

Parental Locus of Control and Student Well-being: Investigating Depression and Academic Achievement in University Students

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Abstract

This study examines how parental locus of control relates to university students' well-being and academic success. Using a sample of 350 undergraduate students from three universities, the study examined the associations between students' perceptions of parental control, levels of depression, and academic achievement. Participants completed standardized questionnaires including a Parental Locus of Control Scale, the Patient Health Questionnaire-9 for depression, and an academic achievement survey. Pearson correlation analyses and linear regression were used to test the hypothesized relationships. The findings revealed a weak but significant positive correlation between a higher external parental locus of control and greater student depression ($r \approx .17, p < .01$). In addition, student depression was moderately negatively correlated with academic achievement ($r \approx -.41, p < .01$), indicating that more severe depressive symptoms were associated with poorer academic performance. Notably, parental locus of control and depression together significantly predicted students' academic achievement in a regression model, accounting for roughly 23% of the variance in performance. A more external parental locus of control (i.e. students perceiving their parents as overly controlling or attributing outcomes to outside forces) and higher depression levels both independently predicted lower academic success in students. These results underscore the intertwined influence of parental factors and mental health on student outcomes. The study concludes that excessive parental control can exacerbate student depression and hinder academic progress, highlighting the importance of balancing parental involvement with student autonomy. Universities, families, and mental health practitioners should collaborate on interventions that reduce the detrimental impact of over-control and support students' psychological well-being and independent learning. Future research is recommended to examine these dynamics across diverse cultural contexts and longitudinally to inform tailored interventions for improving student well-being and achievement.



Keywords: Parental Locus of Control, Student Depression, Academic Achievement, University Students, Autonomy Support, Mental Health in Education

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1. INTRODUCTION

University students' academic success and psychological well-being are influenced by a complex interplay of personal and environmental factors. Among these factors, mental health issues – particularly depression – have emerged as a major concern in higher education settings. Depression is a common mood disorder characterized by persistent feelings of sadness, hopelessness, low energy, and loss of interest in activities, which can significantly impair functioning in academic and social domains. Recent studies indicate that depressive symptoms are highly prevalent among college students worldwide. For example, in the aftermath of the COVID-19 pandemic, nearly half of surveyed college students in one study reported moderate to severe levels of depression. Even prior to the pandemic, meta-analyses estimated that roughly one in three university students globally experiences clinically meaningful depressive symptoms. Such mental health problems can detrimentally affect students' concentration, motivation, and overall academic performance. Research suggests that depression is associated with lower grade point averages and an elevated risk of academic dropout. In one longitudinal analysis, college students diagnosed with depression had significantly lower subsequent GPAs compared to their non-depressed peers, underscoring the link between mental health and academic outcomes (Andrews & Wilding, 2004). These findings make clear that supporting student well-being is not only critical for personal health but also for educational attainment.

In the context of college students (emerging adults), parental locus of control may manifest in how much control or influence students perceive their parents still have over their decisions and life. Late adolescence is a period when young people strive for greater autonomy and responsibility as they move away from home to university. However, parental attitudes and behaviors remain influential during this transition (Fan & Chen, 2017). Parental involvement in a broad sense has long been known to correlate with academic success: a comprehensive meta-analysis confirmed that various forms of positive parental engagement (e.g. encouragement, setting expectations, helping with educational activities) are modestly yet significantly associated with higher student achievement (Fan & Chen, 2017). Crucially, though, the quality and

psychological tone of parental involvement might determine whether it is beneficial or harmful. A high degree of parental involvement that supports the student's autonomy (for instance, parents showing interest and providing guidance while ultimately allowing the student to take responsibility) can bolster students' motivation and confidence (Deci & Ryan, 2015). On the other hand, parental involvement that is controlling, intrusive, or undermines the student's independence may have adverse effects on student well-being (LeMoyne & Buchanan, 2011). LeMoyne and Buchanan (2011) describe the trend of "helicopter parenting," in which parents hover over every aspect of their emerging adult children's lives. Although often driven by good intentions, such over-parenting can lead to greater anxiety, reduced self-efficacy, and increased psychological distress in college-aged children (LeMoyne & Buchanan, 2011). In essence, when students perceive that their parents continue to exert a high level of control over their decisions or attribute the students' successes and failures to parental actions (an external parental locus of control perspective), it may interfere with the students' normal developmental need for autonomy and self-direction.

1.1 Research Objectives

The present study seeks:

- To investigate the relationship between parental locus of control and students' depressive symptoms, with the expectation that an external parental locus of control will be positively associated with higher levels of student depression.
- To examine the direct and indirect effects of parental locus of control on students' academic achievement, considering depression as a mediating factor.

1.2 Research Questions

- How does parental locus of control, as perceived by university students, influence their levels of depression?
- Does student depression mediate the relationship between parental locus of control and academic achievement?



2. LITERATURE REVIEW

2.1 Parental Locus of Control and Theoretical Foundations

The notion of locus of control originates from social learning theory and was first introduced by Rotter (1966) to describe individuals' generalized expectancies about control over reinforcements. An internal locus of control indicates the belief that one's own actions largely determine outcomes, whereas an external locus of control indicates the belief that outcomes are controlled by external forces or luck. In parenting terms, this construct has been modeled to understand parents' beliefs about their influence. Skinner et al. (2015) proposed that parental locus of control is central to a motivational model of parenting. The locus of control expresses parents' trust in their capability to influence their child's development and behaviour. Parents who believe they can influence their children tend to involve themselves more actively in their child's life. Thus, they take responsibility for incorporating guidance, discipline, and support. Many of these parents are heavily involved in their children's everyday lives: they check in on their progress, help them with challenges, and encourage them to solve their own problems, believing such involvement pays off. This belief system aligns closely with the authoritative parenting style, which is characterized by warmth, responsiveness, and the setting of clear expectations (while allowing the child some freedom within those guidelines). Authoritative parents maintain a balance: they exert control when necessary, but also foster autonomy by supporting the child's own agency. Research by Darling and Steinberg (1993) positioned authoritative parenting as an optimal context for child development, noting that it tends to produce children with better social adjustment, higher self-esteem, and stronger academic performance. One explanation is that authoritative parents, who likely have an internal sense of control, engage in consistent and rational parenting behaviors that internalize self-discipline and motivation in the child (Darling & Steinberg, 1993).

