictions of beauty are regularly displayed, further complicates the relationship between vanity and body image issues. Social comparison may be more common among adolescents with high levels of vanity, who use Facebook, Instagram, TikTok, Snapchat etc. to compare themselves to their peers and celebrities (Fardouly et al., 2015). Teenagers are led to assume that their worth is directly related to their appearance by social media's encouragement of users to display carefully chosen pictures of themselves. Frequent exposure to these idealised images has been linked to increased body dissatisfaction, particularly in adolescents who place a higher value on appearance (Levine & Murnen, 2009).

Teenagers who are self-conscious are more likely to make these comparisons, which exacerbates their body image issues. Furthermore, self-objectification (a psychological state in which people see themselves primarily as objects to be examined and judged) is more common in teenagers with high levels of vanity. It has been demonstrated that this process, which is especially common in teenage girls, contributes to poor mental effects like anxiety and sadness as well as body dissatisfaction (Fredrickson & Roberts, 1997). In an effort to attain the idealised image, adolescents with high vanity may also engage in compulsive exercise, excessive dieting, or the usage of cosmetic treatments. These actions are linked to the emergence of eating disorders like bulimia or anorexia nervosa and are frequently motivated by a need for approval from others (Menzel et al., 2011). These drastic actions can worsen issues with body image, creating a vicious cycle of discontent and harmful attempts to change one's look.

Adolescents with high levels of vanity do not always have a poor body image, though. According to research by Tylka (2011), personal characteristics like personality traits, social support, and self-esteem can all help to mitigate the impact of vanity on body image issues. Strong internal resources, such a strong feeling of self-worth or supporting family networks, may help adolescents fend off pressure to live up to society's standards of beauty. On the other hand, people without these resources might be more likely to suffer from body dissatisfaction due to vanity. The link is therefore not deterministic, and individual differences are a major factor in deciding results, even though vanity is a considerable risk factor for body image issues. Teenage body image issues are significantly impacted by vanity, especially when it leads to an unhealthy obsession with appearance and a propensity to internalise negative beauty standards. This association has been exacerbated by the growth of social media, which has produced a feedback loop that feeds into body dissatisfaction.

Adolescent body image issues can be greatly influenced by their need for precision (drive for perfection, accuracy, and exactness in many facets of life). Adolescence is a time of significant physical, emotional, and cognitive growth, which makes people especially susceptible to pressures regarding beauty. Teens who have a strong need for accuracy or precision could also have a strong desire to achieve idealised body standards, which can make them more self-conscious about their looks and more likely to experience body dissatisfaction. The need for precision frequently shows itself as an obsession with obtaining particular physical characteristics, such a certain weight or body shape, which is frequently affected by media representations or societal norms. Maladaptive behaviours including restricted diets, excessive exercise, or the use of weight-control substances, all linked to eating disorders and body image disturbances can be exacerbated by the pursuit of perfection in appearance (Levine & Murnen, 2009). Teenagers who have an intense need for precision may be more prone to perfectionistic body image tendencies, according to research. Body image issues are frequently strongly related to perfectionism (having unreasonably high expectations and feeling unhappy with less-than-ideal results).

Teenagers with perfectionistic inclinations are more likely to experience body dissatisfaction because they may feel pressured to maintain the ideal figure that society expects of them (Flett et al. 2002). These teenagers may become fixated on perceived imperfections and examine their looks in great detail, which can result in low self-esteem and negative self-evaluations. An ongoing loop of self-criticism brought on by this obsession with maintaining a perfect appearance can worsen body image issues and make people more susceptible to disordered eating behaviours (Tiggemann & Slater, 2014). Social comparison pressures, which are especially strong during puberty, collide with the need for precision. In an attempt to attain physical perfection in contrast to others, adolescents with an intense need for precision could compare their bodies to those of their friends or celebrities. Adolescents who frequently compare themselves to others, particularly through social media, are more likely to have a negative body image and to be dissatisfied with their appearance (Fardouly et al.). Adolescents who have a strong need for precision may internalise these idealised and carefully chosen photographs from social media platforms as standards for their own appearance since they promote unachievable beauty standards.

