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Research Article

Academic Hardiness, Stress, And Self-Efficacy in Relation to Career Goals Discrepancy of Pre-Service Teachers: A Path Analysis

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ABSTRACT

This study is a quantitative inquiry aimed at testing a predictive model on career goal discrepancy among pre-service teachers (PSTs) in State Universities and Colleges (SUCs) in the Davao Region. A convenience sampling method was used to collect data from the PST sample. A survey questionnaires containing standardized scales were used to collect data. Results of the study showed that there was a high level of academic hardiness, a low level of academic stress, a high level of self-efficacy, and a moderate level of career goal discrepancy among the PSTs. The best-fitting path model indicated an indirect effect of self-efficacy and academic hardiness on career goal discrepancy. Self-efficacy and academic hardiness both negatively predicted academic stress which in turn positively predicted other types of stress such as physical and environmental stress.

Keywords: *Academic Hardiness, Career Goal Discrepancy, Path Analysis, Pre-service Teachers, Self-efficacy, Students' Stress*

Introduction

Career goal discrepancy refers to the degree of incongruence between a person's current career status and/or perceived career progress and their career goals (Creed & Hood, 2015). This discrepancy can take the form of a discrepancy between achievement, effort, or competencies, and between perceived standards of performance that are realistic or attainable. The effect of career goal discrepancy on career-related motivation, career decision-making and other aspects of career develop-

ment is a major area of study in vocational psychology. Career goal discrepancy is not only a comparison that individuals make with themselves at previous times but also with the expectations of significant others, especially their parents. While this comparison can bring about positive outcomes such as career success, it can also lead to conflict and life satisfaction decrease (Bülbül et al., 2021). On the other hand, most of the research in the field focus on the negative aspects of career goal discrepancy. However, there is growing evidence that

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positive discrepancy is positively related to career satisfaction and optimism (Akmal et al., 2024).

Perceived discrepancy between current status and career goals may exacerbate its psychological effects. Findings from three studies indicated that elevated discrepancy would increase intentions for compromise, adaptation, or rejection of career goals among young adults (Widyowati et al., 2024). Additionally, career goal discrepancy is associated with career distress, negative emotions, including regret, and poor self-regulation, leading to career indecision (Akmal et al., 2024). In terms of career behavior, career goal discrepancy was found to be negatively associated with task performance and positively associated with counterproductive work behavior (Welsh et al., 2020). Thus, the negative effects of career goal discrepancy on psychological reactions and career-related behavior can translate into poor performance in relevant tasks and reduced career functioning (Cai et al., 2025).

Focusing on pre-service teachers, career goal discrepancy is a problem as PSTs' idealised images of teaching collide with the harsh reality of the profession they are entering (Mwamakula, 2023). Despite initial fulfillment with teaching, PSTs face a host of challenges in teaching that are demanding, stressful, and arduous including their workload (Wang et al., 2022). Furthermore, pre-service teachers with higher levels of goal commitment are those who are keen to acquire information regarding the educational goals they need to work towards to achieve their career goals (Isah, 2024). The interaction of these intrinsic and extrinsic motivations and the complex process of goal formation have serious implications for the ongoing professional development of pre-service teachers (Hutner et al., 2021).

Across global contexts, career goal discrepancy phenomena are observable in educational contexts and have been reported to affect pre-service teachers with varying degrees of intensity (Wiboolyasarin et al., 2025; Körkkö et al., 2024). Some literature suggests that discrepancies arise due to the misperception of the teaching profession by pre-service teachers, which is revealed only as they gradually gain teaching experience (Daniels, 2015). The degree of

discrepancies varies and can reveal different motivational and developmental orientations, such as Idealism, Confident Pragmatism, and Realism (Affolter et al., 2015). These orientations differ with respect to academic and teacher training backgrounds (Sinakou et al., 2022; Ning et al., 2022).

Moreover, the career aspirations of PSTs for teaching careers are shaped by socio-demographic factors, and by their ideas about teaching (Bauer & Prenzel, 2021). In Scotland, teachers' preferences for different grade levels are predicted by their career goals (Wang et al., 2021). In Turkey, teaching career aspirations are often affected by financial reasons and thus conflict with vocational goals (Tasli-Karabulut, 2022). Furthermore, in Serbia and Slovenia, in order to set realistic and meaningful career goals, career insight – an accurate image of the teaching profession – is a very important factor for PSTs (Mihelič et al., 2022). Consistently, in many countries, career insight is increased by organized orientation practices and early socialization into the teaching profession (Eryilmaz & Kara, 2018). Thus, career goal discrepancy is a matter of concern, as this discrepancy – if not tackled – can prevent PSTs from making meaningful career plans, and affect their perceived employability (Li & Fan, 2025).

In Asia, career goal discrepancy among pre-service teachers (PSTs) has been reported with distinct characteristics. An example of this is in China, where pre-service teachers' career goals are motivated mainly by internal factors such as motivation, self-efficacy, career calling, and meaning in life (Zhang et al., 2022). This differs from findings in Indonesia where preservice English as a Foreign Language teachers' career goals are mainly motivated by external factors such as social values and the intention to 'give' to students and their community (Novinda et al., 2025). To address such a gap, targeted development programs can effectively link PST career goals with desired professional competencies, such as communication skills and classroom applications of best practices and innovative methodologies (Chigbu et al., 2023). On the other hand, an online teaching training program for preservice teachers in Thailand has also been shown to be successful in enhancing career goal fulfillment through increasing

teachers' confidence and foundational teaching skills (Bamrungsin & Khampirat, 2022).

Meanwhile, for PSTs in the Philippines, there is an implicit career goal discrepancy between the careers that they want to have as professionals and the teaching reality they encounter (Abulon & Rungduin, 2014). Therefore, PSTs still do not have a clear perspective of what effective teaching entails under the Philippine Professional Standards for Teachers, indicating a gap between idealized images and actual expectations (Daga, 2021). Additionally, practicum and field study reveal challenges, which contrast with earlier, more idealistic images of teaching (Comia et al., 2024). Consistently, Dacanay et al. (2019) noted the various systemic barriers that PSTs encounter including poor working conditions, insufficient resources, excessive supervision, and meager salaries. These and other challenges in teaching cause significant stress which negatively affects the health, self-efficacy, and preparation for teaching of PSTs (Collantes, 2021).