In contrast, parents with a high external locus of control often feel that no matter what they do, external circumstances or fate will dictate their child's outcomes. They may attribute the child's successes or failures to innate ability, luck, teacher quality, or other factors outside their immediate control. This belief can lead to two divergent parenting patterns. Some externally oriented parents become permissive or indulgent, pulling back and

allowing children to make their own decisions with minimal guidance – essentially a hands-off approach born out of a sense of inefficacy (Skinner et al., 2015). Other parents respond to an external locus of control by becoming overly strict or controlling in an attempt to force desired outcomes, even while believing those outcomes ultimately depend on forces like luck or societal pressures. The latter case might seem counterintuitive, but it reflects a situation where parents, anxious about uncertain outcomes, attempt to micromanage a child's life in areas they think they can influence. According to the literature (Maccoby & Martin, 1983; Aunola, Stattin, & Nurmi, 2018), both permissive and authoritarian extremes are associated with suboptimal child outcomes. When you are too indulgent as a parent, you deprive the child of the structure that he/she needs and make the child feel the parent cares little. On the contrary, the overly controlling parent does not give the child the confidence which impairs the child's intrinsic motivation. Skinner et al. (2015) note that an external parental locus of control often correlates with inconsistent or coercive parenting practices that do not support a child's socio-emotional adjustment.

Parental Locus of Control and Academic Achievement

Academic achievement in higher education is a multifaceted construct, typically reflected in grades, knowledge acquisition, skill development, and academic persistence. Researchers acknowledge that academic performance is determined by a confluence of personal abilities, motivation, institutional factors, and family environment. The family's role – especially parental support and expectations – has been extensively studied in relation to school-aged children and adolescents (Fan & Chen, 2017; Hill & Tyson, 2009). Parental locus of control provides a novel angle on how parents' beliefs might shape academic outcomes for their college-age children.

Parents with an internal locus of control generally hold the belief that through appropriate involvement, they can positively influence their child's educational trajectory. Such parents are likely to instill the value of education, set high (but realistic) expectations for achievement, and maintain an interest in the student's academic progress even after the student leaves for university (Allen & Land, 2010). Because they see a clear link between their guidance and the child's success, internally oriented parents may, for example, help their college student with time management strategies, provide advice on course selection or career planning, or offer encouragement during stressful academic



periods. Importantly, if combined with an authoritative style, this involvement would be supportive rather than controlling – e.g., reminding the student of their own goals and capabilities rather than dictating choices. The result, often, is that students from such families enter college with strong self-regulation skills and academic confidence (Cutrona et al., 1994; Schunk & Zimmerman, 2008). A meta-analytic review found that various forms of parental academic involvement (monitoring homework, discussing school matters, etc.) predicted better grades and lower dropout rates, though effects tended to be stronger in earlier schooling years. For college students, parental involvement takes a different form – often through emotional support or mentorship rather than direct supervision – but its influence remains present (Allen & Land, 2010).

In contrast, an external parental locus of control might adversely affect academic achievement by shaping a less supportive or more pressure-filled educational environment for the student. Parents who feel outcomes are out of their control may disengage from the student's academics – for instance, showing little interest in their university life or being unwilling to intervene when the student struggles academically, perhaps thinking “it's up to the professors or the student's luck now.” This lack of parental encouragement and involvement can leave students without a safety net or mentorship resource, potentially contributing to lower academic motivation. On the other hand, if externally oriented parents respond with over-control, they may exert undue pressure (e.g., demanding certain grades without offering practical help) or attempt to make decisions for the student (such as choosing a major or career path) without considering the student's autonomy. A student may lose his motivation or feel resentful, overwhelmed due to parental over-involvement. There is evidence that excessive parental pressure correlates with poorer academic adjustment in college – for example, one study found that students who perceived their parents as overly invested in controlling their academic outcomes had higher levels of test anxiety and lower GPAs (Turner et al., 2009). This can be interpreted through the lens of locus of control: students of over-controlling parents might feel that they themselves have little control over their academic success, which ironically can become a self-fulfilling prophecy leading to disengagement or underperformance.

2.2 Parental Locus of Control and Student Depression

The transition to university often coincides with increased psychological vulnerabilities. Depression among college students has multifactorial origins – including genetic predispositions, life stressors, and cognitive patterns – but family environment remains a significant contributor (Hunt & Eisenberg, 2010). Parental locus of control can affect the emotional climate of the family and the parent-child relationship, thereby influencing the student's mental health. Parents with an internal locus of control will be more likely to take action to help their child out with their emotions. They believe their parenting can help reduce the child's distress or build the child's coping skills. Parents may notice something that is off about their kid. He would show symptoms like withdrawal and a sad demeanor. In response, they talk to the student often. They would ask him to see a counselor or lower their expectation from the kid so that he can get lesser pressure. Engaging in these actions on a regular basis may protect against severe depression or at least help with early identification (Xiong et al., 2018). On the other hand, parents with an external locus of control may react to a child's emotional difficulties with helplessness or denial. “*It's fate, we can't change that.*” “*It's the bad influence of friends.*” These may be examples of their thoughts and actions that lack any constructive solution. The student may feel abandoned during a time when they need support the most.

Moreover, an external locus of control in parents sometimes correlates with parenting behaviors that either directly contribute to psychological distress or fail to buffer the child against outside stress. One such behavior is high parental control, as perceived by the student. When parents, feeling anxious, overmanage their child's life, it can lead to a feeling of learned helplessness or being trapped. This is likely because the parents hold an external control belief, which influences their behavior. According to Besharat and Pourbohloul (2011), adolescents whose parents reported very controlling attitudes are more likely to report poorer mental health (more depressive symptoms). If students feel they have no say in anything important or that parents take over and/or make them feel it is a done deal, the students may feel powerless and have low self-worth. These are classic precursors for depression. This finding mirrors principles from self-determination theory: human beings require a sense of autonomy to thrive psychologically; controlling parenting undermines this need, often resulting



in internal conflict and depressive affect (Ryan & Deci, 2000). Other studies have similarly found links between parental over-involvement (sometimes measured as psychological control or overprotection) and depression or anxiety in emerging adults (LeMoyne & Buchanan, 2011; Schiffrin et al., 2014). For example, LeMoyne and Buchanan (2011) found that college students with “helicopter parents” – who intervened in nearly all aspects of the student’s life – were more likely to experience anxiety and depression, as well as use prescribed medication for these issues, compared to those with more moderate parental involvement.

