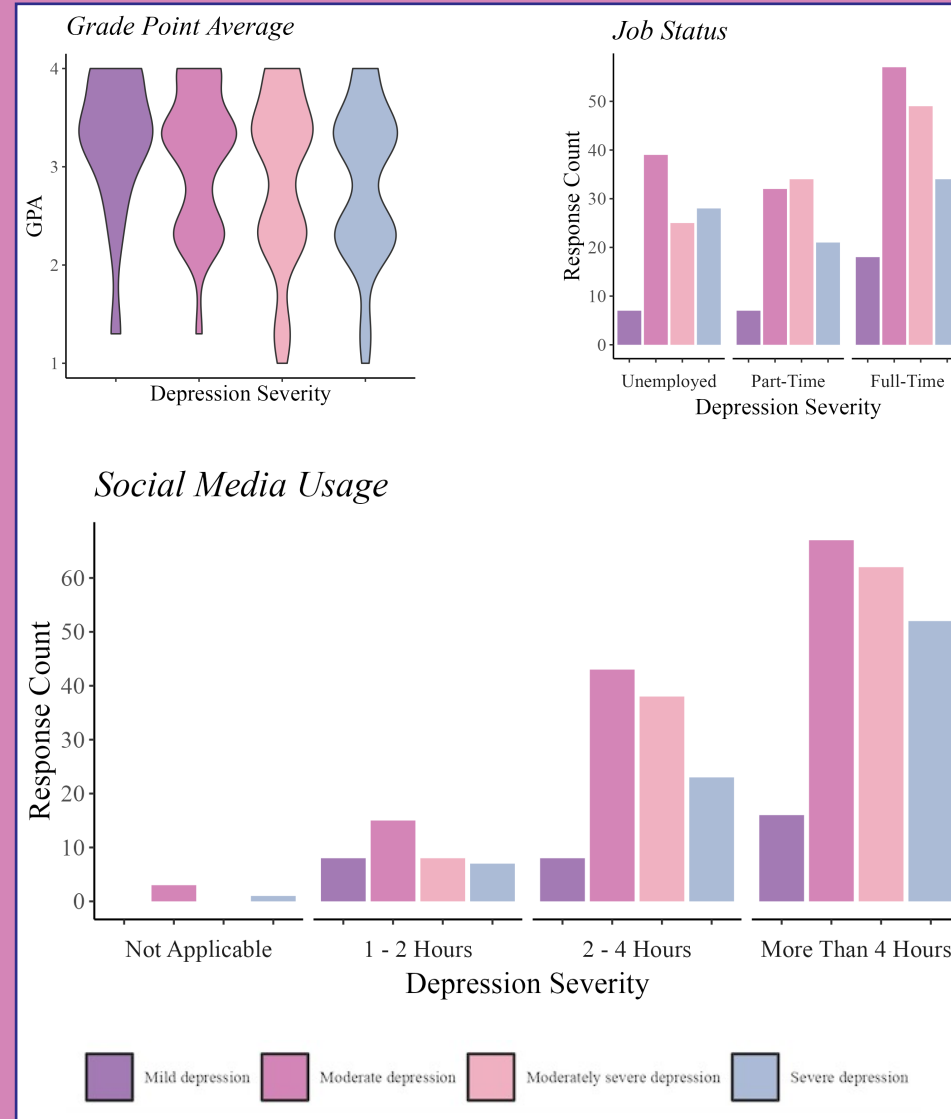# Exploring the relationship between PHQ-9 scores and various factors: A secondary data analysis

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- This secondary data analysis aimed to examine relationships between PHQ-9 scores with GPA, social media usage, and employment, respectively.
- Research indicates that unemployed young adults are three times more likely to experience depression than their employed counterparts (McGee & Thompson, 2015b).
- In a study, students who limited social media to 30 minutes daily for two weeks showed improved psychological well-being, including reduced depressive symptoms (Faulhaber et al., 2023).
- Studies indicate a link between depression and lower grade point average (Consequences of Student Mental Health Issues, n.d.).

- Data were collected by surveying 351 U.S. students at levels of education from high school to master's degree.
- Items from the PHQ-9 were included, along with questions regarding academics, social media usage, and job status.

- RQ1: Are there negative relations between PHQ-9 score and GPA?
- RQ2: Are there relations between PHQ-9 score and social media usage?
- RQ3: Are there relations between PHQ-9 score and job status?

Grade Point Average

Job Status

Social Media Usage

Mild depression — Moderate depression — Moderately severe depression — Severe depression

- Correlational analyses were conducted to examine the relationships between depression severity, GPA, social media usage, and job status,
- Pearson correlation coefficient was utilized for GPA, $r(349) = -.17$, $p < .001$
- Spearman's rank-order correlation was utilized for social media usage and job status.
  - For social media, $r_s(349) = .12$, $P = .03$.
  - For job status, $r_s(349) = -.05$, $P = .31$.

- For GPA, there was a statistically significant weak negative linear relationship. This suggests that as depression severity increases, there tends to be a decrease in GPA.
- For social media, there was a statistically significant weak positive correlation. This suggests that as social media usage increases, there tends to be an increase in depression severity.
- For job status, a negligible and non-significant correlation was observed.

Limitations:
- Credibility of the data source
- Coding discrepancies
- Generalizability weakens with a U.S. student sample, limiting broader relevance

Future research:
- To deepen the understanding of the relations between depression and life aspects, longitudinal studies or qualitative methodologies could be utilized.