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IMPACT OF FINANCIAL STRESS ON PSYCHOLOGICAL WELL BEING AND ACADEMIC PERFORMANCE AMONG THE UNIVERSITY STUDENTS OF GILGIT BALTISTAN

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Abstract

Introduction: *Financial stress is increasingly being considered a significant factor of concern among university students since it impacts emotional stability, daily functioning, and the capacity to maintain academic activity in economically limited environments like Gilgit-Baltistan.*

Aim: *The purpose of the scoping review was to map evidence available regarding the effects of financial stress on psychological well-being and academic achievements among university students, in particular, Gilgit-Baltistan.*

Methodology: *A scoping review was undertaken as per the advice of Arksey and O'Malley and PRISMA-ScR. Major databases and regional sources were searched. The 16 major empirical studies which passed the pre-defined PICOS-based criteria were summarized and charted in a narrative way.*

Findings: *Financial stress was reportedly and consistently related to increased anxiety, depression, distress, poor sleep, and a decrease in well-being across the included studies. A number of studies also associated financial strain with poorer GPA, failure in examinations, decrease in academic activity, and dropout possibility. These were however mostly cross-sectional and located beyond Gilgit-Baltistan. No research was done specifically on university students in Gilgit-Baltistan. This highlights a clear regional gap in the current literature.*

Conclusion: *Financial stress seems to be a relevant predictor of student mental health and student achievement. Financial support must be combined with counseling and student-retention programs in universities in Gilgit-Baltistan, and future research in the region will need to be more direct and provide context-specific evidence.*

INTRODUCTION

University students are at the stage of development where educational ambitions, identity formation, social transition, and employability intersect. Financial stress is not a tangential nuisance in that environment but a predicament that may condition the way students think, feel, and also academic performance.

Financial stress is associated with anxiety, tension or feeling insecure due to tuition fees, housing, transportation, food prices, family needs, debt or not knowing whether to continue studying. According to long-standing student well-being studies, university life has left students vulnerable to a variety of stressors, but the strain of money has

recently emerged as the most significant due to its direct impact on both day-to-day operation and continuity of studies (Andrews and Wilding, 2004; Jessop et al., 2005; Ross et al., 2006).

Its significance is even more apparent in its interconnection with psychological well-being. Psychological well being is not just the absence of sickness, but emotional stability, perceived coping capacity, social functioning, and sense of control. These areas are susceptible among university students since they have to adapt heavily in academic competitiveness, evolving social networks, and future incompressibleness. With the inclusion of financial pressure, students tend to complain of constant anxiety, insomnia, family sacrifice guilt, lack of focus, and decreased confidence in their financial capacity to not only proceed with their education. Repeatedly, empirical research demonstrates that financially strained students are more susceptible to reporting anxiety, depression, and stress, which is an indication that financial insecurity is a chronic psychosocial liability, not a mere budgeting issue (Bayram and Bilgel, 2008; Beiter et al., 2015; Adams et al., 2016; Moore et al., 2021).

This connection is not that of a casual association. Monetary difficulties may pose eternal anticipatory anxiety over the payment of future charges, purchase of learning supplies, or ensuring continuation. It is also capable of increasing shame and social comparison in which peers who vary in terms of visible spending power and involvement in campus life are involved. Moreover, students under financial stress might work more hours or drive more, which means that they will not have enough time to sleep, study, and rest. Jessop et al. (2005) discovered that financial concern had prognostic value of poorer mental and physical wellbeing whereas Adams et al. (2016) revealed that perceived stress mediated the association between financial strain and psychological symptoms. Longitudinal evidence has also added ground to believe that financial challenges can be the precursor of the decline in mental health and not an additional aspect (Elliott et al., 2017).

The second significant area challenged by the impact of financial stress is academic performance. It is usually manifested in grades, GPA, exam success, retention, on time progression, and interaction with studies. The financially constrained student can skip classes, restrict access to books or online materials or simply redirect their energy towards earning money and survival issues. According to Ross et al. (2006), students who were concerned with money had a higher level of debts and poor results in degree tests. Likewise, B 0 e et al. (2021) discovered that the students with financial challenges exhibited a higher number of exam failures as well as poor health conditions compared to their peers. These results are important since academic downfall may become a source of distress on its own, and it becomes a vicious circle with financial stress degrading performance and weak performance making it more susceptible.

Such a relationship between the degree of psychological well-being and an academic performance is particularly applicable in a higher education setting since the two variables are mutually supportive. Mental health may affect concentration, memory, motivation, and self-regulation, which are necessary to succeed in a university. Zada et al. (2021) was able to find in Pakistan that mental health issues had a negative influence on the academic performance of university students, and Asif et al. (2020) reported very high rates of depression, anxiety, and stress among university students in Sialkot. The more recent publications in Pakistan have also indicated that high levels of stress correlate with poorer academic performance among the undergraduate students, even with first-year students who experience pressures of transition (Javaid et al., 2024). Taken together, these studies demonstrate that financial strains are not the sole cause of academic or psychological distress, but it certainly bolsters the bigger picture in that strains that are caused by stress in the university life has academic implications, which can be measured and that the aspect of socioeconomic instability cannot be taken as a background factor.

Gilgit-Baltistan needs to be treated as an individual case and not sucked into generic Pakistani student literature. Gilgit-Baltistan is geographically mountainous and educationally

unequal as well as socioeconomically limited in manners that could amplify the practicality of the financial strain of university students. Expenses that might appear affordable in urban areas might be more disruptive in less urban areas with lower household incomes, higher transport costs or variability, and with educational opportunities being more concentrated. The developing evidence in Gilgit-Baltistan demonstrates that academic stress, level of socioeconomic status, friend support, and family background factors have a significantly strong correlation with the mental health of studies, which reveals that the situations related to mental health are already influenced by material and social inequalities (Quratulain et al., 2024). This is important since students in higher education in these types of environments not only face the financial pressure as an indicator of personal disadvantage, but also as an indicator of broader family susceptibility and geographical poverty.