Although Filipino PSTs experience many difficulties in their professional preparation, they are very optimistic with their future career prospects. Their ultimate aspiration is to pass the licensure examinations and later pursue a higher degree to become better teachers (Rogayan et al., 2024). Some also dream of getting employment in other countries (Ancho et al., 2023). For Filipino PSTs, support from their institutions matter (Lagon, 2025). As previously reported, in-house seminars do foster PSTs' teaching practices and boost their professionalization (Antipolo & Rogayan, 2021). Pedagogical competence and supportive institutions, as found in Cagayan Valley, make PSTs hardy and enhance their career goal clarity (Afalla & Fabelico, 2020). Notably, despite the pressures and struggles of PSTs in the Philippines, there is a significant vacuum in the literature. The concept of career goal discrepancy has not been examined and measured in the Philippine setting. This is an area for future research.

At the national level, several challenges have been identified; however, there is a dearth of research that specifically focuses on career goal discrepancies of pre-service teachers (PSTs) in the island region of Mindanao,

specifically in Region XI. Available studies found that private universities in Mindanao structure their English BSEd and BA programs to distinguish between professional secondary teaching and broader communication careers, though the latter often serves as a strategic fallback for student-teachers seeking non-teaching paths (Ula, 2016). Despite this specialized focus, Early Childhood PSTs at Central Mindanao University exhibit high academic performance but struggle with the practical nuances of diverse classrooms, highlighting a critical disconnect between their professional goals and actual field readiness (Bajan et al., 2025). To bridge these gaps, PSTs across North Eastern Mindanao State University prioritize hands-on workshops and mentorship, viewing these practical experiences as the essential foundation for their long-term commitment to becoming competent, career-ready educators (Lagura & Caperida, 2024). All of these studies focused on preparing PSTs, however, no current study focused on their career goal discrepancies.

Although there are numerous studies about the career trajectories of pre-service teachers, the psychological aspects that relate to career goal discrepancy among pre-service teachers in the Philippines are still in inadequacy, particularly the aspects concerning the psychological determinants. No study so far has attempted to present a structural model that aims to explain the relationship between career goal discrepancy of pre-service teachers and several psychological constructs such as academic hardiness, stress, and self-efficacy. This is a significant problem considering that stress, which can affect the academic hardiness of pre-service teachers, may also influence their self-efficacy that in turn could affect their career goal discrepancy. Additionally, existing studies that focus on the relationship of stress, self-efficacy, and career goal discrepancy among teachers do not develop a comprehensive structural model for predicting career goal discrepancy.

Thus, study aims to formulate a predictive path model that explains career goal discrepancy of pre-service teachers in Region XI using academic hardiness, self-efficacy and academic stress as predictors. The said variables were examined for their direct and indirect effects

through a Path Analysis. Conclusively, this study seeks to fill the void of local empirical models that explains on the psychological predictors of career goal discrepancies of pre-service teachers in Philippine State Universities and Colleges.

Materials and Methods

Research Design

This quantitative study was a descriptive-correlational research design, a suitable approach for investigating the intricate hypothesized causal relationships between academic hardiness, self-efficacy, stress, and career goal discrepancy. To achieve the research goal, the research design integrates descriptive analysis to provide detailed descriptions of the variables and their distributions (Bloomfield & Fisher, 2019) and causal investigation to identify the cause-and-effect relationships among the variables (Deckert & Wilson, 2023).

Furthermore, path analysis was used to rigorously test the underlying theoretical framework. Path analysis was chosen as it allowed the study to simultaneously test a network of relationships, including crucial direct and indirect effects among all variables (Grapentine, 2000). The measure was applied since multiple regression models could not accomplish this approach in a single and comprehensive test. Consequently, this technique allowed the researcher to identify how psychological constructs influenced each other directly and indirectly, thereby establishing best fitting structural model that predicts career foal discrepancy (Babbie, 2020).

Locale

The study took place in Region XI, officially known as the Davao Administrative Region, which is the socio-economic and educational center of southeastern Mindanao. Specifically, it covered the highly urbanized Davao City and five other mainland provinces of Davao del Norte, Davao del Sur, Davao de Oro (formerly Compostela Valley), Davao Occidental, and Davao Oriental. The region was selected due to the critical, yet under-researched, career goal discrepancy and its psychological variables of PSTs. Additionally, this enables to empirically capture the unique experiences by pre-service

teachers (PSTs), thereby ensuring that the findings are directly relevant to informing policy and support programs in Mindanao.

Respondents

There are 389 respondents involved in this study, specifically, bona fide pre-service teachers (PSTs) enrolled in Secondary Education and Elementary Education programs at three participating State Universities and Colleges (SUCs) in the Davao Region. Arriving at this final sample size, the researcher accounted for a conservative 30% non-response rate. This ensured that the actual participation met the 70% threshold required for high precision and descriptive power. Additionally, such a precaution guarantees that the sample provides sufficient statistical power to detect the hypothesized structural relationships within the path analysis model.

The recruitment of the respondents was conducted through a multi-stage sampling approach, starting with convenience sampling to identify the institutions that provided official authorization and voluntary consent. Within the SUCs in Region XI. Then, purposive sampling was used to ascertain that only students meeting the specific program criteria were included. Ultimately, data collection was managed through direct on-site coordination with program heads, allowing the researcher to personally explain informed consent and ensure that all respondents fully understood the voluntary nature of their involvement before completing the instrument.

Instrument

Four standardized survey instruments were utilized to measure key variables in this study. First, the Academic Hardiness Scale (AHS) of Benishek et al. (2005) was utilized to measure academic hardiness. Second, the Student Stress Inventory (SSI) of Arip et al., (2016) was then used to measure the degree of stress that PSTs experience. Third, the General Self-Efficacy Scale (GSES) of Sherer et al. (1982) measures the extent to which an individual is confident in their ability to cope with a range of tasks and situations. Lastly, the Career Goal Discrepancy Scale (CGD-S) of Creed and Hood (2015) measures the perceived discrepancy

between PSTs' career goals and their current career progress. To ensure accuracy and consistency of measures, the validity and reliability of questionnaires were considered. First, the questionnaires were validated by a pool of experts and subsequently revised to ensure linearity and parallelism. Second, suggestions and comments from validators were incorporated into the final draft, and no translations were employed since all instruments were written in English.