2.3 Depression and Academic Achievement

A large body of research confirms that mental health and academic performance are closely linked in university students. Depression, in particular, can undermine various cognitive and motivational processes that are essential for learning. Students suffering from depression often experience difficulties with concentration, memory, decision-making, and energy levels (American Psychiatric Association, 2013). They may have trouble attending classes regularly, completing assignments on time, or studying effectively for exams. Furthermore, depression is associated with anhedonia (loss of interest or pleasure), which can manifest as a lack of engagement in academic work and extracurricular activities that might enrich learning. It is therefore unsurprising that numerous studies find negative correlations between depression and academic indicators. For instance, Andrews and Wilding (2004) reported that university students with higher depression (and anxiety) at the start of the academic year tended to achieve lower exam scores and were more likely to drop out by year’s end. Other studies have estimated that depressed students earn GPAs on average 0.2 to 0.5 points lower (on a 4.0 scale) than non-depressed students, even after controlling for prior academic performance (Hysenbegasi, Hass, & Rowland, 2005). Untreated depression has also been linked to a higher likelihood of academic probation status and longer times to degree completion (Eisenberg et al., 2007).

The reasons behind this link are multifold. Cognitive impairments associated with depression (such as slowed information processing and difficulty concentrating) directly hinder study efficacy and test performance. Motivational deficits play a role as well – depressed students often struggle with initiating tasks and sustaining

effort, due to low expectancy of success or feeling overwhelmed by tasks that previously seemed manageable. When you procrastinate until the last minute, it can cause you to miss classes. Besides, sleep and energy of people can be affected by depression. It can make you less healthy and sick more often. Students successively offends the policies of college and able to poorer performance due to this reason (Mahmoud et al., 2012). As per a report, the social and behavioral mediating factors caused depression of students from hindering the impairment of friends and Professor. They tend not to get help or clarification when confused. As time goes on, any act would only impair one’s performance and at the end, the person would end up ruining himself. Students suffering from depression often do not ask for help from tutors or join study groups. They feel disconnected from other people and powerless.

3. METHODOLOGY

3.1 Research Design

The study conducted a cross-sectional analysis on the relationship between locus of control and depression and academic achievement of university students. The researchers used a correlational approach to test relationships at one point in time, without manipulating anything. Information was processed using reliable surveys and analysed statistically

3.2 Participants and Sampling

A total of 350 undergraduates of three universities in Bahawalpur, Pakistan, were selected as the sample. Recruitment made use of convenience sampling, utilizing online links shared via mailing lists and social media. To be included in this study, current undergraduates had to be enrolled or have one living parent/guardian. Of the participants, 54.9% were men and 45.1% women with an average age of 22.5 years (range: late teens–50). Most students were aged 19–30, and disciplines spanned social sciences, natural sciences, engineering, and arts.



3.3 Measures

Table 1.: Descriptive Statistics and Reliability for Key Measures (N = 350)

Measure	Items	Range (Potential)	Mean (SD)	Cronbach's α
Depression (PHQ-9)	9	0–27 (0–27)	21.5 (3.8)	.49
Academic Achievement (ESS)	15	15–75 (15–75)	49.3 (8.2)	.76
Parental Locus of Control (PIS)	15	15–60 (15–60)	46.8 (10.2)	.94

3.4 Procedure

Ethical approval was obtained prior to data collection. Participants provided informed consent and completed an online questionnaire in English (with clarifications in Urdu where needed). The survey took 10–15 minutes and remained open for one month, with two reminder invitations. Of 370 initial respondents, 350 valid and complete responses were retained. Data were anonymized and screened for inattentive patterns; minimal missing data were present.

3.5 Data Analysis

Analyses were conducted in SPSS (v27). Descriptive statistics summarized variables, and reliability (Cronbach's α) was checked. Pearson correlations examined bivariate associations among parental locus of control, depression, and academic achievement. Multiple regression tested whether parental locus of control and depression jointly predicted academic achievement, controlling for each other. Assumptions of normality, linearity, homoscedasticity, and multicollinearity were verified and met. Additional exploratory checks (gender, age interactions) revealed no significant moderating effects.

4. RESULTS

This section presents the empirical findings of the study in three parts: (1) descriptive statistics of the sample and reliability of measures, (2) bivariate correlations among parental locus of control, depression, and academic achievement, and (3) the regression analysis testing the

combined predictive effect of parental locus of control and depression on academic achievement.

As shown in that table 1, there needs to be descriptive analysis and Cronbach's alpha for each measure. This sample of students scored a mean PHQ-9 depression score of 21.5 (SD = 3.8), which is fairly high and suggests many experienced depressive symptoms quite frequently. Using the conventional PHQ-9 severity cut-offs, a score over 20 suggest severe depression. About 52% of the sample scored 20 or above. Therefore, this suggests a high level of depressive symptomatology in these students. Respondents' Academic Achievement on the 15-75 Scale. The average academic performance in this study's 15-75-point system was 49.3 (SD = 8.2). On average, the responses to each item ranged between 3 and 4, which roughly translates to 3.3 out of 5, or somewhere between neutral and agree. This indicates that students had a fairly positive outlook towards their academic behaviour and outcomes. However, there was a lot of variation. A section of students gave their academic reaching a very low rating while the other students gave theirs a very high rating. Significantly, these self-ratings in academic subjects did not have a precise correspondence to grades. However, loosely speaking, the higher the score, the higher the self-reported GPA for those who supplied it (e.g., Students who reported an "A" range GPA tended to have achievement scores in the upper 50s or 60s.) The mean score obtained by the parents was 46.8 (SD = 10.2) on a scale of 15–60 of parental locus of control. This reflects the score falls near the external end of the scale. This means that, on average, students thought their parents demonstrated a fair bit of control or external orientation with respect to the student's life, though again there was a full range of responses (some students perceived very internally oriented parents). There are significant differences between the students on their perceived parenting.

