



PSYCHOLOGICAL DISTRESS AND SUICIDAL IDEATION AMONG EMERGING ADULTS OF UNIVERSITY OF GUJRAT

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Abstract

Emerging adulthood represents a developmental window of heightened susceptibility to psychological distress and suicidal ideation. The present cross-sectional study examined the differential predictive utility of depression, anxiety, and stress in relation to suicidal ideation among 274 emerging adults (aged 18–25 years) enrolled at the University of Gujrat, Pakistan. Participants completed the Depression, Anxiety, and Stress Scale-21 (DASS-21) and the Suicidal Behaviours Questionnaire-Revised (SBQ-R). Bivariate analyses revealed significant positive correlations between all three distress dimensions and suicidal ideation, with depression demonstrating the strongest association ($r = .462, p < .01$). However, multiple regression analysis identified depression as the sole significant unique predictor of suicidal ideation ($\beta = [\text{insert } \beta], p < .001$), with anxiety and stress failing to contribute independent predictive variance when depression was controlled. Additionally, individuals classified in the high suicidal ideation risk group ($SBQ-R \geq 7$) exhibited significantly greater levels of depression, anxiety, and stress relative to the low-risk group. These findings highlight the primacy of depressive symptomatology in understanding and predicting suicidal ideation among Pakistani university students. Implications for campus-based mental health screening and targeted intervention are discussed.

Keywords: Psychological Distress, Depression, Anxiety, Stress, Suicidal Ideation, Emerging Adulthood

1. Introduction

Emerging adulthood represents a distinct developmental epoch spanning approximately 18 to 25 years of age, characterized by profound transformations in personal identity, social roles, and worldviews (Hochberg & Konner, 2020). As individuals navigate the transition from adolescent dependence to adult independence, they encounter heightened instability, self-exploration, and a shifting sense of possibility. While this period is ripe for growth and self-discovery, it is concurrently marked by significant vulnerability to the onset and escalation of mental health difficulties (Mastorci et al., 2024). The confluence of academic pressures, evolving interpersonal relationships, and future uncertainty renders emerging adults, particularly those in university settings, uniquely susceptible to psychological distress.

Psychological distress is a multidimensional construct that broadly encompasses the negative emotional states of depression, anxiety, and stress (Fatima & Raazia, 2025). While these states are often transient responses to life's challenges, their chronic and unmitigated presence can severely impair daily functioning and overall well-being. Of paramount concern is the robust association between persistent psychological distress and suicidal ideation, a spectrum of thoughts ranging from a passive wish for death to active planning for self-harm (WHO, 2025). Globally, suicide remains a leading cause of death among young people, underscoring the urgent public health imperative to understand the specific psychological mechanisms that precipitate suicidal thinking within this age cohort.



In the Pakistani context, emerging adults face a unique set of ecological stressors, including intense academic competition, socioeconomic pressures, and limited access to mental health infrastructure (Bibi et al., 2021; Naveed et al., 2019). Despite the high prevalence of depressive and anxiety symptoms documented among Pakistani university students, there remains a paucity of empirical research examining the differential predictive utility of depression, anxiety, and stress in relation to suicidal ideation within this cultural milieu. While these three dimensions of distress frequently co-occur and exhibit significant overlap (Vidović et al., 2024), clarifying their unique and collective contributions is essential for designing targeted, contextually relevant prevention and intervention strategies.

Therefore, the present study aims to examine psychological distress—conceptualized through the distinct but interrelated dimensions of depression, anxiety, and stress—as a predictor of suicidal ideation among emerging adults at the University of Gujrat. Specifically, this study seeks to: (1) identify which of these three psychological factors serves as the strongest predictor of suicidal ideation in this population, and (2) compare the levels of depression, anxiety, and stress among emerging adults with high versus low suicidal ideation scores.