Moreover, pilot testing was subsequently conducted using 30 randomly selected pre-service teachers, none of whom were included in the final survey sample. The essential step confirmed the reliability and internal consistency of the survey instruments across all measured variables, yielding results that ranged from acceptable to excellent. Specifically, Academic Hardiness ($\alpha = 0.704$) and Self-Efficacy ($\alpha = 0.747$) demonstrated acceptable internal consistency, while the instruments for Stress ($\alpha = 0.936$) and Career Goal Discrepancy ($\alpha = 0.937$) both exhibited excellent reliability, thus confirming that the instruments were robust and reliable for the subsequent main quantitative study.

Data Gathering Procedure

The researcher obtained formal approval from the Graduate School Dean of the University of the Immaculate Conception (UIC) for the conduct of this study. Consequently, permission to conduct the study in the five participating institutions was obtained via email correspondence to the presidents and research administrators. The communication includes copy of the approval and permission from the UIC Dean and the manuscript. After this, the researcher started data gathering. For in-person collection, respondents were asked to sign the informed consent before completing the survey. Meanwhile, the online respondents received a separate communication with informed consent, requiring them to attach their electronic signature. Upon verification, the researcher sent the survey link to respondents'

registered email addresses. In orientation and batch sessions, orally instructed or written depending on the nature of the data collection, respondents were clearly instructed on how to answer the survey, and were given sufficient time to complete the survey. These measures were made to control for potential extraneous variables such as environmental conditions, time constraints, and survey response fatigue. Additionally, respondents also had the option to complete the survey as they pleased and at their own pace and convenience.

Data Analysis

Several statistical methods were used to test the hypotheses and to achieve the research objectives. Descriptive statistics, such as means and standard deviations, were calculated and thereafter supplemented by some inferential statistics, like bivariate Spearman's rho correlations and path analyses to draw conclusions.

Ethical Consideration

Ethical safeguards were strictly followed throughout the research process. This includes obtaining approval from the university research ethics committee (Protocol Code: GS-ER-07-25-0330), clear communication of the study's objective, voluntary participation, confidentiality, as well as anonymity of responses. All data were handled in compliance with the Data Privacy Act of 2012 (Republic Act No. 10173), securing storage and restricting access to personal information. Respondents were made aware of their right to withdraw at any stage without penalty before asking to sign the informed consent. Ultimately, given that respondents were PSTs and of legal age, minimal risks were identified in terms of comprehension.

Result and Discussion

Level of Academic Hardiness

Academic hardiness is a critical psychological quality that enables students to successfully navigate academic demands. Table 1 presents the respondents' level of academic hardiness.

Table 1. Level of Pre-service Teachers' Academic Hardiness

Academic Hardiness	Mean	SD	Description
Commitment			
1. I take my work as a student seriously	3.67	0.50	Very High
2. I am a dedicated student	3.59	0.54	Very High
3. I work hard for grades	3.56	0.55	Very High
4. I involved myself in all my classes	3.61	0.52	Very High
5. Regardless of the class, I do my best	3.60	0.53	Very High
6. I make personal sacrifices to get good grades	3.45	0.61	Very High
7. *Grades are not important to me	3.34	0.90	Very High
8. Doing well is as important to me as to my parents	3.68	0.49	Very High
9. I am more involved in my preservice teaching activities than in other activities.	3.26	0.67	Very High
Category Mean	3.53	0.34	Very High
Challenge			
1. I enjoy the challenge of a difficult class	2.97	0.63	High
2. *I don't see the purpose of taking a class if I am not confident that I will do well	2.65	0.86	High
3. I consider that difficult classes are the best way to improve one's knowledge	3.42	0.64	Very High
4. I avoid classes that require extra work	3.24	0.84	High
Category Mean	3.07	0.42	High
Control of Affect			
1. *If I do poorly, I doubt my ability as a student.	2.95	0.81	High
2. *I find it difficult to bounce back from academic disappointment	2.53	0.81	High
3. *I become less motivated to study when I don't get the grades I want right away	2.33	0.86	Low
Category Mean	2.60	0.67	High
Overall Mean	3.07	0.35	High

Note: Items with * are reverse scored.

As shown in Table 1, the level of academic hardiness among preservice teachers is 3.07, indicating a high level and suggesting that preservice teachers often exhibit academic hardiness. The standard deviation, with a value of 0.35, denotes that preservice teachers were not dispersed from one another, as the value is less than. A low value like this suggests a high level of homogeneity in the scores, meaning most preservice teachers provided very similar responses and were tightly clustered around the mean. Therefore, the data indicate a consistent, shared opinion or characteristic within the group regarding the variable being measured,

rather than a wide range of individual differences. Although all indicators show high category means, control of affect has the lowest mean of 2.60, while commitment has the highest mean of 3.53.

The findings support the results of Tan et al (2021), indicating that academically hardy students feel an internal locus of control over their performance and learning methods. High level of academic hardiness among preservice teachers strongly supports the notion that commitment, control, and challenge are robust qualities within this population (Setyowati et al., 2024). Moreover, Oliveira et al. (2024)

observed that low affective control among students is characterized by a high prevalence of repetitive negative thinking and diminished subjective well-being. These findings reinforce the link between emotional dysregulation and academic burnout, specifically highlighting its positive association with emotional exhaustion, cynicism, and a lack of efficacy (Iuga & David, 2024), all of which are opposite dimensions of academic hardiness.

While general findings on hardiness are positive for promoting mental health in teaching, context-specific hardiness research paints a different picture. Using hardiness as a predictor of student teacher stress, Yi et al (2024) found that teacher trainees had high academic hardiness before entering the teacher training program, but indicated significant decrease in hardiness during the high-stress middle part of the practical field experience. The transition from academic learning to practical application of teaching skills can have a significant

adjustment period and impact trainees' perceived competence and confidence as well as their ability to cope with stress (Schüle et al., 2017). Therefore, pre-service training should focus on promoting emotional control and self-efficacy, in particular during periods of high-stress in the field work, in order to translate high commitment into good professional mental health and career stability (Seifert et al., 2022).