Furthermore, the larger cultural environment that places a premium on beauty, particularly for young women, frequently exacerbates their need for precision in appearance. According to a study by Grabe et al. (2008), adolescents' demand for accuracy may be heightened by cultural norms surrounding thinness and beauty standards, especially in western cultures. The idea that perfection is required for acceptance and success is further supported by these cultural norms, which imply that beauty and self-worth are strongly related. Teenagers who have a strong need for precision could internalise these outside norms and turn to extreme measures to manage their bodies and have the desired body type. The pursuit of perfection and flawlessness in appearance can result in maladaptive behaviours, perfectionism, and heightened body dissatisfaction. Teenagers who have a strong demand for accuracy are more susceptible to the pressures of social comparison and beauty standards, which can worsen disorders related to body image. Its negative consequences can be lessened and a more positive attitude towards oneself during adolescence can be fostered by addressing the need for accuracy in body image education and encouraging realistic, varied portrayals of beauty.

REVIEW OF LITERATURE

Adolescence, a time of physical, mental, and social development, has been found to be a critical time for body image issues. Teenagers frequently experience peer, media, and social pressure, which heightens their worries about how they look. Numerous psychological elements, including vanity, the need for precision, and personality traits especially those included in the Big Five model have an impact on these worries. This review of the literature looks at the research that has been done on the connection between teenage body image issues, vanity, the need for precision, and the Big Five personality traits.

Body Image Concern: The term "body image concerns" describes how people feel, think, and interpret their physical appearance. Due to their quick bodily changes and growing social comparison, adolescents are especially susceptible to body image dissatisfaction (Grabe et al., 2008). Studies have repeatedly demonstrated that adolescents, especially girls, suffer from severe body dissatisfaction, which is frequently fuelled by cultural standards of muscularity or thinness (Tiggemann & Slater, 2014). Adolescent body image issues are associated with a number of psychological consequences, such as eating disorders, depression, and low self-esteem (Levine & Murnen, 2009). These issues are made worse by the influence of the media and social comparison, which causes teenagers to embrace unattainable ideals of beauty (Fardouly et al., 2015).

Vanity and Body Image Concern: Teens with high degrees of vanity are more likely to be self-conscious about how they look and feel unhappy when they don't live up to idealised beauty standards (Tiggemann & Slater, 2014). According to research by Fredrickson and Roberts (1997), self-

objectification the idea that one's body is an object to be judged by its outward appearance is closely related to vanity. Body dissatisfaction is frequently the result of this self-objectification, especially when social norms of beauty are not fulfilled. According to studies, teens with high levels of vanity compare themselves to others more frequently, particularly on social media, which exacerbates body image issues (Levine & Murnen, 2009). To achieve the ideal body image, these people may engage in compulsive exercise, excessive dieting, or cosmetic surgery, which exacerbates body dissatisfaction (Menzel et al., 2011).

Need for Precision and Body Image Concern: The need for precision, or the desire for exactness and flawlessness, is another psychological factor that can influence body image concerns. Adolescents who have an intense need for precision could obsess over weight, body form, and small flaws in an attempt to achieve the ideal physical appearance. One important way that the need for precision manifests itself is through perfectionism, which has been linked to higher levels of body dissatisfaction, according to studies (Flett et al., 2002). Teens who have a strong need for precision could be more prone to engage in hazardous habits such as severe dieting or overexercising in an attempt to reach an idealised body (Levine & Murnen, 2009). Teenagers' need for precision can be heightened by social comparison, especially on social media, where they contrast themselves with carefully manicured, frequently unattainable ideals of beauty, which exacerbates their negative body image (Fardouly et al., 2015).

Big Five Personality Traits and Body Image Concern: It has been demonstrated that the Big Five personality traits conscientiousness, extraversion, agreeableness, neuroticism, and openness to new experiences have an impact on adolescents' concerns about their bodies. One of the best indicators of body dissatisfaction is neuroticism, which is typified by emotional instability and a propensity for unpleasant feelings. Teens that exhibit high levels of neuroticism are more likely to suffer from appearance-related anxiety and despair, which can lead to a negative body image (Cash & Smolak, 2011). Because conscientious teenagers are less likely to participate in undesirable behaviours related to body alteration, conscientiousness which includes a propensity to be organised and goal-oriented has been associated with more positive body image outcomes (Tiggemann & Slater, 2014).

Concerns about body image have a mixed association with extraversion. However, other research suggests that extraversion may be associated with increased body awareness and social comparison, which can result in dissatisfaction with appearance (Flett et al., 2002). Previous research also suggests that extraverted adolescents may be less concerned with body image because they are more confident in social situations. Although it does not consistently affect body image, openness to experience which includes a liking for novelty and creativity may help people adopt a more flexible perspective on body ideals, which could lessen body dissatisfaction (Fardouly et al., 2015). It has been demonstrated that agreeableness, which is characterised by empathy and care for others, has a weak but favourable correlation with body image because pleasant people are more tolerant of different body types and less influenced by conventional beauty standards (Tiggemann & Slater, 2014).