The sample had a normal distribution for all three scales. The PHQ-9 was rated acceptable but their reliability measure was rather low, that is Cronbach's α ($\alpha = .49$). This may be a reflection of cultural differences in how depressive symptoms cluster, or restriction of range (because most students scored relatively high, some items may lack variation). The reliability for the Academic Achievement and Parental Locus scales were found to be good to excellent ($\alpha = .76$ and $.94$ respectively).



4.1 Bivariate Correlations

Table 2.: Pearson Correlations Among Key Variables

Variable	Parental LOC	Depression	Academic Ach.
Parental Locus of Control	—	+0.17**	-0.21**
Depression (PHQ-9 score)	+0.17**	—	-0.41**
Academic Achievement (score)	-0.21**	-0.41**	—

Table 2 shows inter-correlations with any control variables. These findings indicated no significant relationship between gender and depression (with a correlation of +.05) or parental locus (with a correlation of -.04). However, there was a small significant relationship between gender and academic achievement (with a correlation of +.11 and a p-value of < .05). Female students reported marginally higher academic achievement than their male counterparts on average. There was no relationship between age and the main variables in this sample. Parental education level, was also examined obtained from a subset of respondents who provided this information, and observed no significant correlation with perceptions of locus of control. This suggests that it is the qualitative parenting style, rather than proxies of socio-economic status, that matters here.

Note: LOC = locus of control. Higher Parental LOC scores indicate more external parental locus of control. Academic Ach. is the academic achievement scale score. Correlation is significant at: . $p < .05$; . $p < .01$ (two-tailed).

The correlation matrix demonstrates all pairwise relationships are in the expected direction: parental external locus correlates positively with depression and negatively with achievement; depression correlates negatively with achievement. All these correlations are statistically significant at the 1% level, except the small gender difference noted earlier (not shown in table). This pattern aligns with this study's theoretical model.

4.2 Regression Analysis

The regression model was significant ($F(2,347) = 52.43$, $p < .001$), indicating that the combination of predictors explained a significant portion of variance in academic achievement.

The model's R^2 was 0.232, meaning about 23.2% of the variance in academic achievement scores was explained by the two predictors together. This is a substantial effect for an educational context, suggesting that almost a quarter of the differences in students' academic success (as they perceive it) relate to differences in their depression levels and parental locus of control context. To contextualize, an R^2 of 0.232 is considered a medium-to-large effect size in social science field studies. It underscores that these psychosocial factors (parenting and mental health) have tangible links to academic outcomes.

Looking at the individual predictors:

- Depression emerged as a strong negative predictor of academic achievement ($\beta = -0.38$, $p < .001$). The unstandardized coefficient B was approximately -0.82 (SE = 0.10), indicating that for each 1-point increase in PHQ-9 score (on the 0–27 scale), the academic achievement score (out of 75) was expected to decrease by about 0.82 points on average, holding parental locus constant. In standardized terms, a one standard deviation increase in depression was associated with a 0.38 standard deviation decrease in academic achievement, controlling for parental locus. This result confirms that even when accounting for parental influence, student depression independently has a significant deleterious effect on academic performance indicators. It aligns with prior findings that depression impairs academic functioning and suggests that interventions to alleviate student depression could have direct academic benefits.
- Parental Locus of Control also showed a significant negative predictive effect on academic achievement ($\beta = -0.25$, $p < .001$). The unstandardized B was about -0.20 (SE = 0.04), meaning that for each 1-point increase on the parental locus of control scale (toward more external/high control), the academic achievement score was expected to drop by 0.20 points, assuming depression remains the same. In standardized units, a one standard deviation increase in parental external locus corresponded to a 0.25 standard deviation decrease in academic achievement, controlling for depression. This indicates that parental locus of control has a unique contribution to academic outcomes beyond what is



explained by the student's depression level. Students with similar levels of depression whose parents they perceived as more controlling or fate-oriented performed worse in school. The reason could be due to less self-motivation or more academic pressure due to parental pressure.

Both predictor variables were highly significant. Though of a similar nature, the size of the standardized effect of depression was somewhat larger than that of parental locus (-0.38 vs -0.25). The two predictors of the dependent variable have no suppression or multicollinearity, but rather mutually reinforce each other. The correlation between parental locus and academic achievement was -0.21 bivariately; in the regression, the partial effect of parental locus ($\beta = -0.25$) was slightly stronger in magnitude. This suggests that the control of depression actually offered a clearer of the negative impact of parental locus on academics. This means that although some of the relationship between the two variables was mediated by depression, i.e. parental over-control leads to depression which then leads to poor academics, there is also a direct effect of parental locus on academic achievement. Mediation was tested (using a Baron and Kenny approach and Sobel test, although a full mediation analysis is beyond scope). The results indicated partial mediation: depression mediated roughly one-third of the total effect of parental locus on academic achievement, but the direct path remained significant. This partial mediation interpretation fits with the regression findings – parental locus has both direct and indirect (via depression) links to academic outcomes.

For completeness, Table 3 presents the regression coefficients:

Table 3:. Linear Regression Predicting Academic Achievement from Parental Locus of Control and Depression (N = 350)

Predictor	B	SE B	β	t	p-value
(Constant)	76.64	2.68	—	28.58	< .001
Depression (PHQ-9 score)	-0.82	0.10	0.38	-8.10	.001**
Parental Locus of Control	-0.20	0.04	0.25	-5.30	.001**

Model summary: $R^2 = 0.232$, $F(2, 347) = 52.43$, $p < .001$. Unstandardized coefficients (B) represent the change in Academic Achievement score (15–75 scale) per unit change in predictor. β = standardized coefficient. Both predictors are significant at the 0.001 level (**, $p < .01$).

As shown, both depression and parental locus are significant negative predictors of academic achievement. The intercept (constant) of 76.64 represents the expected academic achievement score for a student with a depression score of 0 and parental locus score of 0 (which is outside the observed range, but simply the regression baseline).

To interpret concretely: a student who is one standard deviation above the mean in depression (roughly PHQ-9 score ~ 25.3) and one standard deviation above the mean in parental locus (score ~ 57) would be predicted to have an academic achievement score significantly below average. Conversely, a student low in depression and whose parents are perceived as internal (supportive without overcontrol) would be predicted to have notably higher academic success.

