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Exploring the relationship between academic self-concept and academic success in king Faisal university students

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Abstract

Academic self-concept plays a pivotal role in shaping students' academic motivation, engagement, and performance. This study investigated the relationship between academic self-concept and academic success among students at King Faisal University in Saudi Arabia. A cross-sectional survey was conducted with 336 undergraduate and postgraduate students using a structured Arabic-translated questionnaire consisting of socio-demographic questions, the Academic Self-Concept Scale (40 items), and the Academic Success Scale (26 items). Descriptive and inferential statistics, including t-tests, ANOVA, and Pearson correlation, were performed using SPSS. The overall mean academic self-concept score was 3.06 (SD = 0.38), indicating a generally positive self-view. Significant differences in self-concept were observed based on gender (p = 0.013), age (p = 0.032), academic level (p = 0.044), GPA (p = 0.004), and discipline (p = 0.022). Academic self-concept showed a strong positive correlation with the domain "Teaching Environment and Contribution of Others" (r = 0.50, p = .001) and with "Impact of Students' Individual Characteristics" (r = 0.48, p = .001). These results underscore the influence of both individual and contextual factors on students' academic confidence and outcomes. Educational interventions that nurture self-concept may enhance academic success. Longitudinal studies are recommended to further explore causal relationships.

Keywords: Academic self-concept, Academic success, Learning environment, Student motivation, University students.

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1. Introduction

Academic self-concept is a crucial construct in educational psychology, reflecting how students perceive their abilities and competence within academic contexts. It influences not only how learners engage with their studies but also how they

respond to challenges and setbacks. The importance of academic self-concept has been emphasized in various studies that highlight its role as both a predictor and an outcome of academic achievement [1].

In recent decades, the relationship between academic self-concept and academic success has attracted considerable scholarly attention. According to Hansen and Henderson [2], there is a growing body of evidence suggesting that academic self-concept significantly drives students' academic performance across different educational stages. This suggests that interventions aimed at improving students' self-concept could have far-reaching effects on their educational outcomes.

Furthermore, academic self-concept does not operate in isolation; it interacts with other psychological and environmental factors that impact learning. For instance, Colmar, et al. [3] noted that academic buoyancy, or the ability to overcome challenges in the academic sphere, is closely linked with self-concept and, in turn, academic performance. This highlights the dynamic nature of academic self-concept and its interaction with various motivational and contextual factors.

Notably, the longitudinal relationship between academic self-concept and academic achievement has been confirmed in numerous meta-analytic studies, which consistently show a positive correlation between the two [1, 4]. Such findings emphasize that academic self-concept is not merely a byproduct of achievement but also a key driver of sustained academic success.

Research also indicates that changes in academic self-concept during formative years, such as in junior high school, can have significant implications for future academic performance [5]. This underscores the importance of fostering positive academic self-concept early on to support long-term academic trajectories.

Interestingly, academic self-concept also interacts with emotional factors such as anxiety. Brumariu, et al. [6] found that anxiety can mediate the relationship between self-concept and academic performance, suggesting a need for comprehensive support that addresses both cognitive and emotional aspects of student life. This is particularly relevant in the university setting, where academic pressures are high.

In the context of higher education, self-concept has been shown to play a mediating role between resilience and academic success. For instance, García-Martínez, et al. [7] demonstrated that students with higher self-concept tend to be more resilient, leading to better academic outcomes. Similarly, Schnitzler, et al. [8] found that patterns of student engagement are significantly associated with self-concept and, by extension, academic achievement.

The interplay between academic self-concept, engagement, and learning outcomes has been highlighted in studies exploring university environments. Guo, et al. [9] reported that students' perceptions of their learning environments and their engagement levels are significantly linked to their self-concept and learning outcomes. This suggests that improving students' perceptions of their learning environments could have a positive impact on both their academic self-concept and academic success.

Given these insights, the current study seeks to explore the relationship between academic self-concept and academic success among students at King Faisal University. Despite the wealth of international literature on this topic, there remains a gap in understanding how this relationship manifests in the specific context of Saudi Arabian higher education. This study aims to address this gap by investigating the extent to which academic self-concept influences the academic success of King Faisal University students, thereby contributing to the broader understanding of this critical psychological construct in the university context.

1.1. Statement of the Problem

Academic self-concept is increasingly recognized as a key psychological construct influencing students' motivation, resilience, and academic achievement [1, 4]. It reflects how students perceive their own academic abilities and significantly shapes their learning behaviors and engagement. While numerous international studies have validated the relationship between self-concept and academic performance, much of this research has focused on Western educational contexts [2, 9]. In Saudi Arabia, educational reforms have emphasized student-centered learning and improved academic support services, yet empirical research examining students' academic self-concept in this unique socio-cultural context remains scarce. Alnahdi and Schwab [10] highlighted notable differences in academic self-concept between Saudi and German students, underscoring the importance of localized investigations. However, their study focused on school-age children, leaving a gap in the literature regarding university students.

