

Motivation Matters: Linking Self-Concordance, Academic Anxiety, and Achievement in Student Teachers' Education

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Abstract—Self-concordance refers to the degree to which individuals' goals align with their intrinsic values, interests, and authentic self. In this study, we explored the relationship between academic achievement, academic anxiety, and self-concordance among Bachelor of Education (B.Ed.) student teachers recruited through convenience sampling from institutions such as MZU, IASE, and DIET in Aizawl. 120 participants participated in the study who were recruited based on their convenience. Self-concordance was measured using the adapted Self-Concordance Scale (Sheldon & Elliot, 1999), which evaluates motivation across four dimensions: intrinsic, identified, external, and introjected motivations. Academic anxiety was assessed using a specially designed scale, while academic achievement was measured using participants' CGPA. The results revealed a moderate positive relationship between self-concordance and academic achievement ($r = 0.58$, $p < 0.01$), indicating that students with higher levels of autonomous motivation tend to perform better academically. Academic anxiety, on the other hand, was negatively correlated with self-concordance ($r = -0.20$, $p < 0.05$) but showed no significant direct relationship with CGPA. Regression analysis also showed that self-concordance significantly predicted academic achievement ($\beta = 0.608$, $p < 0.001$), and accounts for 35.5% of the variance in CGPA. From the findings, it is clear that fostering self-concordance in student teachers may enhance academic performance while potentially mitigating the effects of academic anxiety. The implications for educational practice, along with limitations and recommendations for future research, are discussed in detail in the report.

Index Terms—Student teachers, Academic Anxiety, Academic Achievement, Self-Concordance, Aizawl

I. INTRODUCTION

The concept of self-concordance emphasizes that individuals are more likely to succeed when their goals align with their personal values, interests, and intrinsic motivations. Deci and Ryan (1985) proposed that self-concordant goals foster a sense of autonomy and authenticity, which are critical for sustained motivation and personal growth. Extending this idea, Sheldon and Elliot (1999) demonstrated that self-concordant goals lead to greater effort, persistence, and satisfaction—factors that are essential for academic success. Intrinsically motivated students, whose academic goals resonate with their inner values, exhibit higher levels of engagement and achievement, as highlighted by Vansteenkiste et al. (2004).

The protective role of self-concordance against burnout has also been explored. Niemiec and Ryan (2009) found that students pursuing meaningful and authentic goals are less likely to experience exhaustion and disengagement, issues frequently observed among high-achieving students. Such goals enhance emotional well-being, fostering positive emotions that help sustain long-term engagement. Conversely, students driven by external pressures—such as societal demands or parental expectations—often report diminished satisfaction and suboptimal performance (Kasser & Ryan, 1996).

A. Academic Anxiety and Its Relationship with Academic Achievement

Academic anxiety is a prevalent phenomenon that exerts both positive and negative influences on students' performance. Zeidner (1998) defined academic anxiety as the apprehension or fear

experienced during evaluative situations, such as tests or presentations. Excessive anxiety can impair cognitive performance by disrupting working memory and focus, as evidenced by Eysenck et al. (2007). For instance, Putwain and Daly (2014) found that high test anxiety frequently predicts lower academic achievement, particularly among students with inadequate coping mechanisms.

However, not all anxiety is detrimental. Moderate levels of anxiety can act as a motivational force, driving students to prepare and perform better. This phenomenon aligns with the Yerkes-Dodson Law (Yerkes & Dodson, 1908), which posits an optimal level of arousal for peak performance. The impact of anxiety—whether as a motivator or a hindrance—largely depends on how students interpret and respond to stress. Factors such as self-concordance influence whether stress is appraised as a challenge to overcome or a threat to self-worth.

There are multiple studies which have examined the relationship between academic anxiety and achievement, with mixed findings. A few of these may be cited here:

1. Yadav and Sharma investigated this relationship among 130 teacher trainees in the Ambala District. Stratifying the sample by gender and marital status, they conducted a correlation analysis that revealed a low but significant positive correlation ($r = 0.24$, $p < 0.05$) between anxiety and academic achievement. This indicates that while mild anxiety can motivate better performance, it does not ensure optimal academic outcomes.

