



## Motivation, self-efficacy, and resilience in early childhood pre-service teachers' education career decision-making

*Motivación, autoeficacia y resiliencia en la toma de decisiones profesionales de docentes de educación en la primera infancia*

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### Abstract

**Introduction:** In Indonesia, the Ministry of Education has strategically established early childhood education (ECE) programs within universities to cultivate specialized educators. However, pre-service teachers often enter these programs with perceptions of teaching that may not align with the professional realities they ultimately face. Despite structured programs designed to foster motivation, resilience, and self-efficacy in career decision-making, a persistent gap exists between academic preparation and the practical demands of the teaching profession. **Objective:** This study examines the nexus between pre-service early childhood teachers' education resilience, self-efficacy in making career decisions, and motivation to pursue a teaching career.

**Methodology:** The study involved 305 early childhood education teachers-candidates from three colleges in Medan, North Sumatera. Structured questionnaires were used to collect data, and AMOS 26 software was used for structural equation modeling (SEM) and Pearson's correlation analysis. **Results:** Significant correlations between the three variables are found in the results, which further emphasize the mediation function of career decision self-efficacy in the association between career resilience and motivation for pursuing a teaching career.

**Discussion:** The aforementioned findings highlight the need of incorporating focused tactics into early childhood education curricula to enhance pre-service teachers' self-efficacy in making career decisions, thereby cultivating resilience in their career paths.

**Conclusions:** This study contributes to the growing body of research on teacher preparation by elucidating the intricate dynamics between motivation, resilience, and self-efficacy in career decision-making. By demonstrating the mediating role of career decision self-efficacy, this research offers empirical insights for refining early childhood teacher education programs.

### Keywords

Career choice; career decision self-efficacy in teaching; pre-service early childhood education teachers; teacher career resilience.

### Resumen

**Introducción:** En Indonesia, el Ministerio de Educación ha establecido estratégicamente programas de educación de la primera infancia en las universidades para formar educadores especializados. Sin embargo, los futuros docentes suelen ingresar a estos programas con percepciones de la enseñanza que pueden no estar en consonancia con las realidades profesionales a las que finalmente se enfrentan. A pesar de los programas estructurados diseñados para fomentar la motivación, la resiliencia y la autoeficacia en la toma de decisiones profesionales, existe una brecha persistente entre la preparación académica y las exigencias prácticas de la profesión docente.

**Objetivo:** Este estudio examina el nexo entre la resiliencia de la educación física de los futuros maestros de la primera infancia, la autoeficacia para tomar decisiones profesionales y la motivación para seguir una carrera docente.

**Metodología:** El estudio involucró a 305 estudiantes de educación física infantil de tres universidades de Medan, en el norte de Sumatra. Se utilizaron cuestionarios estructurados para recopilar datos y se utilizó el software AMOS 26 para el modelado de ecuaciones estructurales (SEM) y el análisis de correlación de Pearson.

**Resultados:** Los hallazgos mencionados anteriormente resaltan la necesidad de incorporar tácticas enfocadas en los programas de educación de la primera infancia para mejorar la autoeficacia de los futuros docentes al tomar decisiones profesionales, cultivando así la resiliencia en sus trayectorias profesionales.

**Conclusiones:** Este estudio contribuye al creciente corpus de investigaciones sobre la preparación de docentes al dilucidar la intrincada dinámica entre la motivación, la resiliencia y la autoeficacia en la toma de decisiones profesionales. Al demostrar el papel mediador de la autoeficacia en la toma de decisiones profesionales, esta investigación ofrece perspectivas empíricas para perfeccionar los programas de formación docente para la primera infancia.

### Palabras clave

Elección de carrera; autoeficacia en la toma de decisiones profesionales en la docencia; maestros de educación de la primera infancia en formación; resiliencia profesional docente.