Body Image Concerns and Gender: Adolescents are particularly concerned about body image dissatisfaction, and gender greatly influences how these problems are perceived. Females are more prone than males to report body dissatisfaction, according to numerous studies. According to a study by Grabe et al. (2008), women are especially susceptible to social pressures that highlight thinness as the ideal body type, which is frequently depicted in the media. These pressures cause girls to have higher levels of body image dissatisfaction, which can result in behaviours like dieting, excessive exercise, and in rare circumstances, the emergence of eating disorders like bulimia or anorexia. On the other hand, male body image issues have historically received less attention; however, new studies show that men, especially teenage boys, are becoming more and more focused on developing muscularity and physical power. According to Griffiths et al. (2016), male body dissatisfaction is

frequently associated with a desire for a strong and lean physique, which can lead to behaviours like excessive weightlifting or the use of performance-enhancing drugs. Although issues with body image are common in both genders, the underlying causes and social influences are frequently different. The ideal physical type is usually muscularity for men and thinness for women. These distinctions are essential to comprehending how body image problems appear and impact teenage mental health and self-esteem in both genders.

Vanity and Gender Differences: It has been found that women are more likely than men to exhibit vanity, which is described as an excessive fixation with one's appearance, though this difference is closing in recent years. According to research by Cash and Pruzinsky (2004), women are more likely to prioritise beauty in social situations and spend more time on appearance-related activities such as grooming and makeup application. This obsession with looks frequently results in increased body image issues and discontent. Further Menzel et al., (2011) suggests that women who have higher levels of vanity are more likely to experience severe body dissatisfaction and to engage in extreme body alteration behaviours, such as excessive dieting or cosmetic surgery.

Need for Precision and Gender Differences: Body image dissatisfaction has been linked to the need for precision, which is frequently connected to perfectionism and an obsession with flawless performance. It has been demonstrated that perfectionism, which entails having high expectations and criticising one's performance or looks, affects body image issues in both sexes. According to a study by Flett et al. (2002) adolescent girls with high levels of perfectionism were more prone to participate in hazardous behaviours such restricted eating, excessive exercise, and the pursuit of unachievable beauty standards. Male perfectionism, on the other hand, is typically more concerned with strength and muscularity. High-perfectionism males frequently aim for an idealised muscular body type, which might cause them to feel dissatisfied with their bodies when they don't meet these standards. Therefore, both genders may experience body image dissatisfaction due to the desire for precision in appearance-related domains, while the exact focus of this demand varies between males and females. Thinness is frequently associated with women, but muscularity and physical strength are associated with men.

Big-Five Personality Traits and Gender Differences: Research has indicated a correlation between neuroticism and greater body image concerns, especially in women (Cash & Smolak, 2011). Anxiety and despair about looks are more common in females with high neuroticism scores. Although muscularity rather than thinness is frequently highlighted, neuroticism is similarly linked to body dissatisfaction in males (Griffiths et al., 2016). Extraversion is associated with a lower sense of body dissatisfaction, particularly in men, who may feel more confident about their physical appearance (Tiggemann & Slater, 2014). But for females, extraversion could result in greater social comparisons, especially when it comes to beauty, which in some situations might make them feel more dissatisfied with their bodies. Because conscientious people are more likely to practise appropriate body maintenance behaviours such as frequent exercise and eating a balanced diet. Research indicates that conscientiousness is positively correlated with body image in both genders (Tiggemann & Slater, 2014). Nonetheless, adolescents with high agreeableness tend to be more tolerant of different body shapes, which could lessen body dissatisfaction (Tiggemann & Slater, 2014). More flexible body ideals have been linked to openness to experience, especially in men, which may lessen body dissatisfaction.