2. Similarly, Habeeb and Muzaffar explored the general impact of anxiety on academic performance among 118 B.Ed. students from three colleges in Aurangabad. Employing a descriptive survey methodology, they found a significant negative correlation ($r = -0.261$) between anxiety levels and CGPA, suggesting that higher anxiety is often associated with lower academic achievement.

3. Sanuar et al. (2023) further investigated the interplay between study habits, test anxiety, and academic achievement among 120 B.Ed. students, equally distributed by gender. Using Mukhopadhyay and Sansanwal's Study Habit Inventory and Spielberg's Test Anxiety Inventory, the researchers analyzed the data with Pearson's Product Moment Correlation Coefficient and t-tests. Their findings showed a strong positive correlation between effective

study habits and academic achievement. Conversely, test anxiety was significantly negatively correlated with academic performance. These results underscore the importance of fostering positive study habits while mitigating test-related anxiety to enhance academic outcomes.

B. The Link Between Self-Concordance and Academic Anxiety

Emerging research suggests that self-concordance influences how students manage academic anxiety and its effects on achievement. Students pursuing self-concordant goals often view academic challenges as opportunities for personal growth rather than threats to their self-worth (Sheldon & Houser-Marko, 2001). This perspective reduces the intensity of anxiety and encourages healthier coping strategies.

Pekrun et al. (2002), in their control-value theory of emotions, found that self-concordant goals are associated with fewer negative emotions like anxiety and more positive emotions like pride and enjoyment. These emotions enhance engagement and performance in academic tasks. Furthermore, self-concordance has been linked to adaptive perfectionism, characterized by high personal standards and a growth-oriented mindset, which lowers anxiety and improves achievement (Damian et al. 2014).

On the other hand, students with low self-concordance—those whose goals are externally motivated—are more vulnerable to anxiety. External pressures create a disconnect between what student's value and what they pursue, heightening stress and reducing performance (Deci & Ryan, 2000). Putwain and Symes (2011) highlighted that external motivation amplifies the negative effects of test anxiety by tying students' self-worth to their performance outcomes.

C. Purpose of the Research

Despite the growing body of literature on self-concordance, academic achievement, and anxiety, there is a noticeable gap in research contextualized to Mizoram, particularly among B.Ed. teacher trainees. Teacher trainees shape the academic and emotional well-being of their students, and if these individuals perceive their academic goals as aligned with their authentic selves, the associated academic and emotional burdens may be alleviated. In this study, we attempted to explore such a relationship with the intention of understanding if self-concordance

optimize academic outcomes in the context of Mizoram, and if it does, to what extent it mitigates academic anxiety enhances the overall well-being of B.Ed. teacher trainees, thereby providing insights for developing targeted interventions and fostering a supportive educational environment.

D. Objectives:

The primary objectives of this study were:

1. To examine the relationship between self-concordance and academic achievement among B.Ed. student teachers.
2. To examine the relationship between academic anxiety and academic achievement among B.Ed. student teachers.
3. To examine the relationship between self-concordance and academic anxiety among B.Ed. student teachers.
4. To predict academic achievement from academic anxiety and self-concordance among B.Ed. student teachers

E. Hypotheses:

Based on the objectives, the following hypotheses were formulated:

1. H₁: There is a significant positive relationship between self-concordance and academic achievement among B.Ed. student teachers.
2. H₂: There is a significant negative relationship between academic anxiety and academic achievement among B.Ed. student teachers.
3. H₃: There is a significant negative relationship between self-concordance and academic anxiety among B.Ed. student teachers.
4. H₄: Academic Anxiety and Self-concordance will significantly predict academic achievement in B.Ed. student teachers, with each accounting for a significant variance in CGPA.

II. METHODOLOGY

A. Sample:

120 B.Ed. student teachers were selected through convenience sampling from several institutions in Aizawl, including MZU (Mizoram University), IASE (Institute of Advanced Studies in Education), and DIET (District Institute of Education and Training).

These participants were selected based on their availability and willingness to participate in the study.

B. Research Design:

This study uses a correlational research design to meet the study's objectives. Multiple Regression analysis was also used in the analysis.

