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

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**Abstract**

This report examines the significant impact of academic, work, and financial stress on the prevalence of depression among university students. The analysis of current research reveals a strong correlation between each of these stressors and the development of depressive symptoms. Furthermore, the report explores how a family history of mental illness can increase a student's vulnerability to stress-related depression and investigates the effectiveness of various mental health interventions and support systems available to students.

Logistic regression and comparative analysis (T-test) were used to test a sample of N = 27,900. Significant relationships between depression, academic pressure (OR = 2.30, p < 0.001) and financial stress (OR = 1.78, p < 0.001) were found, while work pressure was not significant (p = 0.203). Family history enhanced these effects modestly. Findings lay emphasis on the importance of focused mental health interventions targeted at academic and financial stressors, particularly in at-risk students.

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

**1. Introduction**

The mental health of university students has become an increasingly pressing concern worldwide, with a notable rise in the prevalence of mental health issues, particularly depression.[1] This upward trend over the past decade signifies a critical need for universities to understand the factors contributing to this decline and to implement effective strategies to support their students.[2] Depression among university students is not merely a personal challenge but also has far-reaching consequences, negatively affecting academic performance, student retention rates, and overall well-being.[3] The ability to identify and address the various stressors that contribute to depression in this population is therefore paramount for fostering a thriving academic community.

University students face a unique set of pressures, with academic, work, and financial stress emerging as key contributors to their mental health.[4] The university environment itself, characterized by rigorous academic demands, transitions to independent living, financial responsibilities, and anxieties about future careers, can significantly amplify these stressors. [5] For many students, the university experience involves navigating new social circles, adapting to a more demanding academic schedule, managing their finances for the first time, and grappling with uncertainties about their professional futures.[6] This confluence of challenges can create a fertile ground for the development of mental health difficulties. This report aims to provide a comprehensive analysis of the impact of academic, work, and financial stress on depression among university students. It will also consider the moderating role of family history of mental illness, examine the effectiveness of available interventions, explore the global prevalence of depression in this population, and ultimately analyze the implications of these findings for university policies and the provision of student support services.

**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**

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

Conflicts of Interest: None declared.