2. Literature Review

Depression and Suicidal Ideation

Depression, or Major Depressive Disorder (MDD), is a pervasive mood disturbance defined by the American Psychiatric Association (APA, 2022) as a constellation of symptoms including persistent sadness, markedly diminished interest or pleasure in activities (anhedonia), and significant functional impairment. The clinical manifestations of depression are heterogeneous, impacting multiple domains of human functioning. Emotionally, depression is characterized by feelings of hopelessness, emptiness, and irritability (Mayo Clinic, 2022). Cognitively, it fosters a pessimistic outlook on the future, negative self-appraisal, and impaired concentration and decision-making (National Institute of Mental Health, 2024). Behaviorally, it precipitates social withdrawal, psychomotor changes, and disruptions in sleep and appetite, while physiological symptoms often include unexplained somatic complaints such as fatigue and chronic pain (Kapfhammer, 2006).

The progression from depressive symptomatology to suicidal ideation is a well-documented clinical trajectory. Extended periods of emotional despair and self-critical cognition can induce a state of cognitive narrowing, wherein the individual perceives a foreshortened sense of future options and an overwhelming sense of entrapment (Ribeiro et al., 2018). Within the framework of the Interpersonal Theory of Suicide (Van Orden et al., 2010), the physiological depletion and social withdrawal associated with depression are posited to intensify feelings of perceived burdensomeness and thwarted belongingness—two key interpersonal precursors to the desire for suicide. Empirical evidence consistently positions depression as the most potent predictor of suicidal ideation among university students (Vidović et al., 2024; Brás et al., 2025). In Pakistan, research has elucidated that depressive symptoms, particularly when compounded by low social support or exposure to bullying, significantly elevate the risk of suicidal thoughts among young people (Naveed et al., 2019).

Anxiety and Suicidal Ideation

Anxiety is an emotional state characterized by apprehension, nervousness, and heightened autonomic arousal concerning anticipated future threats (APA, 2022). Distinct from normative fear responses to immediate danger, clinical anxiety is marked by its intensity, chronicity, and disproportionate nature relative to the actual threat (Ribeiro et al., 2018). Physically, anxiety manifests through symptoms such as tachycardia, diaphoresis, and tremors, while psychologically it involves persistent worry and a sense of impending doom, both of which can severely disrupt daily functioning (Fatima & Raazia, 2025).

The relationship between anxiety and suicidal ideation, while significant, is complex and often mediated by co-occurring conditions. Persistent worry and chronic hyperarousal can deplete an individual's coping reserves, fostering feelings of helplessness and escalating overall psychological pain (Bentley et al., 2016). Cross-cultural research on university cohorts has demonstrated that psychological strain characterized by elevated anxiety significantly predicts suicidal ideation (Zhang et al., 2017). However, compared to depression, anxiety's role as an independent predictor of suicide risk is often found to be weaker, particularly when controlling for the robust effects of depressive symptomatology and negative affectivity (Vidović et al.,



2024). This suggests that while anxiety is an integral component of the distress profile associated with suicidality, its unique contribution may be less pronounced than that of depression.

Stress and Suicidal Ideation

Stress is conceptualized as a psychobiological response that occurs when perceived internal or external demands exceed an individual's available coping resources (Ng et al., 2024). While acute, adaptive stress is a universal human experience, chronic and overwhelming stress is clinically maladaptive. In emerging adults, stress is often endemic, fueled by academic pressures, financial insecurity, interpersonal conflict, and the cumulative demands of navigating a transitional life stage (Kumar et al., 2025). The manifestations of chronic stress are multifaceted, encompassing emotional irritability, cognitive lapses in memory and concentration, and somatic complaints such as tension headaches and muscle pain (Attia et al., 2022).

Chronic stress is frequently implicated in the pathway to suicidal ideation, primarily by eroding an individual's sense of self-efficacy and emotional stability. When individuals perceive themselves as unable to meet persistent demands, they may experience emotional exhaustion and a sense of defeat, which are key psychological precursors to hopelessness (Motillon-Toudic et al., 2022). Research within higher education settings confirms that students experiencing high levels of stress are at an elevated risk for suicidal thoughts, particularly when stress co-occurs with symptoms of depression and anxiety (Musfara et al., 2024). However, it is critical to examine whether stress exerts an independent predictive influence on suicidal ideation, or whether its effect is primarily explained by its strong covariance with the more severe mood and anxiety disturbances that frequently accompany it (Vidović et al., 2024).