The institutional support in Gilgit-Baltistan also seems to be ineffective and this is what further reasons the investigation of this subject. Gohar et al. (2025) stated that universities of the three branches of the public face difficulties in the provision of effective guidance and counseling services that can be considered a topical discovery since financial stress does not always act independently and often needs formal assistance before it becomes a factor affecting the well-being or performance. On a broader Pakistani context, Asim et al. (2025) observed that medical students reported that financial stress would influence academic performance, career decisions, health behaviors, and general well-being. Though medical students are not the same as the overall population of the university located in Gilgit-Baltistan, the research demonstrates that, on a nationwide level, financial stress among the students is seen as a multidimensional phenomenon that is not confined to budget constraints but is spread to the mental well-being and choice of education.

It is against this background that a scoping review on the effect of financial stress on student psychological well-being and academic performance of university students of Gilgit-Baltistan is justified. It may systematize the existing knowledge regarding the relationships between financial stress, mental health, and academic achievements; determine the extent to which the existing materials concern Gilgit-Baltistan and not are borrowed by much different settings; and illustrate gaps in research, particularly the lack of region-related research and emphasis on policy or support actions. It, therefore, requires a rigorous review to not just summarize literature, but to find out whether the issue of financial stress should be considered a core higher education and mental health aspect to be addressed in Gilgit-Baltistan.

Materials and Methods

This scoping review was conducted in an attempt to map the scope, nature and features of the literature available on the effects of financial stress on psychological well being and academic performance on university students of Gilgit-Baltistan. The scoping review method was chosen as the topic covers several ideas, such as financial hardship, mental health, and educational outcomes, and is probably to contain quantitative, qualitative, and mixed-method evidence instead of a unified body of literature. The scoping review framework outlined by Arksey and O'Malley, later narrowed by Levac et al. and more recently updated by Joanna Briggs Institute guidance informed the review procedure. The PRISMA Extension on Scoping Reviews was used to report to enhance transparency during the identification of the studies, screening, and selection, as well as synthesis to undertake the proposed research.

Study Design

The review followed a structured scoping design as opposed to a standard systematic review or meta-analysis. This is methodologically correct since the aim of the current study was not to estimate a pooled effect size but to determine how financial stress has been conceptualized, what outcomes have been investigated, which groups of students have been investigated and where research gaps exist, specifically among Gilgit-Baltistan. Despite the fact that scoping reviews tend to utilize the Population–Concept–Context approach, the current study utilized PICOS due to the need to tighten the topic of research and eligibility criteria

since the topic the user is interested in combines a definite population, an exposure of interest, quantifiable outcomes, and a variety of eligible research designs. This was pragmatism and not dogma.

Study Question

The central review question was: *What is known from the existing literature about the impact of financial stress on psychological well-being and academic performance among university students of Gilgit-Baltistan?* To make the question analytically useful, it was further divided into four subquestions. First, how has financial stress been defined and measured among university students? Second, what evidence links financial stress with psychological outcomes such as stress, anxiety, depression, emotional distress, life satisfaction, or general mental well-being? Third, what evidence links financial stress with academic outcomes such as grade point average, examination performance, concentration, retention, attendance, engagement, or dropout risk? Fourth, to what extent does the available evidence directly represent Gilgit-Baltistan, and where does it rely on broader Pakistani or international student samples? These questions reflect the scoping review objective of mapping evidence breadth, not only summarizing findings.

Selection Criteria

Selection criteria were developed before screening to maintain consistency and reduce arbitrary inclusion. Studies were considered eligible when they addressed higher education students and examined financial stress, financial hardship, economic strain, tuition burden, debt-related strain, or comparable indicators of financial pressure, together with outcomes relating to psychological well-being or academic performance. Because direct literature from Gilgit-Baltistan was expected to be limited, the selection strategy was intentionally layered. Studies conducted specifically in Gilgit-Baltistan were prioritized. However, studies from Pakistan more broadly were also retained when they contributed relevant contextual evidence on university students and the same conceptual relationship. International studies were included only where they helped establish broader conceptual and methodological patterns that could inform interpretation of the regional evidence base. This approach is consistent with scoping review logic, which emphasizes mapping heterogeneous evidence while making contextual boundaries explicit.

Inclusion Criteria

The criteria of inclusion involved empirical research studies, publications in peer-reviewed journals, university repositories, theses, dissertations, and gray literature sealants. To be included in eligible studies, a study needed to include university, college, or other higher education students; a central exposure or predictor of financial stress or another economic relevant hardship and at least one outcome measure about psychological well-being or academic success. All the studies which were eligible were quantitative cross-sectional, longitudinal, cohort, case-control, qualitative, and mixed-method since the review needed both conceptual and methodological diversity. Commonly published studies in the English language between January 2000 and March 2026 were identified because this was the time frame that reflected the current state of higher education, increased tuition-related stress and surged study on student mental health. In the case of a mixed-student population in a study, the study was only considered in cases where the results of the participants at university level could be separated out.

Exclusion Criteria

The studies were filtered out as they included studies concentrating on school students, non-student adult populations, working professionals, and general household financial strains not associated with higher education. Other articles, such as editorials, commentaries, letters, narrative opinion, and abstracts of conferences that lacked the full data, and publications that were published duplicate were also removed. These were removed since the participant studies that did not incorporate any form of financial stress factor determined the variables that were analyzed in

which the main question of the review was not included. Articles that spoke of socioeconomic status as a background demographic variable and not as an analytic variable were also excluded. Non-English documentation was excluded due to feasibility and uniformity of screening and synthesis. This exclusion plan was aimed at ensuring that the review would not fall into a genomic student stress review, but instead would maintain a focus on the particular financial stress pathway.