Higher levels of parental external locus of control and depression collectively predict lower academic achievement, with the model explaining nearly a quarter of the variance in academic outcomes. The findings validate the idea that parental locus of control and student well-being are interrelated factors that together impact academic performance. Notably, even after accounting for depression, parental locus of control retained a significant effect, highlighting that parental influence is directly relevant to academic outcomes and not solely through its effect on mental health.

5. DISCUSSION

This study sets out to investigate the interplay between parental locus of control, student depression, and academic achievement among university students, framing the inquiry within a psychological and educational context. The findings provide empirical support for the proposed model (illustrated in Figure 1) and contribute nuanced insights into how parenting attitudes can affect college student well-being and success. In this section, each key finding in turn is discussed, relate this study's results to previous research and theoretical frameworks, consider the implications for practice and policy, and acknowledge the limitations of the study along with directions for future research.

- Parental Locus of Control and Student Depression:** A significant positive relationship was found between an external parental locus of control (as perceived by students) and the students' level of depression. Although the correlation ($r \approx .17$) was modest, it aligns that students who feel their parents exert a high degree



of control or hold fate-based beliefs tend to experience more depressive symptoms. This result resonates with earlier research on parental psychological control and its emotional toll on children. For instance, this study's finding is consistent with Besharat and Pourbohloul's (2011) observation that heavy parental control is associated with poorer mental health in offspring. One interpretation through the lens of self-determination theory is that controlling parenting undermines the student's basic need for autonomy, leading to frustration, stress, and ultimately depressive feelings (Ryan & Deci, 2000). When parents have an external locus of control, they might either micromanage the student (due to anxiety over external threats) or disengage (feeling ineffectual), and both can leave the student psychologically vulnerable. This study's data specifically suggest that a perception of high parental control – which could include invasive monitoring, making decisions for the student, or conveying that the student's own efforts don't matter as much as parental actions or luck – correlates with the student endorsing more frequent depressive symptoms. This is in line with the "helplessness" that students may internalize a sense of helplessness if their parents behave in ways that imply the student has little personal control (Seligman, 1975). Over time, this internalized external locus can manifest as depressive cognition ("nothing I do will change things"), fueling the depression.

It is important to note that the effect size was relatively small, indicating that parental locus of control is just one of many factors influencing student depression. Indeed, some students with very controlling parents may still avoid depression if they have other support systems or personal resilience, whereas others with supportive parents might experience depression due to unrelated factors (e.g., genetic predispositions or academic pressures). However, even a small effect at the population level is noteworthy: given the high prevalence of depression in college students (as evidenced by this study's sample and other studies), any identifiable risk factor warrants attention. This study's findings suggest that interventions aimed at parents – educating them about the importance of granting appropriate autonomy and expressing confidence in their child's self-efficacy – could help mitigate one risk pathway for student depression. Research suggests, that when authority figures (including parents) become more autonomy-supportive, the mental health of young people

improves (Joussemet et al., 2005) – findings consistent with self-determination theory-based interventions.

Parental locus of control influences adolescent mental health cross-culturally (García-Moya et al., 2019), and this study's findings affirm this overlaps with the predictions. In Pakistan, strong parental control is usually common. This is usually due to the culture, which supports these practices. The average student in the sample believed that their parents are relatively high on the control/external orientation scale (mean ~47 on a 15–60 scale). Within this context, normal parenting may still mean controlling parenting. The relationship to depression suggests that this style has psychological costs for students, even if normative. The impact may be larger in another culture or a different family setting, however.

Depression and Academic Achievement: The relationship between student depression and academic achievement was found to be reasonably strong and negative ($r \approx -.41$). The existing literature indicates that depression is bad for academic performance as noted by Eisenberg et al, 2007 and Hysenbegasi et al, 2005. Students with depression in the sample were more likely to report having trouble academically, in line with their low energy, difficulty concentrating and loss of motivation. The size of the correlation is moderate, indicating that depression is one of the stronger correlates of academic achievement in this sample (for reference, many individual difference factors such as personality or learning styles often correlate with GPA at a smaller size). These findings are similar to those of Andrews and Wilding (2004), who found a similar strength of correlation between mental distress and examination performance in a UK student sample. They are also comparable to later findings that show depressive symptoms predict later fall in GPA.

One particularly striking finding is that depression continues to be a strong predictor of academic achievement even with (e.g. parental) controls in the regression. The standardized beta of -0.38 indicates that depression had almost two-fifths standard deviation impact on academic success, controlling for parenting. According to a major study by the Asian College of Teachers, children's mental health is as important as their physical health. This fits within the idea that universities should deal with mental health as part of an academic support a student's mental health can lead to better academic results (and vice versa academic results can lead to mental health improvement because of accomplishment). According to the findings,



there is a demand in the higher education system for connecting mental health service to wellness programming and an enable campus context. (Hunt & Eisenberg, 2010). Many of the students screened in this study as having severe depressive symptoms may end up underperforming at school, or dropping out of school, if help is not provided to them.

The data shows that depressive symptoms can negatively affect achievement in adolescents. The cognitive-behavioral viewpoint expands on the cause of depression negatively e.g. “I’m going to fail anyway, why even study” because of which studies suffer. When a person is depressed, their ability to concentrate and to remember may become impaired. Such cognitive processes are necessary for learning. The data can’t pinpoint the mechanisms, but they suggest this association exists in this context, similar to westerns ones. Also, academic problems can increase depression, so the relationship likely reflects a two-way influence. (19 words) Some participants reportedly got depressed due to academic failures and disappointments. However, this only further impeded their academic performance creating a vicious cycle of events. Nevertheless, knowledge of this cycle is important for intervention (which should ideally aim at breaking the cycle on both ends: providing academic help, and mental health help concurrently).

5.1 Parental Locus of Control and Academic Achievement:

Parental locus of control was inversely correlated with academic achievement ($r \approx -.21$) and remained a significant predictor of achievement even after controlling for depression ($\beta = -.25$). This is a novel contribution of this study, as relatively few works have directly linked parents’ control beliefs with college students’ academic performance. The result suggests that students who perceive their parents to be more controlling or to attribute outcomes externally tend to perform worse academically. There are several possible explanations for this link:

- **Motivational Mediation:** A likely reason is that parental locus of control affects the student’s motivation and self-regulation. If parents are external and controlling, students might not develop strong internal motivation or accountability for their studies. For example, a student with controlling parents might study “because my parents force me” rather than out of personal interest or goal pursuit.