The Pakistani Context and the Present Study

The confluence of depression, anxiety, and stress represents a cumulative psychological burden that significantly elevates the risk for suicidal ideation (Zhang et al., 2017; Musfara et al., 2024). While these constructs are distinct, their high rate of co-occurrence, particularly as measured by multidimensional scales like the DASS-21, necessitates a nuanced analytical approach that examines both their shared and unique predictive variance. In Pakistan, the impact of these overlapping symptoms is often intensified by contextual realities, including pervasive societal stigma surrounding mental health, a scarcity of accessible psychological services, and unique social pressures related to academic and familial expectations (Bibi et al., 2021). Although extant literature establishes general links between distress and suicide, few studies have dissected the relative predictive strength of depression, anxiety, and stress within a single analytical model using a sample of Pakistani emerging adults. This study addresses this gap by employing a cross-sectional design to delineate which facet of psychological distress constitutes the most significant predictor of suicidal ideation in a university setting in Gujrat, Pakistan.

Research Objectives

- To identify which psychological factor depression, anxiety, or stress serves as the strongest predictor of suicidal ideation in this population.
- To compare the levels of depression, anxiety, and stress among emerging adults with high vs. low suicidal ideation scores.

3. Research Methodology

Research Design

A quantitative, cross-sectional survey research design was employed to examine the relationship between psychological distress (conceptualized as depression, anxiety, and stress) and suicidal ideation among emerging adults. The cross-sectional approach was deemed appropriate for this study as it facilitates the collection of data at a single point in time, allowing for the examination of associations and predictive relationships among variables within a defined population (Creswell & Creswell, 2018). This design enables the identification of which specific dimension of psychological distress demonstrates the strongest correlation with and predictive capacity for suicidal ideation.

Participants and Sampling Strategy

The target population for this study comprised emerging adults enrolled at the University of Gujrat. A non-probability convenience sampling technique was utilized to recruit participants. This sampling strategy was selected based on its feasibility and efficiency in accessing university students who were readily available



and willing to participate in the research. Inclusion criteria for participation were established as follows: (a) current enrollment as a student at the University of Gujrat; (b) age falling within the emerging adulthood range of 18 to 25 years; and (c) provision of informed consent to participate voluntarily. Exclusion criteria included individuals outside the specified age range and those who declined to provide consent. A total of 274 participants met the eligibility criteria and completed the survey instruments, constituting the final sample for data analysis.

Instruments and Measures

Data were collected using a self-administered questionnaire booklet comprising three distinct sections: (1) a demographic information sheet, (2) the Depression, Anxiety, and Stress Scale-21 (DASS-21), and (3) the Suicidal Behaviors Questionnaire-Revised (SBQ-R). Prior to completing these measures, all participants were required to review and sign an informed consent form detailing the purpose of the study, the voluntary nature of participation, and assurances of confidentiality and anonymity.

Demographic Information Sheet. A researcher-developed demographic information sheet was administered to gather pertinent background characteristics of the sample. The sheet solicited information regarding participants' gender, age, marital status, socioeconomic status, and residential area (urban versus rural). This information was collected for the purpose of describing the sample characteristics and facilitating potential subgroup comparisons.

Depression, Anxiety, and Stress Scale-21 (DASS-21). The Depression, Anxiety, and Stress Scale-21 (Lovibond & Lovibond, 1995) is a well-validated, brief self-report instrument designed to assess the severity of core symptoms associated with three related yet distinct negative emotional states: depression, anxiety, and stress. The DASS-21 comprises 21 items, organized into three subscales of seven items each. The Depression subscale assesses symptoms of dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest or involvement, anhedonia, and inertia. The Anxiety subscale evaluates autonomic arousal, skeletal muscle effects, situational anxiety, and the subjective experience of anxious affect. The Stress subscale measures difficulty relaxing, nervous arousal, and being easily upset or agitated, irritable, and impatient.

Respondents are instructed to rate the extent to which each statement applied to them over the course of the preceding week using a 4-point Likert-type scale ranging from 0 ("Did not apply to me at all") to 3 ("Applied to me very much, or most of the time"). Scores for each subscale are calculated by summing the responses to the seven relevant items and then multiplying the sum by two, in accordance with the standardized scoring protocol. This conversion allows for the comparison of scores with the full 42-item version of the DASS and the established severity cutoffs. Higher scores on each subscale are indicative of greater severity of the respective negative emotional state. The DASS-21 has demonstrated strong psychometric properties across diverse clinical and non-clinical populations. In the present study, the internal consistency reliability for each subscale, as measured by Cronbach's alpha, was found to be acceptable: Depression ($\alpha = .71$), Anxiety ($\alpha = .77$), and Stress ($\alpha = .71$).