Search Strategy

A comprehensive search was conducted across PubMed, Scopus, Web of Science, PsycINFO, ERIC, and Google Scholar. To improve coverage of regional evidence, additional searching was conducted in Higher Education Commission repositories, Pakistani university digital libraries, and relevant local journals. Search terms were built around four concept clusters: financial stress, psychological well-being, academic performance, and university students. These terms were combined using Boolean operators. A typical search string was structured as follows: ("financial stress" OR "financial hardship" OR "economic strain" OR "financial burden" OR debt) AND ("psychological well-being" OR mental health OR depression OR anxiety OR stress) AND ("academic performance" OR academic achievement OR GPA OR grades OR retention) AND ("university students" OR college students OR higher education) AND ("Gilgit-Baltistan" OR Pakistan). Hand-searching of reference lists was also carried out to identify additional studies missed through database indexing. All retrieved records were imported into reference-management software, duplicates were removed, and the remaining citations were screened first by title and abstract and then by full-text review. The search, screening, and reporting flow were structured in line with PRISMA-ScR expectations.

Table no. 1: PICOS framework for research question of present study

PICOS element	Description for the present study
Population (P)	University and other higher education students, with primary interest in students from Gilgit-Baltistan and secondary contextual evidence from Pakistan
Intervention/Exposure (I)	Financial stress, financial hardship, economic strain, tuition burden, debt stress, or inadequate financial resources
Comparison (C)	Students with lower or no reported financial stress, alternative exposure levels, or studies without a formal comparison group where association could still be examined
Outcomes (O)	Psychological well-being outcomes such as stress, anxiety, depression, distress, coping, and life satisfaction; academic outcomes such as GPA, grades, academic engagement, attendance, retention, and dropout risk

Study design (S)	Quantitative, qualitative, mixed-method, cross-sectional, longitudinal, cohort, case-control, and relevant intervention studies

The PICOS framework was used here as an operational device to structure the research question and eligibility decisions, even though PCC is more typical in scoping reviews. Because the present topic contains a definable exposure and outcome pathway, PICOS provided sharper boundaries for screening and data charting.

Data Extraction

Information was extracted into a standardized charting form that was designed specially to be used in this review. To include the study, the subsequent information was noted: author, publication year, country or region, settings of the study, sample size, characteristics of the participants, study design, definition and measurement of financial stress, psychological well being measures, academic performance measures, key findings, and other major methodological notes. The extraction form also indicated whether the study directly reflected Gilgit-Baltistan, broader Pakistan, or a different context since distance between contexts was at the core of the interpreting evidence. Unified representation of data is advised in the guidelines on scoping review since it enables easy comparison of heterogeneous studies and allows the production of storytelling about the patterns and gaps.

Study Outcomes

Psychological well-being and academic performance were the main outcomes of interest. The outcome psychological well-being variables encompassed depression, anxiety, stress, emotional distress, subjective mental health, coping difficulty, and similar variables reported by the studies chosen. The academic outcomes were grade point average, test marks, participation in studies, attendance, satisfaction with academic studies, retention, and dropout indicators. The mediating or moderating factors that were considered as dependent secondary outcomes were social support, employment during the course of study, scholarship provision, gender, living conditions, and economic burden on family. The selection of such outcomes was determined by the fact that the review was not only to determine the existence of a relationship, but to appreciate the mechanisms and circumstances in which financial stress can affect student functioning.

(a) Quality Assessment

In not all scoping reviews, formal quality assessment is required, as its primary role is evidence mapping and not pooled causal inference. In this current research, however, the quality of the methods has been evaluated to enable the reader to have a better understanding of the power and weakness of the evidence available. Due to the fact that the review was supposed to encompass qualitative, quantitative, and mixed-method studies, the Mixed Methods Appraisal Tool was chosen as it allows appraisal of various empirical study types under one type. Individual studies were checked against the standards applicable to its design and the appraisal was applied to guide interpretation of results as opposed to throwing away eligible studies. This was significant since omitting weaker studies included in an evidence of sparse topic (regionally) may hide the same gaps the review was intended to detect.

(b) Risk of Bias Assessment

Risk of bias was evaluated independently of quality of overall methodology to draw a distinction between flaws within study design, conduct and reporting, and more general problems of rigor. Risk of bias was assessed based on RoB 2 where randomized studies were found. Where non randomized intervention studies have been discovered, ROBINS-I was used. The review also found the domain-specific threat to be notably pertinent to the student financial stress research

since this theme is likely to be occupied by the observational and cross-sectional studies over trials, such as selection bias, poor control over confounding, self-reporting bias, missing data and selective reporting. In the case of qualitative research, the problem of reflexivity, credibility, and transparency were regarded in parallel with the methodological appraisal instead of being pushed to the trial-style bias template. Just as in quality assessment, risk-of-bias assessment was an interpretative, but not exclusionary, role, and the review could help the literature to be mapped without biased representations, yet indicating where conclusions should be approached with caution.

Results

After database and manual searching, all retrieved records were imported into a reference manager and screened in stages. Duplicate records were removed first, followed by title and abstract screening, after which potentially relevant articles underwent full-text assessment. Studies were excluded if they were duplicates, systematic reviews or meta-analyses, non-empirical papers, non-student studies, or did not examine financial stress in relation to psychological well-being or academic performance. Finally, 16 primary empirical studies met the predefined eligibility criteria and were included in the review. Because the exact numbers of initially retrieved, duplicate, and excluded records were not recorded in the previous screening steps, only the final inclusion count can be reported with certainty from the current study set.

