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Social Comparison and Psycho-Social Consequences among Generation Z

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Abstract

The present study was quantitative that examined psycho-social consequences of social comparison on generation z. It examined the social comparison behavior and subsequent outcomes in the generation z moderate self-continuity and social connectedness grounded in social comparison theory. The study was based on the quantitative research design. Sample size was drawn 300 students by using proportionate stratified random sampling technique and the data was collected by using structured questionnaire. Key variables included social comparison, social consequences and psychological consequences that were measured on 4-point Likert scale. The research examined upward, downward, and temporal comparisons on digital platforms affect anxiety, self-esteem, life satisfaction, perceived social support, online connectedness, and offline social avoidance. The reliability of variables was analyzed (Cronbach's Alpha = 0.822), quantitative data were analyzed via Kendall's tau-b correlation and multiple linear regression in SPSS version 21. Findings revealed that social comparison significantly predicts psycho-social consequences ($p < .001$), with upward comparison being the strongest driver of anxiety and reduced life satisfaction. These results underscore the urgent need for digital wellness interventions targeting Gen Z in Pakistani society.

Keywords: Social Comparison, Generation Z, Psychological Consequences, Social Consequences, Temporal Comparison

Introduction

Social comparison is an inherent human behavior predetermined by four context factor which include the context online platform and algorithm stimulations, temperament, objectives and tools. The kids associate themselves with carefully chosen web picture to satisfy their need, preferences and goals (Sharma et al., 2023). Social comparison is center of experience even though an important part of the existing literature is the trap and following loss of self-worth, upward inspiration occurs in the online world. The successes and accomplishments of other individuals is a source of motivation and goal setting. Nerveless, it is a healthy envy and crippling insufficiency thus one should be aware of the time these digital comparisons might serve as the source of impetus and



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when it turned into the source of suffering (Pazer, 2024). The social comparison theory explains why people will draw up their own value in regard to the consideration of their personal and social value with regards to making the comparisons made about oneself with others (Tripathi et al., 2024). The social comparison theory stipulates that there are two important ways in our life as one is upward comparison, the other is downward comparison (Opoku et al., 2025). They may not even appear to go together as we, at surface, push us upwards into comparisons we contrast our lives with vis-a vis other highlighted lives and push ourselves downwards into comparisons we contrast our lives with other people who struggle against our lives (Ozimek et al., 2023). This trait of betraying fellow users at all times in any setting, establishes a positive impact to the lives of individuals in the virtual times (Wen & Jin, 2025). University students who are subjective and individual in their expressive actions both personal and creating their identity, are especially vulnerable to them, as the form of self-creation is still under development (Derbaix et al., 2025). Social media has the potential to form the self-concept of university students in Pakistan, and frequent exposure lead to more negative or critical self-concepts (Nizam, 2025). This is particularly concerning when it comes to female students who are even more susceptible to a lower level of self-esteem and depressive emotions due to constant social comparisons on online platforms (Latif et al., 2026). Generation z youth having formed the habit of social comparison on online communities, they were likely to report engaging in symptoms of anxiety, decreased self-esteem and fear of missing out, which they experienced when the comparison was positive at the time they were also capable of demonstrating mental strength in online self-improvement (Ugwu et al., 2023). In the past 10 years, smartphone products have increased exponentially among the young demographic of developing economies like Pakistan (Waseem et al., 2025). Although, the approaching similar tendency is moderated with the opposite cultural norms e.g. the family honor maintenance, educational achievement and saving of the social position in Pakistan ((Syed et al., 2026). A cross-sectional survey of Pakistani university undergraduates, found that 68 per cent of them spent more than three hours on Instagram each day and hours of daily use had a strong positive relationship with depressive symptoms. The social comparison was a significant predictor, whereas passive scrolling contributes to the level of contribution, the moderate contributory level of depression was 41.3% (Chhachhar et al., 2025).

Review of Literature

As one of the most significant mechanism of psychology in the digital age that has a considerable impact on generation z is social comparison. Social comparison in the context of social media occurs in three primary forms; upward, downward, and temporal comparisons. Such comparisons, common in the digital world, have a great diversity of psycho-social consequences. These comparisons have a particularly significant effect since they influence the self-esteem of people, their psychological health, and social identity. The comparison of oneself to those who one considers superior, a phenomenon known as upward social comparison has been enhanced in the visualized world of the internet. Such comparisons have been normalized by the existence of highly edited, idealized images and posts depicting perfect lifestyles that have become commonplace (Festinger, 1957). Social media (with its bias towards visual and aesthetic content) also contributes to this cycle. Such platforms tend to nourish their users with what they view as a norm and thus generating a cycle of comparison (Hanna et al., 2017). The larger extension is that this digital world has brought a systemic problem and now it is being manifested in the mental health of an entire generation, further as the comparisons are



