

# Self-Esteem, Social Comparison and Materialism in University Students

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## ABSTRACT

**Aim of the Study:** This study investigates the relationship among self-esteem, social comparison, and materialism in university students. It hypothesized that (a) self-esteem is negatively correlated to social comparison and positively correlated to materialism, (b) social comparison mediates the relationship between self-esteem and materialism, and (c) gender differences exist in self-esteem, social comparison, and materialism.

**Methodology:** The study used a correlational research design and a purposive sampling method to obtain a sample of 265 undergraduate students (133 males and 132 females) recruited from two government universities. The assessment tools included the Rosenberg Self-Esteem Scale (RSES), Iowa Netherlands Comparison Orientation Measure (INCOM), and Material Value Scale (MVS), along with a demographics form. Statistical analyses encompassed descriptive statistics, reliability analysis, Pearson r correlations, independent sample t-tests, and mediation analysis.

**Findings:** The results revealed that social comparison partially mediated the link between self-esteem and materialism. Furthermore, there were notable gender disparities that indicated men were more materialistic than women.

**Conclusion:** The results imply that a greater inclination towards social comparison lowers self-esteem, which in turn causes university students to become more materialistic. Since males are usually seen as the providers of money, the gender disparities that have been identified could stem from societal norms. These findings indicate the necessity for programs aimed at nurturing self-esteem and reducing materialistic mindset among university students and provide valuable insight into the psychological factors that contribute towards materialism.

**Keywords:** Self-esteem, Social Comparison, Materialism, Materialistic Tendencies, Social Comparison Orientation.

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# 1. INTRODUCTION

In their educational journey, university students face multiple psychological and social stressors such as peer pressure, academic performance challenges, and sociocultural expectations that can negatively impact their mental well-being (Bewick et al., 2010). In light of this, this paper will investigate three important psychological variables: self-esteem, social comparison, and materialism. These factors take on great relevance during young adulthood, which represents an emerging period of social engagement, emotional development, and identity construction (Aspinwall & Taylor, 1993; Li et al., 2018).

Self-esteem is defined as the general and overall sense of value or worth that an individual perceives of oneself (Rosenberg, 1965). It is important for social interactions, educational achievement, and individual well-being (Bong & Clark, 1999). High self-esteem acts as a protective factor wherein students use it to cope with academic stress, foster positive relationships, and show resilience when confronted with failure (Mruk, 2013; Baumeister et al., 2003). On the other hand, depression, unsatisfactory academic achievement, and compromised social functioning are all associated with low self-esteem (Orth et al., 2008).

According to the social comparison theory (Festinger, 1954), people assess their own skills, characteristics, and feelings by contrasting them with those of others. Emotional states and self-concept/self-esteem are greatly influenced by this process. Both upward and downward comparisons with peers are common among university students, with differing effects based on the comparison's context and nature (Wood, 1989; Buunk & Gibbons, 2007). In addition to encouraging self-improvement, upward comparisons can sometimes cause jealousy or feelings of inadequacy, particularly in students who believe they are less competent (Tesser, 1980). Downward comparisons, on the other hand, may boost self-esteem but may also promote superiority or disengagement (Alicke & Sedikides, 2011).

The value that people place on material belongings as markers of success and personal pleasure is known as materialism (Richins & Dawson, 1992). Materialism, therefore, gives some students a greater sense of achievement and social standing than their wealthier peers when their expectations are met. However, unmet expectations tie unfulfilled desire for material possessions with lower well-being, higher stress, and unhappiness (Van Boven, 2005). Young adults, including university students, may therefore be within these times particularly vulnerable to materialistic pressures as they negotiate a competitive environment and work to develop their identities (Ling et al., 2023).

The current study therefore seeks to explore the relationship between self-esteem, social comparison, and materialism as a way to understand their influence on the developing psychological health of young students and their identity construction.