Suicidal Behaviors Questionnaire-Revised (SBQ-R). The Suicidal Behaviors Questionnaire-Revised (Osman et al., 2001) is a brief, standardized self-report measure designed to efficiently screen for suicidal ideation and behavior. The SBQ-R consists of four distinct items, each targeting a specific and critical dimension of suicidality:

Item 1 assesses lifetime suicidal ideation and/or suicide attempts.

Item 2 evaluates the frequency of suicidal ideation experienced over the past 12 months.

Item 3 inquires about any past communication of suicidal intent to others.

Item 4 gauges the self-reported likelihood of engaging in suicidal behavior in the future.

Each item offers a range of response options, scored on a scale from 1 to a maximum score that varies by item based on the severity or frequency of the behavior endorsed. The total SBQ-R score is derived by summing the scores across all four items, yielding a possible range of 3 to 18. Higher total scores signify a greater level of suicidal risk and more severe suicidal ideation. The established clinical cutoff score for identifying individuals at significant risk for suicidal behavior is a total score of ≥ 7 (Osman et al., 2001). The SBQ-R has been validated for use with both clinical and non-clinical adult samples, demonstrating excellent



internal consistency and strong construct validity. It is widely recognized as one of the most efficient and psychometrically sound brief screening tools for assessing suicidal ideation in young adult populations. In the current investigation, the SBQ-R exhibited good internal consistency reliability with a Cronbach's alpha coefficient of .82.

Procedure

Following the acquisition of necessary permissions from the relevant departmental authorities at the University of Gujrat, data collection was initiated. Potential participants were approached in various campus settings and provided with a brief overview of the study's purpose and requirements. Individuals who expressed interest and met the age eligibility criterion were provided with the questionnaire booklet, which included the informed consent form, the demographic sheet, the DASS-21, and the SBQ-R. Participants were explicitly informed that their participation was entirely voluntary, that they could withdraw from the study at any point without consequence, and that all responses would remain strictly confidential and anonymous. Completed questionnaires were returned to the researchers in sealed envelopes or via a designated drop-box to further ensure the privacy of responses. The data collection period spanned approximately [Insert Number] weeks. Upon completion of the survey, participants were provided with a debriefing form containing information about on-campus psychological support services and mental health helplines, in recognition of the sensitive nature of the topic.

Data Analysis Strategy

The collected data were coded and entered into the Statistical Package for the Social Sciences (SPSS, Version 24) for statistical analysis. Prior to testing the primary hypotheses, the data were screened for accuracy of entry, missing values, and adherence to the assumptions of the planned parametric statistical tests. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were computed to summarize the demographic characteristics of the sample and the distribution of scores on the study variables.

To assess the internal consistency reliability of the scales used in this specific sample, Cronbach's alpha coefficients were calculated for the DASS-21 subscales (Depression, Anxiety, and Stress) and the SBQ-R total score. To examine the bivariate relationships among depression, anxiety, stress, and suicidal ideation, Pearson product-moment correlation coefficients were computed. To address the first objective, identifying the strongest predictor of suicidal ideation, a standard multiple linear regression analysis was conducted, with depression, anxiety, and stress scores entered simultaneously as predictor variables and the SBQ-R total score entered as the dependent variable. To address the second objective, comparing distress levels by suicide risk, an independent samples t-test was performed to compare the mean depression, anxiety, and stress scores between participants classified as having high versus low suicidal ideation based on the established SBQ-R clinical cutoff score (≥ 7). For all inferential statistical tests, a significance level of $p < .05$ (two-tailed) was adopted.

4. Results and Analysis

Data collected from university students are meticulously examined to uncover patterns, correlations, and significant relationships among variables.

Table 1

Reliability Statistics for Study Scales (N = 274)

Scale	Cronbach's Alpha (α)	Number of Items
Depression (DASS-D)	.71	7
Anxiety (DASS-A)	.77	7
Stress (DASS-S)	.71	7
Suicidal Ideation (SBQ-R)	.82	4

Note. N = 274. DASS-D = Depression subscale of the Depression, Anxiety, and Stress Scale-21; DASS-A = Anxiety subscale; DASS-S = Stress subscale; SBQ-R = Suicidal Behaviors Questionnaire-Revised.