Table: Characteristics of included studies (Studies 1–8)

Study	Country / region and setting	Sample size and participant characteristics	Study design	Definition / measurement of financial stress	Psychological well-being measures	Academic performance measures	Key findings	Major methodological notes / contextual relevance
Joo et al. (2008)	United States; one large public university in the southwest	N = 540; mean age 19.4 years; 55.3% female; almost 40% freshmen; all nine colleges represented	Quantitative cross-sectional web survey	Self-reported financial satisfaction, financial stress, debt worry, subjective financial knowledge, and whether financial issues interfered with school	Self-esteem included as a psychosocial variable	Reduced course load due to debt; dropped out / considered leaving for financial reasons	Financially strained students were more likely to reduce course load or drop out; financial stress and debt worry were salient predictors of poorer academic continuation	Strong for financial strain and retention-related outcomes, but academic outcome is persistence, not GPA; single-institution U.S. sample

Adams et al. (2016)	United States; Roosevelt University / undergraduate sample in Chicago context	N = 157 undergraduate students; data collected Dec 2013–Mar 2014	Quantitative cross-sectional online survey	Self-reported financial strain; modeled with perceived stress as mediator	Psychological symptomology; perceived stress	Academic and social integration (not GPA)	Perceived stress mediated the relationship between financial strain and both psychological symptoms and academic/social integration	Good mechanism paper, but academic outcome is integration rather than direct performance metric
Richardson et al. (2017)	United Kingdom; national sample of British undergraduates	N = 454 first-year British undergraduates; up to four time points across just over one year; 77.9% female; mean age 19.9 years	Quantitative longitudinal prospective cohort	Index of Financial Stress (IFS), views of student loan, consideration of abandoning course for financial reasons, other financial variables	Anxiety (GAD-7), depression (CES-D), stress (PSS), global mental health, alcohol dependence	No direct GPA; academic relevance through considering abandoning studies / not coming to university for financial reasons	Financial difficulties predicted greater depression and stress cross-sectionally and poorer anxiety, global mental health, and alcohol dependence over time; findings suggested a possible vicious cycle	One of the strongest designs in the set; strong mental-health evidence, weaker direct academic-performance measurement
Iqbal et al. (2022)	Pakistan; Lahore and Bahawalpur	N = 259 students; purposive convenience sample; reported age range 10–19 years	Quantitative cross-sectional analytical study with mediation analysis	Financial Stress Scale designed for undergraduate students; 22-item scale	Positivity Scale; family conflict via Brief Family Relationship Scale	Academic achievement measured by grades in school, college, and university	Financial stress had a significant negative relationship with positivity and academic achievement; family conflict partially mediated these associations	Pakistan-relevant, but the unusually young age range and mixed educational framing reduce direct fit to university-only populations

Peltz et al. (2021)	United States; multi-site study in Upstate New York	N = 792 undergraduates; mean age 20.1 years	Quantitative cross-sectional self-report online study	Financial strain conceptualized as perceived economic stress / lack of financial support; also examined family SES / family financial situation as moderators	Sleep disturbance and depressive symptoms (PHQ-7)	No direct academic performance measure	Greater work hours predicted poorer sleep, which predicted more depressive symptoms; indirect effects were strongest among students with more financial strain / lower SES	Useful for mechanism (financial strain → work/sleep burden → mental health), but not for direct academic outcomes
Leung et al. (2021)	United States; large public Midwestern university	N = 793 college students; mean age 22.9 years; ~50% female; 73% undergraduates	Quantitative cross-sectional survey	Financial insecurity assessed alongside food and housing insecurity using validated instruments; cumulative basic-needs insecurity score created	Anxiety and depression via PHQ-4; general health status	Cumulative GPA from academic records (or self-report if record linkage unavailable)	Students with all three insecurities had markedly higher odds of anxiety/depression and lower GPA than fully secure students	Strong because it links insecurity to both mental health and GPA, but exposure is broader than financial stress alone
Bøe et al. (2021)	Norway; national SHoT 2018 student survey	N = 50,054 full-time students aged 18–35; 69.1% women	Quantitative national cross-sectional survey	Work status, income, and experience of financial difficulties	Mental health problems via HSCL-25; somatic complaints via SSS-8; self-harm and suicide attempts	Ever failed exams; number of failed exams	Students often experiencing financial difficulties reported more depression, anxiety, somatic complaints, self-harm, suicide attempts, and more exam failures	Very strong sample size and direct academic indicator, but still cross-sectional

Moore et al. (2021)	United States; large private urban university	N = 30 students in 4 focus groups; majority female; mix of undergraduate and graduate students; majority Asian and White	Qualitative focus-group study	Broadly defined as students' subjective experience of worrying about paying for needed or wanted things	Well-being explored qualitatively through lived experiences of stress, social life, belonging, and emotional burden	Academic success / study challenges discussed qualitatively	Students described financial stress as harming academic studies and social lives and as affecting belonging within the university community	Valuable for mechanism and lived experience; single institution and no standardized scales

Table: Characteristics of included studies (Studies 9–16)

Study	Country / region and setting	Sample size and participant characteristics	Study design	Definition / measurement of financial stress	Psychological well-being measures	Academic performance measures	Key findings	Major methodological notes / contextual relevance
Lawley et al. (2025)	United States; university students during COVID-19 pandemic	N = 485; majority female and majority White; data collected May 2020–Mar 2021	Quantitative cross-sectional online survey	Self-reported COVID-19-related financial strain	Stress, depression, anxiety, loneliness, social support, subjective well-being, physical symptoms, sleep latency, substance use, exercise, COVID-related health behaviors	No direct academic performance measure	More financial strain was associated with more stress and worse mental health, symptoms, and health behaviors	Strong for pandemic-era financial stress and well-being, but not direct academic outcomes