## Introduction

In Indonesia, the Ministry of Education has established early childhood education departments in universities to cultivate specialized early childhood teachers. These programs are designed with the expectation that students will pursue careers as early childhood teachers upon graduation. For many enrollees, admission to these programs marks a predetermined career path. However, while these programs provide pre-service teachers with curricula to prepare them for professional roles, their initial perceptions of teaching often differ from the realities of the profession (Caldwell et al., 2021). Practical training experiences have been shown to significantly influence these perceptions, potentially altering their career aspirations (Baek & Sung, 2021; Peciuliauskiene et al., 2022). Additionally, novice teachers frequently encounter workplace challenges that may lead to reconsideration of their career choice (Haghighi Irani et al., 2020; Nguyen et al., 2022). These findings highlight the need to explore how pre-service teachers' motivations for choosing a teaching career are shaped by their expectations and experiences.

Prior research on career choice-related psychological and behavioral factors i.e. career resilience, career decision-making self-efficacy, career stress, and career indecision, suggests a strong relationship between these factors and career motivation in teaching (Ahmad & Nasir, 2023; Hamzah et al., 2021). Career motivation refers to the underlying reasons and goals that drive individuals to pursue teaching and is closely linked to their anticipated satisfaction in the profession (Amaral et al., 2024). Huberman in (Turda, 2024) categorized these motivations into active (e.g., intrinsic interest in teaching), passive (e.g., lack of alternative career options), and material (e.g., salary or work conditions). Similarly, Kyriacou and Coulthard in (Zhang et al., 2024; Zhou et al., 2021) identified intrinsic (e.g., personal interest and aptitude), extrinsic (e.g., social status, salary), and altruistic motivations (e.g., desire to contribute to society) as critical factors. The Educational Development Institute (1983) classified these motivations into categories such as aptitude, social respect, occupational stability, and self-realization. Chui et al., (2022) further synthesized these classifications into three overarching categories: intrinsic, extrinsic, and passive motivations. Intrinsic motivation, in particular, has been identified as a significant factor not only in teaching but also in processes such as foreign language acquisition (Jia et al., 2022; Parola et al., 2024).

For pre-service early childhood teachers, motivations to pursue teaching are influenced by various factors, including the appeal of the profession, the joy of working with children, the desire to make a meaningful impact, personal aptitude, and situational circumstances (Kwok et al., 2022; Wang et al., 2023). Motivation has a direct impact on teaching aptitude, professional dedication, satisfaction with one's major (Cañabate et al., 2021; Ye et al., 2024), career decision self-efficacy (Abonyi et al., 2021), and performance of professional roles (Ye et al., 2021). It is also positively reinforced through practical training (Chan et al., 2023; Ivanec, 2020).

While pre-service teachers often share the goal of becoming educators, their motivational pathways can differ significantly based on whether their motivations are intrinsic, extrinsic, or passive (Tang et al., 2020). Studies reveal that teachers' motivations are shaped by intrinsic, passive, and extrinsic factors, and that these motivations are dynamic, evolving due to experiences such as practical training and policy changes (Barış Pekmezci & Dağdeviren Ertaş, 2024; Fernández et al., 2024; Uysal, 2022). Thus, understanding the complex interplay between motivation, self-efficacy, and resilience is essential for fostering a committed and well-prepared early childhood teaching workforce.

Career decision self-efficacy and career resilience are critical factors influencing college students' career decision-making processes. Career decision self-efficacy refers to an individual's belief in their ability to successfully perform tasks related to academic and career planning, encompassing dimensions such as goal setting, self-assessment, information gathering, and problem-solving (Tang et al., 2020). Goal setting measures confidence in establishing and achieving academic and career objectives, while self-assessment pertains to evaluating personal abilities, values, and interests to identify suitable occupations. Career planning reflects confidence in pursuing education or employment plans, and problem-solving assesses the ability to navigate challenges related to career paths (Spittle et al., 2022). For early childhood educators, career decision self-efficacy has been identified as a key predictor of teacher commitment.



For pre-service early childhood teachers, career decision self-efficacy significantly impacts employment-related stress (Chen et al., 2021) and serves as a primary driver of career preparation behaviors (Huang et al., 2020; Mokhtar et al., 2023). It also influences broader factors such as career choice (Xin et al., 2020), career adaptability (G. Wang et al., 2021), cultural adjustment, and problem-solving efficacy (Cayupe et al., 2023). High levels of career decision self-efficacy are consistently associated with greater job satisfaction (Zou et al., 2022).