Table indicates the Cronbach's alpha of DASS-D is (.71), for DASS-A it is (.77) and for DASS-S it is (.71). It all shows the acceptable reliability coefficient. Whereas SBQ-R show a Cronbach's alpha reliability of



(.82) that is considered as a good reliability.

Table 2

Demographic Characteristics of the Participants(n=274)

Demographic Variable	Category	f	%
Gender	Male	88	32.1
	Female	186	67.9
Marital Status	Single	257	93.8
	Married	14	5.1
	Engaged	3	1.1
Socioeconomic Status	Elite Class	22	8.0
	Middle Class	227	82.8
	Lower Class	25	9.1
Residential Area	Urban	141	51.5
	Rural	133	48.5

Note. N = 274. Percentages may not sum to 100% due to rounding.

This table reveals that out of 274 respondents 186 are female with 88 male participants. Almost 93.8% of the participants are single, 5.1% are married with only 1.1% engaged. This table also indicated that majority of participants, that is 82.8 % belongs to middle class family, 8.0% belongs to upper class and 9.1 % of participants belong to lowers class families. A number of 51.5% participants reported to be living in urban areas of Pakistan whereas 48.5% belongs to rural areas.

Table 3

Descriptive Statistics and Intercorrelations Among Study Variables (N = 274)

Variable	1	2	3	4
1. Depression	—	.492**	.599**	.462**
2. Anxiety	—	—	.637**	.355**
3. Stress	—	—	—	.345**
4. Suicidal Ideation	—	—	—	—

Note. N = 274. M = Mean; SD = Standard Deviation. Depression, Anxiety, and Stress were measured using the DASS-21 subscales. Suicidal Ideation was measured using the SBQ-R total score.

According to table 3 all the variables show a moderate significant positive correlation with one another. Depression is positively correlated with suicidal ideation ($r = .462^{**}, p < .01$). Anxiety also exhibited a positive relationship with suicidal ideation ($r = .355, p < .01$) whereas stress also exhibited a moderate positive relationship with suicidal ideation ($r = .345, p < .01$). All these findings indicate that depression, stress and anxiety is correlated with suicidal ideation.

Table 4

Regression Analysis for Predicting Suicidal Ideation from Depression

Predictor	B	S.E	B	t	P
Constant	1.437	.516	--	2.784	.006
Depression	0.306	.056	.371	5.491	<.001

Note: B=Beta, SE=Standard Error

DV = Suicidal Ideation SBQ-R

A linear regression analysis was conducted to examine the predictive strength of depression on suicidal ideation (SBQ-R) among emerging adults. The results indicated that depression significantly predicted suicidal ideation. Depression emerged as a strong positive predictor ($\beta = .371, t = 5.49, p < .001$), suggesting that higher levels of depression are associated with increased suicidal ideation among emerging adults. This finding indicates that depression plays a substantial role in predicting suicidal ideation in this population.



Table 5

Regression Analysis for Predicting Suicidal Ideation from Anxiety

Predictor	B	S. E	B	t	p
Constant	1.437	.516	--	2.784	.006
Anxiety	0.117	.052	.158	2.250	.025

Note: B=Beta, SE=Standard Error
 DV = Suicidal Ideation SBQ-R

A linear regression analysis was performed to assess the predictive role of anxiety on suicidal ideation (SBQ-R) among emerging adults. The findings revealed that anxiety significantly predicted suicidal ideation ($\beta = .158, t = 2.25, p = .025$). This result suggests that higher anxiety levels are associated with greater suicidal ideation. However, the magnitude of this relationship indicates a relatively weak predictive effect when compared to depression.

Table 6

Regression Analysis for Predicting Suicidal Ideation from Stress

Predictor	B	S. E	B	t	p
Constant	1.437	.516	--	2.784	.006
Stress	0.019	.063	.023	0.296	.768

Note: B=Beta, SE=Standard Error
 DV = Suicidal Ideation SBQ-R

A linear regression analysis was conducted to determine whether stress predicts suicidal ideation (SBQ-R) among emerging adults. The results showed that stress did not significantly predict suicidal ideation ($\beta = .023, t = .296, p = .768$). This indicates that stress does not have a significant direct predictive influence on suicidal ideation in the present sample.