There is a complicated and nuanced interaction between the Big Five personality traits, vanity, body image concerns, and the need for accuracy. Because they place a great value on appearance and are more prone to engage in hazardous behaviours in an attempt to acquire an ideal body, adolescents with high vanity or perfectionistic tendencies are more susceptible to body dissatisfaction. Concerns about body image are also greatly influenced by the Big Five personality traits, with neuroticism and

conscientiousness having the most effects. Developing therapies that encourage a good body image and lower the risk of eating disorders in teenagers requires an understanding of these psychological aspects. The combined effects of these elements and how psychological interventions could lessen them require more investigation. The necessity of taking gender into account when analysing body image difficulties among adolescents is highlighted by gender differences in Big-Five personality traits, vanity, the need for precision, and body image concern. Males are growing more interested with muscularity and strength, whereas women have historically been more dissatisfied with their bodies, especially when it comes to thinness and beauty standards. Perfectionism and vanity both contribute significantly to the development of body dissatisfaction, with each gender placing a different focus on standards connected to beauty. Personality factors, particularly neuroticism, also have an impact on body image issues; women are more likely to have poor body image, which is associated with emotional instability.

Significance of the study: The significance of this study lies in its potential to provide valuable insights into the psychological and personality-related factors contributing to body image concerns among adolescents, a demographic that is particularly vulnerable to societal pressures regarding physical appearance. Adolescence is a crucial developmental stage where individuals experience heightened sensitivity to body image due to physical changes, peer influence, and media portrayals of idealized beauty. This study aims to explore the impact of vanity, the need for precision, and personality factors on body image concerns, offering a comprehensive understanding of how these factors interact and influence adolescent well-being.

First, Vanity is closely linked to self-objectification and body dissatisfaction, both of which can lead to negative psychological outcomes, such as anxiety, depression, and low self-esteem. By exploring this relationship, the study can contribute to the development of targeted interventions to reduce these harmful effects and promote healthier body image perspectives among adolescents.

Second, examining the need for precision provides an understanding of how perfectionistic tendencies might exacerbate body image concerns. Adolescents with high levels of perfectionism often engage in rigid self-evaluations, focusing on flaws and perceived imperfections. These tendencies can lead to increased dissatisfaction with their appearance, fostering maladaptive behaviours like extreme dieting or excessive exercise. By studying the impact of the need for precision, the research can contribute to the design of programs aimed at reducing perfectionistic tendencies, thereby supporting the mental well-being of adolescents.

Third, the study's focus on personality factors, particularly the Big Five traits (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness), can offer valuable insights into individual differences in body image concerns.

Lastly, the findings of this study can inform educators, mental health professionals, and policymakers in developing effective strategies for promoting positive body image and preventing the onset of eating disorders, which are often rooted in body dissatisfaction. By identifying key psychological factors that contribute to body image concerns, the study can help in the creation of early intervention programs targeting at-risk adolescents.

In summary, the significance of this study lies in its potential to advance the understanding of the complex interplay between vanity, the need for precision, personality traits, and body image concerns among adolescents. The insights gained could inform prevention and intervention strategies, leading to improved mental health and well-being for adolescents struggling with body image issues.

OBJECTIVES:

1. To examine the gender difference on body image concerns, vanity, need for precision and personality traits among adolescents.
2. To investigate the inter-relationship between vanity, need for precision, Big Five personality traits and body image concerns among adolescents.
3. To explore the impact of vanity, need for precision, and personality traits on body image concerns.
4. To provide recommendations for interventions aimed at reducing body image concerns among adolescents.

HYPOTHESES:

- H1.** It is expected that significant gender differences exist in body image concerns, vanity, need for precision, and personality traits among adolescents.
- H2.** It is expected that body image concern is positively correlated with vanity and the need for precision in both male and female adolescents.
- H3.** It is expected that body image concern will exhibit a negative relationship with personality traits in both genders.
- H4.** It is expected that vanity, the need for precision, and personality factors will serve as significant predictors of body image concern among male and female adolescents.

METHODOLOGY

Sample: The total of 123 adolescents participated in the study in which 87 were females and 36 were males from urban region.

Measuring instruments:

