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**Original Article**

# Relationship between Social Anxiety, Social Comparison and Competitive Behavior among Social Media Users

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## ABSTRACT

**Aim of the Study**: The present study was aimed to investigate the relationship between social anxiety, social comparison and competitive behavior among social media users.

**Methodology:** The current study was comprised of social media users (*N*=300) having age 17-30 years from Rawalpindi and Islamabad. Sample was collected through purposive sampling technique. The measures used to explore the variables were; Social Interaction Anxiety Scale (SIAS) (Mattick & Clarke, 1998), Social Comparison Scale (SCS) (Gibbons & Buunk, 1999) and Competitive Behavior Scale (CBS) (Martens & Burton, 1990).

**Findings:** The results showed that competitive behavior has significant positive correlation with social anxiety and social comparison. Social anxiety is also significantly positively related to social comparison. Moreover, competitive behavior positively predicted social comparison among social media users.

**Conclusion:** The study revealed the impact of social comparison on competitive behavior among Pakistani teenagers. The Pakistani cultural focuses on competitiveness and social comparisons as measures of success and growth, which in turn increases social anxiety among the individuals.

**Keywords:** Social Comparison, Social Anxiety, Competitive Behavior, Social Media Users.

## Introduction

Individuals are frequently presented with situations that provoke social anxiety in today's increasingly competitive society, where the fear of negative assessment by others might impair their capacity to perform at their best (Antony et al., 2005). Meanwhile, the impact of social media platforms has made social comparison a fundamental part of our everyday lives, leading individuals to assess their own value and accomplishments in comparison to others. Both social anxiety and social comparison have been thoroughly investigated, emphasizing their tremendous influence on psychological well-being (Festinger, 1954, Oberle et al., 2010). However, there is a rising interest in determining how these variables interact and impact competitive behavior.

The cognitive model of social anxiety proposed by (Clark & Wells, 1995) posits that individuals with social anxiety tend to have negative beliefs and biases about themselves and others. They perceive themselves as socially inadequate and believe that others are more competent, attractive, or confident. These distorted beliefs contribute to heightened self-consciousness and an exaggerated fear of scrutiny in social situations, leading to avoidance and isolation (Cororve & Gleaves, 2022). A key psychological process called social comparison includes assessing oneself in relation to others. People compare themselves to others in order to judge their skills, beliefs, and personal qualities as well as their social position (Kraus et al., 2017). According to the social comparison theory, people evaluate themselves accurately and learn about their surroundings by comparing themselves to others (Festinger, 1954).

Competitive situations can increase social anxiety and the need to compare. Social anxiety can grow more extreme in competitive situations, affecting people's performance and involvement (Chan & Schmitt, 2019). Social comparisons with more successful competitors may amplify anxiety and the urge to achieve, resulting in a vicious cycle of negative thoughts and avoidance actions (Orji et al., 2019).

Competitive conduct is defined as behavior connected to individuals' prior successes, which is accomplished by comparing one's own competence to that of others (Hofmann & Smits, 2007). Individuals must be able to compete in all aspects of life, including the family, on college, and at work, in order to engage in social relationships in this dynamic technology era (Barlow, 2000). According to the literature, people who experience social anxiety compare themselves to others more often than people who do not (Jefferies & Ungar, 2020). A research by Smith and Jones (2012) reported that, those who struggle with social anxiety are more likely to compare their accomplishments, social skills, and attractiveness to those of others. This heightened social comparison was linked to greater inferiority complexes and worse self-esteem.

Individuals instinctively favor peers to outsiders; yet, study indicates this tendency may not always be true on critical compared dimensions, and considering close relationship enhances comparing anxiety and, as a result, competitors (Wang et al., 2020). For competitive activities that are self-relevant, for example, study found that participants supplied fewer valuable suggestions to friends than to strangers (Thompson & Brown, 2018). Additional studies found individuals are more anxious of their friends' achievement than of competitors' achievements (Weeks et a;., 2011). Furthermore, in a competition, competitors who established an individual comparison, defined as "a significant emotional connection with the objective" (Lee & Smith, 2021), defeated those who made less precise, general comparisons.