Level of Stress

Stress is a complex challenge that profoundly impacts students' health and well-being, especially in educational settings (Wuthrich et al., 2020). It encompasses a range of emotional, psychological, and physiological responses to identified challenges or threats, including academic stress, social stress, and stress associated with significant life changes (Karaman et al., 2019). Table 2 presents the respondents' level of stress.

Table 2. Level of Pre-service Teachers' Stress

Stress	Mean	SD	Description
Physical			
1. Headaches	2.53	0.78	High
2. Back pain	2.70	0.93	High
3. Sleep problem	2.70	0.99	High
4. Difficulty breathing	1.66	0.80	Very Low
5. Excessive worry	2.49	0.96	Low
6. Stomach pain/nausea	1.83	0.84	Low
7. Constant tiredness/fatigue	2.45	0.95	Low
8. Sweating/sweaty hands	2.18	1.07	Low
9. Frequent cold/flu/fever	1.88	0.78	Low
10. Drastic weight loss	1.72	0.85	Very Low
Category Mean	2.21	0.61	Low
Interpersonal Relationship			
1. I find it difficult to meet my high parents' expectations	2.03	1.03	Low
2. My parents treat me as a helpless person	1.41	0.72	Very Low
3. I feel guilty if I fail to fulfill my parents' hopes	2.81	1.03	High
4. My parents wish only for my success	3.38	0.90	Very High
5. I find it difficult to get along with group-mates in doing academic tasks	1.81	0.85	Low
6. My friends did not care about me	1.42	0.67	Very Low
7. I feel disturbed when I have a problem with my boyfriend/girlfriend/friend	1.71	0.90	Very Low
8. My family is not supportive	1.21	0.56	Very Low

Stress	Mean	SD	Description
9. My lecturers/ teachers are not supportive	1.29	0.59	Very Low
10. I feel frustrated by the lack of faculty management	1.68	0.77	Very Low
Category Mean	1.88	0.43	Low
Academic			
1. I have a financial problem because of the expenses of the university	2.71	0.98	High
2. I find it difficult to juggle time between study and social activity (e.g., finding a balance between academic commitments and a fulfilling social life).	2.42	0.84	Low
3. I feel nervous delivering the class presentation	2.61	0.87	High
4. I feel stressed as the submission deadline neared	2.63	0.84	High
5. I feel stressed to sit for the examination	2.27	0.84	Low
6. I find it difficult to juggle time between study and society involvement (e.g., volunteering for community service and preparing for exams simultaneously).	2.34	0.82	Low
7. I lost interest in courses	1.70	0.78	Very Low
8. I feel the burden of academic workloads	2.33	0.88	Low
9. I feel stressed dealing with a difficult subject	2.56	0.84	High
10. I find it difficult to handle my academic problem	2.34	0.82	Low
Category Mean	2.39	0.62	Low
Environmental			
1. I have a transportation problem	2.11	0.98	Low
2. I feel stressed with the bad living conditions	2.03	0.94	Low
3. Surrounding noise distracted me	2.74	0.93	High
4. Pollution makes me uneasy	2.64	0.91	High
5. Hot weather makes me avoid going out	3.05	0.89	High
6. Messy living conditions distracted me	2.97	0.91	High
7. I feel frustrated by inadequate campus facilities	2.22	0.89	Low
8. Crowding makes me feel uneasy	2.51	0.92	High
9. Waiting in a long line makes me feel uneasy	2.56	0.90	High
10. I feel scared being in an insecure place	2.53	0.95	High
Category Mean	2.54	0.62	High
Overall Mean	2.25	0.45	Low

Shown in Table 2 is the level of stress among pre-service teachers, with an overall mean of 2.25, indicating a low level of stress that is manifested less frequently. The standard deviation of 0.45 indicates that the participants

were spread out from each other because they were less than 1. This could be seen as a cautiously optimistic light given stress impacts and the stress of students in education today (Wuthrich et al., 2020). However, there are

several studies in similar contexts which report entirely different results. For instance, Balakrishnan et al. (2017) reported that less than 1% of Malaysian pre-service teachers reported being “well” whereas in this sample the pre-service teachers were reporting a low level of stress. On the other hand, Arabiyat et al. (2025) reported that medical students were experiencing moderate to severe academic stress primarily due to schoolwork. Given the results of this sample of pre-service teachers, they could possibly benefit from effective protective factors such as high levels of coping strategies, protective social supports, and academic scaffolding in program design to help alleviate typical academic stressors (Karaman et al., 2019).

Furthermore, the low stress levels found in the study could be due to many different variables. First of which is that students have a strong support network of family and friends which would explain their low stress due to how social support can decrease academic stress and increase self-efficacy in students, a phenomenon studied with young Colombian and Spanish university students (Castro-Villarreal et al., 2014). Secondly, the students in this

study reported high levels of emotional intelligence which may have also attributed to low stress. Finally, students who participate in physical activity have a much lower risk of experiencing high levels of psychological distress (Gasiuniene & Mieziene, 2022). Although stress means may be low, stress can increase throughout the year, especially in December when students have heaviest assignment loads. Despite the successful adoption of technology for teaching and learning, students feel stress caused by information technology (Wahyu & Simanullang, 2020).

Level of Self-Efficacy

Self-efficacy, derived from Bandura's (1977) social cognitive theory, refers to a person's belief in their ability to accomplish what is necessary to reach specific goals. This idea is important in education, especially for preservice teachers. Self-efficacy beliefs influence how teachers address instructional challenges and how students engage with academic content, persevering when faced with difficulties (Gerbinio, 2020). Table 3 presents the respondents' level of self-efficacy.

Table 3. Level of Pre-service Teachers' Self-efficacy

Self-efficacy	Mean	SD	Description
Initiative			
1. *I do not bother even trying something that looks too complicated.	2.53	0.73	High
2. *I avoid trying to learn new things when they look too difficult	3.06	0.71	High
3. *When trying to learn something new, I soon give up if I am not initially successful	3.04	0.74	High
Category Mean	2.88	0.57	High
Effort			
1. When I make plans, I am certain I can make them work	3.23	0.57	High
2. If I cannot do a job the first time, I keep trying until I can	3.38	0.60	Very High
3. When I have something unpleasant to do, I stick to it until I finish it	2.97	0.67	High
4. When I decide to do something, I go right to work on it	3.22	0.59	High
5. Failure just makes me try harder	3.35	0.65	Very High
Category Mean	3.23	0.42	High
Persistence			
1. *When I set important goals for myself, I rarely achieve them	2.35	0.73	Moderate

Self-efficacy	Mean	SD	Description
2. *I do not seem capable of dealing with most problems that come up in my life	2.87	0.71	High
3. *When unexpected problems occur, I do not handle them very well	2.82	0.72	High
4. *I feel insecure about my ability to do things	2.52	0.83	High
Category Mean	2.64	0.54	High
Overall Mean	2.92	0.35	High

Note: Items with * are reverse scored.