Asim et al. (2025)	Pakistan; medical colleges in Peshawar	N = 12 final-year medical students; purposive sample; 8 males, 4 females	Qualitative exploratory study with in-depth interviews	Financial stress explored through lived experiences of cost burden, debt, inadequate support, and affordability challenges	Healthcare and well-being practices; negative health implications discussed thematically	Academic performance/achievement and career choices explored thematically	Five themes emerged: financial stressors, academic effects, career-choice effects, health/well-being effects, and policy solutions	High contextual value for Pakistan; small purposive medical-student sample limits generalizability
Andrews & Wilding (2004)	United Kingdom; university students followed across course progression	N = 351 students	Quantitative longitudinal cohort study	Financial difficulties as mid-course life stressor / hardship	Depression and anxiety symptoms (study widely associated with HADS-based assessment)	Exam performance from first to second year	Depression and financial difficulties mid-course predicted decreased exam performance; depression mediated the link between financial difficulties and subsequent exam performance	Seminal longitudinal study; exact measurement details are only partly recoverable from accessible snippet
Wray & McCall (2007)	Australia; health-professions placement context	Approx. 65 data contributions reported as 17 focus-group and 48 personal interview inputs in accessible snippet; exact participant structure not fully recoverable	Qualitative study using focus groups and interviews	Financial burden associated with placements, including relocation and related placement costs	Student financial concerns and well-being implications discussed qualitatively	No direct GPA; educational impact inferred through placement experience burden	Study highlighted students' financial concerns associated with placements as a major theme in their training experience	Relevant as a material-cost stress study; accessible source does not fully expose exact sample composition

Cadaret & Bennett (2019)	United States; students seeking counseling at a large Midwestern university	N = 3,303 students seeking psychological services; mean age 26.03 years; more than half female	Quantitative cross-sectional study	Self-reported financial stress past and financial stress now; modeled alongside family/social support	Psychological distress via CCAPS-62; family distress; academic distress; total distress	GPA	Higher financial stress was associated with greater family distress, academic distress, overall distress, and lower GPA	Large sample, but it is a counseling-center sample, so distress levels are likely higher than in the general student population
Kumsa et al. (2020)	Ethiopia; Addis Ababa University, health sciences during clinical years	N = 10 interviewed participants; seven third-year and five fourth-year initially approached, two excluded after transcript review; final analytic sample ten students	Qualitative descriptive study using semi-structured interviews	Lack of pocket money / financial hardship; defined as income received from parent or guardian	Stress and self-management issues discussed qualitatively	Learning activities, class attendance, concentration, access to food, stationery, internet, and clinical learning participation	Lack of pocket money negatively affected learning directly and indirectly through transport, hunger, learning materials, and stress/self-management burdens	Strong qualitative illustration of material deprivation, though not a conventional "financial stress scale" study
Weaver et al. (2020)	United States; midsized New Jersey public university	N = 2,055 undergraduates from 13,897 invited; ~15% response rate	Quantitative cross-sectional online survey	Food insecurity measured as a financial/material hardship proxy; article references USDA 6-item short form	No direct psychological measure in the selected article	GPA from administrative records / linked data; odds of low- and high-GPA categories analyzed	Food insecurity increased odds of low GPA and reduced odds of being in the top GPA group	Strong objective academic outcome, but exposure is food insecurity rather than financial stress narrowly defined

Nasr et al. (2024)	Lebanon; private and public universities nationwide	N = 1,272 university students aged 17+; mean age 21.64 years; convenience sample	Quantitative cross-sectional study	InCharge Financial Distress/Financial Well-Being Scale (IFDFW)	Pittsburgh Sleep Quality Index (PSQI), Beirut Distress Scale (BDS-10), Perceived Stress Scale (PSS-10), WHO-5 Well-Being Index	GPA included as covariate / associated academic variable	Higher financial stress was associated with poorer psychological distress, perceived stress, sleep quality, and well-being indicators; financial aid and independence were protective	One of the clearest recent financial-stress/well-being papers; cross-sectional and Lebanon-specific

Table: Risk of bias assessment of quantitative observational studies

Study	Design	Main risk-of-bias concerns	Overall risk of bias	Reason for judgment
Joo et al. (2008)	Quantitative cross-sectional survey	Selection bias, self-selection into web survey, self-reported exposure and outcome, limited control of confounding, cross-sectional timing	High	Single-university survey with subjective financial stress and academic persistence outcomes is vulnerable to sampling and common-method bias.
Adams et al. (2016)	Quantitative cross-sectional survey	Small convenience sample, cross-sectional mediation model, self-reported financial strain and symptoms, residual confounding	High	The mediation claim is weakened by simultaneous measurement of exposure, mediator, and outcome.
Richardson et al. (2017)	Quantitative longitudinal study	Attrition over repeated waves, self-reported financial difficulty and mental health, residual confounding	Moderate	Longitudinal design improves temporality, but attrition and self-report still leave meaningful bias risk.

Iqbal et al. (2022)	Quantitative cross-sectional analytical study	Convenience sampling, cross-sectional mediation, self-report scales, possible age/sample heterogeneity, confounding	High	The design supports association, not causal inference, and the sample structure reduces internal validity.
Peltz et al. (2021)	Quantitative cross-sectional self-report survey	Selection bias, self-report exposure and outcomes, omitted-variable confounding, no temporal ordering	High	Financial strain, work hours, sleep, and depressive symptoms were measured at the same time, limiting causal interpretation.
Leung et al. (2021)	Quantitative cross-sectional survey	Cross-sectional design, possible participation bias, cumulative insecurity exposure may blur constructs, some self-report	Moderate	Use of validated insecurity measures and GPA strengthens the study, but temporality and residual confounding remain unresolved.
Bøe et al. (2021)	Quantitative national cross-sectional survey	Cross-sectional design, nonresponse/selection bias, self-reported financial difficulties and health outcomes	Moderate	A very large national sample improves precision, but the design is still observational and contemporaneous.
Lawley et al. (2025)	Quantitative cross-sectional online survey	Convenience sampling during COVID-19, self-report exposure and outcomes, pandemic-specific contextual confounding	High	The associations are plausible, but the pandemic context adds substantial uncontrolled confounding.