### *Objectives of the Study*

1. To investigate the relationship between social anxiety, social comparison, and competitive behavior among social media users.
2. To explain the role of demographics on social anxiety, social comparison, and competitive behavior among social media users.

### *Hypotheses*

1. Competitive behavior positively predicts social comparison among social media users.
2. Competitive behavior positively correlates with social anxiety social media users.
3. Competitive behavior positively correlates with social comparison social media users.
4. Social comparison positively correlates with social anxiety social media users.
5. Girls using social media exibit higher social comparison as compared to boys.

## Method

### Result Design

A cross-sectional research design was used to gather, analyze, and interpret data and the study was based on survey research method.

### Sample

A sample of 300 social media users was taken in the present study. The sample is collected from different private and public universities of Pakistan, social media user girls and boys were selected by using purposive sampling technique. Participants who were active social media users; posting, liking, commenting on content, and interacting with others with more than 3 hours per day use were included. Participants were between the ages of 17- 30 years. Participants with any physical and mental disability were excluded. Results showed the frequency and percentage of gender, age, education, family status. In terms of Age, 17- 21 is 50.8% and 22-30 is 48.8%. In terms of gender males are 19% and females are 81%. In terms of education, graduates are 28% and undergraduates are 72%. In terms of family status, 68% belong to nuclear families and 32% are joint families.

### Instruments

***Social Interaction Anxiety Scale (SIAS):*** The Social Interaction Anxiety Scale was used to assess social anxiety (Mattick & Clarke, 1998). The SIAS is made up of 20 items that assess cognitive, emotional, and behavioral elements of social anxiety. Respondents assess each item on a Likert-type Scale, often ranging from 0 (not at all indicative of me) to 4 (extremely characteristic of me). This results in a total score ranging from 0 to 80. The SIAS has demonstrated good reliability is 0.92.

***The Social Comparison Scale (SCS):*** The SCS, developed by Gibbons and Bunk (1999), examines many characteristics of social comparison. The SCS was consisted of 11 items that assess various aspects of social comparison tendencies. Respondents assess each item on a Likert-type Scale, often ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), reflecting the amount to which they participate in various social comparison activities. This scale's reliability is 0.81.

***Competitive Behavior Scale (CBS):*** The CBS is a psychological evaluation tool that developed by Martens and Burton (1990), assesses an individual's competitiveness in a range of situations. The scale includes 25 items that assess several characteristics of competitiveness. Each item is graded on a 3-point Likert scale, with answers —Always, Sometimes and Never. The CBS has been demonstrated that the reliability of scale is 0.8.

### Results

**Table 1:** *Psychometric Properties of the Study Variables (N=300)*

| Variables | No of Items | Cronbach | *M* | *SD* | Actual | Potential | Skew | Kurt |
|---|---|---|---|---|---|---|---|---|
| SIAS | 20 | .87 | 35.16 | 16.00 | 0-75 | 0-80 | -.04 | .40 |
| SCS | 11 | .67 | 35.12 | 4.45 | 20-46 | 11-55 | -.66 | .55 |
| CBS | 25 | .80 | 52.26 | 7.45 | 29-75 | 25-75 | -.06 | .55 |

*Note*: SIAS = Social Anxiety Interaction Scale, SCS = Social Comparison Scale, CBS = Competitive

***Behavior Scale***

Table 1 showed that all scales are reliable and adequate. The values of kurtosis and skewness are less than 2, indicating that the data is normally distributed.

**Table 2:** *Pearson Correlations of Study Variables (N=300)*

| | Variables | 1 | 2 | 3 |
|---|---|---|---|---|
| 1 | Social Anxiety | - | .13** | .14** |
| 2 | Social Comparison | | - | .18** |
| 3 | Competitive Behavior | | | - |

** *p* <.01

Table 2 showed that social interaction anxiety has significant positively correlation with social comparison (*r* = .13, *p* < .01) and competitive behavior (*r* = .14, *p* < .01). Whereas, social comparison has also significant positive relation with competitive behavior (*r* = .18, *p* < .01).