This lack of research is particularly pressing in light of the academic and emotional challenges that Saudi university students face in increasingly competitive and rapidly changing educational environments. Without understanding the role of academic self-concept in shaping students' academic trajectories, universities may overlook vital psychological factors that influence academic outcomes. Although institutions like King Faisal University offer diverse academic programs and student support services, it is unclear how students' beliefs about their academic abilities affect their success. Moreover, Salman, et al. [11] emphasized the mediating role of self-concept in relation to academic resilience and emotional self-regulation among Arab university students, suggesting a complex interplay of internal psychological resources. This study aims to address this gap by exploring the relationship between academic self-concept and academic success among students at King Faisal University, contributing to a more nuanced and culturally relevant understanding of student achievement in the Saudi context.

1.2. Research Questions

1. What is the overall level of academic self-concept and academic success among students at King Faisal University?

2. Are there statistically significant differences in academic self-concept and academic success based on students' gender, age, academic level, GPA, and academic discipline?
3. What is the relationship between academic self-concept and academic success among university students?
4. Which domains of academic success (e.g., teaching environment, curriculum, individual characteristics) show the strongest correlation with academic self-concept?
5. To what extent do socio-demographic variables (such as age, gender, GPA) influence the academic self-concept of university students?

1.3. Research Objectives

1. To assess the overall levels of academic self-concept and academic success among students at King Faisal University.
2. To examine whether there are statistically significant differences in academic self-concept and academic success based on gender, age, academic level, GPA, and academic discipline.
3. To explore the relationship between academic self-concept and academic success among university students.
4. To identify which domains of academic success are most strongly correlated with students' academic self-concept.
5. To analyze the influence of socio-demographic variables on the academic self-concept of students at King Faisal University.

1.4. Research Significance

1.4.1. Theoretical Significance

This study contributes to the growing body of literature on academic self-concept by providing empirical evidence from a non-Western, Arab educational context. While previous research has established the reciprocal relationship between academic self-concept and academic achievement [1, 4], there remains a scarcity of research focused on Saudi university students. By examining this relationship at King Faisal University, the study adds cultural and contextual depth to existing theoretical frameworks and supports the applicability of global psychological constructs in local settings. It also extends the work of Alnahdi and Schwab [10] by shifting focus from school-aged children to higher education, offering new insights into how academic self-concept evolves in older student populations.

1.5. Practical Significance

Practically, this research provides valuable insights for educators, academic advisors, and university administrators seeking to improve academic outcomes. The findings highlight the importance of fostering a positive academic self-concept to enhance student engagement, resilience, and performance. Interventions such as mentorship programs, personalized academic advising, and supportive learning environments could be developed or refined based on the study's results. Additionally, recognizing the role of demographic variables (such as gender, GPA, and academic discipline) can help institutions create more targeted support strategies to address the diverse needs of students. Ultimately, this study can inform evidence-based policies and practices that aim to promote academic success across Saudi universities.

1.6. Research Limits

- Topical Limits: This research was confined to investigating the construct of academic self-concept and its association with academic success. It did not explore other psychological or environmental factors such as motivation, stress, parental involvement, or institutional support that may also influence academic performance.
- Human Limits: The study was limited to a sample of 336 undergraduate and postgraduate students enrolled at King Faisal University. Participants were selected from various academic disciplines and years of study, but the results may not be generalizable to all university students in Saudi Arabia or other educational contexts.
- Time Limits: Data collection was conducted over a three-week period from April 15 to May 7, 2025. The study reflects students' self-concept and academic success perceptions during this specific academic period and may not capture long-term changes or fluctuations.
- Spatial Limits: This research was conducted exclusively at King Faisal University, located in Alahsa, Saudi Arabia. As such, the findings are context-specific and may not reflect the experiences of students in other universities or regions within the country.

1.7. Definition of Terms

- Academic Self-Concept: Academic self-concept refers to a student's perception of their own academic abilities and competence within an educational context. It influences motivation, learning behavior, and academic outcomes. In this study, academic self-concept was measured using the Academic Self-Concept Scale developed by Reynolds [12], which includes 40 items assessing students' beliefs about their academic capabilities. This construct is supported by Möller, et al. [4] and Wu, et al. [1], who emphasized its predictive value in educational achievement.
- Academic Success: Academic success is defined as the extent to which a student meets short- or long-term academic goals, including GPA, engagement, and performance in learning environments. In this research,

academic success was measured using the Academic Success Scale adapted from Erçetin, et al. [13], which assesses various domains such as curriculum, teaching environment, and student behavior.

- King Faisal University: King Faisal University is a public university located in Alahsa, Saudi Arabia. It offers a diverse academic environment encompassing various faculties including education, science, health, and humanities. This institution was selected as the study setting due to its large and diverse student population, which allowed for the investigation of academic self-concept and academic success across different disciplines and academic levels.