1. **Body image concern inventory (BICI):** This inventory was developed by Littleton, Axson, and Pure in 2005. This inventory consists of a total of 19 items that measure two aspects of body image (i.e., dysmorphic symptoms and symptom interference). For each item, the participants must respond on a Likert scale ranging from 1 (never) to 5 (always). The reliability of the scales is 0.92 and 0.76 for dysmorphic concern and symptom interference, respectively.
2. **Vanity: Trait aspects of vanity (VN):** "Vanity," as delineated by Netemeyer, Burton, and Lichtenstein (1995), has four trait aspects: (a) physical appearance, (b) view of physical appearance, (c) concern for achievements and (d) view of achievements. All items are scored on 7-point Likert-type scales from *strongly disagree* to *strongly agree*. Item scores are summed within dimensions to form composite scores for each dimension. internal consistency estimates (i.e., coefficient alpha and composite reliability via LISREL) ranged from .80 to .92 across the four vanity dimensions.
3. **Need for Precision (NFP):** The final form of the NFP scale is composed of 13 items scored on 7-point *strongly disagree* to *strongly agree* scales. Items 3-7 and 9-11 require reverse scoring. Need for precision (NFP) is defined as "a preference for engaging in a relatively fine-grained mode of processing" (Viswanathan 1997, p. 727). Estimates of internal consistency ranged from .76 to .84
4. **Big-5 personality inventory (BFI):** BFI (John et al., 1991). BFI aimed to evaluate the personality dimensions through 44 items, structured by simple sentences, and rated in the Likert scale of 5 points, ranging from 1 (totally disagree) to 5 (totally agree). The Cronbach's Alpha of 0.65, 0.75, 0.75, 0.64 and 0.69 respectively for the five factors of "Openness", "Neuroticism", "Extraversion", "Conscientiousness" and "Agreeableness".

ABBREVATIONS USED IN STUDY

DV=Dependant variable	BIC=Body image concern
F=Females	PA=Physical appearance
M=Males	VPA=View of physical appearance

R=Multiple correlation	CA=Concern for achievement
R ² = Proportion of the total variance in the DV	VA=View of achievement
ΔR ² =R Square change	NFP=Need for precision
F=F-Ratio	EXT=Extraversion
Df=degree of freedom	AGR=Agreeableness
β =Beta	CON=Conscientiousness
Sig.=level of significance	NEU=Neuroticism
r=partial correlation	OPEN=Openness to experience
T=tolerance value	VN=Vanity

Inclusion criteria: Participants must be adolescents aged between 12 and 18 years. Participants (and their guardians, if necessary) must provide informed consent to participate in the study. Adolescents who are willing to voluntarily participate in the study and complete all the assessments. Participants must be able to understand and complete the questionnaires in the language in which the study is conducted (e.g., English or the local language).

Exclusion criteria: Adolescents younger than 12 or older than 18 years will be excluded to maintain age consistency within the study sample. Adolescents who have been diagnosed with severe psychological conditions, such as severe depression, schizophrenia, eating disorders (e.g., anorexia nervosa, bulimia nervosa, binge eating disorder) or other major psychiatric disorders, will be excluded, as these conditions may interfere with body image concerns and the study's objectives. Adolescents who do not agree to participate or complete the questionnaires accurately and honestly will be excluded. Adolescents who cannot understand or complete the survey in the language of administration will be excluded to ensure accurate and reliable data collection.

Data analysis: Data is scored by using the instruction given in scoring manuals. Final scores are statistically analysed by using descriptive statistics, ANOVA, correlational analysis and step-wise multiple regression.

RESULTS: Results of the present investigation is divided into four parts: A. descriptive statistics (Table 1); B. correlational analysis (Table 1); C. analysis of variance (Table 2, 3); D. regression analysis (Table 4).

A. Descriptive statistics: Mean, standard deviation, range, coefficient variance, skewness, and kurtosis were calculated for females ($N1=87$) and males ($N2=36$). The mean (M) and standard deviation (SD) are given to explain the variation. The values of skewness (Sk) and kurtosis (Ku) are near zero (within range of -2 and +2) and are considered to be acceptable to prove normal univariate distribution (George & Mallery, 2019). Hence, as the values obtained on all the variables fall under this paradigm that they are sufficiently normally distributed to enable the use of these parametric tests.

B. Correlational analysis: Result of correlational analysis shows that, for females, body image concern is significantly positively related with physical appearance (PA) ($r=0.49$, $p<0.01$) and Concern for achievement (CA) ($r=0.26$, $p<0.05$), whereas significantly negatively related with extraversion (EXT) ($r=-0.27$, $p<0.01$) and conscientiousness (CON) ($r=-0.32$, $p<0.01$). For males, body image concern is significantly positively related with physical appearance (PA) ($r=0.37$, $p<0.05$), neuroticism (NEU) ($r=0.58$, $p<0.01$) and openness to experience (OPEN) ($r=0.37$, $p<0.05$) whereas, significantly negatively related with conscientiousness (CON) ($r=-0.49$, $p<0.01$).