C. Tools Used:

1. Self-Concordance Scale (Sheldon & Elliot, 1999): The Self-Concordance Scale was adapted to measure the degree to which participants' academic goals align with their intrinsic values, interests, and authentic self. It evaluates motivation across four dimensions: intrinsic motivation, identified motivation, external motivation, and introjected motivation.
2. Academic Anxiety Scale: A specially designed scale was used to assess the level of academic anxiety experienced by the participants. The scale focused on various anxiety-inducing factors such as test anxiety, fear of failure, and stress related to academic expectations.
3. CGPA (Cumulative Grade Point Average): Participants' academic achievement was measured by their CGPA, which was considered a reliable indicator of their overall academic performance.

D. Data Analysis:

Pearson's correlation coefficient (r) was computed to explore the relationships between self-concordance, academic anxiety, and academic achievement. A multiple regression analysis was conducted to determine whether academic anxiety and self-concordance could significantly predict academic achievement (CGPA). Significance levels were set at $p < 0.05$ to test the hypotheses. The data was analyzed using the statistical software SPSS (Version 16).

III. RESULTS

1. Correlation Analysis

The Pearson correlation coefficients among the variables of academic anxiety, CGPA, and self-concordance can be seen from Table 1.

Table 1
Correlations Among Academic Anxiety, CGPA, and Self-Concordance

Variable	Academic Anxiety	CGPA	Self-Concordance
Academic Anxiety	1	-0.006	-0.197*
CGPA	-0.006	1	0.585**
Self-Concordance	-0.197*	0.585**	1

Note:

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

The analysis revealed the following relationships:

- a. Academic Anxiety and Self-Concordance: There is a significant negative correlation between academic anxiety and self-concordance ($r = -0.197, p < 0.05$). This suggests that higher levels of academic anxiety are associated with lower levels of self-concordance in the student teachers. In other words, students who experience more anxiety related to their academics tend to show lower alignment of their academic goals with their intrinsic values and interests.
- b. Self-Concordance and CGPA: A moderate positive correlation was found between self-concordance and CGPA ($r = 0.585, p < 0.01$). This indicates that higher levels of self-concordance are strongly associated with better academic

performance. Students who exhibit more autonomous and self-aligned motivation tend to achieve higher academic outcomes as reflected in their CGPA.

- c. Academic Anxiety and CGPA: There was no significant relationship between academic anxiety and CGPA ($r = -0.006, p = 0.946$). This suggests that academic anxiety, in isolation, does not directly influence academic achievement in this sample of B.Ed. student teachers.

2. Multiple Regression Analysis

The results of the multiple regression analysis which was conducted to examine the predictive role of academic anxiety and self-concordance on CGPA can be seen from Table 2.

Table 2
Result of the Multiple Regression Analysis

Model	Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	6.087	0.571		10.657	0.000	4.956	7.219
	Academic Anxiety	0.005	0.003	0.114	1.501	0.136	-0.002	0.011
	Self-Concordance	0.161	0.020	0.608	8.022	0.000	0.121	0.201

a. Dependent Variable: CGPA

Note: Adjusted R Squared = 0.355, Durbin Watson statistics = 2.55, $F = 32.18, p < .001$

The regression analysis reveals that self-concordance is a significant predictor of CGPA, while academic anxiety does not have a significant effect on academic performance. The unstandardized coefficient for self-concordance ($B = 0.161$) is positive, and the standardized coefficient (Beta = 0.608) is substantial, indicating that for each unit increase in self-concordance, CGPA is expected to increase by 0.161

units. This relationship is statistically significant ($p < 0.001$), and the confidence interval for B does not include zero ($CI = [0.121, 0.201]$), further confirming the significance of the result.

On the other hand, academic anxiety has a small positive effect ($B = 0.005$), but this effect is not statistically significant ($p = 0.136$), as the confidence interval for B (-0.002 to 0.011) includes zero. This

suggests that academic anxiety does not have a meaningful predictive impact on CGPA in this sample. The Adjusted R^2 value of 0.355 indicates that the model explains approximately 35.5% of the variance in CGPA, suggesting that self-concordance, in particular, is a strong predictor of academic performance among the student teachers in this study. The Durbin-Watson statistic of 2.55 suggests that there is no significant autocorrelation in the residuals, ensuring the validity of the regression model.