**Table 3:** *Regression Coefficient of Competitive Behavior on Social Comparison*

| Variable | *B* | *β* | *SE* |
|---|---|---|---|
| Constant | 29.43*** | | 1.80 |
| CB | .10** | .18 | .03 |
| *R²* | .33 | | |

*Note.* CB = competitive behavior

*p* < .01

Table 3 showed the impact of competitive behavior on the social comparison in social media users. The $R^2$ value of .33 revealed that the predictor variable explains a 33% variance in the outcome variable with $F (1, 297) = 438.12$, *p* < .01. The findings reveal that competitive behavior positively predicted social comparison. (β= .18, *p*< .01).

### Mean Differences between Variables of Study

Results showed the significant gender differences on social comparison $t(298) = 4.28$, *p*<.05. Outcomes showed girls exhibited higher score on social comparison (*M*= 42.12, *SD*= 11.20) as compared to boys participants (*M*= 31.01, *SD*= 10.50). Cohen's d was .62 (> 0.50) that indicate medium size effect.

### Discussion

The main hypothesis of the present study is explained by the $R^2$ value which indicates that the predictor variable, competitive behavior, explains roughly 3.3% of the variation in the outcome variable, social comparison. The positive regression coefficient (r = 0.18) implies that higher levels of competitive behavior among Pakistani social media users is connected with a greater level of social comparison. This conclusion is consistent with the cultural background, in which competition is frequently stressed and social comparisons serve as a standard for judging success and progress (Reh et al., 2018). When an in-group member defeats an out group opponent, the in-group member is more driven to compete, and that social comparison is necessary for this effect (Charoensukmongkol, 2018).

The other hypotheses of the present research were also supported i.e. there is a significant positive relationship between social comparison and social anxiety. The research literature suggests that there can be a positive relationship between social anxiety and social comparison under certain circumstances. Social anxiety, which often involves heightened self-awareness and sensitivity to social cues, might drive individuals to engage in more thoughtful and critical self-evaluation when comparing themselves to others (Schuman-Olivier, 2020). The researchers suggested that adolescents who frequently engage in social comparison may experience higher levels of anxiety due to the constant evaluation of themselves in relation to their peers (Nesi & Prinstein, 2015). The heightened self scrutiny could also lead to an

increased motivation for self-improvement and personal growth, as individuals strive to bridge the perceived gaps between themselves and their peers. In this way, social anxiety could potentially serve as a catalyst for introspection, encouraging individuals to address their insecurities and make positive changes in their lives, ultimately leading to enhanced self-esteem and a greater sense of self-awareness (Sherry et al., 2007).

The another hypothesis is that the social comparison and competitive behavior has a positive relationship. Competitive conduct entails engaging in activities or behaviors targeted at exceeding others. Several research have looked into this link and found evidence. A previous research found that higher levels of social comparison were positively associated with greater social anxiety and more competitive behavior in adolescents (Jiang & Ngien, 2020). Buunk and Gibbons (2007) explored the effects of competitive situations on social comparison and self-esteem. They found that in competitive contexts, individuals were more likely to engage in downward social comparison, comparing themselves to those who are worse off. This downward comparison served as a self-enhancement strategy, boosting individuals' self-esteem (Cramer, 2016).

Results also showed that girls exhibit higher score on social comparison as compared to boys participants. These findings were also supported by a previous research that showed that boys involved less than girls in social comparisons (Beesdo et al., 2009).

## Conclusion

The current study explored the relationship between social anxiety, social comparison, and competitive behavior in Pakistani social media users growing up in a collectivistic society. Results exhibited the association between social anxiety and social comparison, indicating that social comparison may contribute to experiences of social anxiety in social media users. Furthermore, a somewhat positive link was found between social comparison and competitive behavior, suggesting that greater levels of social comparisons are related with increased involvement in competitive behavior. The study additionally examined at mean differences across gender. Results showed that boys scored low on social comparison as compared to girls. These findings have crucial implications for understanding the psychological mechanisms underpinning social comparison among Pakistani adolescents. It emphasizes competitive behavior as a key predictor and proposes that therapies and support programs targeted at lowering social comparison tendencies should prioritize addressing competitive behaviors in the society.