2. Theoretical Framework and Previous Studies

2.1. Academic Self-Concept

Academic self-concept is a key construct in educational psychology that refers to students' perceptions of their own academic abilities. It encompasses beliefs about competence, confidence, and performance in academic settings [4]. This perception influences how students approach learning tasks, how much effort they invest, and how resilient they are in the face of academic challenges. According to Wu, et al. [1], academic self-concept is not merely a byproduct of achievement but a dynamic factor that plays a bidirectional role in influencing academic outcomes across developmental stages.

The theoretical foundation of academic self-concept is rooted in the reciprocal effects model (REM), which posits a two-way interaction between self-concept and academic achievement. Wu, et al. [1] confirmed this model in their meta-analysis, showing that students with high academic self-concept tend to achieve better academically, and academic success further reinforces their self-perceptions. The REM framework emphasizes that self-beliefs and achievement form a reinforcing cycle over time, especially in educational contexts that support student engagement and recognition.

Self-concept also interacts with emotional and contextual variables. Brumariu, et al. [6] reported that anxiety can mediate the relationship between academic self-concept and performance, suggesting that a positive self-concept can buffer the negative effects of stress. In addition, studies such as Colmar, et al. [3] highlighted how academic buoyancy—the ability to cope with everyday academic demands—is positively related to academic self-concept. These findings suggest that enhancing academic self-concept can strengthen both cognitive and emotional resilience in students.

In the Saudi context, Alnahdi and Schwab [10] emphasized that academic self-concept is influenced by cultural perceptions of success and social inclusion. Their study showed that students with learning disabilities in Saudi Arabia reported lower academic self-concept compared to peers, highlighting the importance of inclusive educational practices. This supports the idea that academic self-concept is shaped by both internal beliefs and external support systems. Thus, understanding and fostering academic self-concept is essential for improving educational outcomes, particularly in culturally diverse settings like Saudi Arabia.

2.2. Academic Success

Academic success is a multidimensional construct that includes achieving desirable academic outcomes such as high grades, goal attainment, and positive learning behaviors. It goes beyond GPA to encompass classroom participation, motivation, learning strategies, and social engagement García-Martínez, et al. [7]. As such, academic success is shaped by both internal psychological factors and external educational structures. In this study, academic success was measured through a scale assessing the influence of institutional practices, learning environments, and personal efforts.

The theoretical understanding of academic success is closely linked to constructions like student engagement and resilience. Schnitzler, et al. [8] demonstrated that students with higher levels of engagement and positive academic self-concept exhibit greater academic achievement. Their findings align with the self-determination theory, which suggests that students who feel competent and autonomous in their learning are more likely to succeed. Similarly, Reyes, et al. [14] emphasized that parenting style and student engagement significantly affect academic performance, further supporting the multifactorial nature of academic success.

Academic success is also influenced by students' perceptions of their learning environment. Guo, et al. [9] found that a positive and supportive university environment—characterized by effective teaching, relevant curriculum, and resource availability—correlates strongly with academic performance. This perspective aligns with the ecological systems theory, which posits that a student's learning is embedded within and influenced by multiple environmental systems. Therefore, efforts to improve academic success should address both individual and systemic factors.

In the Arab higher education context, Salman, et al. [11] demonstrated that emotional self-regulation, resilience, and academic engagement are strong predictors of academic performance among university students. Their study emphasizes the role of internal psychological resources, particularly academic self-concept, in promoting academic success. These findings are particularly relevant to the Saudi university context, where educational reforms and increased focus on student-centered learning highlight the need for evidence-based strategies to support academic achievement. Understanding how students define and experience success in this setting is essential for shaping effective academic policies and support systems.

2.3. Previous Studies

Colmar, et al. [3] conducted a study investigating the role of academic buoyancy, defined as the ability to overcome daily academic challenges, and its relationship with academic performance in mathematics and reading among 191 upper primary-aged students. The researchers used structural equation modeling to analyze the associations and found that academic buoyancy was positively linked to academic performance, mediated by academic self-concept. Their results underscored that this relationship was domain-specific—strong within each subject area (mathematics and reading), but

not across both simultaneously. While the study was limited by its cross-sectional design, it offers valuable insights into the interconnectedness of students' resilience in learning, self-perceptions, and achievement. This work lays the groundwork for future investigations into how academic buoyancy and self-concept together influence educational outcomes.

Wu, et al. [1] conducted a comprehensive meta-analysis synthesizing 240 effect sizes from 68 longitudinal studies to better understand the evolving relationship between academic self-concept (ASC) and academic achievement. Their findings revealed a significant reciprocal association, where academic achievement positively influenced self-concept ($\beta = 0.16$, $p < 0.01$) and vice-versa ($\beta = 0.08$, $p < 0.01$). Notably, the study also highlighted the moderating influence of student age on both pathways, with achievement level and measurement type additionally moderating the impact of self-concept on achievement. These insights suggest that while younger students may initially develop self-concept primarily through academic skill-building, the interplay between self-concept and achievement becomes increasingly reciprocal as students mature. This research provides valuable evidence for the reciprocal effects model (REM), offering a dynamic developmental perspective on how self-perceptions and academic performance reinforce each other over time.