## 1.1. *Theoretical Framework*

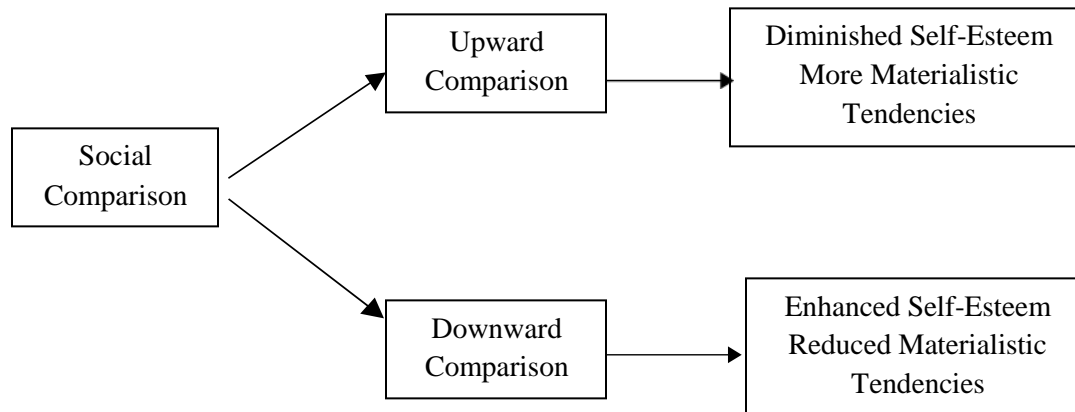
The Social Comparison Theory, proposed by Leon Festinger in 1954, will serve as the theoretical framework for this study. According to this theory, individuals frequently evaluate their abilities, emotions, and possessions by comparing them with others. Thus, people can gain a better understanding of their social and personal status through such comparisons. From this theory, it is very clear that self-esteem is greatly affected by social comparison. Upward social comparison is the situation where one compares oneself with others whom one believes to be more successful or better off. This often evokes feelings of inadequacy and a drop in self-esteem (Tesser, 1980). On the other hand, by enhancing a sense of competence or superiority, downward social comparison—in which people compare themselves to those they perceive to be less fortunate—can increase self-esteem (Buunk & Gibbons, 2007).

Additionally, the theory highlights a connection between social comparison and materialism. In today's consumer-driven culture, material possessions frequently act as benchmarks for comparison (Richins & Dawson, 1992). People often judge their social position by comparing what they own to others' possessions. This dynamic can lead to feelings of insufficiency, driving a stronger desire to accumulate

more goods in an effort to close the perceived gap and enhance social status, ultimately compensating and enhancing their self-esteem (Kasser, 2002).

**Figure 1.1**

*Social Comparison Theory*



*Adapted from Leon Festinger (1954), Social Comparison Theory*

Social comparison is common among university students, who are in a crucial phase of identity formation and social placement. Peer comparisons can have a big influence on their self-esteem as they move through social and academic settings (Marsh & Parker, 1984). Students are frequently exposed to both upward and downward comparisons throughout this developmental stage, which affects their materialistic tendencies and sense of self impacting their self-esteem as well (Buunk & Gibbons, 2007; Tesser, 1980; Kasser, 2002; Richins & Dawson, 1992).

## 2. LITERATURE REVIEW

By carefully analyzing empirical research, this review seeks to untangle the intricate connections between self-esteem, social comparison processes, and tendencies toward materialistic goals among younger populations. Drawing from a variety of academic contributions, this study aims to provide insights into how these psychological constructs affect individuals' self-perceptions, social interactions, and behavioral patterns, particularly in the contexts of self-esteem, dynamics of social comparison, and materialism.

Li et al. (2018) conducted research in China using an experimental design to explore whether university students from lower socioeconomic backgrounds display stronger materialistic tendencies as a mechanism to compensate for low self-esteem. Through two experimental methods—priming and imagination exercises—the study discovered that students from less privileged social classes exhibited heightened materialistic inclinations. In this relationship, self-esteem served as a critical link, mediating the association between social class and materialistic behavior.

The applicability of social comparison and cultivation theory in diverse cultural situations was investigated by McCardle and Speck (2019). In this study, 882 students from China, India, Croatia, and the US were examined for their well-being in connection to materialism and social comparison through television. The study discovered a positive correlation between materialism and social comparison through the use of structural equation modeling. It also showed that in collectivistic countries, television shows frequently encourage upward social comparisons, which in turn encourages viewers to adopt materialistic attitudes.

In a two-year longitudinal study, Wang et al. (2020) followed 430 Chinese undergraduate students to investigate the relationship between materialism and self-esteem, with socioeconomic status acting as a potential moderating factor. Materialistic behaviors may prolong cycles of poor self-esteem, according to the study, which found that materialism has a negative impact on self-esteem over time, particularly among students with limited resources and limited opportunities.

