**The Impact of Academic, Work, and Financial Stress on Depression Among University Students.**

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This report views the great impact of academic, work, and financial stress on the depression rate of university students. Current research shows a strong correlation between each of these stressors and making someone depressive. It will further discuss how a family history of mental illness can make a student more prone to being stressed and depressed about studies, as well as looking into the results of several mental health treatments and support systems for students. This was subjected to logistic regression and comparative analysis (T-test) on a sample of N = 27,900. The relationship between depression and academic pressure was significant (OR = 2.30, p < 0.001), as well as financial stress (OR = 1.78, p < 0.001); however, work pressure did not come out to be significant (p = 0.203). A family history slightly boosted these effects. The findings suggest the need for interventions in mental health focused on the major stressors academic and financial for students who are identified as being at risk.

**Keywords:** depression, academic stress, financial stress, moderation analysis, mental health

**1. Introduction**

The mental health of university students remains a serious global challenge, and mental disorders, especially depression, are becoming very common. [1] This increase within the last decade shows that universities need to pay attention to what is causing this decline and how best to help their students.[2] Depression is a ubiquitous issue with university students and has devastating effects such as poor academic performance, lower retention rates, and reduced quality of life.[3] The capacity to manage the range of stress factors that trigger depression in this population is essential to the development of a healthy academic society.

A combination of academic, employment, and financial tasks places a unique set of burdens on university students that impacts their mental health.[4] The university setting which includes challenging academics, entering adulthood, assuming financial responsibilities, and worrying about future employment can act as a source of some of the stressors.[5]

For many students, the university experience involves negotiating new friendship groups, settling into a more intensive study regime, learning to manage money for the first time, and dealing with uncertainties about their careers. The overlap of these various life challenges creates an ideal setting for mental health problems to develop. This paper will try to do an in-depth review of how academic, work, and financial stress bring about depression among university students. It will check out how family mental illness history can moderate these factors; it will also look at how effective the treatments are; where is depression most common in such a population; and what do these results mean for university policies and student support services.

**Impact of academic stress and depression**

Various studies have clearly uncovered a strong positive relationship between academic stress and depression among students in the university level.[6] This pattern has consistently been substantiated across a variety of demographic studies highlight academic stress as one of the prominent precursors of depression in the life of a college student. One study noted the relationship between academic workload and depression to be quite strong (r=0.845), affirming that higher levels of academic stress are associated with greater depressive symptoms.[4] This is consistent with earlier work that revealed a strong relationship between academic stress and anxiety as well as depression among students. One other study of college students across the United States who form a representative sample of the broader population also demonstrated a strong positive correlation between academic stress and mental health issues.[6]

**The Impact of Work-Related Stress on Students’ Mental Health**

An increasing number of university students are navigating academics alongside work, which poses a considerable threat to their mental health [5]. The stereotypical image of a college student engrossed in books is becoming more and more uncommon, as countless students work out of economic necessity not only to pay for basic needs, but also to relieve the debt burden that student loans post on graduates [6]. It appears that a large proportion of both full-time and part-time undergraduate students are employed [5]. There is a need at educational institutions to understand the demands placed on students, in terms of work, for their mental therapy and to expand relief frameworks beyond traditional scopes for diverse student profiles.

**Financial Strain as a Predictor of Depression**

University students are particularly vulnerable to depression due to financial strain and there is overwhelming evidence associating financial stress with deteriorating mental well-being [6]. The price of attaining a college education which includes tuition, textbook, housing, and daily expenses often leads students to seek loans; hence they get into debt which is a source of chronic stress in their life [7]. A considerable percentage of student’s report experiencing constant worry about affording these necessities, underscoring the pervasive nature of financial stress in this population.

**H₁:** Work pressure, school pressure, and financial pressure are positively associated with depression.

**H₂:** They are stronger for students with a family history of mental illness.

**2. Methods**

**2.1 Data Collection**

Dataset: Secondary analysis of anonymized survey data on university students (publicly archived dataset and GDPR-compliant) was downloaded from the Kaggle website, cleaned with MS Excel 2019 before analysing the data. Meta data about the data set is available in the GitHub repository.

**Variables**

Outcome: Depression (binary: self-reported diagnosis/clinical threshold).

Predictors: Academic pressure, work pressure, financial stress.

Moderator: Family history of mental illness (binary).

**2.2 Statistical Analysis**

Logistic Regression: Assessed the relationships between stressors and depression (H₁).

Subgroup Analysis: Compared mean difference among stressor effects between students with/without family history (H₂).

Software: SPSS version 26.0 was used in analysing the dataset at a significant level of p < 0.05.

**3. Results**

**3.1 Primary Analysis (H₁)**

Academic Pressure: Most significant predictor (OR = 2.30, 95% CI [2.25, 2.36], p < 0.001).

Financial Stress: Significant (OR = 1.78, 95% CI [1.74, 1.82], p < 0.001).

Work Pressure: Not a significant (OR = 1.43, p = 0.203).