Career resilience, on the other hand, addresses psychological responses to career-related uncertainties and challenges. It represents an individual's ability to approach negative factors flexibly and maintain a positive outlook (Santos, 2021). Sub-factors of career resilience include positive self-belief, a strong drive for achievement, effective use of interpersonal relationships, and self-determination (Mena et al., 2023; Zhao et al., 2022). Research demonstrates that career resilience and career decision self-efficacy are closely interlinked, with career resilience influencing career decision-making and self-efficacy in various contexts (Ma et al., 2022; Yim, 2023). Among college students, particularly pre-service early childhood teachers' students, both factors significantly shape career preparation behaviors (Yada et al., 2021). Furthermore, a direct relationship exists between higher levels of career decision self-efficacy and greater career resilience (Forgie et al., 2022).

In the context of pre-service early childhood education teachers, understanding the interplay between these factors is essential. Motivation for choosing a teaching career reflects the reasons behind individuals' aspirations and the anticipated satisfaction they derive from the profession (Qiao et al., 2022; Wen et al., 2023). This motivation is likely to influence, and be influenced by career decision self-efficacy and resilience (Duan et al., 2023; Elwakil, 2023; Wen et al., 2022). Investigating these dynamics can inform strategies to enhance teacher preparation programs by fostering stronger career self-efficacy and resilience among pre-service educators.

This study aims to examine the relationships between pre-service early childhood education teachers' motivation for choosing a teaching career, their career decision self-efficacy, and their career resilience. Specifically, it explores the mediating role of career decision self-efficacy in the relationship between motivation for choosing a teaching career and career resilience. The research is guided by the following questions: (1). What are the relationships between pre-service early childhood education teachers' motivation for choosing a teaching career, career decision self-efficacy, and career resilience? (2). Does career decision self-efficacy mediate the relationship between motivation for choosing a teaching career and career resilience? Through the investigation of these issues, the study advances our knowledge of the behavioral and psychological elements affecting pre-service early childhood education teachers' career growth.

## Method

The study employed descriptive statistics to summarize participant characteristics and examined the factor structure, reliability, and validity of the measurement tools through exploratory factor analysis and Cronbach's alpha. Pearson correlation analysis was conducted to identify relationships between the study variables.

### *Participants*

The participants of this study were 305 undergraduate students majoring in early childhood education at five universities located in Medan, North Sumatera, Indonesia. Students were recruited based on their willingness to participate after the purpose and objectives of the study were explained. A total of 310 surveys were initially distributed; however, after excluding incomplete responses, 305 surveys were retained for analysis. The respondents' demographics are summarized in Table 1.

Table 1. Respondents' demographics

College Year	Students			Percentage (%)
	Male	Female	Total	
First	0	72	72	23.23
Second	2	80	82	26.45
Third	1	70	71	22.9
Final	2	83	85	27.42
Total	5	305	310	100

## Procedure

### *Data Collection*

Data collection occurred from February 3 to April 1, 2024. Surveys were administered in paper format to participants who consented to take part after the study's objectives were outlined. A total of 308 surveys were returned, of which 300 were deemed complete and eligible for analysis.

## Measurement Instruments

### *Motivation for Choosing a Teaching Career*

The respondents' motivation for pursuing a teaching career was assessed using a combination of survey items from the Educational Development Institute's teaching consciousness scale and Skaalvik & Skaalvik (2020) scale. The measurement tool included 12 items divided into three sub-dimensions: intrinsic motivation (5 items), extrinsic motivation (4 items), and passive motivation (3 items). Responses were recorded on a 5-point Likert scale, with higher scores indicating stronger motivation. The reliability coefficient (Cronbach's alpha) for this instrument was .70.