- C. Analysis of variance:** The results of between-subjects effects showed that there exist significant difference on view of achievement (VA) $\{F(3,107)=5.813, p<0.01\}$ and neuroticism (NEU) $\{F(3,107)=5.813, p<0.01\}$ on the basis of gender. Pairwise comparison shows that on view of achievement (VA) $\{MD(I-J)=2.65, p\leq 0.05\}$ males are high as compared to females and on neuroticism (NEU) $\{MD(I-J)=4.51, p\leq 0.01\}$ females are high as compared to males.
- D. Regression analysis:** Step-wise multiple regression shows that in females there are two predictors of body image concern (BIC) i.e. conscientiousness (CON) and extraversion (EXT). On account of tolerance values there is low level of multicollinearity is present (tolerance = 0.94 & 0.92) for conscientiousness (CON) and extraversion (EXT) respectively. The multiple correlation is found to be $R=.37$ which accounted for 14 % variance body image concern (BIC) for both the predictor variables.

As apparent from the standardized coefficient (β), bearing t value that is significant at 0.01 level, conscientiousness (CON) has the predictive power ($\beta=-.25; p<0.01$) and contributed about 9% in body image concern (BIC) among female adolescents ($\Delta R^2 = 0.09$, $F(1,124)=9.21; p<0.01$). Extraversion (EXT) emerged as the next significant potential predictor ($\beta=-0.21; p<0.03$) which contributed approximately 4% ($\Delta R^2=0.04$, $F(1,124)= 7.03; p< 0.01$) of variance in body image concern (BIC) among female adolescents. This indicates when female adolescents are high on conscientiousness (CON) ($r=-0.26$) and extraversion (EXT) ($r=-0.22$) personality their body image concern (BIC) is found to be low. In males there are two predictors of body image concern (BIC) i.e. neuroticism (NEU) and conscientiousness (CON). Step-wise multiple regression shows that in males there are two predictors of body image concern (BIC) i.e. neuroticism (NEU) and conscientiousness (CON). On account of tolerance values there is low level of multicollinearity is present (tolerance = 0.83 & 0.81) for neuroticism (NEU) and conscientiousness (CON) respectively. The multiple correlation is found to be $R=.64$ which accounted for 41% variance body image concern (BIC) for both the predictor variables. As apparent from the standardized coefficient (β), bearing t value that is significant at 0.01 level, neuroticism (NEU) has the predictive power ($\beta=0.45; p<0.01$) and contributed about 33% in body image concern (BIC) among male adolescents ($\Delta R^2=0.33$, $F(1,124)=17.721; p<0.01$). Conscientiousness (CON) emerged as the next significant potential predictor ($\beta=-0.31; p<0.04$) which contributed approximately 7% ($\Delta R^2=0.07$, $F(1,124)=12.01; p< 0.01$) of variance in body image concern (BIC) among male adolescents. This indicates when male adolescents are high on neuroticism (NEU) ($r=-0.47$) there is a tendency that their body image concern (BIC) is also high on the other hand, when male adolescents are high on conscientiousness (CON) ($r=-0.34$) personality their body image concern (BIC) is found to be low.

TABLE 1: Shows the Descriptive statistics and Correlational analysis. Females (N1=87) & Males (N2=36).										
	Descriptive statistics								Correlation	
	FEMALE				MALE				FEMALE	MALE
	M	SD	Sk	Ku	M	SD	Sk	Ku	BIC	
BIC	45.82	19.76	0.46	-0.81	39.81	16.13	0.8	0.01	1	1
PA	24.12	6.23	-0.59	0.01	23.71	6.69	-0.24	-0.49	0.49**	0.37*
VPA	22.19	8.25	0.11	-0.65	24.64	8.79	0.23	-0.46	-0.06	-0.21
CA	23.68	7.33	-0.59	-0.11	23.86	6.92	-0.19	-0.53	0.26*	0.04
VA	16.81	6.91	0.12	-0.39	19.45	6.91	0.14	-0.27	-0.02	-0.21
NFP	4.45	0.61	-0.32	1.74	4.44	0.71	0.34	-0.25	-0.07	-0.09
EXT	24.65	5.82	0.21	0.39	26.32	5.51	0.02	0.53	-0.27**	-0.21
AGR	33.49	5.63	-0.18	0.06	31.86	4.64	-0.31	-0.74	-0.15	-0.12
CON	28.13	5.63	-0.01	0.13	28.54	4.51	-0.03	0.56	-0.32**	-0.49**
NEU	27.13	6.15	-0.17	0.15	22.62	6.03	0.45	0.26	0.18	0.58**
OPEN	36.39	5.29	-0.34	-0.41	35.89	4.68	0.16	-1.09	-0.08	0.37*