Shown in Table 3 is the level of self-efficacy among pre-service teachers, with an overall mean of 2.92, indicating a high level and suggesting that pre-service teachers' self-efficacy is often well developed. The standard deviation of 0.35 indicates that pre-service teachers were not dispersed from one another, as it is less than 1. Meanwhile, persistence has the lowest mean of 2.64, which is depicted as relatively high, while effort has the highest mean of 3.38, which is depicted as very high.

Teachers' self-efficacy refers to the inner beliefs about their capabilities to perform teaching tasks. Self-efficacy beliefs influence how teachers address instructional challenges and how students engage with academic content, ultimately motivating them to persevere when faced with difficulties (Gerbino, 2020). Self-efficacy is a complex concept that encompasses initiative, effort, and persistence (Bosscher & Smit, 1998), with each area influencing people's motivation, academic engagement, and long-term success in distinct ways (Balluerka et al., 2014). Ultimately, self-efficacy benefits preservice teachers, both as a student and while preparing for the professional world (Foulstone & Kelly, 2019).

Moreover, findings found consistency with reflective practices and structured support during teacher education, which have a significant impact on preservice teachers' self-efficacy across diverse cultural backgrounds (Nduagbo & Casale, 2023). Whereas, Fayda-Kımk (2024) found that Turkish preservice teachers were highly confident in developing instructional materials regardless of gender or institution type. On the other hand, Colson et al. (2017) found that participants in more extended student teaching placements in the US were more confident in managing classrooms

and keeping students engaged than those in shorter placements.

High self-efficacy is closely linked to the quality of instruction and predicts positive student outcomes, while poor mental health among pre-service teachers is directly associated with perceptions of low self-efficacy and a corresponding lack of confidence, which negatively affects teacher performance (Yin, 2024). Furthermore, high levels of self-efficacy serve as a protective factor, strengthening pre-service teachers' commitment to the profession and preventing attrition by guarding against professional exhaustion; this protective role is empirically supported by findings showing a significant negative association between teacher self-efficacy and teacher burnout (Li, 2023).

Self-efficacy can also be affected by mastery experiences, vicarious learning, verbal persuasion, and emotional states (Putra et al., 2024). Teacher training programs are encouraged to foster this critical belief system by ensuring environmental conditions, such as the fulfillment of basic psychological needs like relatedness and mentor support during practicums, positively contribute to these gains in self-efficacy (König et al., 2023).

Level of Career Goals Discrepancy

Career goal discrepancy refers to the perceived gap between where students are currently and where they aspire to be in their future careers. This includes differences in achievement, effort, standards, and abilities (Alkan et al., 2019). It is a dynamic objective that changes based on self-awareness, feedback, and ongoing professional development (Neuenschwander & Kracke, 2023). Table 4 presents the respondents' level of career goals discrepancy.

Table 4. Level of Pre-service Teachers' Career Goal Discrepancy

Career Goal Discrepancy	Mean	SD	Description
Achievement Discrepancy			
1. My plans are not working out to get the career I really want.	2.23	0.64	Moderate
2. What I have achieved to date does not give me confidence that I will reach my career goals.	2.22	0.65	Moderate
3. I am making progress on my career goals, but I do not think I have achieved enough to get the career I want.	2.65	0.71	High
Category Mean	2.37	0.56	Moderate
Effort Discrepancy			
1. I think I am going to miss out on my ideal career despite my best efforts.	2.39	0.73	Moderate
2. I think I will have to settle for something less than my ideal career, even with my best efforts.	2.32	0.70	Moderate
3. I am working hard, but still doubt I will end up with the career I would really like.	2.62	0.77	High
Category Mean	2.45	0.63	Moderate
Standard Discrepancy			
1. I doubt I can meet the standards of entry to my ideal career.	2.56	0.70	High
2. I have set my sights on a particular career, but I do not think that I am going to reach it.	2.48	0.74	Moderate
3. I have an image of my dream job, but I think it is out of my reach.	2.46	0.79	Moderate
Category Mean	2.50	0.65	Moderate
Ability Discrepancy			
1. I thought I had the ability to get the career I want, but now I am not so sure.	2.59	0.77	High
2. I know the career I want, but I don't think I have what it takes to reach it.	2.56	0.77	High
3. I am not sure I can meet the requirements for the career I really want.	2.56	0.78	High
Category Mean	2.57	0.71	High
Overall Mean	2.47	0.56	Moderate

Shown in Table 4 is the level of career goal discrepancy of pre-service teachers, garnering an overall mean of 2.57, a moderate level indicating that pre-service teachers' career goal discrepancy is below expectations. The standard deviation of 0.56 indicates that pre-service teachers were not dispersed from one another, as it is less than 1.

Career goal discrepancy includes differences in achievement, effort, standards, and abilities (Alkan et al., 2019). It is a dynamic objective that evolves with self-awareness, feedback, and ongoing professional development (Neuenschwander & Kracke, 2023). The

dynamic process is essential for individuals preparing for teaching careers, as they must balance their personal goals with those of their school and society (Thompson & Webber, 2010). Furthermore, students create a false self to feel the gap when threatened with the realization of their goals (Winnicott, 2018).

The moderate level of career goal discrepancy suggests that pre-service teachers are generally grounded in their professional ambitions, reflecting a manageable gap between their idealized goals and the realities of the profession, often sustained by strong intrinsic commitment. This manageable discrepancy is

possible because motivational factors, particularly intrinsic career values such as the perceived social utility and honor of teaching, account for a significant portion of the variance in satisfaction and help pre-service teachers maintain their commitment despite encountering common negative aspects, such as heavy workloads (An et al., 2020). The active management of this discrepancy is achieved through strong self-regulation, as pre-service teachers (especially high-performing ones) engage more deeply with tasks that require reflection and goal management to successfully integrate theory into practice (Del Mar Ferradás Canedo & Rodríguez, 2022).