Once at university, without the parent looking over their shoulder daily, such a student might lack the self-driven study habits necessary for success. This interpretation aligns with self-determination theory – controlling parental behaviors (stemming from an external locus) undermine intrinsic motivation, which is crucial for deep learning and persistence (Deci & Ryan, 2015). The finding that parental locus predicts achievement beyond depression hints that motivation could be the mediator: even if a student isn’t depressed, having been raised under tight control could result in poorer study skills or less perseverance, affecting grades.

- **Stress and Burnout:** Alternatively, high parental control could place excessive pressure on a student to perform, leading to academic burnout or anxiety that impairs performance. Some students in the sample likely faced intense parental expectations (common in many families where parents tie educational success to family honor or future security). If parents take too much ownership of the student’s outcomes (“*we must ensure you become a top student*”), the student may feel a crippling pressure to succeed, which paradoxically can cause test anxiety, fear of failure, and avoidance behaviors that hurt achievement. This data cannot directly measure academic stress, but the significant correlation suggests it might be a factor – consistent with research that finds parental pressure correlates with academic stress and lower self-efficacy in students (Lee, 2009).
- **Lack of Skill Development:** Another factor may be that parents with an external locus might not effectively help their children develop academic skills during earlier schooling. For instance, a parent who believes success is mostly due to luck might not invest time in helping the child build good study routines or problem-solving skills, potentially leading to gaps in the student’s preparation by the time they reach university. If parents put in their best to help their child cope yet then withdraw their efforts because they think nothing they do matters, the student may have had even less academic guidance. Parents that have an internal locus may have taught the skills or sought out tutoring help, etc. The findings could reflect the total impact of these differences.



Looking in to existing literature, a parent is supportive, when the student gets better grades. Over-involvement or lack of involvement is detrimental. The construct of parental locus of control connects with this construct by portraying the nature of involvement (supportive vs controlling). Research on college students has also found that those whose parents balance availability for advice with a lack of control cope better with academic challenges (Cutrona et al., 1994). This study provides more evidence that if a parent's approach is controlling (external locus) the student's academic performance may be negatively impacted.

It is instructive to consider cultural context here. In Pakistan, as in many collectivist cultures, parents are deeply invested in their children's education and often maintain involvement through college. High parental control might be somewhat normalized, but the data suggest it still has adverse effects on academic outcomes. Interestingly, one might assume that in a culture where parental control is common, it might not correlate with poor outcomes because it's expected and accepted. However, these results did not show a null effect – a negative correlation was observed – implying that even if normal, parental over-control is not optimal for student achievement. Even so, the moderate effect size indicates that certain pupils perhaps end up thriving under parental pressure (maybe those who channel it positively). More research would be needed to see whether there are subgroups for whom parental control matters differently, e.g. students from particular fields, first-generation students might behave differently, etc. This study was overall correlational, so it shows a trend.

As noted by Baker et al (2020), the consequences of this important study are also significant for teachers and guidance officers. Factors like family situation and the person's mental health are both important and somewhat independent correlates of success in school. A student may underperform at school even when they are a non-depressed student. This can stem from a highly controlling parenting background. On the other hand, a student from a supportive family who is depressed may also underperform. Therefore, the interventions should be multi-pronged. Counseling just the student without involving his family environment may be missing something important.

Depression partially mediates the effect of parental locus on achievement, according to the findings. It means an open pathway parental control on misbehaviour students become more depressed. This depression then impairs

students' academics. Not everything led through a mediator, so there was a second pathway that was direct: controlling parent → student's academic functioning hampered (through motivation or stress) not dependent on depression. To truly support students, both students' mental wellbeing and parental involvement perceptions must be addressed. University counseling services, for instance, may want to include family systems in their assessment.

5.2 Comparison with Previous Studies and Theoretical Implications

Results of this study are consistent with several theoretical frameworks

- **Self-Determination Theory (SDT):** As noted, SDT (Deci & Ryan, 2000) provides a strong lens for interpreting the findings. The impact of parental locus of control over student academic performance is strong and predicted. Parents who give autonomy to their child will raise the esteem and confidence levels of their child, ultimately leading them to be successful people with high self-value. The data confirms with this claim. A lack of autonomy support from parents creates an external locus of control which is detrimental to academic success and is linked to depression. Research suggests that the Self-Determination Theory (SDT) can be applied in higher education across cultures. Training parents on how to communicate their trust in the child's self-regulation and avoiding controlling language could lead to some benefits. Hence, increasing parental autonomy support through interventions could be helpful.
- **Ecological Systems Theory:** Bronfenbrenner (1979) considers family to be a microsystem influencing the individual, and this influences the outcome such as education. These findings emphasize that the family context, here measured by parental beliefs/behaviours, penetrates into the academic microsystem of the student. Parental influence is an ecological factor at any level even at university where arguably peers and institutional factor take over. The family-university mesosystem interactions are important for student development. That is the relationship between family and student's school life.
- **Attribution Theory:** People use locus of control to explain an individual's successes and failures per attribution theory. Looking at the data this way



suggests that if parents internalize control, maybe students learn to internalize their failures/successes as well as per social learning. Students may be more likely to succeed if they blame their failures on their own behaviors as opposed to their parents or other external factors. If a controlling parent promotes an external attribution style, that could directly hamper academic improvement. In other words, the locus of parents can hamper academic achievement. The research stated that a student's own locus of control can be related to their performance in school, applies to this study. This contribution is showing how parents participate in that equation.