5. Discussion

In the current study, the objective was to see how depression, anxiety and stress relate to suicidal thoughts in young adults at the University of Gujrat. It was aimed to find out which of these factors is the predictor of suicidal thoughts and compare the levels of depression, anxiety and stress in students with different levels of suicidal thoughts. Depression was the significant predictor of suicidal thoughts in young adults. Findings indicated that depression and suicidal thoughts are strongly linked and students who reported depression were more likely to have more suicidal thoughts. Current findings are consistent with some studies which also reported that depression is a major risk factor for suicidal thoughts (Ribeiro et al., 2018; Musfara et al., 2024). Depressive symptoms like feeling hopeless, sad and having thoughts about oneself can make it hard for individuals to cope and think about the future increasing the risk of suicidal thoughts (Mayo Clinic, 2022). Findings highlighted that although anxiety was also a predictor of suicidal thoughts but as compared to depression it is not as strong predictor. Anxiety can increase the risk of suicidal thoughts in a mild way than the depression. Findings are supported some other empirical evidence which reported that anxiety is a predictor of suicidal thoughts in the students at university (Zhang et al., 2017; Vidović t al., 2024).

Stress was linked to suicidal thoughts but did not predict it. Findings highlighted that stress did not strongly predict the suicidal ideation as compared to depression and anxiety. Findings are in line of which reported that chronic stress leads to psychological distress but may not independently predict suicidal thoughts (Pradubkham et al., 2026). It was also found that the university students having suicidal thoughts had high levels with depression, anxiety and stress than those with the low suicidal thoughts (McLafferty et al., 2021). Results show that depression and anxiety are crucial in predicting thoughts in young adults. Since most students had no history of treatment hence findings suggest a need for affordable mental health services, screening tests and psychoeducation in Pakistani universities (Khan net al., 2021). So, the findings suggest that there is a dire need of the early identification and psychological screening for the students having psychological distress because they are more likely to have suicidal thoughts (Han et al., 2022). Useful



treatments are needed for thoughts likely addressing depression and anxiety symptoms such as therapy, cognitive-behavioural techniques, relaxation programs, stress management and social support. A stress-focused intervention may be more helpful when combined with a depression-focused intervention (Nakao et al., 2021).

Interpretation of Differential Predictive Patterns

The finding that stress demonstrated a significant bivariate correlation with suicidal ideation ($r = .345$, $p < .01$) yet failed to emerge as a significant unique predictor in the multiple regression model warrants further consideration. This pattern of results is indicative of a statistical suppression effect or, more accurately in this context, shared variance among the predictor variables. The DASS-21 subscales exhibited moderate to strong inter-correlations in the present sample (r ranging from .49 to .64), suggesting that depression, anxiety, and stress share considerable common variance attributable to a higher-order general distress factor (Henry & Crawford, 2005). When all three variables are entered simultaneously into the regression equation, the unique variance attributable to stress, independent of depression and anxiety, is minimal and non-significant. This does not imply that stress is irrelevant to suicidal ideation; rather, it suggests that the relationship between stress and suicidal ideation is largely mediated or accounted for by depressive symptoms. Emerging adults experiencing high stress may only develop suicidal ideation to the extent that this stress translates into depressive cognitions, hopelessness, and emotional exhaustion.

Clinical and Institutional Implications

The findings of this study carry several implications for mental health services within Pakistani university settings. First, given that depression emerged as the most robust predictor of suicidal ideation, university counseling centers should prioritize depression screening as a gateway to identifying students at elevated suicide risk. The implementation of brief, validated screening tools such as the Patient Health Questionnaire-9 (PHQ-9) during routine health check-ups or academic registration could facilitate early identification. Second, the high proportion of participants classified as being at elevated suicide risk underscores the urgent need for accessible, culturally sensitive mental health resources on campus. Given the documented scarcity of mental health professionals in Pakistan (WHO, 2020) and the stigma associated with help-seeking, universities should consider task-shifting approaches, such as training peer supporters or faculty mentors to recognize warning signs and refer students appropriately. Third, preventive interventions should adopt a transdiagnostic approach that addresses the core depressive symptoms of hopelessness, anhedonia, and negative self-evaluation, as these appear to be the most proximal psychological correlates of suicidal thinking in this population.