### *Limitations and Suggestions of Present Study*

The study only included Pakistani social media users from a collectivistic community, limiting the findings' applicability to other cultural situations or age groups. The study used a cross-sectional design, which makes establishing causal links between social anxiety, social comparison, and competitive behavior challenging. Longitudinal research would help us understand the temporal dynamics of these factors. For evaluating social anxiety, social comparison, and competitive behavior, the study relied on self-report measures, which are susceptible to biases such as social desirability or faulty self-perception. The absence of a control group restricts the capacity to compare the findings with a group that was not exposed to the issues under consideration, making it difficult to separate the particular impacts of social anxiety and social comparison on competitive behavior. The study focused largely on early and late adolescents, ignoring other age groups that may demonstrate distinct patterns of social anxiety, social comparison, and competitive behavior.

### *Implications*

The findings of the present study will help the concerned authorities for development of intervention plans. These findings have significant implications for understanding the psychological mechanisms that underpin social comparison in Pakistani teenagers. They propose that addressing competitive behaviors is critical in treatments and support programs targeted at lowering social comparison tendencies in this population. Interventions that address competitive behavior and promote better ways of judging oneself

may help offset the negative impacts of social comparison and contribute to the general well-being of Pakistani adolescents.

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# References

Antony, M. M., Rowa, K., Liss, A., Swallow, S. R., & Swinson, R. P. (2005). Social comparison processes in social phobia. *Behavior Therapy, 36*(1), 65– 75.

Barlow, D. H. (2000). Unraveling the mysteries of anxiety and its disorders from the perspective of emotion theory. *American Psychologist, 55*(11), 1247-1263.

Beesdo, K., Knappe, S., & Pine, D. S. (2009). Anxiety and anxiety disorders in children and adolescents: developmental issues and implications for DSM-V. *The Psychiatric Clinics of North America, 32*(3), 483-524.

Buunk, A. P., & Gibbons, F. X. (2007). Social comparison orientation: A new  perspective on those who do and those who don't compare with others. In I. G.

Chan, D. K., & Schmitt, N. (2019). Social anxiety and performance in sports, games, and occupations: The role of social competition and task *motivation. Motivation and Emotion, 43*(2), 172-184.

Charoensukmongkol, P. (2018). The impact of social media on social comparison and envy in teenagers: The moderating role of the parent comparing children and in-group competition among friends. *Journal of Child and Family Studies*, *27*(1), 69-79.

Clark, D. M., & Wells, A. (1995). A cognitive model of social phobia. In R. G. Heimberg, M. R. Liebowitz, D. A. Hope, & F. R. Schneier (Eds.), Social phobia: Diagnosis, assessment, and treatment (pp. 69-93). Guilford Press.

Cororve, M. B., & Gleaves, D. H. (2022). Body dysmorphic disorder: a review of conceptualizations, assessment, and treatment strategies. *Obsessive-Compulsive Disorder and Tourette's Syndrome*, 13-34.

Cramer, E. M., Song, H., & Drent, A. M. (2016). Social comparison on Facebook: Motivation, affective consequences, self-esteem, and Facebook fatigue. *Computers in Human Behavior*, *64*, 739-746.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*(2), 822-830.

Gibbons, F. X., & Buunk, B. P. (1999). Individual differences in social comparison: The development of a scale of social comparison orientation. *Journal of Personality and Social Psychology, 76*(1), 129-142.

Hassan, S.A.U., Safdar, G. (2022). Relationship between Self-Esteem and Problematic Use of Facebook among University Students. *Annals of Social Sciences and Perspective, 3*(1), 199-217. DOI: 10.52700/assap.v3i1.83

Hofmann, S. G., & Smits, A. J. (2007). Cognitive-Behavioral Therapy for Social Anxiety Disorder: Current Status and Future Directions. *Biological Psychiatry, 51*(12), 101-108.