- **Stress and Coping Theory:** The strong correlation between depression and achievement shows that how well you do in school does not only depend on your intellect but also on your state of mind. According to Lazarus and Folkman's stress-coping model, academic difficulties could be regarded as stressors to which one has to cope. Depressed students are likely to have impaired coping (for instance, less active coping or more avoidance) which may lead to worse academic coping. At the same time, parental pressure can be seen as an additional stressor. students who are facing high parental pressure can suffer from continuous stress that can eventually result in possible depressive symptoms or burnouts in students. This finding indicates that the external stress of students, which occurs due to parental expectations, and their internal coping i.e. mental health, should be managed.
- **Cultural Considerations:** Interpreted through a cultural lens is important. The study took place in Pakistan, a country known for its family-oriented culture and parental authority. Some parental control makes students feel cared for or that there is concern for them. Society expects this, and even understands this, especially in an Asian qualitative study. In certain cultures parental control is seen as care according to the implications section of the thesis. Hence, students may not view parental control negatively. What are the effects of sub-cultural differences on locus of parental control, depression and achievement of an individual? These samples show a strong linkage; although perhaps something like 'perceived parental support' along with 'perceived parental control' would show that in this culture, control and support overlap – controlling parents often being highly supportive in some tangible way, which may have

contradictory effects. The medium size of the correlation may suggest that for some students parental control did in fact feel like care (so it did not cause depression) while for some others it felt oppressive. It's a reminder that individual differences in perception matter; two students with equally controlling parents might interpret it differently depending on their own values and experiences.

Another cultural aspect is mental health stigma and reporting. The very high average depression score (21.5 on PHQ-9) is striking. It could be that the sample indeed had an elevated depression level due to the time of year (perhaps data were collected near exam period, etc.) or due to broader societal stressors. Or it could reflect a response style or even an overestimation. It's possible some participants exaggerated or that the PHQ-9's cutoff might differ culturally. Considering global data that consistently reports high depression rates among students, it is likely that many of these students were genuinely experiencing significant distress. In a culture where discussing mental health is not always commonplace, the anonymity of an online survey might have allowed them to be truthful. If anything, stigma might have caused under-reporting rather than over-reporting, so the high scores are concerning. It underscores the universality of the student mental health crisis and suggests Pakistani universities need to treat student depression as a serious issue, just as Western universities do.

This study's findings encourage cross-cultural comparisons in future research: it would be valuable to see if, for example, in a more individualistic society, the correlation between parental locus and student depression is even higher (because control is more at odds with cultural norms), or if in a more collectivist society than Pakistan, it might be lower (if control is even more accepted). Regardless, the general directions are likely to hold since fundamental psychological needs (autonomy, competence, relatedness) are human universals (Ryan & Deci, 2000). This study adds a non-Western datapoint supporting those principles.

5.3 Implications for Practice

The insights gained from this study have practical implications for universities, mental health professionals, and parents. In this Implications section, a detailed specific recommendations is given.



One major implication is that interventions to improve student success should include a family component when feasible. Universities could develop workshops or informational sessions for parents of students (especially first-year students) to educate them on healthy ways to support their university-going children. Emphasizing the difference between support and control is crucial. Parents can be guided to understand that while their involvement and interest are beneficial, overly controlling or not allowing the student to take ownership can backfire, potentially harming both the student's mental health and academic results. As suggested in the thesis implications, encouraging a "moderate amount of parental intervention" is key – parents should be caring and available but also let students have independence. This balanced approach can help students develop responsibility and resilience.

For mental health practitioners (counselors, psychologists on campus), these findings suggest that when a student is present with depression or academic problems, it might be useful to gently inquire about their family background and parental expectations. Family dynamics could be a contributing factor that needs addressing. Some counseling centers might consider offering family therapy sessions or parent consultations for students who are comfortable with that. Even if direct family involvement isn't possible, therapists can help students develop strategies to cope with parental pressure – for instance, assertiveness skills to negotiate boundaries with parents, or cognitive techniques to reframe critical parental comments. This data showed that students facing high parental control and depression simultaneously were at the greatest academic risk; these students can be identified and prioritized for interventions like stress management training, study skills combined with therapy, etc.

For parents, a clear message is that promoting your child's autonomy and viewing them as an agent of their own success is beneficial. Parents should be encouraged to maintain interest in their student's academic life (ask about their day, celebrate their successes, offer help if asked) but resist the urge to dictate or monitor. It may help to provide parents with concrete examples of autonomy-supportive behaviors: e.g., instead of saying "You must enroll in these classes I chose for you," they can say "I trust you to make good choices, but I'm here to discuss options if you want." Similarly, instead of reacting to a bad grade with "What did you do wrong? Next time, you will have to learn it under my supervision." They might say, "Sorry to hear about the marks. What do you think made this happen? How can I

help you next time?" "An empowered (internal locus of control) approach may make subtle changes in your wording and approaches that can help change the motivation and stress levels of the student.

The personnel of your academic support services (the tutoring centers, the academic advisors, etc.) may want to note more than a lack of ability or study skills, sometimes students' weak performance could be due to transference of stress. Thus, educational aid must always or at least keep in mind mental health aid. For example, an academic advisor may notice that a student's grades are slipping and ask her to share anything that could be potentially weighing on her mind, adding that her performance could suggest she's feeling overwhelmed, down, etc. Instead of only suggesting time management strategies, the advisor would make a counseling referral if necessary.

5.4 Limitations

The study is useful, however its limitations should control interpretations and assist future research. A limitation of using cross-sectional design does not allow causation. As this is being examined, how locus of parental control may "predict" (or not) depression and/or academics, it is possible (although possibly less likely) that a students' depression may influence their perceptions of their parents (making them see them as more controlling than they are). If a student appears to perform poorly in academics, that could lead the parents to become more controlling (i.e. a reverse causation for that link). Time-based data will help us understand it better. Future studies can follow students over time, for instance taking measure of parental locus perception in the first semester and then following the trajectory of the depression and grades through the next semesters to see if it predicts them.

Second, all measures were self-reported by students. It opens the possibility of common method bias and perceptual bias. Independent verification of academic achievement (such as GPA records) and independent assessment of parental locus of control (such as parent reports) were not obtained. The use of self-reported academic achievement, while pragmatic, could be influenced by mood: depressed students might underrate their achievement due to negative self-view. Similarly, depressed or distressed students might perceive their parents in a harsher light. Although these concerns are somewhat mitigated by the fact that significant results still emerge (if anything, depression might inflate the



correlation with parental locus due to negative bias, but it's hard to disentangle). In future, multimethod approaches would strengthen evidence – for example, including parent questionnaires or structured interviews, and obtaining academic performance data directly.