Table 2: Shows the Tests of Between-Subjects Effects				
DV	SS	df	F	Sig.
BIC	943.81	1/124	2.67	.104
PA	4.63	1/124	.11	.736
VPA	157.85	1/124	2.22	.138
CA	0.84	1/124	.02	.899
VA	183.59	1/124	3.85	.05
NFP	0.01	1/124	.01	.931
EXT	73.11	1/124	2.23	.138
AGR	69.39	1/124	2.41	.123
CON	4.31	1/124	.15	.698
NEU	532.34	1/124	14.22	.00
OPEN	6.56	1/124	.25	.618

Table 3: Pairwise Comparisons				
DV	(I) Gender	(J) Gender	MD (I-J)	Std. Error
VA	M	F	2.65*	1.35
NEU	F	M	4.51**	1.19

Table 4: Regression equation for Body Image Concern (BIC).													
DV	Sample	N	Step	Predictors	R	R ²	ΔR ²	F	df	β	Sig.	r	T
BIC	F	87	<u>1</u>	CON	.31	0.09	0.09	9.21**	1	-0.25	0.01	-0.26	0.94
			<u>2</u>	EXT	.37	0.14	0.04	7.03**	1	-0.21	0.03	-0.22	0.92
	M	36	<u>1</u>	NEU	.58	0.33	0.33	17.72**	1	0.45	0.01	0.47	0.83
			<u>2</u>	CON	.64	0.41	0.07	12.01**	1	-0.31	0.04	-0.34	0.81

DISCUSSION:

This study aimed to explore the relationships between body image concern (BIC), vanity (VN), need for precision (NFP), personality traits, and gender differences among adolescents. The analysis addressed four hypotheses regarding these relationships. The results support some of the hypotheses, while others necessitate further exploration or alternative interpretations.

H1: Gender Differences in Body Image Concerns, Vanity, Need for Precision, and Personality Traits: The first hypothesis anticipated significant gender differences in body image concerns, vanity, need for precision, and personality traits. The findings of the analysis align with this expectation, as the results of the analysis of variance revealed significant gender differences on vanity *viz. view of achievement* (VA) and neuroticism (NEU). Specifically, males showed higher levels of vanity *viz. view of achievement* (VA), whereas females exhibited higher levels of neuroticism. These gender differences are consistent with previous research that has found males to have greater concerns with physical appearance and personal achievement, which are central to vanity (Netemeyer, Burton, & Lichtenstein, 1995). Additionally, the higher neuroticism in females mirrors the findings of studies suggesting that women tend to experience higher levels of neuroticism and emotional instability compared to men (Costa, McCrae, & Holland, 1996), which may contribute to heightened body image concerns.

Moreover, these gender differences in personality traits could be explained through a theoretical lens, such as the *Social Comparison Theory* (Festinger, 1954), which posits that individuals compare themselves to others to evaluate their own worth. It is plausible that females, due to social pressures to conform to idealized body standards, engage more frequently in social comparisons, leading to increased body image concerns. In contrast, males, with their higher vanity *viz. view of achievement* (VA) scores, may focus more on maintaining a positive image of their physical appearance and

achievements, which is consistent with gendered societal expectations of masculinity and body image (Griffiths et al., 2016).

H2: Positive Correlation Between Body Image Concern, Vanity, and Need for Precision: The second hypothesis posited that body image concern would be positively correlated with vanity and need for precision in both genders. This hypothesis was partially supported. For females, body image concern showed a significant positive correlation with vanity *viz. physical appearance* (PA) and *concern for achievement* (CA) but a negative correlation with the need for precision (NFP) and conscientiousness (CON). This finding aligns with *Objectification Theory* (Fredrickson & Roberts, 1997), which suggests that women are socialized to internalize an objectified view of their bodies, focusing heavily on appearance and achievement (PA; CA). This may lead to increased body image concerns as women attempt to meet societal standards of beauty and success.

Interestingly, for males, the need for precision (NFP) was not significantly correlated with body image concern, suggesting that while males may exhibit vanity related to their physical appearance, their concern about body image may not be as strongly influenced by precision or perfectionism. The absence of a significant relationship between the need for precision and body image concern in males might reflect different societal pressures and gender-specific body image concerns, where males may not experience the same level of scrutiny regarding the "*fine details*" of their appearance as females do.