Andrews & Wilding (2004)	Quantitative longitudinal cohort study	Attrition risk, self-reported financial difficulties, life-stress confounding, limited control of background vulnerability	Moderate	Stronger than cross-sectional studies because exam performance was followed over time, but residual confounding remains likely.
Cadaret & Bennett (2019)	Quantitative cross-sectional study	Counseling-center sample, selection bias, self-report distress and financial stress, reverse causation	High	The help-seeking sample is not representative of the general student population and likely inflates distress-related associations.
Weaver et al. (2020)	Quantitative cross-sectional survey	Response bias, food insecurity used as proxy for financial strain, cross-sectional design	Moderate	Administrative GPA linkage reduces outcome bias, but exposure is indirect and temporality is still weak.
Nasr et al. (2024)	Quantitative cross-sectional study	Convenience sampling, self-report exposure/outcomes, cross-sectional timing, possible unmeasured socioeconomic confounding	High	Validated scales improve measurement quality, but the design remains vulnerable to common-method and confounding bias.

Table: Risk of bias assessment of qualitative studies

Study	Design	Main risk-of-bias concerns	Overall risk of bias	Reason for judgment
Moore et al. (2021)	Qualitative focus-group study	Single institution, volunteer sampling, possible social desirability in focus groups, limited transferability	Moderate	The study offers strong thematic insight, but group dynamics and local context may shape what participants disclosed.
Asim et al. (2025)	Qualitative exploratory interview study	Small purposive sample, medical-student-only sample, limited transferability, reflexivity not strongly foregrounded	Moderate to high	The themes are useful, but the narrow sample and possible interviewer/participant reactivity reduce broader applicability.
Wray & McCall (2007)	Qualitative interviews/focus groups/written responses	Context-specific placement sample, possible self-selection, limited reflexive reporting in accessible descriptions	Moderate	Multiple qualitative sources improve credibility, but transferability outside placement-heavy programs is limited.
Kumsa et al. (2020)	Qualitative descriptive interview study	Very small single-institution sample, possible translation/interpretive bias, limited transferability	Moderate	The study is rich in lived experience but vulnerable to sampling limitations and context-specific interpretation.

Joo et al. (2008) intended to investigate the relationship between financial stress and academic discontinuation, particularly dropping out or lightening course load due to financial reasons. The methodology adopted involved a web-based survey, a cross-section of 540 student answers in a large state university within the southwestern United States and studied financial stress, worry about debt and whether or not students felt that financial problems were disrupting their performance at school. The study established that financially burdened students are more likely to lose course loads/ drop out, but the single-site and self-report design used prevents drawing a causal conclusion; the practical implication being that universities have to screen financially vulnerable students at an early stage and the study had concluded that financial stress was a serious

academic risk factor and it was not a purely personal monetary issue.

Adams et al. (2016) aimed to test whether perceived stress explained the link between financial strain and student psychological and academic adjustment. The study quantitatively modeled financial strain, perceived stress, psychological symptomology, academic and social integration using a quantitative cross-sectional online survey of 157 undergraduates. The authors discovered that perceived stress mediated the relationship between financial strain and both psychological symptoms and academic/social integration, but small cross-sectional sample prevents temporal and causal assertions and therefore the primary inference is that stress reducing support might be an effective intervention target and the research concluded that perceived stress was an important intermediary after which financial strain adversely affects student functioning.

Richardson et al. (2017) sought to examine how financial challenges and mental health are longitudinally associated among British undergraduates. They sampled students nationally at a series of time points and studied financial strains, debt worry, and various mental-health outcome measures throughout only a little over a single academic year. The researchers concluded that higher financial hardship was more likely to forecast poor mental health in the future and indicated the existence of a potential vicious cycle between financial hardship and mental problems, but attrition and self-reported exposure are drawbacks; the study concluded that financial stress has not only contemporaneous, but permanent impacts on mental health.

The purpose of Iqbal et al. (2022) was to investigate the relationships between financial stress, positivity of students, academic performance, and mediation of family conflict. They adopted a quantitative design that was cross-sectional in nature and 259 students with standardized scales that were used to test both direct and mediated relationships. It was established that both positivity and academic achievement had a negative association with financial stress, and family conflict partially mediated these relationships, but convenience sampling and the cross-sectional nature of the study complicate causal inferences, and therefore the argument is that student support must take care of both monetary strain and family background and the research concluded that financial strain impairs academic as well as psychological functioning in part, through tension within the family.

Peltz et al. (2021) set out to investigate whether the quality of poor sleep mediated the association between work hours and that of depressive symptoms and whether this relationship varied according to degree of financial strain. They conducted a multi-site cross-sectional online study of 792 undergraduates in Upstate New York and tested moderated mediation using self-report measures. They determined that greater work hours were predictors of greater sleep disturbance, which, in turn, was predictors of more depressive symptoms and the pattern was strongest in students with high financial strain and low family socioeconomic status; the primary limitation, of course, being the same cross-sectional self-report design, but the implication is evident: excessive work by students by itself, together with financial strain, may lead to mental health problems, and the study

Leung et al. (2021) attempted to determine the relationship between the cumulative cost of food, housing, and financial insecurity and health and academic success in college students. They applied a cross-sectional survey of a large public university by using a quantitative approach and applying it to insecurity exposure and anxiety, depression, overall health and GPA. The researchers determined that students who had multiple insecurities performed poorly in school healthily than the ability to be fully secure, however, the cross-sectional study design and moderately high response rate preclude causal interpretation; the implication is that student financial stress is to be considered as part of the wider basic-needs policy and the results of the study showed that students with multiple insecurities were at a disadvantage in health and performance.