Trzcińska and Sekścińska (2021) investigated the relationship among self-esteem, consumerism, and financial condition of 1,138 Polish adults. Their results showed a negative relationship between self-esteem and materialistic attitudes and their dimensions as well, including happiness, success, and centrality, but a positive relationship between materialism and better financial position. Their findings indicated how social comparison lowers one's self-esteem and ultimately makes one more inclined toward materialistic attitudes.

Ozimek et al. (2017) investigated the relationship between Facebook use and consumerism in Germany. The findings revealed that materialistic individuals use Facebook more actively, primarily to establish a large social network and engage in social comparison. Thus, they indicated that higher chances of comparison on digital platforms could foster materialistic behaviors.

In another study, Lee et al. (2016) examined the influence of reality TV on compulsive shopping and materialism. Their results indicated that the formation of materialistic values and viewing reality TV are related to higher social comparisons. These factors were also linked with greater life dissatisfaction and compulsive shopping behaviors.

In India, Gupta and Singh (2019) studied the relationship between consumerism, mental health, and self-esteem. Their findings indicated that materialistic people often have low self-esteem, which causes negative effects on their mental health. This often resulted in a greater likelihood of depression, amplifying the negative impacts of materialistic values and attitudes.

A study by Zhao et al. (2023) conducted in the UK tested the impact of materialism on interpersonal relationships. The research revealed a notable relationship between heightened materialistic tendencies, anxious attachment styles, and low self-esteem. And even after controlling for several demographic factors, this relationship remained significant, highlighting the far-reaching emotional and social consequences of materialism.

A study conducted in Pakistan investigated the impact of social comparison on materialism and compulsive buying in a sample of adolescents and young adults. They concluded from the findings that social comparison in this population significantly shapes materialistic attitudes. Particularly the comparison with media celebrities (upward comparison) had the most impact (Islam et al., 2018).

In another study, Shah et al. (2016) investigated different factors that contribute to materialism among young adults. The sample was recruited from Khyber Pakhtunkhwa, Pakistan. The results of the study showed that more social comparison particularly with media celebrities through TV commercials and lower levels of self-esteem are significant predictors of materialism. The findings revealed how media exposure fosters more social comparison among youth, ultimately making them more inclined towards a materialistic mindset.

Similarly, Zeb et al. (2019) investigated the factors contributing to materialism among adolescents in Pakistan. Their research identified a strong link between social comparison with peers, exposure to advertisements, and communication with parents and friends, all of which significantly contributed to materialistic attitudes.

## **2.1. Rationale**

From the above literature review, it can be inferred that previous studies have somehow explored the association of two variables at a time, either self-esteem and materialism or social comparison and materialism. Furthermore, the previous research has mainly focused on the role of social media,

celebrities, and socio-economic causes of materialistic values in their relationship to self-esteem. At the same time, the review outlines some obvious gaps that still remain in the literature. Key limitations include the fact that not enough research has been conducted into population groups in South Asia, especially within Pakistan, where such a relationship may be modulated by cultural factors. In addition, most of the research done so far in this regard has focused on the role of social media and celebrities, completely excluding other important factors that could include peer and family interactions, which are more likely to bear strong influences on the self-esteem and materialism of university students in Pakistan. This paper will fill these gaps by focusing on the complex relationship of self-esteem, social comparison, and materialism in university students in Pakistan, therefore providing culturally relevant insights that contribute to a more nuanced understanding of these dynamics.

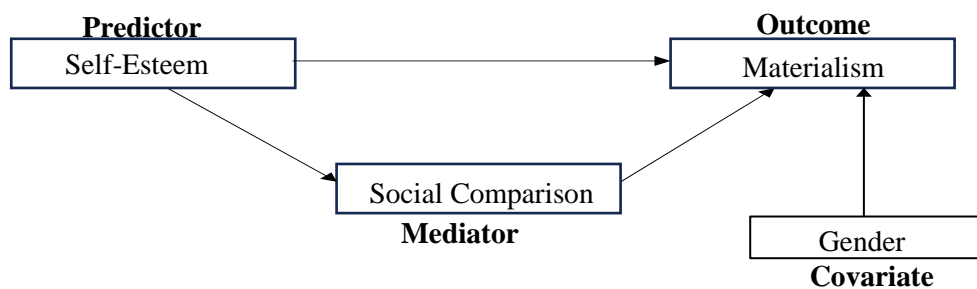
## 2.2. Hypotheses

The current study hypothesizes that:

- There is likely to be a relationship among self-esteem, social comparison, and materialism in university students.
- Social comparison is likely to mediate the relationship between self-esteem and materialism.
- There are likely to be gender differences across self-esteem, social comparison, and materialism in university students.