H3: Negative Relationship Between Body Image Concern and Personality Traits: The third hypothesis suggested a negative relationship between body image concern and certain personality traits in both genders. The findings revealed that body image concern was significantly negatively correlated with conscientiousness (CON) and extraversion (EXT) in females and conscientiousness (CON) in males. These results align with previous studies that suggest individuals with high conscientiousness (CON) tend to be more focused on personal achievement, responsibility, and self-discipline, which may distract from or mitigate body image concerns (BIC) (Furnham, Batey, & Hamid, 2011). Additionally, extraversion (EXT), which is associated with sociability and outward expression, may serve as a protective factor against excessive body image concerns, as extroverted individuals may be less focused on internalized ideals of beauty and more concerned with social engagement and self-expression (McCrae & Costa, 2004). Conversely, neuroticism (NEU) emerged as a significant predictor of body image concern (BIC) among males, suggesting that males with higher levels of neuroticism (NEU) may be more prone to body image concerns (BIC). This finding is consistent with the *Biopsychosocial Model of Body Image* (Cash & Smolak, 2011), which posits that individuals with high neuroticism may be more susceptible to internalizing societal body ideals, leading to greater dissatisfaction with their appearance.

H4: Predictors of Body Image Concern: The final hypothesis proposed that vanity, need for precision, and personality traits would serve as significant predictors of body image concern in both genders. Step-wise regression analysis supported this hypothesis, revealing that conscientiousness (CON) and extraversion (EXT) were significant predictors of body image concern (BIC) in females, whereas neuroticism (NEU) and conscientiousness (CON) were significant predictors in males. For females, higher conscientiousness (CON) and extraversion (EXT) were associated with lower body image concern, suggesting that personality traits related to self-control and social engagement may buffer against body image dissatisfaction. This finding is consistent with the *Five-Factor Model of Personality* (McCrae & Costa, 2004), which posits that individuals high in conscientiousness (CON) and extraversion (EXT) are likely to experience lower levels of body dissatisfaction due to their focus on personal achievement and social interactions, rather than solely on appearance.

In contrast, in males, neuroticism (NEU) was the strongest predictor of body image concern (BIC), with higher neuroticism being associated with increased body image dissatisfaction. This suggests that males with higher emotional instability may be more vulnerable to body image concerns, particularly in the context of societal pressures regarding masculinity and physical appearance. This finding is consistent with previous research indicating that higher levels of neuroticism are associated with increased body dissatisfaction in both males and females (Cash, 2002).

Suggestions and limitations:

Future research on adolescent body image concerns could benefit from expanding the sample size and diversity, including participants from varied cultural, socioeconomic, and geographical backgrounds for greater generalizability. Longitudinal studies would also provide valuable insights into how body image, vanity, and personality traits evolve over time. With the growing influence of social media, examining its impact on body image concerns and how it interacts with personality traits would be crucial. Additionally, exploring cultural differences in body image ideals would help understand how societal norms shape adolescents' perceptions. Incorporating qualitative methods like interviews or focus groups would offer deeper insights into personal experiences with body image. Finally, further research on gender differences in contexts such as sports, media, and peer pressure could reveal specific factors influencing gendered body image concerns, aiding in the development of targeted interventions.

The study has several limitations. The small, gender-imbalanced sample limits generalizability, and future research should aim for a larger, more balanced sample. The cross-sectional design prevents causal inferences, so longitudinal studies would better assess long-term effects. Self-reported data may be biased due to social desirability, and alternative data collection methods, like observations or peer reports, could offer a more accurate view. The use of only the Big-Five personality inventory may not capture all relevant traits, such as self-esteem or narcissism, which could further explain body image concerns. Additionally, the study did not consider cultural or societal influences, like media portrayals or beauty standards, which are key factors. Lastly, excluding individuals with severe psychological conditions limits the applicability to those with more significant body image issues.

Conclusion:

In conclusion, the present study provides valuable insights into the complex relationships between body image concerns, vanity, need for precision, personality traits, and gender. The findings support several hypotheses and are consistent with existing literature, highlighting the role of personality factors such as conscientiousness, neuroticism, and extraversion in shaping body image concerns among adolescents. These results contribute to a deeper understanding of the factors that influence body image, offering implications for interventions aimed at reducing body dissatisfaction, particularly among vulnerable adolescents. Future research should explore additional variables, such as social media use and cultural influences, that may further elucidate the mechanisms underlying body image concerns across genders.

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