Jefferies, P., & Ungar, M. (2020). Social anxiety in young people: A prevalence study in seven countries. *PloS one*, *15*(9), e0239133.

Jiang, S., & Ngien, A. (2020). The effects of Instagram use, social comparison, and self-esteem on social anxiety: A survey study in Singapore. *Social Media+ Society*, *6*(2), 2056305120912488.

Khan, A.W., Safdar, G., Ashraf, M. (2018). Effects of Mobile Phone Usage on Social Behaviours of University Students: A Case study of Islamia University of Bahawalpur, Pakistan. *Global Media Journal Pakistan Edition, 11*(1), 1-26.

Kraus, M. W., Park, J. W., & Tan, J. J. (2017). Signs of social class: The experience of economic inequality in everyday life. *Perspectives on Psychological Science*, *12*(3), 422-435.

Lee, E., & Smith, J. K. (2021). Social media use, social anxiety, and well-being in young adults: The moderating role of self-compassion. *Computers in Human Behavior*, 118, 106693.

Martens, R., Burton, D., Vealey, R. S., Bump, L. A., & Smith, D. E. (1990). Development and validation of the competitive state anxiety inventory-2. *Competitive anxiety in sport*, *3*(1), 117-190.

Mattick, R. P., & Clarke, J. C. (2012). Social Interaction Anxiety Scale. *Psychological Assessment*.

Nesi, J., & Prinstein, M. J. (2015). Using social media for social comparison and feedback-seeking: Gender and popularity moderate associations with depressive symptoms. *Journal of abnormal child psychology*, *43*, 1427-1438.

Oberle, E., Schonert-Reichl, K. A., & Thomson, K. C. (2010). Understanding the link between social and emotional well-being and peer relations in early adolescence: Gender-specific predictors of peer acceptance. J*ournal of Youth and Adolescence*, 39, 1330-1342.

Orji, R., Oyibo, K., Lomotey, R. K., & Orji, F. A. (2019). Socially-driven persuasive health intervention design: competition, social comparison, and cooperation. *Health Informatics Journal*, *25*(4), 1451-1484.

Reh, S., Tröster, C., & Van Quaquebeke, N. (2018). Keeping (future) rivals down: Temporal social comparison predicts coworker social undermining via future status threat and envy. *Journal of Applied Psychology*, *103*(4), 399.

Schuman-Olivier, Z., Trombka, M., Lovas, D. A., Brewer, J. A., Vago, D. R., Gawande, R., & Fulwiler, C. (2020). Mindfulness and behavior change. *Harvard review of psychiatry*, *28*(6), 371.

Shabir, G., Hameed, Y.M.Y., Safdar, G., Gilani, S.M.F.S. (2014). Impact of Social Media on Youth: A Case Study of Bahawalpur City. *Asian Journal of Social Sciences and Humanities, 3*(4), 132-151.

Shabir, G., Iqbal, Y.W., Safdar, G. (2014). Demographics‟ Differences in Social Networking Sites Use: What Communication Motives Does it Gratify? *International Journal of Social Work and Human Service Practice, 2*(5), 184-194.

Sherry, S. B., Hewitt, P. L., Flett, G. L., & Lee-Baggley, D. L. (2007). Trait perfectionism and perfectionistic self-presentation in social anxiety *disorder. Journal of Psychopathology and Behavioral Assessment, 29*(4), 233-243.

Smith, R. L., & Jones, T. K. (2012). Social anxiety and self-comparisons to others in the context of social interactions. *Journal of Social Psychology, 152*(6), 711-724.

Thompson, C., & Brown, C. (2018). Social media use and social anxiety: A systematic review. *Psychology of Popular Media Culture, 7*(2), 198-211.

Wang, Y., Wang, S., Shi, J., & Wu, Y. (2020). Social anxiety and aggressive behavior: The mediating role of social comparison. *Frontiers in Psychology*, 11, 344-351.

Weeks, J. W., Michelson, A. A., & Mushquash, A. R. (2011). Social anxiety, negative social expectancies, and the type-I error rate. *Journal of Anxiety Disorders, 25*(7), 117-140.