## 2.3. Conceptual Framework

**Figure 2.1**



### *Hypothesis Research Model of Prediction*

#### *Key Concepts*

Self-Esteem (Predictor), Social Comparison (Mediator), Materialism (Outcome)

## 3. RESEARCH METHODOLOGY

A correlational research design was employed to examine the relationship between self-esteem, social comparison, and materialism among university students. Data were collected from a sample of 265 students (133 males, 132 females) enrolled in undergraduate programs at two government universities, with an age range of 18 to 26 years. Non-probability purposive sampling was used to recruit participants. Participants were required to be unmarried, currently enrolled in an undergraduate program (third semester onwards), and proficient in English. Students enrolled in MPhil or MS programs, married students, and those with physical or psychological health issues were excluded.

### 3.1. Demographic Characteristics

Data were collected on participants' age, gender, birth order, degree program, CGPA, residence type, monthly family income, family system, and socioeconomic status.

**Table 3.1:** Descriptive Statistics of Demographic Variables (N=265)

Demographic Characteristics	M (SD)	f (%)
<b>Age (in years)</b>	21.18 (1.85)	
<b>Gender</b>		
Male		133 (50.2)
Female		132 (49.8)
<b>Birth Order</b>		
First Born		68 (25.7)
Middle Born		136 (51.3)
Last Born		58 (21.9)
Only Child		3 (1.1)
<b>Program</b>		
BS or Equivalent		240 (90.6)
M.Sc./MA or Equivalent		25 (9.4)
<b>CGPA</b>	3.27 (.40)	
<b>Residence Type</b>		
Hostelites		121 (45.7)
Day Scholar		144 (54.3)
<b>Monthly Family Income</b>		
Less than 50k		112 (42.3)
51k to 100k		96 (36.2)
101k to 200k		43 (16.2)
More than 200k		14 (5.3)
<b>Family System</b>		
Joint Family		101 (38.1)
Nuclear Family		164 (61.9)

Note. n=no. of participants, %= percentage

### 3.2. Measures

#### Self-Esteem

Assessed using the Rosenberg Self-Esteem Scale (Rosenberg, 1965), a 10-item measure with responses on a 4-point Likert scale. Higher scores indicate higher self-esteem.

#### Social Comparison

Measured using the Iowa Netherlands Comparison Orientation Measure (Gibbons & Buunk, 1999), an 11-item scale scored on a 5-point Likert scale. Higher scores reflect greater social comparison orientation.

#### Materialism

Measured using the Material Value Scale (Richins & Dawson, 1992), a 15-item scale assessing material values across three subscales: Success, Centrality, and Happiness. Responses were rated on a 5-point Likert scale.

### 3.3. Procedure

Prior to data collection, permission was obtained from the relevant university authorities and the authors of the scales used. Participants provided informed consent and were assured of the voluntary nature of their participation, their right to withdraw at any time, and the confidentiality of their responses. Data were collected through a questionnaire consisting of a demographics sheet and the three scales (RSES, INCOM, MVS). After collecting 300 responses, 35 were excluded due to incomplete or careless responses, resulting in a final sample of 265 participants. Data were analyzed using SPSS version 26. Ethical approval was granted by the respective institutions, and all participants provided informed consent. Confidentiality and participants' autonomy over their data were maintained throughout the study.

## 4. RESULTS

The skewness and kurtosis values, along with the visual inspection of histograms, showed that the variables were roughly normally distributed, making them suitable for parametric analyses. The study employed descriptive statistics to summarize the data, calculated reliability coefficients to ensure the consistency of the scales, and used Pearson correlation to explore the relationships between the variables. Mediation analysis was conducted through hierarchical regression to determine whether social comparison acted as a mediator between self-esteem and materialism. Additionally, independent samples t-tests were used to examine gender differences in self-esteem, materialism, and social comparison.