Perinelli, et al. [5] examined how academic self-concept (ASC) in math and verbal domains evolves over the course of junior high school and how these changes relate to academic achievement. Tracking 1,674 students from ages 10 to 13, they observed that, on average, both math and verbal self-concepts decline significantly during this period. However, the degree and direction of change varied widely among individuals, with no consistent pattern linking changes across the two domains. Longitudinal analyses revealed that positive changes in self-concept within a given domain were associated with improved achievement in that same domain, while cross-domain effects were minimal or nonsignificant. These findings reveal the dynamic and domain-specific nature of self-concept development in early adolescence and underscore the importance of tailored interventions that support students' self-belief in both math and verbal subjects independently.

Hansen and Henderson [2] explored how students' beliefs about their own academic abilities—referred to as academic self-concept—influence their performance in the General Certificate of Secondary Education (GCSE) exams in the UK. Analyzing data from the Next Steps study, the researchers found that students with a stronger academic self-concept achieved significantly higher GCSE scores, even after adjusting for other background characteristics. Specifically, high self-concept was associated with an average increase of four GCSE grade points. The study also revealed that both high and low achieving students with elevated academic self-concept were more likely to secure five A*–C grades and higher overall GCSE scores than their peers with lower self-concept but similar academic potential. These results underscore the substantial role of self-concept in driving academic performance and highlight its importance in educational strategies and policies.

Alnahdi and Schwab [10] conducted a cross-national study comparing the perceptions of school inclusion, well-being, and academic self-concept among fifth and sixth-grade students in Saudi Arabia and Germany. Using the Perception of Inclusion Questionnaire (PIQ), they analyzed responses from 888 Saudi and 699 German students. Findings revealed that Saudi students generally reported more positive perceptions of inclusion, although they also tended to agree with all statements, including those reflecting negative aspects. Notably, no significant differences emerged between the two groups in terms of their reluctance to attend school, and both groups reported high levels of peer support and social inclusion. However, students with learning disabilities in both countries exhibited lower academic self-concept compared to their peers. The authors suggest that these findings reveal the need for further research and interventions to support the academic self-concept and well-being of students, particularly those with learning disabilities, in diverse educational contexts.

Salman, et al. [11] investigated how academic self-concept, academic resilience, and academic engagement collectively influence the academic performance of students at Wasit University in Iraq. Involving a sample of 306 students, the study also examined whether emotional self-regulation mediates these relationships and whether self-esteem moderates them. Using structural equation modeling, the researchers found that emotional self-regulation significantly mediated the links between academic self-concept, resilience, engagement, and academic outcomes. However, self-esteem did not exhibit a moderating effect. These findings underscore the importance of fostering psychological resources, particularly emotional self-regulation—in conjunction with enhancing students' self-concept and resilience. The authors advocate for higher education policies that prioritize building these supportive internal and contextual factors to boost academic success.

3. Methodology

3.1. Research Design

This study used a cross-sectional design to examine the relationship between academic self-concept and academic success among university students. The cross-sectional design was selected because it allows researchers to gather data from a diverse sample at a single point in time, offering a snapshot of how variables are related across different individuals. This design is particularly useful in identifying patterns and associations without the need for long-term tracking, making it an efficient choice for examining the factors that contribute to academic success in a university setting.

3.2. Research Population and Setting

The research population consisted of undergraduate students enrolled at King Faisal University, located in Alahsa, Saudi Arabia. The university hosts students from a variety of faculties, including scientific, literary, and professional disciplines, providing a diverse academic environment. The study was conducted within the College of Educational Sciences, leveraging the availability of students from different majors and academic levels. The target population included

both male and female students across first-year to final-year levels, ensuring a comprehensive view of academic self-concept and success across the student body.

3.3. Research Sample and Sampling Strategy

A sample of 336 students were selected to participate in the study. The sampling strategy employed was stratified random sampling, which ensured that students from different faculties and academic levels were proportionately represented. This approach reduced potential biases and helped to ensure that the findings could be generalized to the broader university population. Participants were recruited through multiple channels, including in-class announcements, emails sent via the university's internal communication system, and secure online platforms, encouraging broad participation and accessibility for students from different backgrounds.

3.4. Data Collection Tools

Data was collected using a structured questionnaire that consisted of three main parts. The first part included socio-demographic questions to gather essential information about participants, such as age, gender, academic year, faculty, and grade point average (GPA). This data helped to contextualize the findings and understand potential differences in academic self-concept and success across subgroups.

The second part of the questionnaire featured the Academic Self-Concept Scale developed by Reynolds [12]. This scale measured students' confidence and beliefs in their academic abilities through 40 items. Responses were rated on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). Sample items included statements like "If I try hard enough, I will be able to get good grades" and "I consider myself a very good student." Higher average scores indicated a more positive academic self-concept. This scale had high internal consistency ($\alpha = .91$) and had been widely validated in previous research [15].