IV. SUMMARY AND INTERPRETATION OF THE FINDINGS

The results of the study are summarised in the following sections while addressing the study hypotheses:

1. H₁: There is a significant positive relationship between self-concordance and academic achievement among B.Ed. student teachers: The analysis revealed a moderate positive correlation between self-concordance and CGPA ($r = 0.585$, $p < 0.01$), supporting this hypothesis. This indicates that students with higher self-concordance tend to achieve better academic performance, as measured by their CGPA. The multiple regression analysis further confirmed that self-concordance is a significant predictor of CGPA ($B = 0.161$, $p < 0.001$), explaining a substantial portion of the variance in academic achievement (Adjusted $R^2 = 0.355$). These results validate that aligning academic goals with intrinsic values and interests enhances academic performance among student teachers.
2. H₂: There is a significant negative relationship between academic anxiety and academic achievement among B.Ed. student teachers: Contrary to the hypothesis, the correlation analysis showed no significant relationship between academic anxiety and CGPA ($r = -0.006$, $p = 0.946$). This suggests that academic anxiety, in isolation, does not directly impact academic performance. The regression analysis also showed that academic anxiety does not significantly predict CGPA ($B = 0.005$, $p = 0.136$). Therefore, this hypothesis was not supported by the data.
3. H₃: There is a significant negative relationship between self-concordance and academic anxiety among B.Ed. student teachers: The results

indicated a significant negative correlation between self-concordance and academic anxiety ($r = -0.197$, $p < 0.05$), supporting this hypothesis. This suggests that students with higher levels of self-concordance—those whose academic goals align with their intrinsic values—tend to experience lower levels of academic anxiety. This finding highlights the potential benefit of fostering self-concordance as a means to alleviate anxiety among student teachers.

4. H₄: Academic anxiety and self-concordance will significantly predict academic achievement in B.Ed. student teachers, with each accounting for a significant variance in CGPA: The results of the regression analysis show that self-concordance significantly predicts CGPA ($\beta = 0.608$, $p < 0.001$), while academic anxiety does not. The model explains 35.5% of the variance in CGPA (Adjusted $R^2 = 0.355$), with self-concordance being the only significant predictor of academic achievement. Therefore, this hypothesis is partially supported: while self-concordance significantly predicts academic achievement, academic anxiety does not make a meaningful contribution to predicting CGPA.

V. Discussion

The findings of the study provide a detailed examination of the relationships between self-concordance, academic anxiety, and achievement among B.Ed. student teachers. Self-concordance emerges as a critical factor closely linked to academic success. Students whose goals align with their intrinsic values tend to achieve higher academic performance, as demonstrated by the moderate positive correlation and significant predictive strength of self-concordance for CGPA. This shows the significance of internal motivation in sustaining effort and achieving positive outcomes, particularly in professional training programs that demand high levels of personal dedication.

On the other hand, the role of academic anxiety appears limited. The lack of a significant relationship between academic anxiety and achievement challenges the assumption that anxiety consistently hampers academic performance. In this context, it is possible that anxiety effects are moderated by other variables, such as effective coping mechanisms or

supportive educational environments. Anxiety may function as a background factor, present but exerting little direct influence on measurable academic outcomes like CGPA.

The observed negative relationship between self-concordance and academic anxiety further suggests that intrinsic motivation may help reduce stress levels. Students with higher self-concordance, whose academic goals align with their values, report lower levels of anxiety. This alignment likely provides a sense of clarity and direction, reducing psychological strain. For B.Ed. students balancing theoretical and practical demands, such alignment may be especially beneficial in managing the pressures inherent to their training.

The regression analysis reinforces the prominent role of self-concordance as a determinant of academic achievement, while academic anxiety contributes little to the predictive model. These findings highlight the central role of intrinsic motivation in fostering success, while suggesting that anxiety, in this sample, does not directly shape academic outcomes. The model's ability to explain 35.5% of the variance in CGPA emphasizes the importance of self-concordance in academic contexts.

VI. IMPLICATIONS OF THE FINDINGS

These outcomes raise important questions. While self-concordance clearly supports achievement, the absence of a significant relationship between anxiety and performance invites further exploration. Does anxiety influence other aspects of the learning process that are not captured by CGPA? Could its effects be mediated or moderated by factors such as self-efficacy or resilience? Educators could benefit from fostering intrinsic motivation by encouraging goal-setting that aligns with students' interests.