Whereas slight discrepancy between stated goals may indicate unstable yet adaptive pre-service teachers, a moderate discrepancy may point to issues of perceptual inaccuracy and identity fragility masking surface-level stability. For example, Calkins and colleagues (2021) found that pre-service teachers often reported high levels of confidence in their abilities to achieve specific goals related to classroom behavior and engagement, only to have their university supervisors' observations highlight overt areas for improvement, thereby exposing possible overconfidence. In addition, goal

discrepancy frequently stems from ongoing role stress and conflict, which can hamper the process of professional identity verification and lead to persistent psychological distress and diminished professional legitimacy (Ansori & Wulansari, 2021). Emerging teachers must develop a professional identity that supports their long-term career goals, and this process is highly susceptible to external factors such as emotional issues and academic environments. When perceived gaps in competence or role conflicts arise, emotional instability can, in turn, prevent management of goals and obstruct professional identity development (Chen et al., 2022).

Relationships between Study Variables

Spearman's rank-order correlation (r) was conducted to examine the strength and direction of associations among variables: academic hardiness, stress, self-efficacy, and career goals. The Spearman correlation was employed instead of Pearson's r because the data violated one or more assumptions required for parametric correlation analysis, such as normality. Doing this ensures a more accurate estimation of the strength of association between variables.

Table 5. Significance of the Relationship between academic hardiness, stress, self-efficacy, and pre-service teachers' career goals discrepancy

Variables Paired	Spearman's rho	p-Value	Remarks
Academic Hardiness and Stress	-0.444***	<.001	Significant
Academic Hardiness and Self-efficacy	0.537***	<.001	Significant
Academic Hardiness and Career Goal Discrepancy	-0.505***	<.001	Significant
Stress and Self-Efficacy	-0.297***	<.001	Significant
Stress and Career Goal Discrepancy	0.489***	<.001	Significant
Self-efficacy and Career Goal Discrepancy	-0.505***	<.001	Significant

*Note: N=389, *** $p < .001$*

Table 5 presented several significant correlations among the study variables. Academic hardiness was found to have negative relationship with stress ($r = -0.444$, $p < 0.001$). This meant that there were students who were highly hardy but experienced stress. However, the findings revealed that competence and resilience were the most potent internal defenses against career uncertainty. Highly hardy students utilized their attributes of commitment, control, and challenge to cope with academic

stressors and manage the stress of career uncertainty in choosing and persevering in the teaching profession (Cabungag et al., 2025).

In contrast, academic hardiness was found to be positively correlated with self-efficacy, $r = .537$, $p < .001$, while inversely related to career goals discrepancy, $r = -0.505$, $p < .001$. Thus, students with greater academic hardiness tend to commit to their goals and challenges, view such as opportunities rather than threats, and manage their emotions appropriately to

accomplish academic tasks and perceive themselves as being able to do so. Moreover, hardy students also experience less discrepancy or anxiety in setting and trying to fulfill their career goals (Viola et al., 2016).

In reviewing the interrelations between Academic Hardiness and Self-Efficacy, it is noted that hardiness is a precursor to confidence. Hardiness is a way of viewing challenges as opportunities for growth, which pre-service teachers must possess before they can believe in their ability to complete the challenges of teaching. The challenge and control components of hardiness are therefore associated with Self-Efficacy ($r = .537$), indicating that hardy individuals are more likely to experience enhanced confidence in their ability to teach effectively (Monteiro et al., 2021). This final set of barriers to career goal discrepancy is Career Decision-Making Self-Efficacy (CDMSE), which comprises beliefs about having the skills to plan, to acquire information, and to make a decision regarding one's career. These beliefs drastically affect a student's perception of a goal gap, and a confident student is expected to have high CDMSE (Lee & Hong, 2024). In this pathway, hardiness builds the necessary psychological capital, which in turn fuels the confidence required for concrete career action (Sagone & Indiana, 2023).

Stress showed a significant negative correlation with self-efficacy, $r = -0.297$, $p < 0.001$, indicating that higher stress levels were associated with lower self-efficacy. On the other hand, stress was positively correlated with career goals discrepancy, $r = .489$, $p < .001$, suggesting that as stress increases, students may experience heightened pressure or urgency regarding their career-related aspirations. Finally, self-efficacy was negatively correlated with career goals discrepancy, $r = -0.505$, $p < 0.001$, indicating that students who are more confident in their abilities may experience less

anxiety or ambivalence in clarifying their career goals.

When stress levels are high and confidence is low, the ability to engage in proactive career planning diminishes. Instead, students may experience heightened anxiety, indecisiveness, or emotional pressure regarding their professional future, viewing the teaching career not as an achievable goal but as an overwhelming obstacle (Clipa, 2018). This creates a perception of urgency or conflict, as reflected in the high discrepancy score (Bayrakdaroglu & Hekim, 2020).

Multiple Regression Predicting Career Goal Discrepancy from Academic Hardiness, Stress, and Self-Efficacy

Multiple regression analysis was conducted to determine whether academic hardiness, stress, and self-efficacy significantly predict the dependent variable. The overall regression equation was highly significant, $F(3, 385) = 88.66$, $p < .001$. This means that the predictors collectively accounted for a significant proportion of the outcome variance. The model explained approximately 40.9% of the variance, with $R^2 = .409$ and adjusted $R^2 = .404$, suggesting a moderate to strong effect size.

The results revealed that academic hardiness was a significant negative predictor of the outcome, $B = -0.35$, $SE = 0.08$, $\beta = -0.22$, $t(385) = -4.36$, $p < .001$, indicating that students with higher levels of academic hardiness tended to have lower levels of career goals discrepancy. Stress was a significant positive predictor, $B = 0.35$, $SE = 0.06$, $\beta = 0.28$, $t(385) = 6.39$, $p < .001$, indicating that higher stress levels were associated with greater career goals discrepancy. In contrast, self-efficacy emerged as a significant negative predictor, $B = -0.49$, $SE = 0.07$, $\beta = -0.31$, $t(385) = -6.64$, $p < .001$, implying that students with greater self-efficacy reported lower levels of career goals discrepancy.