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now becoming a part of everyday life. Upward social comparison is the most empirically documented driver of psychological harm. To illustrate, Vogel et al. (2014) have found that social comparison is the most important mediator between Facebook use and self-esteem. They found that an increased level of social comparison is always linked to lower self-esteem especially among frequent users of the site. This result was confirmed by a follow-up study that monitored the effects of social comparison in the course and after the COVID-19 pandemic, as the effect of perceived exposure to upward comparisons on Instagram was also detrimental, which increased the global shortage of self-esteem (Chen, 2025). Moreover, Khalaf et al. (2023) provided a synthesis of twenty studies and revealed that the behavior of social comparison has a direct negative effect on the problem of anxiety, especially in young women. Constant exposure to social networks like Instagram and Facebook, they found, contributes to the rise in body image disturbances and eating disorders because of the high rates of upwards comparisons. Downward social comparison (DSC) is frequently theorized as a self-regulatory mechanism which helps to offset the adverse outcomes of upward comparisons. Although the advantages of downward comparison are clear, they do not necessarily apply to all situations to mitigate the adverse effects of upward comparisons (Diel et al., 2024). The researchers discovered that the positive impacts of downward comparison on these outcomes were mediated by the belief of a person in a just world (Hu et al., 2024). However, not all is well with the protective advantages of downward comparison. An example of this is a systematic review by Schmuck et al. (2019) which emphasized the role of the negative influence of social media consumption in increasing the negative effect of social comparison, whether the comparison is upward or downward. Gender is a critical aspect in the psychological effects of social comparison. Research conducted by Tiggemann and Slater (2013) found that female teenagers are especially vulnerable to the adverse effects of social comparison in social media sites like Facebook. These media contribute to body surveillance and the users tend to perceive themselves as objects to be examined instead of participants in their lives. As Meng (2023) additionally examined the gendered character of such comparisons, 97.7 percent of gen z TikTok users stated that the platform had an impact on their perception of the ideal body. Especially women were concerned with skin, weight and shape whereas men were more concerned with muscularity. These discoveries are indicative of larger social conventions concerning gender and body image that are supported in processes of social media comparison. Empirical evidence to this effect is very strong. The Cyber smile report (2023) also notes that almost 89% of gen z engage in social comparison on the internet at least once a day, which makes this once incidental activity a habitual (Manago et al., 2023). Notably, Haferkamp and Krämer (2011) have shown that although people are aware that the content they read or watch is highly edited or staged, they are still greatly affected by upward comparison, thus they are psychologically in a state of distress. This observation questions the notion that media literacy effective enough to counteract the negative effects of social media. This brings up one of the main concerns, which is that social comparison in the digital era is not a personal problem, but a structural one, and it affects the collective mental health.

Data Methods

This study employed a quantitative cross-sectional research design. The target population comprised 1,200 undergraduate Generation Z students enrolled at the University of Gujrat, across four departments of faculty of sciences and social sciences, Sociology, Education, Botany, and Chemistry. Using the Taro Yamane formula ($n = N/1+N(e)^2$,



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$e=0.05$), a total sample of 300 was derived. Proportionate stratified random sampling was applied within each department, yielding department-level sample. Data were collected via a structured questionnaire comprising 72 items across six sections, including socio-demographic background and four main variable scales rated on a 4-point Likert scale (1=Strongly Disagree to 4=Strongly Agree). A pre-test on 30 students outside the sampling frame confirmed instrument clarity. Overall, reliability was Cronbach's Alpha = 0.822, with individual scale alphas ranging from 0.704–0.769, all meeting the ≥ 0.70 threshold. Data were analyzed in SPSS version 21 using descriptive statistics, Kolmogorov-Smirnov and Shapiro-Wilk normality tests, Kendall's tau-b non-parametric correlation, and multiple linear regression.