The third part of the questionnaire used the Academic Success Scale Erçetin, et al. [13], which assessed students' perceptions of their academic success. This scale included 26 items covering various dimensions such as the influence of teachers, curriculum structure, school environment, and individual study habits. Examples of items included "Students do their homework regularly" and "Teachers use technological tools in teaching." These items were also rated using a Likert scale format, capturing the multi-dimensional aspects of academic success.

3.5. Data Collection Procedure

The data collection procedure was carefully designed to ensure clarity, reliability, and cultural appropriateness. All scales and questionnaire items were translated into Arabic to ensure comprehension and cultural relevance for the participants. The final Arabic version of the questionnaire was pilot tested for clarity and accuracy prior to full deployment. The questionnaire was then distributed through a secure link using the Google Forms service, which allowed participants to access and complete the survey conveniently from their devices. Data collection took place over a three-week period from 15th April to 7th May 2025. This study was reviewed and approved by the Research Ethics Committee at King Faisal University (approval number: KFU-REC-2024-NOV- ETHICS2810). Prior to participation, students were provided with detailed information about the study and gave their informed consent. Participants were assured that their responses would remain confidential and that they could withdraw from the study at any time without any negative consequences. Completed questionnaires were automatically recorded and stored in the secure Google Forms database, accessible only to the research team for analysis.

3.6. Data Analysis

Data analysis was performed using the Statistical Package for Social Sciences (SPSS) software. Descriptive statistics, including means, standard deviations, and frequencies, were calculated to summarize the demographic characteristics and key study variables. Inferential statistics were then used to assess potential differences in academic self-concept and academic success across subgroups based on gender, academic year, and faculty. Specifically, independent samples t-tests and one-way analysis of variance (ANOVA) were used for group comparisons. To explore the relationship between academic self-concept and academic success, Pearson correlation analyses were conducted, allowing for the determination of the strength and direction of the associations. A significant level of $p < 0.05$ was set for all statistical tests, ensuring the reliability of the findings and their implications. This comprehensive methodology allowed the study to rigorously explore the relationship between academic self-concept and academic success among King Faisal University students. The insights gained from this research can inform future initiatives and interventions to enhance student support programs and promote academic achievement across the university.

4. Results and Discussion

A total of 336 participants were enrolled in the study. The mean age of the participants was 21.4 years (SD = 2.1). Regarding gender distribution, 45.2% of the participants were male (n = 152) and 54.8% were female (n = 184). Most participants were undergraduate students (92.3%, n = 310), with a smaller proportion being postgraduate students (7.7%, n = 26).

Participants were distributed across various academic levels: 20.8% were in their first year (n = 70), 28.3% were in their second year (n = 95), 25.0% were in their third year (n = 84), and 25.9% were in their fourth year or beyond (n = 87). Academic disciplines represented included scientific (20.8%, n = 70), art (11.9%, n = 40), management and economy (14.9%, n = 50), education (17.9%, n = 60), social sciences (13.7%, n = 46), agriculture and environment (8.9%, n = 30),

allied health (7.4%, n = 25), and technical and vocational fields (4.5%, n = 15). The mean GPA of the participants was 3.2 (SD = 0.4).

Table 1.
Baseline Socio-demographic and Academic Characteristics of the Enrolled Participants (n=336).

Variable	Frequency (n)	Percentage (%)
Age (Mean ± SD)	21.4 ± 2.1	
Gender		
Male	152	45.2
Female	184	54.8
Educational Stage		
Undergraduate	310	92.3
Postgraduate	26	7.7
Academic Level		
First Year	70	20.8
Second Year	95	28.3
Third Year	84	25.0
Fourth Year or more	87	25.9
Academic Discipline		
Scientific	70	20.8
Art	40	11.9
Management and Economy	50	14.9
Education	60	17.9
Social Sciences	46	13.7
Agriculture and Environment	30	8.9
Allied Health	25	7.4
Technical and Vocational	15	4.5
GPA (Mean ± SD)	3.2 ± 0.4	

The results presented in Table 2 represent the participants' responses to the Academic Self-Concept Scale. The overall mean score for the scale was 3.06 (SD = 0.38), indicating a generally positive self-concept among the participants.

Participants reported high confidence in their academic abilities, as shown by items such as "Being a student is a very rewarding experience" (M = 3.35, SD = 0.35) and "For me, studying hard pays off" (M = 3.45, SD = 0.41). Similarly, they felt capable of helping others with class work (M = 3.30, SD = 0.40) and expressed satisfaction with their grades (M = 3.09, SD = 0.40).

Conversely, some items revealed challenges. For instance, participants noted feelings of discouragement (M = 3.29, SD = 0.40) and a perception that classmates were often better prepared (M = 3.24, SD = 0.37). Lower mean scores were observed for items such as "At times I feel like a failure" (M = 2.49, SD = 0.37) and "I do not study as much as I should" (M = 2.60, SD = 0.34), reflecting areas of potential concern regarding academic self-efficacy and study habits.