Table 6. Variable that Best Predicts the Preservice Teachers' Career Goals Discrepancy

Predictor	Career Goal Discrepancy				
	B	SE	β	t	p
Intercept	4.149	0.310	—	13.373	< .001
Academic Hardiness	-0.346	0.080	-0.217	-4.357	< .001
Stress	0.351	0.055	0.282	6.389	< .001
Self-Efficacy	-0.494	0.074	-0.312	-6.643	< .001

Model Summary:

$R = .639$, $R^2 = .409$, Adjusted $R^2 = .404$, RMSEA = .432

ANOVA:

$F(3, 389) = 88.66$, $p < .001$

Note: $N=389$

A body of recent literature generally supports the significant directional relationships found in the multiple regression analysis, which suggest that academic hardiness and self-efficacy negatively predict career goals discrepancy, while stress positively predicts it. Specifically, the finding that academic hardiness is a significant negative predictor of career goals discrepancy ($\beta = -0.22$) aligns with the literature, which views hardiness as a protective factor. Students with higher levels of hardiness (characterized by commitment, control, and challenge) tend to show greater resilience and better psychological well-being when faced with academic pressure and challenges (Zhou et al., 2025). This hardiness is often associated with positive academic outcomes and less maladaptive behaviors, suggesting that hardy students are better equipped to maintain focus, commitment, and a sense of control over their goals, thus reducing the gap (discrepancy) between their current situation and future career aspirations (Benishek et al., 2005).

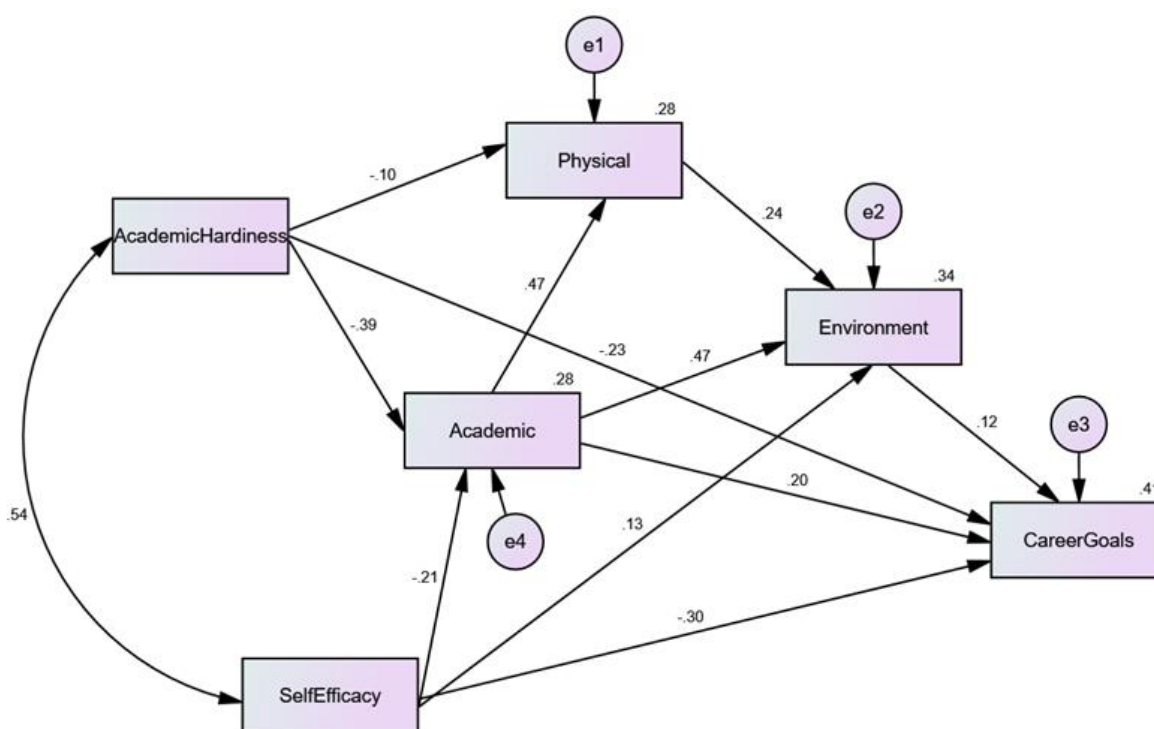
There was a significant positive relationship between stress and the discrepancy between career goals ($\beta=0.28$). It is consistent with research on the detrimental effects of high stress and anxiety (Rani, 2025). Stress has become an increasing problem, particularly in academic or professional settings, which can lead to poor performance, negative emotional states, and hinder the cognitive processes necessary for effective decision-making and goal-setting (De Los Angeles Avalos Guijarro, 2024). Students experiencing higher stress may struggle with clarity, focus on deficiencies, and magnify potential difficulties, making them more vulnerable to shifts or confusion in their career goals (Liu et al., 2023). High stress can also be interpreted as an indicator of vulnerability, potentially lowering self-efficacy and further exacerbating goal uncertainty (Bandura, 1997).

Finally, the finding that self-efficacy, which is found to be the best predictor of career goal discrepancy ($\beta = -0.31$), is strongly supported by Social Cognitive Career Theory and related research (Farmer et al., 2021). Self-efficacy—the belief in one's ability to successfully execute tasks—is consistently linked to positive career outcomes, greater persistence, and the ability to set and pursue challenging goals (Bandura, 1997). Students with greater academic or career-related self-efficacy are more likely to have a firm grasp of their career decision level, engage in career preparation behaviors, and view obstacles as challenges rather than threats, which translates to a lower likelihood of reporting a discrepancy between their goals and their current standing (Zhou et al., 2025). Therefore, a strong sense of self-efficacy acts as a buffer against goal uncertainty and inconsistency, which aligns with the observed negative relationship (Kim & Kim, 2023).

Path Model

To illustrate the interplay between study variables, a path analysis was conducted. Figure 1 shows the best-fit model.