Results and Discussion

Descriptive Statistics of Study Variables

Table 01 Descriptive Statistics of Social Comparison, Psychological Consequences and Social Consequences

Variables	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Social comparison	45.00	21.00	66.00	47.9900	7.20530	51.916
Upward comparison	18.00	6.00	24.00	15.6200	3.85033	14.825
Downward comparison	17.00	6.00	23.00	16.1767	2.70861	7.337
Temporal comparison	16.00	8.00	24.00	16.1933	3.25750	10.611
Psychological consequences	42.00	27.00	69.00	47.2700	6.81262	46.412
Anxiety	18.00	6.00	24.00	15.6333	3.42413	11.725
Self-esteem	17.00	6.00	23.00	15.4167	3.04202	9.254
Life satisfaction	18.00	6.00	24.00	16.2200	3.14078	9.864
Social consequences	41.00	29.00	70.00	48.6667	6.60158	43.581
Perceived social support	18.00	6.00	24.00	16.4733	3.15422	9.949
Online social connectedness	18.00	6.00	24.00	16.0233	2.95724	8.745
Offline social avoidance	16.00	7.00	23.00	16.1700	2.74217	7.519

According to the given table prove the range of social comparison, the range is 45.00, where the least value is 21.00, and the highest value 66.00. The mean = 47.9900, SD = 7.20530 and the variance of social comparison = 51.916. On the same note, the results suggest that the lowest value of the range of upward comparison is 6.00, highest value is 24.00, the mean is 15.6200, standard deviation is 3.85033 and the variance 14.825. Besides, the range of the results indicates that downwards comparison has 17.00, the minimum value is 6.00, the highest value is 23.00, mean is 16.1767, standard deviation equals 2.70861 and variance equals 7.337. Similarly, the results show that the range of temporal comparison is 16.00 that has a minimum of 8.00 and maximum of 24.00 with the mean of 16.1933, a standard deviation of 3.25750 and a variance of 10.611. In terms of psychological consequences, the values show its range of 42.00, its minimum of value of 27.00 and its maximum value of 69.00, the mean is 47.2700, standard deviation of



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6.81262 and variance of 46.412. Specifically, the range for anxiety is 18.00, minimum is 6.00, and maximum is 24.00, with a mean of 15.6333, standard deviation of 3.42413, and variance of 11.725. The findings show that self-esteem has a range of 17.00, minimum of 6.00, maximum of 23.00, a mean of 15.4167, standard deviation of 3.04202, and variance of 9.254. For life satisfaction, the range is 18.00, minimum is 6.00, and maximum is 24.00, with a mean value of 16.2200, standard deviation of 3.14078, and variance of 9.864. Lastly, the results reveal how the spectrum of social consequences is 41.00 with minimum and maximum of 29.00 and 70.00 respectively, having a mean of 48.6667, standard deviation of 6.60158 and 43.581 variance. The results of the Perceived social support are within the range of 18.00, minimum of 6.00, maximum of 24.00, a mean of 16.4733, SD of 3.154222 and variance of 9.949. Likewise, the minimum Online connectedness is 6.00, standard deviation is 2.95724, maximum is 24.00, mean is 16.0233 and the variance is 8.745. Thus, the results show that the minimum and the maximum value of the range of the Offline social avoidance is 16.00 and 23.00 respectively with a mean of 16.1700, standard Deviation of 2.74217 and the variance.

Table 02 Kendall's tau-b Correlation among all Variables

variables	Social Comparison	Psychological Consequences	Social Consequences
Social Comparison	1		
Psychological Consequences	.462 **	1	
Social Consequences	.305 **	.405 **	1

Table identifies the Kendall's tau-b between social comparison, social consequences and psychological consequences. The table of correlation depicting association between four important constructs social comparison, social consequences and psychological consequences. This paper assesses the trends and the strengths of the linear relationships of these variables based on the coefficient Kendall's tau-b. An increased rate of digital behaviors is always positively associated with positive psychological and social outcomes all coefficients are positive and statistically significant (0.01). The highest correlation in the table is between Social Comparison and Psychological Consequences ($\tau = .462$). As the study suggests that digital behavior and psychological well-being are highly correlated, it implies that the key indicator of negative psychological consequences in this study social comparison mean of comparing the life of the individual with the lives of others. The fact that social consequences are correlated with the psychological consequences ($\tau = .405$) shows that these effects are related to each other. This moderate to strong association supports the concept of a spreading effects of internal psychological tension where tension is identifiably linked with social friction or adverse social outcomes. This indicates that digital, involvement has complex effects, and it affects inter-personal relations and mental health of a person simultaneously.