The findings in Table 2 revealed an overall mean academic self-concept score of 3.06 (SD = 0.38), suggesting that students generally perceive themselves positively in academic contexts. High ratings on items such as "For me, studying hard pays off" and "Being a student is a very rewarding experience" reflect students' confidence in the value of their academic efforts. This supports existing literature, which emphasizes academic self-concept as a foundational predictor of motivation and performance [1, 2]. However, lower mean scores for items such as "At times I feel like a failure" and "I do not study as much as I should" also suggest internal struggles with academic efficacy and self-discipline—highlighting areas where intervention could improve students' study habits and emotional coping mechanisms [6].

Table 2.
Participants' Responses to the Academic Self-Concept Scale (n=336).

Item	Mean ± SD
Being a student is a very rewarding experience.	3.35 ± 0.35
If I try hard enough, I will be able to get good grades.	3.08 ± 0.33
Most of the time my efforts in school are rewarded.	3.20 ± 0.31
No matter how hard I try I do not do well in school.	3.45 ± 0.50
I often expect to do poorly on exams.	3.37 ± 0.37
All in all, I feel I am a capable student.	2.80 ± 0.38
I do well in my courses given the amount of time I dedicate to studying.	3.19 ± 0.34
My parents are not satisfied with my grades in college.	2.97 ± 0.44
Others view me as intelligent.	2.98 ± 0.32
Most courses are very easy for me.	3.08 ± 0.39
I sometimes feel like dropping out of school.	3.03 ± 0.36
Most of my classmates do better in school than I do.	3.29 ± 0.42
Most of my instructors think that I am a good student.	3.15 ± 0.37
At times I feel college is too difficult for me.	3.02 ± 0.34
All in all, I am proud of my grades in college.	3.09 ± 0.40
Most of the time while taking a test I feel confident.	3.07 ± 0.42
I feel capable of helping others with their class work.	3.30 ± 0.40
I feel teachers' standards are too high for me.	2.96 ± 0.42
It is hard for me to keep up with my class work.	3.06 ± 0.37
I am satisfied with the class assignments that I turn in.	2.83 ± 0.38
At times I feel like a failure.	2.49 ± 0.37
I feel I do not study enough before a test.	3.13 ± 0.38
Most exams are easy for me.	3.17 ± 0.36
I have doubts that I will do well in my major.	2.85 ± 0.31
For me, studying hard pays off.	3.45 ± 0.41
I have a hard time getting through school.	2.71 ± 0.38
I am good at scheduling my study time.	3.01 ± 0.32
I have a fairly clear sense of my academic goals.	2.96 ± 0.42
I'd like to be a much better student than I am now.	3.31 ± 0.35
I often get discouraged about school.	3.29 ± 0.40
I enjoy doing my homework.	3.03 ± 0.44
I consider myself a very good student.	3.08 ± 0.41
I usually get the grades I deserve in my courses.	2.82 ± 0.46
I do not study as much as I should.	2.60 ± 0.34
I usually feel on top of my work by finals week.	2.93 ± 0.42
Others consider me a good student.	3.03 ± 0.37
I feel that I am better than the average college student.	3.25 ± 0.36
In most of the courses, I feel that my classmates are better prepared than I am.	3.24 ± 0.37
I feel that I do not have the necessary abilities for certain courses in my major.	2.92 ± 0.38
I have poor study habits.	2.94 ± 0.40
Total Scale Score	3.06 ± 0.38

The results presented in Table 3 summarize the participants' responses to the Academic Success Scale. The findings reveal various aspects of academic success as perceived by the participants.

Participants reported high agreement on several key aspects of academic success. For instance, "Teachers benefit from technological tools such as smart board, projector, computer" received a relatively high mean score (M = 3.35, SD = 0.37). Other areas of strong agreement included "Short inhalation times" (M = 3.29, SD = 0.34), "Focusing on club activities at school" (M = 3.23, SD = 0.39), and "There is no sound during the course to prevent the flow of the course from outside" (M = 3.23, SD = 0.51).

In contrast, lower mean scores were observed for items such as "Teacher re-explaining when there is a subject that the student does not understand" (M = 2.54, SD = 0.38) and "Making the textbooks used attractive for students" (M = 2.59, SD = 0.41). Additionally, participants expressed moderate agreement regarding their personal academic efforts, with "Students do their homework regularly" (M = 3.18, SD = 0.41) and "Students know the methods of study" (M = 3.18, SD = 0.42).

As shown in Table 3, students reported moderately high academic success, particularly in areas like the use of technological tools by instructors (M = 3.35) and school cleanliness (M = 3.12). These scores reflect a generally supportive institutional environment that facilitates learning. However, lower means for items such as "Teacher re-explaining when there is a subject that the student does not understand" (M = 2.54) and "Making the textbooks attractive

for students" (M = 2.59) suggest perceived gaps in pedagogical responsiveness and curriculum engagement. These findings are consistent with Guo, et al. [9], who asserted that academic success is highly influenced by students' perceptions of the learning environment and curriculum relevance [16].