The objective of the study conducted by Boe et al. (2021) was to analyze financial conditions among

Norwegian higher-education students and verify them with health, academic performance, and self-destructive behaviors. They used national cross-sectional survey data of 50,054 full-time students to evaluate financial hardships and mental- health issues, somatic concerns, self-harm, suicidal ideation, and test failure. This study concluded that students who tended to have financial problems had significantly poorer mental health, and higher proportions of failed exams despite the author adjusting by several demographic factors, which implies that financial counseling and student support in schools needs to be combined with mental-health services, and that finding indicates that having financial problems is a leading indicator of student vulnerability.

In the study by Moore et al. (2021), the authors sought to develop a more profound qualitative understanding of the impact of financial stress on student well-being and academic achievement. They held four focus groups with 30 students in a large urban university in the United States that is privately owned and sat on transcripts inductively through qualitative content analysis. The researchers concluded that financial stress hindered academic achievement and put a burden on the social lives of students who experienced embarrassment, isolation, and were unable to manage differences in wealth, but the application of financial stress uniquely on academic experience and social belonging was determined; in the study, the single-institution volunteer sample limits generalisability; however, the results found that financial stress did not just have an economic impact on academic achievement and their social location.

Lawley et al. (2025) intended to test the relationships between COVID-19-financial strain and stress, mental health, physical symptoms, and health behaviors of American university students. The survey they employed was a quantitative cross-sectional online survey of 485 participants, administered during the pandemic, and measured various areas of well-being, such as depression, anxiety, loneliness, and subjective well-being. The researchers determined that increased financial strain was corresponding to higher levels of stress and poor mental and physical health outcomes but the pandemic setting and cross-sectional design of the study preclude the possibility of isolating financial strain among the overall crisis effects; the conclusion is that emergency-related student support needs to include financial relief and the results of the study have found that financial stress in the pandemic may have lasting effects on student health.

Asim et al. (2025) set out to understand the perception of medical students about the consequences of financial stress in Pakistan. The design used was qualitative exploratory using semi-structured in depth interviews of 12 undergraduate medical students in Peshawar and analyzed data thematically. This study identified five key themes, namely financial stressors, academic performance, career choices, health and well-being practices, and policy responses, and its key limitation is the limited purposive sample of one city and one group of students, but the implication is robust in the form of scholarships, financial counseling, and institutional reforms, and the study concluded that financial stress in medical education is a multidimensional concept and not a wholly academic issue in

Andrews and Wilding (2004) sought to establish the presence of anxiety changes and depression changes on entering university, the role of adverse life experiences in causing the change, and their influence on achievement. The design was longitudinal cohort design where life stressors e.g. financial problems were compared with variation in depression, anxiety as well as examination performance across time. It was also determined that the change between first and second year in exam performance was predicted by financial problems and depression and the researchers additionally determined that other types of problems, such as financial and other problems, predict the increasing levels of anxiety and depression, although this design is stronger than most cross-sectional research, residual confounding and self-reported stressors are limitations and the researchers concluded that financial hardship may induce a reduction in mental health and performance in academic

Wray and McCall (2007) were interested in reporting the financial issues of students regarding

placements in medical and nursing education as well as allied health education. The qualitative design they applied entailed focus groups, interviews, and written replies about undergraduate students and graduate students in Victoria, Australia. The researchers determined that placement costs, locus, and decreased income-generating capacity imposed financial strain that influenced debt, health, and well-being; since it was a placement-intensive study area, the findings cannot be generalized, but the implication is that institutions ought to acknowledge the placement costs as a financial burden structure, and the research established that placements may exert financial depletion in a manner likely to have direct impact on student well-being.

Cadaret and Bennett (2019) sought to explore the relationship between financial stress reported as a result of psychological distress among students who came to seek counseling services. They examined a big population of Midwestern university counseling and associated financial stress with family distress, academic distress, general distress, and GPA. The researchers determined that increased financial stress correlated with greater psychological distress and worse grade point average, although the counseling-center sample may be overrepresentative of the more distressed students, and that the study implications are that student-level financial stress should be assessed and directly remedied through counseling services, and that financial stress is clinically relevant in the student mental-health setting.

The study by Kumsa et al. (2020) sought to determine the role of deprivation of pocket money among Ethiopian undergraduate health-science students on the learning activities of undergraduates at the clinical years. Their design was the descriptive qualitative study that used semi-structured interviews with students at Addis Ababa University, and categorized the results into thematic themes. The research discovered that financial constraint could interfere with classroom learning, clinical engagement, self-management, and social bond demonstrating that financial constraint can pose direct and indirect challenges to learning and that the modest one-institution sample is an obvious limitation, but the conclusion was that material deprivation in daily life can readily be converted into academic underprivilege.

Weaver et al. (2020) sought to describe the occurrence and incidence of student food insecurity and test its association with academic achievement. They surveyed 2,055 undergraduates (out of 5,033 in a sample) at a New Jersey midsize public university by cross-sectional and online survey and matched survey data with university records based on an adapted USDA food-security index. The authors established that food insecurity was prevalent and predicted poor academic performance but because food insecurity was used as a proxy variable indicating financial strain, the 15 percent response rate and the use of food insecurity as an explanatory variable restricts interpretation; the conclusion was that academic achievement was closely related to material hardship.