At the same time, strategies to address anxiety—like clear communication, supportive feedback, or stress management exercises—could help students navigate academic pressures. Exploring how factors like self-efficacy or resilience mediate these effects may reveal further insights. A focus on both motivation and emotional well-being can make educational practices more effective and student-centered.

VII. LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

While this study provides helpful findings about self-concordance, academic anxiety, and academic achievement, it does have some limitations. First, the sample was selected using convenience sampling, which means the results might not apply to all B.Ed. students. Since participants came from specific institutions in Aizawl, the findings may not represent students from other areas or backgrounds. Future studies could include a more diverse sample to make the findings more broadly applicable.

Another limitation is that the study only looked at data from one point in time. This cross-sectional approach makes it difficult to see how these relationships change or develop over time. A longitudinal study would help show how self-concordance and academic anxiety affect academic performance in the long run. It could also help identify other factors, like coping skills or time management, that might influence these relationships.

The study used self-reported data, which can sometimes be inaccurate because participants might answer in ways they think are expected rather than truthfully. Future research could include other methods, such as interviews or observations, to get a fuller picture of how students experience academic anxiety and motivation.

In this study, academic performance was measured using CGPA, which, while useful, only tells part of the story. Adding other measures, such as performance in practical teaching or feedback from mentors, could give a more complete view of how well students are doing overall.

Future research could also explore additional factors that might shape or influence the relationships found in this study. For example, looking at how personality traits, cultural values, or peer support interact with self-concordance and academic anxiety could provide a deeper understanding. Including students from other educational programs or regions would also help show how these findings apply in different contexts.

Lastly, while the statistical methods used here were effective, future studies could use more advanced techniques to explore the connections between these variables in greater detail. This might help uncover patterns or influences that were not visible in this study.

Addressing these points in future research would help build on the findings of this study and give a clearer

understanding of what supports academic success in B.Ed. students.

REFERENCES

- [1] Damian, L. E., Stoeber, J., Negru, O., & Băban, A. (2014). Perfectionism and school engagement: A three-wave longitudinal study. *Personality and Individual Differences*, 74, 42–47.
- [2] Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer US.
- [3] Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- [4] Eysenck, M. W., Derakshan, N., Santos, R., & Calvo, M. G. (2007). Anxiety and cognitive performance: Attentional control theory. *Emotion*, 7(2), 336–353.
- [5] Habeeb, K. T., & Muzaffar, K. Z. (2023). Effect of general anxiety on academic achievement of B.Ed students. *International Journal of Creative Research and Thought*, 11(8).
- [6] Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22(3), 280–287.
- [7] Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133–144.
- [8] Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, 37(2), 91–105.
- [9] Putwain, D. W., & Daly, A. L. (2014). Test anxiety prevalence and gender differences in a sample of English secondary school students. *Educational Studies*, 40(5), 554–570.
- [10] Putwain, D. W., & Symes, W. (2011). Teachers' use of fear appeals in the mathematics classroom: Worrying or motivating students? *British Journal of Educational Psychology*, 81(3), 456–474.
- [11] Sanuar, S. K., Patra, K., & Maity, A. (2023). Correlation between study habit, test anxiety and academic achievement of the male and female B.Ed. college students. *Journal for ReAttach Therapy and Developmental Diversities*, 6(9s), 1872–1880.
- [12] Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76(3), 482–497.
- [13] Sheldon, K. M., & Houser-Marko, L. (2001). Self-concordance, goal attainment, and the pursuit of happiness: Can there be an upward spiral? *Journal of Personality and Social Psychology*, 80(1), 152–165.
- [14] Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004). Motivating learning, performance, and persistence: The synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *Journal of Personality and Social Psychology*, 87(2), 246–260.
- [15] Yadav, S., & Sharma, S. (2013). Co-relates between anxiety and academic achievement in teacher trainees. *Journal on School Educational Technology*, 9(2).
- [16] Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology*, 18(5), 459–482.
- [17] Zeidner, M. (1998). *Test anxiety: The state of the art*. Springer US.