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Histogram of Variables

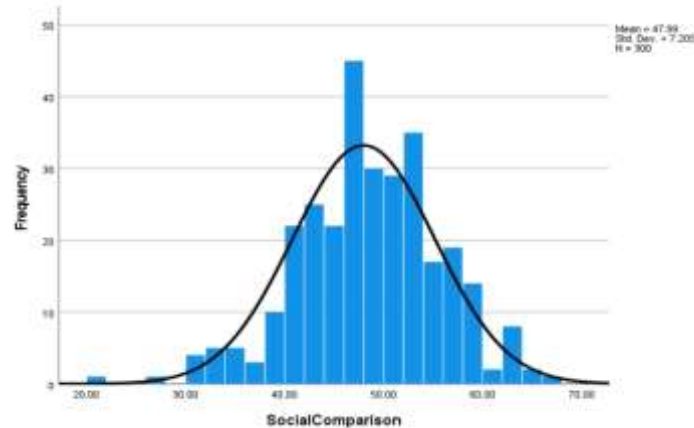


Figure 1: Histogram of Social Comparison

The social comparison histogram suggests that the data was approximately normally distributed. The scores are normally distributed around a bell-shaped curve with an uncritically small positive skew since the tail against the high values is slightly long. Since the mean (47.99) is centrally positioned in the range of data, most of the scores are concentrated around the center, the assumption of normality was rather fulfilled in this sample (N = 300).

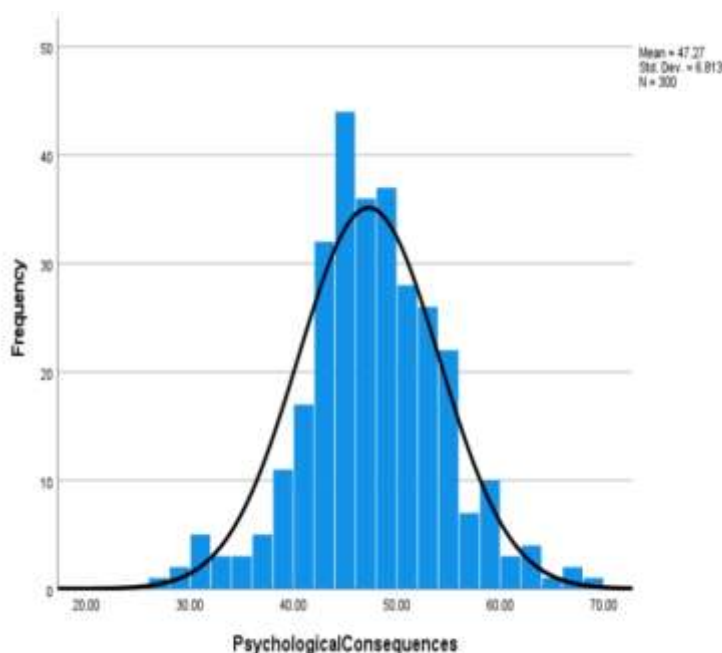


Figure 2: Histogram of Psychological Consequences

The psychological consequences histogram indicated that it was distributed normally in an approximate manner. The normality assumption was relatively satisfied since the data were distributed in a bell-shaped curve with a small negative skew. A slight clustering of scores to slightly above the mean occurs but the overall symmetry of the distribution could be used to assume the normality of the distribution of the sample (N = 300).

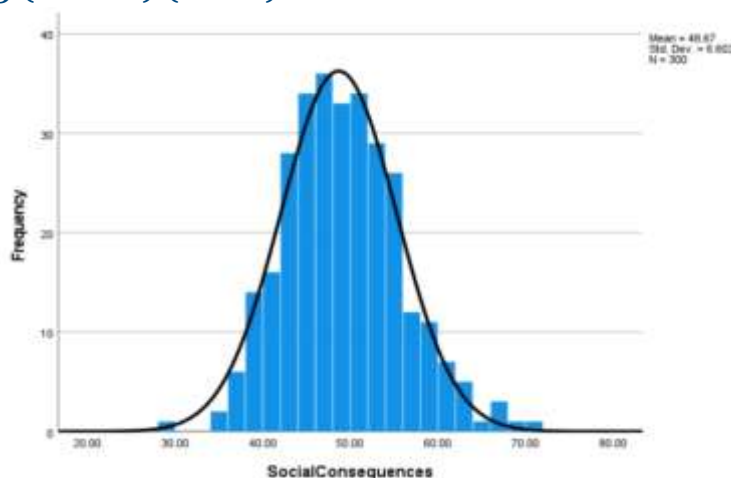


Figure 3: Histogram of Social Consequences

The social consequences histogram indicated that the distribution was rather normal. The statistics were normal with a positive skew, as it is attested by the fact that the higher scores are distributed slightly around a bell line ending to the right. This gives an indication that the assumption of normalcy was well observed regarding this sample (N = 300).