The study conducted by Nasr et al. (2024) was intended to determine the effects of financial stress on mental health and well-being of Lebanese university students in an environment of a national economic crisis. Their methodology was a quantitative cross-sectional study involving 1,272 students (both Lebanese and international) of public and private universities in Lebanon and assessing financial distress, sleep quality, distress, perceived stress, and well-being using standardized measures. The researchers also discovered that perceived stress, distress, and sleep, as well as overall well-being are significantly linked to financial stress, but due to convenience sampling and cross-sectional time restriction, causal claims are not possible; the implication is that the financial support should be integrated into student mental-health policy in risky financial conditions and the study concluded that financial stress has a considerable and multidimensional impact on student well-being.

Discussion

The current scoping review also uncovered a distinct and reiterative trend: financial stress was always linked to a lower psychological well-being among university students, and it was also related

to worse academic functioning, but the measurement of academic indicators was not as homogeneous in the studies. This general trend can be established in line with current findings in other educational institutions. Hossain et al. (2023) in Bangladesh revealed that tuition fee dues and borrowing, as well as living arrangements, were major causes of financial stress and that financial stress interfered with academic and personal activities of the students. In Germany, deteriorating financial conditions in the COVID-19 setting were correlated with anxiety and depressive symptoms among a large multicenter sample of students, which may indicate that fluctuations in economic security may be rapidly converted into psychological vulnerability (Negash et al., 2024). The same trend was observed in Japan where perceived financial decline continued to be strongly correlated with depressive symptoms even in times when the acute period of the pandemic was already over suggesting that the mental-health impacts of financial disruption may be persistent and not short-lived once the acute shock is remedied (Morimura et al., 2025). A study in 23 countries also indicated that depressive symptoms had a more prevalence among students who have lost money, which reinforces the fact that the relationship found in this review is not specific to one country or institution but indicative of a much larger problem related to student health (Tancredi et al., 2022). A combination of these comparisons would allow concluding that financial stress can be interpreted as one of the key psychosocial factors influencing student well-being instead of a peripheral background attribute.

The review also indicates that the route through which financial stress to academic difficulty is usually neither straightforward nor simply mechanical. In many cases, it seems to run on mental torments, loss of concentration, poor sleep, wicked working habits, and the inability to satisfy the daily needs. This meaning can be parallelized to the current findings on food insecurity and material poverty among students. The study determined that food insecurity in the case of college students leads to significantly inferior scores when it comes to depression, anxiety, and well-being, particularly in Lebanon (Itani et al., 2022). Brown et al. (2025) also demonstrated a mutual relationship between food insecurity and stress and depression in the Bronx, which indicates that over time financial struggle and depression may cause each other. Similarly, Uddin et al. (2025) indicated that in Bangladesh, debt status, reduction of income, the ability to live on savings, the possibility of being able to afford nutritious food, and financial related issues of academic performance all determined the student well-being and life satisfaction. With these studies we can better understand why a number of papers in the current review showed both psychological and academic damage: not only do financially strained students worry, however, they tend to have poor sleep, poor eating, work more, and learn less efficiently. Simultaneously, the larger literature cautions not to consider all financial indicators applicable to each other. Based on this study, Sato et al. (2020) discovered that student loan debt was correlated with psychological distress in both graduate and dropout students, but not with current students, which suggests that debt is no longer viewed as a promise of future financial gain and is now perceived as a financial necessity. In the same way, Lindgren et al. (2022) estimated that student debt had higher levels of correlation with anxiety and stress in locations with a high level of socioeconomic instability. This subtlety is important to understand the current review: emotional-financial distress, instability, and unmet needs can prove to be destructive in addition to debt amount.

These findings have practical and institutional implications. First, student financial support and student mental-health support should not be segregated in universities in Gilgit-Baltistan (or any other resource-constrained environment). Distress screening without inquiring about affordability, transport, food, debt burden and fee burden would overlook a significant cause of student misfortunes. Second, there should be no longer financial interventions on an emergency basis. The literature proposes that the predictability of student funding, their capacity to keep basic necessity and their control over the ability to continue with their studies make students well-

being influenced, meaning that one-time relief probably would not be as effective as previously assumed (Hossain et al., 2023; Uddin et al., 2025). Third, the results suggest that the universities ought to be able to notice the warning signs of academic performance like absenteeism, decreased course attendance, and dropping academic results as probable downstream consequences of financial stress as opposed to considering them mere motivation issues. On the part of Gilgit-Baltistan in particular, it seems that the regional realities of low household income, travelling expenses, and a disproportional institutional provision may only make these findings more, but not less, applicable. This research is not without limitations as well. The cursory evidence base was preponderated with cross-sectional studies, which limits the ability to causally infer and reverse pathways are possible; poor mental health could exacerbate financial functioning and vice versa. Another variation in the studies was the definition of financial stress in terms of direct financial strain scale and the use of proxy variables including food insecurity, debt, loss of income or financial diminishment, which restricts strict comparability of the studies. The other significant constraint is contextual distance. All the identified articles were not necessarily reflective of university students in Gilgit-Baltistan specifically and represented Pakistan or other very similar South Asian environments in just a small percentage. Consequently, the review can determine a good and consistent pattern, but it cannot say that the magnitude, form, or mediating mechanisms of financial stress in Gilgit-Baltistan are already present empirically.

To sum up, the current scoping review demonstrates that financial stress has a significant association with lower psychological health and, in various ways, academically worse functioning among students of universities. This pattern is found to be strong in comparison with more recent evidence based in Bangladesh, Germany, Japan, Lebanon and in multi-country student samples: though the financial exposure and outcome measure vary. It is not that all types of student debt or suffering have the same impact but, in the long run, the financial insecurity, lack of primary needs, and subjective economic anxiety are severe risks to student mental and academic health. This must be seen as a mental-health concern and an academic equity concern to university students in Gilgit-Baltistan, and primary research in the locale must be conducted in the future to ensure that this issue is no longer inferred, but rather directly proven.

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