Table 3.
Participants Responses to the Academic Success Scale (n=336)

Item	Mean ± SD
Explaining the rules to be followed by school administrators	3.32 ± 0.39
Planning the studies that will support the success of the students in compensating the empty courses by school administrators	2.88 ± 0.35
School administrators guide students according to their interests, abilities and achievements in field / department choices	2.89 ± 0.39
School administrators follow the student's absenteeism status	2.79 ± 0.43
Organizing trial exams for students preparing for the exam by school administrators	3.17 ± 0.37
Teacher re-explaining when there is a subject that the student does not understand	2.54 ± 0.38
Teachers benefit from technological tools such as smart board, projector, computer	3.35 ± 0.37
Teacher to make the lesson enjoyable for the student while teaching	2.85 ± 0.36
Consecutive courses such as mathematics and physics are challenged in the daily curriculum	3.06 ± 0.37
Taking two exams on the same day	2.95 ± 0.40
Short inhalation times	3.29 ± 0.34
Making the textbooks used attractive for students	2.59 ± 0.41
Parents often come to school to meet the teacher	2.94 ± 0.48
Parents support student participation in reinforcement courses at school	2.92 ± 0.44
Focusing on club activities at school	3.23 ± 0.39
Organization of university preparation courses at school	2.78 ± 0.36
Increasing the number and diversity of places such as laboratory, music-painting workshop, sports hall in school environment	2.97 ± 0.36
Sufficient course materials in classrooms	2.82 ± 0.48
Lack of warming problems at school	3.01 ± 0.40
The school is clean	3.12 ± 0.37
Airy classrooms	2.78 ± 0.41
There is no sound during the course to prevent the flow of the course from outside	3.23 ± 0.51
Students do their homework regularly	3.18 ± 0.41
Regular daily repetition of the student	3.10 ± 0.43
Students know the methods of study	3.18 ± 0.42
Pre-preparation of the student for exams	2.86 ± 0.38

Table 4 presents the differences in scores on the Academic Self-Concept Scale and the Academic Success Scale according to the participants' socio-demographic characteristics. Significant differences were observed across several variables.

Regarding age, participants younger than 20 years reported higher mean scores on the self-concept scale (M = 3.23, SD = 0.34) compared to those aged 20–22 years (M = 2.53, SD = 0.41) and those older than 22 years (M = 3.23, SD = 0.45), with a statistically significant difference (p = .032). Similarly, academic success scores differed significantly by age group (p = .025).

Gender differences also emerged: males reported higher self-concept scores (M = 3.37, SD = 0.34) compared to females (M = 3.09, SD = 0.39), with a significant p-value (p = .013). Academic success scores were also significantly different between males and females (p = .014).

The educational stage was another variable with significant differences in self-concept (p = .006) and academic success (p = .015), with undergraduates reporting lower mean scores on both scales compared to postgraduates. Academic level also showed significant differences in both scales (self-concept p = .044; academic success p = .003), with first-year students reporting the highest self-concept scores (M = 3.51, SD = 0.35) and the highest academic success scores (M = 3.14, SD = 0.39).

Differences in scores based on GPA were also significant (self-concept p = .004; academic success p = .011). Students with GPAs between 2 and 3 reported the highest mean scores on the academic success scale (M = 3.33, SD = 0.36), whereas those with GPAs less than 2 had the lowest academic success scores (M = 2.65, SD = 0.41).

Finally, academic discipline significantly influenced self-concept (p = .022) and academic success (p = .039). For example, students in the art discipline reported the highest mean self-concept scores (M = 3.20, SD = 0.40), while those in technical and vocational fields reported the highest academic success scores (M = 3.15, SD = 0.49).

Table 4 presents statistically significant differences in academic self-concept and success based on demographic factors. Younger students (under 20 years) and first-year students scored higher in self-concept, suggesting that early university experiences might initially boost academic confidence, as supported by Perinelli, et al. [5] and Schnitzler, et al. [8]. However, this confidence may taper in later years, indicating a need for sustained academic and emotional support

throughout the academic journey. Gender differences also emerged, with male students reporting slightly higher self-concept scores than females—consistent with findings by Timmermans and Rubie-Davies [17], although academic success levels were relatively comparable. Additionally, students with higher GPAs exhibited stronger self-concept scores, reinforcing the reciprocal relationship described by Möller, et al. [4] and Onah [18], where academic achievement strengthens self-belief and vice versa.