### 4.1. Reliability Analysis

**Table 4.1:** Descriptive Statistics and Reliability analysis of the Study Variables (N = 265)

Scales	M	SD	Range	Cronbach's $\alpha$
RSES	28.09	4.25	17-36	.76
INCOM	32.69	7.19	12-50	.78
MVS	44.31	8.14	19-71	.75

Note. RSES = Rosenberg Self-Esteem Scale, INCOM = Iowa Netherlands Comparison Orientation Measure, MVS = Material Value Scale,  $\alpha$  = reliability coefficient, M = Mean, SD = Standard Deviation

Table 2 presents the descriptive statistics, including the mean, standard deviation, range, and Cronbach's alpha coefficients for self-esteem, social comparison, and materialism. The Rosenberg Self-Esteem Scale demonstrated good internal consistency. The Social Comparison Orientation Measure and the Material Value Scale also exhibited satisfactory reliability.

### 4.2. Correlation Analysis of Study Variables

**Table 4.2:** Descriptive Statistics and Correlations for Study Variables (N= 265)

Variables	n	M	SD	1	2	3
1. Self-Esteem	265	28.09	4.25	-	-.31***	-.33***
2. Social Comparison	265	32.69	7.19		-	.49***
3. Materialism	265	44.31	8.14			-

Note. \*p<.05; \*\*p<.01; \*\*\*p<.001.

Results show a significant negative correlation between self-esteem and both social comparison and materialism, indicating that higher self-esteem is associated with lower levels of social comparison and materialism. Additionally, social comparison exhibits a significant positive correlation with materialism, suggesting that individuals who frequently compare themselves to others tend to display higher materialistic tendencies.

### 4.3. Mediation Analysis

**Table 4.3:** Regression Analysis for Mediation of Social Comparison between Self-Esteem and Social Comparison (N=265)

Variables	B	95%CI	SEB	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1					.11	.11***
Constant	61.86***	[55.61, 68.10]	3.17			
Self-Esteem	-.63***	[-.84, -.41]	.11	-.33***		
Step 2					.28	.17***
Constant	38.71***	[30.61, 46.80]	4.11			
Self-Esteem	-.37**	[-.58, -.16]	.11	-.19**		
Social Comparison	.49***	[.37, .61]	.06	.43***		

Note. CI = Confidence Interval, \*\*\*p < .001, \*\*p < .01, \*p > .05

Above table shows the impact of self-esteem and social comparison on materialism in university students. In Step 1, the regression analysis revealed that self-esteem explained 11% of the variance in materialism, with  $F(1, 263) = 31.32$ ,  $p < .001$ . Self-esteem was found to negatively predict materialism. In Step 2, the model including both self-esteem and social comparison explained 28% of the variance in materialism, with  $F(2, 262) = 49.97$ ,  $p < .001$ . This analysis confirmed that self-esteem negatively predicted materialism, while social comparison positively predicted it. The change in variance ( $\Delta R^2$ ) was 17% from Model 1 to Model 2, with  $\Delta F(1, 262) = 61.42$ ,  $p < .001$ . The regression coefficient for self-esteem decreased from Model 1 (-.33) to Model 2 (-.19) but remained significant, indicating a partial mediation effect. These findings suggest that self-esteem has both direct and indirect effects on materialism, with the negative beta values for self-esteem across both steps demonstrating a consistent negative relationship with materialism.

### 4.4. Independent Samples t-Test

**Table 4.4:** Independent Samples t-Test for gender differences among study variables (N=265)

Variables	Men		Women		t (263)	p	Cohen's d
	M	SD	M	SD			
Self-Esteem	28.20	4.20	27.98	4.31	.43	.666	.05
Social Comparison	32.77	6.47	32.64	7.87	.11	.917	.02
Materialism	46.07	7.89	42.54	8.03	3.61	.000	.44

Note. M = Mean; SD = Standard Deviation

The findings indicate significant gender-based disparities in materialism, with men exhibiting higher levels of materialism than women. The moderate effect size suggests that this difference is not only statistically significant but also meaningful in practical terms. Although the effect size is not large, it underscores the importance of gender in influencing materialistic tendencies. This supports the notion that men generally display more materialistic tendencies than women, highlighting the real-world implications of gender as a significant factor in materialism.

## 5. DISCUSSION

This study investigated the correlation between self-esteem, social comparison, and materialism in a sample of 265 university students (133 males and 132 females). In this section, the results are discussed in light of previous literature. Moreover, the limitations of the present study as well as its implications are also discussed. In the end, there are some recommendations for future research.