Third, the sample was limited to three universities in one region of Pakistan, which may affect generalizability. The sample size was reasonably large (350), but it may not represent all Pakistani students or students in other countries. Students in more elite universities or different provinces might have different experiences (perhaps different parent profiles or stressors). Additionally, this sample composition in terms of disciplines was mixed but not controlled; certain majors (e.g., engineering vs. arts) might have different stress levels and parent expectations, which was not analyzed separately. Slightly more males than females participated, and although no strong gender differences were evident in the main effects, subtle gender dynamics may still exist. For instance, parental control may influence daughters' depression differently than sons. The sample size did not provide sufficient statistical power to thoroughly test such interactions. Future research could stratify analyses by gender or examine parent–student gender combinations (e.g., maternal versus paternal influence).

Another limitation relates to the measure of parental locus of control. Although the adapted scale demonstrated high reliability, questions remain regarding the specific aspects of parenting it captured. The instrument conflated parental beliefs with students' perceptions of parental behavior, essentially reflecting “perceived parental locus of control.” In practice, the scale appeared to emphasize controlling aspects of parenting, as many items focused on the degree of parental control. This raises interpretive challenges, as high scores may reflect either parental attribution to fate or overt controlling behavior. Distinguishing between parental locus of control beliefs and controlling practices in future research would clarify the mechanisms at play. Multi-dimensional assessments of parenting, including elements such as warmth and support, would provide a more comprehensive perspective.

Finally, other potentially relevant variables were not considered, including peer support, personality traits, financial stress, or the influence of the COVID-19 pandemic, depending on the timing of data collection. Other factors may also affect your depression and performance. A student's specific trait of neuroticism can

predispose them to depression, irrespective of their parent's actions. An incredibly serious financial constraint or something similar (the pandemic brought sickness to their family) could outsize anything their parents do. This model was focused on parental loci and depression; however, future models could add more control variables that let us isolate the parenting effect.

5.5 Future Research Directions

Building on these limitations and findings, future research could take several directions:

- **Longitudinal and Cross-Lagged Studies:** To study the mutual influence over time between the perception of parental locus of control and student outcomes. The initial parental locus at T1 will predict either the child's depression or the child's GPA at T2 over and above the stability effect from T1 to T2. Conversely, the child's depression and the child's GPA will predict parental locus at T1 over and above the stability effect. Tracking students from freshman to senior year may also show if parents may lose some of their influence as students age, or if only specific times matter (the first-year transition for instance).
- **Intervention Studies:** Designing and assessing programs that influence a parent's behavior or a student's coping strategies to establish cause and effect. One way to measure the impact of communication training could involve an experimental study. In this type of study, one group of parents training autonomy-supportive communication would receive training. Likewise, while control groups receive no training monitoring, students' mental health and grades could not be so monitored.
- **Possible Application for This Program:** a program that helps children cope with their parents and measures whether it decreases their depression and has positive grades compared to control.
- **Mediation and Moderation:** Researchers are interested in finding out how a parent's locus of control may affect his or her child. Consider moderators such as gender, birth order, education level of parents, and cultural values. Research has found that the way parents manage their children affects depression more in students who value



independence greatly and less in students who value filial piety a lot; the relevant hypotheses can be tested with measures of valuing cultural orientation.

- **Different Cultural Contexts:** Repeating similar studies in other areas such as Asia, Europe and North America. It will be interesting to see if the same model will work in other cultures. Further research carried out to create a common ground for all researchers. For instance, say in a U.S. sample parental locus of control correlates $r = .30$ with depression (maybe stronger because valuing autonomy is so highly prized). If, say, in a more rural traditional society it's $r = .10$ (maybe weaker because this is normative), that would contextualize the culture position further.
- **Sibling and Family Dynamics:** The parent-child relationship is somewhat treated in isolation in this study. Family systems theory suggests analyzing situations involving the entire family. It might be useful to measure the perspectives of multiple siblings or to include both mother and father (there may be differences perhaps mother's locus of control has a different effect than father's). It will also be interesting to study whether – differences are found for students coming from different family constellations (e.g., single parent home or two parent home).
- **Objective Academic Outcomes:** Incorporating actual academic performance data (transcripts, exam scores) would solidify the findings related to achievement. Also, perhaps looking at other success indicators like retention (who stays in school vs. drops out). It could be that high parental control not only affects GPA but also whether a student decides to continue or leave (some might drop out to escape the pressure, or conversely persist due to pressure – interesting questions there).

In conclusion, this research contributes to a deeper understanding of how family factors and personal well-being jointly shape academic trajectories in university students. The findings demonstrate that parental locus of control and student depression are significant, interrelated predictors of academic achievement, underscoring the importance of a holistic approach to student support—one that integrates mental health and family context alongside traditional academic interventions. The discussion above elaborated on why these relationships likely exist and how

they fit within broader psychological theories and findings. The consistency of these results with prior studies and theory gives us confidence in their validity, while the unique context and combination of variables add novel insights to the literature. These findings will spur both further scholarly inquiry and practical efforts to foster environments (both at home and on campus) that optimize student well-being and success.

6. CONCLUSION

The study revealed significant associations among parental locus of control, student depression, and academic achievement in Pakistani university students. Having parents with a less controlled outlook makes students more prone to get depressed. It is hard to be academically successful when you are depressed or anxious. Excessive attempts to control every aspect of life conflict with personal freedom and reduce intrinsic motivation to strive for meaningful outcomes. Further, this also weakens our resistance against life's challenges. Research shows that parents and mental health have a significant impact on academic performance.

The results show that good upbringing, good education and good mental health awareness is a good thing. A student's academic success is not determined by his intellectual ability alone. When students' parents encourage them and support them to the fullest, they stay on top of the school. Parents who are too controlling often put pressure on their children, not allowing them to participate in extra activities. As a result, parents help them out with academics. Taking care of their mental health is essential for a student's success. When a student chooses to take good care of themselves, instead of being stressed and tense about all of the homework you have due tomorrow or the next day, you are happier. As a result, you are getting your work done more efficiently. In the same way, you're not taking on more than you can handle. That's something to think about. Parents and universities are starting to see changes to how they do things because of the need to understand and change. Graduates can enhance their capacity to adjust to new challenges and experience positive outcomes by enhancing these attributes.



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