Figure 1 displays several significant direct effects among the variables. Self-efficacy demonstrates a positive influence on Academic performance (0.47) and a negative direct effect on Career Goals (-0.30). Academic Hardiness exhibits a strong positive correlation with Self-Efficacy (0.54) but shows a negative direct effect on both Physical (-0.10) and Academic (-0.39). Further relationships include Physical stress positively affecting Academic stress (0.28) and Environmental stress (0.24), while the Academic stress positively affects both Career Goal Discrepancy (0.20) and Environmental Stress (0.47). Lastly, the Environmental stress is shown to have a positive direct effect on Career Goal Discrepancy (0.12).



Legend:

- AcademicHardiness = Academic Hardiness
- SelfEfficacy = Self-Efficacy
- Academic = Academic Stress
- Physical = Physical Stress
- Environment = Environmental Stress
- CareerGoals = Career Goal Discrepancy

Figure 1. Path Model

These indirect effects show several degrees of complexity and include two positive indirect paths by which Self-Efficacy affects Career Goals through Academic Stress: first, through Career Goal Discrepancy (Self-Efficacy → Academic Stress → Career Goal Discrepancy, 0.47×0.20) and second through the combination of Career Goal Discrepancy and Career Goal Aspirations (Self-Efficacy → Academic Stress → Career Goal Discrepancy, 0.47×0.20). Meanwhile, Academic Hardiness has two indirect effects on Career Goal Discrepancy. On the one hand, it has a negative effect through Academic Stress (Academic Hardiness → Academic Stress → Career Goal Discrepancy, -0.39×0.20). On the other hand, it has an even more complex effect through Physical Stress and Academic Stress (Academic Hardiness → Physical Stress → Academic Stress → Career Goal Discrepancy, -

$0.10 \times 0.28 \times 0.20$). This model thus portrays a complex pattern of effects among the variables within the model. In summary, physical stress affects academic stress, and the overall environmental stress affects the difference between career goals.

The model confirms that self-efficacy and academic hardiness are not distal variables which predict career goal discrepancy, rather they predict it indirectly. This supports current knowledge on the role of individual difference variables in promoting motivation for different career paths, and suggests that these ‘distal’ cognitive and personality traits affect student outcomes indirectly through more ‘proximal’ psychological states (Liu et al., 2024). Specifically, for students, higher levels of self-efficacy (Bandura, 1997) are better equipped to manage academic demands, thus experiencing

reduced academic stress (Ramos, 2022). Higher levels of academic hardiness, being hardy in terms of commitment, control and challenge, also provides a 'buffer effect' for individuals dealing with stressful academic events (Bull, 2025). Moreover, the effect of self-efficacy and academic hardiness on helping to reduce the level of career goal discrepancy lies in their relevance to, and impact on, the student's academic environment. Specifically, by reducing academic stress, both traits facilitate the process of goal setting for career development and help students to adopt a focused career direction (Loan et al., 2025).

While many studies have found that stress affects career goal formation, the present study elucidates how stress affects career goal formation through academic stress as the central point of connection. Results from the path analysis reveal that academic stress affects career goal discrepancy through other forms of stress. The strongest effect within the entire model is the link between academic stress and physical stress ($\beta = .494$). As noted in the prior quote, this link reflects the psychosomatic effects of stress whereby academic stress produces various physical and physiological effects (Schlarb et al., 2017). Such effects may interfere with the task load associated with academic work (Deng et al., 2022).

Interestingly, academic stress may also affect environmental stress. Prior research documents the spillover effect of academic stress such that academic pressure affects students' perceived environmental contexts including positive sources of social and relational support, such as family life and peer relationships. Moreover, these environments permeate other domains of life including physical health (Jiang et al., 2022). Thus, within the present study, academic stress can recursively exacerbate the uncertainty and conflict regarding professional trajectories that already foresee considerable career goal discrepancy (Manzoor & Ahmed, 2023).

The ultimate outcome, career goal discrepancy, refers to the difference between where a student is headed and where the student would like to be in terms of career. The findings of this study revealed that the immediate cause of career goal discrepancy is stress, including

physical and environmental stress, resulting from unmitigated academic stress. While the current model refers to stressors that are academic and environmental in nature, future research could explore the role of relational stress. Negative interpersonal hostility has been found to increase stress, and thus could increase career goal discrepancy (Couto et al., 2012). In contrast, strong social support and positive relationships are cited as stress-reducing factors (Nappo, 2020), yet they are not reflected in the current model. Physical fatigue and relational stress can leave students without the energy to engage in the critical self-reflection, information processing, and planning necessary to reduce career goal discrepancy (Drăghtici & Cazan, 2022). Career counseling is only one part of the intervention model needed to reduce career goal discrepancy. The heart of the model includes academic hardiness training, increasing self-efficacy, and academic stress management. These interventions can help students break the negative stress cascade generated by unmitigated academic stress (McLennan et al., 2017).

Conclusion

The study found that pre-service teachers have high academic hardiness and self-efficacy and low overall stress. PSTs report strong identification with academics, and challenges are viewed as opportunities. They also report some limitations in their emotional regulation, and control of their affect. Consequently, PSTs report low stress in the physical, interpersonal and academic areas, but high environmental stress. Environmental stressors impact the well-being of pre-service teachers significantly. Career goal discrepancy was found to be moderate overall, however, the gap between perceived ability and desired goals was the greatest area of discrepancy for pre-service teachers indicating they believe they lack the skills to fulfill their desired roles as teachers.

While the level of academic hardiness and regression analyses identified positive relationships between academic hardiness and self-efficacy and negative relationships with stress and career goal discrepancy, the path and regression analyses further elucidated the way in which these variables were interrelated.

Specifically, academic hardiness and self-efficacy functioned as protective personal resources that lessened stress and career goal discrepancy, whereas stress had a negative and exacerbating effect on career goal discrepancy. Importantly, self-efficacy emerged as the strongest negative predictor of career goal discrepancy, identifying a critical role for self-efficacy in helping pre-service teachers to set realistic career goals. A theoretically grounded and practical path model of the inter-relationships of academic hardiness, stress, self-efficacy, and career goal discrepancy was found to explain a satisfactory amount of variance in career goal discrepancy. The findings support the notion that academic hardiness and self-efficacy can both directly and indirectly influence career goal discrepancy through their relationships with stress. The findings provide insight into the career goal setting of pre-service teachers and highlight a number of practical avenues for intervention. Teachers education programs could benefit from initiatives that promote teacher resilience, optimize teacher self-efficacy and develop strategies to mediate stress.

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