Table 4.
Differences in Academic Self-Concept and Academic Success Scale Scores According to Socio-Demographic Characteristics

Variable	Mean ± SD on Self-Concept Scale	p-value (Self-Concept)	Mean ± SD on Academic Success Scale	p-value (Academic Success)
Age				
Less than 20	3.23 ± 0.34	0.032	3.08 ± 0.49	0.025
20-22	2.53 ± 0.41		3.07 ± 0.43	
More than 22	3.23 ± 0.45		2.76 ± 0.38	
Gender				
Male	3.37 ± 0.34	0.013	2.99 ± 0.38	0.014
Female	3.09 ± 0.39		3.00 ± 0.48	
Educational Stage				
Undergraduate	2.82 ± 0.44	0.006	2.82 ± 0.35	0.015
Postgraduate	2.88 ± 0.43		2.86 ± 0.44	
Academic Level				
First Year	3.51 ± 0.35	0.044	3.14 ± 0.39	0.003
Second Year	2.71 ± 0.31		2.83 ± 0.42	
Third Year	2.80 ± 0.38		3.22 ± 0.33	
Fourth Year or more	3.09 ± 0.37		3.12 ± 0.41	
GPA				
Less than 2	3.15 ± 0.37	0.004	2.65 ± 0.41	0.011
2-3	2.80 ± 0.43		3.33 ± 0.36	
3-4	3.22 ± 0.38		2.80 ± 0.51	
Academic Discipline				
Scientific	2.96 ± 0.41	0.022	3.08 ± 0.36	0.039
Art	3.20 ± 0.40		2.41 ± 0.33	
Management and Economy	2.70 ± 0.46		2.88 ± 0.42	
Education	3.17 ± 0.45		3.01 ± 0.45	
Social Sciences	3.10 ± 0.42		2.96 ± 0.45	
Agriculture and Environment	3.03 ± 0.41		2.75 ± 0.37	
Allied Health	2.72 ± 0.35		3.19 ± 0.38	
Technical and Vocational	2.95 ± 0.27		3.15 ± 0.49	

Table 5 presents the correlations between the Academic Self-Concept Scores and the domains of the Academic Success Scale. Overall, the data indicate significant positive correlations between academic self-concept and various aspects of perceived academic success.

The strongest correlation was observed with the domain "Teaching Environment and Contribution of Others" ($r = 0.50$, $p = .001$), suggesting that students who perceive a supportive and engaging educational environment tend to have a higher academic self-concept. A similarly strong association was found with "Impact of Students' Individual Characteristics" ($r = 0.48$, $p = .001$), indicating that students' self-management and individual behaviors significantly align with their academic self-concept.

Moderate correlations were observed for "College Administrators and Management Style" ($r = 0.45$, $p = .002$) and "Curriculum" ($r = 0.42$, $p = .004$). These findings underscore the importance of supportive administrative practices and clear, relevant curriculum structures in fostering students' confidence in their academic abilities.

Smaller yet statistically significant correlations were found with "Instructor-Related Factors" ($r = 0.37$, $p = .009$) and "Physical Qualifications of College" ($r = 0.30$, $p = .020$). These results suggest that teaching practices and physical learning environments, while important, may be secondary to more relational and personal factors in shaping academic self-concept.

Table 5 highlighted strong positive correlations between academic self-concept and several academic success domains. The most significant was with the "Teaching Environment and Contribution of Others" ($r = 0.50$, $p = .001$), suggesting that students who perceive their instructors and peers as supportive tend to develop stronger academic self-belief [9, 19]. Another strong correlation was observed with the "Impact of Students' Individual Characteristics" ($r = 0.48$), emphasizing the role of personal discipline, resilience, and motivation in shaping self-concept [3, 20]. Moderate

correlations with curriculum (r = 0.42) also reinforce the importance of relevant and engaging academic content [14, 21]. These results confirm that both internal factors (e.g., personal habits and motivation) and external influences (e.g., instructors, curriculum) contribute to the formation of a strong academic self-concept.

Table 5.
Correlations between Academic Self-Concept Scores and Domains of the Academic Success Scale

Academic Success Domain	Correlation with Academic Self-Concept Score (r)	p-value
College Administrators and Management Style (1-5)	0.45	0.002
Instructor-Related Factors (6-8)	0.37	0.009
Curriculum (9-12)	0.42	0.004
Teaching Environment and Contribution of Others (13-17)	0.50	0.001
Physical Qualifications of College (18-22)	0.30	0.020
Impact of Students' Individual Characteristics (23-26)	0.48	0.001

5. Recommendations

In conclusion, this study underscores the integral role of academic self-concept in shaping university students' academic success across a range of socio-demographic and contextual variables. The findings reveal significant associations between self-concept and academic achievement, highlighting how environmental, personal, and institutional factors shape students' perceptions of their capabilities. Thus, the study recommends:

1. Provide targeted support to students in later academic years, where self-concept may decline, to maintain motivation and academic confidence.
2. Implement teaching strategies that emphasize clarity, encouragement, and re-explanation of difficult content to support students' learning needs.
3. Regularly review and adapt curricula to ensure relevance, fairness, and alignment with student interests to strengthen engagement and self-perception.
4. Offer training for instructors on how to create psychologically safe and inclusive learning environments that foster student confidence.
5. Integrate personal development and time-management skills into student support services to improve academic habits and self-efficacy.
6. Encourage longitudinal research and qualitative studies across multiple universities to validate findings and explore deeper influences on academic self-concept.

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