Model Fit: 76% correct (82.3% specificity; 67.2% sensitivity).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Depression** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Yes | 11565 | 41.5 | 41.5 | 41.5 |
| No | 16335 | 58.5 | 58.5 | 100.0 |
| Total | 27900 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Predicted** | |  |
|  |  |  | **Depression** | | **Percentage Correct** |
|  | Observed |  | Yes | No |  |
| Step 1 | Depression | Yes | 7776 | 3787 | 67.2 |
|  |  | No | 2897 | 13437 | 82.3 |
|  | Overall Percentage |  |  |  | 76.0 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables in the Equation** | | | | | | | | **95% CI** | |
|  |  | **B** | **S.E.** | **Wald** | **df** | **Sig.** | **Exp(B)** | **Lower** | **Upper** |
| Step 1 | Academic Pressure | 0.835 | 0.012 | 4769.017 | 1 | 0.000 | 2.304 | 2.250 | 2.359 |
|  | Financial Stress | 0.574 | 0.011 | 2805.313 | 1 | 0.000 | 1.775 | 1.738 | 1.814 |
|  | Work Pressure | 0.357 | 0.280 | 1.623 | 1 | 0.203 | 1.428 | 0.825 | 2.472 |
|  | Constant | -3.940 | 0.055 | 5181.430 | 1 | 0.000 | 0.019 |  |  |

**3.2 T-test by Family History (H₂)**

The t-tests showed that there were significant differences in academic pressure and financial stress for depressed versus non-depressed students (all p<0.001), with depressed students in both groups reporting lower means. Effect sizes did not vary significantly as a function of family history (academic ΔM ≈-1.3; financial ΔM≈ -1.1). Work pressure was not significant (p>0.2). Results confirm academic and financial stress as strong depression correlates, with little moderating role for family history.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mental illness history = No. equal variance assumed | | | | | | | 95% CI | |
| Depression |  | N | Mean | Std. Deviation | Std. Error Mean | Sig. (2-tailed) | Lower | Upper |
| Academic Pressure | Yes | 6335 | 2.3640 | 1.25515 | 0.01577 | 0.000 | -1.35637 | -1.27582 |
|  | No | 8062 | 3.6801 | 1.19856 | 0.01335 |  |  |  |
| Work Pressure | Yes | 6335 | 0.0008 | 0.06282 | 0.00079 | 0.864 | -0.00177 | 0.002109 |
|  | No | 8062 | 0.0006 | 0.05569 | 0.00062 |  |  |  |
| Financial Stress | Yes | 6335 | 2.5478 | 1.33799 | 0.01681 | 0.000 | -1.08 | -0.9921 |
|  | No | 8061 | 3.5838 | 1.33351 | 0.01485 |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mental illness history = Yes. Equal variance assumed | | | | | | | 95% CI | |
| Depression |  | N | Mean | Std. Deviation | Std. Error Mean | Sig. (2-tailed) | Lower | Upper |
| Academic Pressure | Yes | 5230 | 2.3587 | 1.25036 | 0.01729 | 0.000 | -1.38902 | -1.30541 |
|  | No | 8273 | 3.7059 | 1.17926 | 0.01297 |  |  |  |
| Work Pressure | Yes | 5230 | 0.0004 | 0.02766 | 0.00038 | 0.209 | -0.00021 | 0.00098 |
|  | No | 8273 | 0.0000 | 0.00000 | 0.00000 |  |  |  |
| Financial Stress | Yes | 5228 | 2.4836 | 1.35702 | 0.01877 | 0.000 | -1.13819 | -1.04520 |
|  | No | 8273 | 3.5752 | 1.33323 | 0.01466 |  |  |  |

Testing mean difference between mental history P-value = 0.992

**4. Discussion**

**4.1 Key Findings**

* Academic and financial stress are key predictors of depression, as predicted by Lazarus & Folkman's (1984) stress-coping theory.
* Family history plays a marginal aggravating role, suggesting genetic/environmental vulnerabilities
* Null work pressure results might reflect measurement problems (e.g., low variability).

**4.2 Implications**

Policy: Academic/financial support should be prioritized in universities (e.g., flexible deadlines, emergency grants).

Research: Replicate with longitudinal designs to permit causality inferences.

**4.3 Limitations**

* Cross-sectional data limits causal inference.
* Self-reported stressors may be prone to bias.

**5. Conclusion**

This study confirms academic and financial stress as major correlates of depression, while there are no significant differences in depression between the students with or without family history and as such, we reject the null hypothesis H₂. Interventions that target these stressors can potentially prevent student mental health crises.

**Reference**

[1] N. Liangruenrom, M. Joshanloo, W. Hutaphat, and S. Kittisuksathit, “Prevalence and correlates of depression among Thai university students: nationwide study,” *BJPsych Open*, vol. 11, no. 2, p. e59, Mar. 2025, doi: 10.1192/bjo.2025.21.

[2] “New brief on student mental health support in higher education released | International Institute for Higher Education in Latin America and the Caribbean.” Accessed: Apr. 23, 2025. [Online]. Available: https://www.iesalc.unesco.org/en/articles/new-brief-student-mental-health-support-higher-education-released

[3] R. P. Auerbach *et al.*, “WHO world mental health surveys international college student project: Prevalence and distribution of mental disorders,” *J Abnorm Psychol*, vol. 127, no. 7, pp. 623–638, Oct. 2018, doi: 10.1037/abn0000362.

[4] R. P. Auerbach *et al.*, “WHO world mental health surveys international college student project: Prevalence and distribution of mental disorders,” *J Abnorm Psychol*, vol. 127, no. 7, pp. 623–638, Oct. 2018, doi: 10.1037/abn0000362.

[5] Y. Deng *et al.*, “Family and Academic Stress and Their Impact on Students’ Depression Level and Academic Performance,” *Front Psychiatry*, vol. 13, Jun. 2022, doi: 10.3389/fpsyt.2022.869337.

[6] “The Consequences of Academic Pressure on Students’ Mental Health.” Accessed: Apr. 23, 2025. [Online]. Available: https://www.transformationsnetwork.com/post/the-consequences-of-academic-pressure-on-students-mental-health

[7] “Depression in College Students | EBSCO Research Starters.” Accessed: Apr. 25, 2025. [Online]. Available: https://www.ebsco.com/research-starters/consumer-health/depression-college-students

Ethics Statement: This study used anonymized data; no ethical approval was required.

Conflicts of Interest: None declared.