The first hypothesis of the present study was that there is a correlation between self-esteem, social comparison, and materialism. The findings revealed that there is a significant negative correlation between self-esteem and social comparison. This finding is consistent with the previous literature (Fuhr et



al., 2015; Tallat et al., 2009; Vogel et al., 2015). For example, a study conducted by Apple et al. (2016) investigated, how more social comparison via social networking sites leads to feelings of envy, dissatisfaction, and poor self-esteem. They indicated that people having low self-esteem are more inclined towards social comparison to get approval from others rather than depending on their own judgment thus highlighting a negative correlation between self-esteem and social comparison. Similarly, Vogel et al. (2014) found that people having low self-esteem make more upward social comparisons. This upward comparison further reduces their self-esteem indulging them in the vicious cycle of poor self-esteem and more social comparison orientation.

Furthermore, the findings revealed a significant negative correlation between self-esteem and materialism. This finding is also consistent with the previous literature (Gupta & Singh, 2019; Trzcińska & Sekścińska, 2021; Wang et al., 2022; Zhao et al., 2023). For example, a study conducted by Chaplin and John (2007) highlighted that people with poor self-esteem rely more on material possessions and have more materialistic attitudes in order to compensate for their low self-esteem. Similarly, Wang et al. (2020) indicated that materialism has an exclusively negative impact on the self-esteem of people, particularly those from low socioeconomic status.

On the other hand, a significant positive correlation was found between social comparison and materialism. This means the more the people make social comparisons the more they will be inclined towards the materialistic mindset and materialistic attitudes. This also implies that such people perceive more material possessions and more financial achievement as the markers of success and self-worth. Previous literature supports this finding as well (Richins & Dawson, 1992; Dittmar, 2005). More recently, Pelser et al. (2023) pointed out that social comparison and materialism are the predictors of status-oriented consumption among students in South Africa indicating a positive relationship between social comparison and materialism.

The second hypothesis of the present study was that the relationship between self-esteem and materialism is mediated by social comparison. The findings revealed a partial mediation implying that self-esteem directly influences materialism as well as indirectly influences materialism through social comparison. This finding is supported by Tesser's (1988) model which states that a person evaluates oneself through social comparison. The evaluation via social comparison influences many subsequent behaviors including materialistic attitudes. Moreover, previous literature also supports this finding. For example, Hu et al. (2022) found that more social comparison on social networking sites mediated the relationship between higher materialism and lower self-esteem among teenagers. Similarly, Shah et al. (2016) highlighted the significant role of social comparison in explaining the negative relationship between low self-esteem and feelings of insecurity and more materialistic orientation.

The present study also investigated the gender differences among study variables. The findings revealed significant gender differences in materialistic tendencies. Men were found to be more materialistic than women. The evidence can also be found from the prior research. Kasser and Ryan (1993) proposed that the socialization process subjects men to link success and power with financial stability and material possessions, ultimately making them more material-oriented. In line with this, Keech et al. (2020) found that men frequently see material possessions as the markers of success. However, no significant gender differences were found in self-esteem and social comparison.

## **6. CONCLUSION**

From the above findings of the present study, it can be concluded that reducing the materialistic mindset among university students may be achieved by boosting self-esteem and addressing their destructive social comparison behaviors. Educational institutions and mental health professionals should use interventions that enhance self-esteem and lessen unfavorable social comparisons to improve the psychological well-being of students ultimately making them valuable members of society.

### **6.1. Limitations**

- Inferences about causality are limited by the cross-sectional design. The directionality of the relationships between the variables must be established by longitudinal research.
- The majority of the undergraduate students in the sample were from middle-class backgrounds and recruited from the two government universities, which may limit the findings' generalizability to other populations.
- Relying solely on self-reported data may result in response biases that compromise the reliability of responses recorded.

### **6.2. Recommendations**

- To investigate the causal relationships between materialism, social comparison, and self-esteem, future research should employ longitudinal approaches.
- Investigating these relationships across diverse cultural and demographic contexts will enhance the generalizability of findings.
- Further insights into the factors influencing materialism may be obtained by looking at other mediating and moderating variables, such as peer influence and mindfulness etc.

The present study has emphasized how crucial it is to help young students or the young generation develop self-esteem as a means of lowering their materialistic inclinations and improving their psychological health. Programs aimed at reducing social comparison and promoting intrinsic drive or self-esteem should be created by educational institutions and mental health professionals.

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### **Conflict of Interest**


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