Multiple Regression Analysis Predicting Psychological Consequences of the Gen Z

Table 03 Regression Analysis of Psychological Consequences of the Gen Z

Predictors	B	Std. error	Beta	t	Sig.
Social comparison	.351	.047	.372	7.488	< .001
(Constant)	12.089	2.139		5.651	< .001

R = .694^a, R Square = .482, Adjust R Square = .479, std. Error of the Estimate = 4.91866, df = 2, F = 138.297

Multiple regression analysis indicate that the selected digital interaction is also significantly correlated with psychological outcomes in the gen z sample. The R² of .482 indicate that 48.2% of the variance of psychological consequences could be clarified by social comparison which implies that model will be rather foretelling, and the predictor has been found to be significantly related to psychological consequences (p = .001). the relative size of the standardized regression coefficients indicates that model is to a greater degree predictive and the predictor. In general, the finding substantiates the significance of digital interactions as a primary predictor of psychological aftermaths on gen z. this investigation is a piece of quantitative evidence that used in further research and development of a digital well-being model.

Table 04 Regression Analysis of Social Comparison and Social Consequences of the Gen Z

Predictors	B	Std. error	Beta	f	Sig.
Social comparison	.122	.054	.133	2.274	0.24
(Constant)	23.857	2.440		9.778	<.001

R = .532, R Square = .283, Adjust R Square = .278, std. Error of the Estimate = 5.610, df = 2,

F = 58.506

Social Comparison was determined as not being statistically significant (p = .24 which is



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larger than the normal level of 0.05). This shows that in this sample, social comparison does not affect the social consequences of respondents significantly at the expense of other variables. Here, this implies that the process of social benchmarking influences the inner psychological experiences of individuals, less critical to the social outcomes individuals claim it has, with the implication that the impact of social comparison is more localized, which is chiefly related to their mental wellbeing.

Table 05 Chi square test of social comparison and psychological consequences

	Value	df	Asymptotic significant
Pearson Chi-square	2311.03	1443	<.001
Likelihood ratio	784.118	1443	1.000
Linear by linear association	106.97	1	<.001

1520 cells (100.0%) have an expected count less than 5. The minimum expected count is .00.

A Pearson Chi-Square test of independence was performed to explore the relationship between social comparison and psychological consequences among the participants (N = 300). The results demonstrated a statistically significant association between the two variables, $(1443) = 2311.03$, $p < .001$. Furthermore, the linear-by-linear association test indicated a highly significant linear trend, $(1, N = 300) = 106.97$, $p < .001$, suggesting that higher levels of social comparison systematically track with varying levels of psychological consequences. However, data diagnostics indicated that the distributional assumption for the Pearson Chi-Square test was violated, as 100.0% of the cells (1,520 cells) had an expected count of less than 5, with a minimum expected count of .00. This sparse distribution is a function of the extensive cross-tabulation matrix (df = 1443) relative to the sample size. Consequently, while the linear trend is robust, the primary Pearson Chi-Square value must be interpreted with academic caution.

Table 06 Chi square test of social comparison and social consequences

	Value	df	Asymptotic significant
Person chi square test	1502.576	1258	< .001
Likelihood ratio	714.766	1258	1.000
Linear by linear association	42.025	1	< .001

1330 cells (100.0%) have an expected count less than 5. The minimum expected count is .00.

A Pearson Chi-Square test of independence was conducted to explore the relationship between social comparison and social consequences among the sample population (N = 300). The test indicated a statistically significant association between the two variables, $X^2(1258) = 1502.58$, $p < .001$. Additionally, the linear-by-linear association test confirmed a highly significant linear trend, $X^2(1, N = 300) = 42.03$, $p < .001$, revealing that shifts in social comparison levels systematically align with changes in social consequences. However, data diagnostics indicated a total violation of the test's distributional assumptions, given that 100.0% of the cross-tabulation cells (1,330 cells) produced an expected count below 5, with a minimum expected count of .00. This is an artifact of a large, complex cross-tabulation grid (df = 1258) relative to the sample size. Therefore, while the linear trend is statistically reliable, the primary Pearson Chi-Square test value should be approached with caution during full thematic discussion.



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Conclusion

The results of this study support the idea that the digital world is one of the most salient locations of psychological bargain where social comparison is strong predictors of well-being among the case of the generation z university students. The results of the investigation conclude that the most common psychological phenomenon, i.e. presence of the so-called upward comparison, i.e. comparison of oneself with ideal and controllable norms of other people is direct cause of anxiety and lowered life satisfaction. That is to say that the interactive and visual elements of the social media that exist presently not only enable this type of connection, but present a relative engine that constantly destabilizes the self-esteem of the users.

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