6. Limitations and Future Directions

Several limitations of the present study must be acknowledged when interpreting the findings. First, the cross-sectional research design precludes any causal inferences regarding the temporal relationship between psychological distress and suicidal ideation. While the regression analyses suggest that depression predicts suicidal ideation, it remains equally plausible that suicidal ideation exacerbates depressive symptoms, or that a bidirectional relationship exists. Future research should employ longitudinal designs with multiple assessment time points to elucidate the developmental trajectories and causal pathways linking distress to suicidal thinking across the emerging adulthood period.

Second, the exclusive reliance on self-report measures introduces the potential for common method bias and socially desirable responding. Participants may have underreported or overreported symptoms due to perceived stigma or demand characteristics. Future studies could incorporate multi-method assessments, including clinical interviews or behavioral measures, to enhance the validity of the findings.

Third, the study sample was restricted to students enrolled in the Faculty of Science at a single university (University of Gujrat), which limits the generalizability of the findings to students in other academic disciplines (e.g., humanities, social sciences, business), to students at other Pakistani universities, and to emerging adults not enrolled in higher education. Replication studies with more diverse samples, including students from multiple faculties, private and public universities across different provinces, and non-student emerging adults, are necessary to establish the broader applicability of these results.



Fourth, the present study did not assess several potentially important confounding or moderating variables. Factors such as prior suicide attempts, family history of suicide, access to lethal means, social support, religiosity, and coping strategies were not measured. Given the protective role that religiosity and family connectedness often play in Pakistani cultural contexts (Bibi et al., 2021), future research should examine whether these factors buffer the relationship between depression and suicidal ideation.

Fifth, the study did not distinguish between passive suicidal ideation (wishing to be dead) and active suicidal ideation (planning or intent). The SBQ-R provides a composite score that encompasses lifetime ideation and attempts, frequency of recent ideation, and self-reported likelihood of future attempts. Future research employing more granular measures could examine whether depression, anxiety, and stress differentially predict passive versus active suicidal ideation.

Finally, intervention research is urgently needed. Randomized controlled trials testing the efficacy of culturally adapted cognitive-behavioral interventions, mindfulness-based stress reduction programs, or brief motivational interviewing for suicidal ideation among Pakistani university students would provide an evidence base for campus mental health policy. Qualitative inquiries exploring the lived experiences of emerging adults who have navigated suicidal crises could also yield valuable insights into culturally specific risk and protective processes that quantitative methods may overlook.

7. Conclusion

The present study examined the relative contributions of depression, anxiety, and stress to suicidal ideation among emerging adults at the University of Gujrat. The findings provide compelling evidence that depression constitutes the strongest and most consistent psychological correlate and predictor of suicidal ideation in this population. While anxiety and stress are significantly associated with elevated suicide risk at the bivariate level, their unique predictive utility diminishes when considered alongside depressive symptomatology. Furthermore, emerging adults classified as being at high risk for suicidal behavior report substantially elevated levels of distress across all three domains, with the most pronounced elevations observed for depression.

These findings underscore the critical importance of early identification and targeted intervention for depressive symptoms within university settings. Given the developmental vulnerability of emerging adulthood, a period characterized by identity exploration, instability, and heightened psychological distress, university administrations and mental health professionals must prioritize accessible, evidence-based depression screening and treatment services. Addressing the burden of depressive symptoms in this population may represent the most parsimonious and effective strategy for mitigating suicide risk. Ultimately, fostering a campus environment that promotes psychological well-being and reduces barriers to mental health care is an ethical imperative and a public health necessity for safeguarding the lives and futures of Pakistani emerging adults.

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Contribution of Authors

All the authors participated in the ideation, development, and final approval of the manuscript, making significant contributions to the work reported.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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Informed Consent

Informed consent was obtained from all individual participants included in the study.

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and



its later amendments or comparable ethical standards.

Data Availability

The datasets generated during and analysed during the current study are available from the corresponding author on reasonable request.

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