### *Career Decision Self-Efficacy*

Career decision self-efficacy was measured using the scale developed by (Tang et al., 2020). After removing items with low reliability, the finalized tool consisted of 13 items grouped into three sub-dimensions: goal setting (6 items), job information (4 items), and problem-solving (3 items). Responses were recorded on a 5-point Likert scale, with higher scores reflecting higher levels of career decision self-efficacy. The reliability coefficient for this scale was .82.

### *Career Resilience*

Career resilience was evaluated using the scale developed by (Yada et al., 2021). Following an assessment of item reliability, the tool was refined to include 18 items divided into four sub-dimensions: career independence (5 items), relationship utilization (5 items), self-belief (4 items), and desire for achievement (4 items). Responses were captured on a 5-point Likert scale, with higher scores representing greater career resilience. The reliability coefficient for this measure was .90.

## Data analysis

Data analysis was performed using IBM SPSS Statistics 26 and IBM SPSS Amos 26. Structural equation modeling (SEM) was utilized to test the hypothesized relationships and the mediating effect of career decision self-efficacy on the relationship between motivation for choosing a teaching career and career resilience. The significance of indirect effects was assessed using bootstrapping techniques with Amos 26. Items with low validity in sub-factor analyses were excluded to ensure the robustness of the findings. By employing this method, the study aimed to comprehensively examine the interrelationships among pre-service early childhood teachers' motivation for choosing a teaching career, career decision self-efficacy, and career resilience.

## Results

### *Relationships between pre-service early childhood education teachers' motivation for choosing a teaching career, career decision self-efficacy, and career resilience*

This study examined the nexus among three dimensions of motivation for choosing a teaching career (intrinsic, extrinsic, and passive motivation), three dimensions of career decision self-efficacy (goal setting, job information, and problem-solving), and four dimensions of career resilience (career independence, relationship utilization, self-belief, and desire for achievement). Descriptive statistics were analyzed to assess the general tendencies and normality of each variable as is shown in Table 2. Skewness and kurtosis values for most variables were well within the acceptable ranges for normality ( $\pm 2$  for skewness and  $\pm 7$  for kurtosis), with the exceptions of relationship utilization and goal setting. These results indicate that the data distribution was suitable for subsequent parametric analyses.

Table 2. Descriptive statistics of general tendencies and normality of variable of motivation for choosing a teaching career, career decision self-efficacy, and career resilience (N = 305)

Variables	Dimensions	Average (M)	Standard Deviation (SD)	Skewness	Kurtosis
Motivation for Choosing a Teaching Career	Intrinsic motivation	1.85	.75	.650	.771
	Extrinsic motivation	3.02	.80	-.058	-.162
	Passive motivation	3.65	.94	-.572	-.064
	Overall	2.78	.52	.047	.784
Career decision self-efficacy	Goal setting	2.30	.62	.484	1.273
	Job information	1.92	.55	.275	-.415
	Problem-solving	2.62	.78	.286	-.298
	Overall	2.12	.49	.059	.013
Career resilience	Career independence	1.85	.64	.418	-.189
	Relationship utilization	1.60	.66	1.211	1.488
	Self-belief	1.79	.69	.437	-.331
	Desire for achievement	2.15	.72	.236	-.672
	Overall	1.83	.54	.341	-.138

### *Correlation Analysis*

The findings from the Pearson's correlation analysis, as presented in Table 3, reveal significant interrelationships among the variables under investigation, shedding light on the dynamics of motivation, career decision self-efficacy, and career resilience. Intrinsic motivation for choosing a teaching career demonstrated a robust positive correlation with career decision self-efficacy and career resilience, emphasizing its critical role in fostering confidence and adaptability among pre-service teachers. Similarly, extrinsic motivation was positively correlated with both career decision self-efficacy and career resilience, indicating its supportive role in enhancing career-related capabilities and adaptability. Interestingly, a positive relationship was also observed between intrinsic and extrinsic motivation, suggesting that these motivational dimensions may operate synergistically to influence career outcomes. However, passive motivation exhibited a negative correlation with career decision self-efficacy, highlighting its detrimental impact on the confidence required for effective career decision-making. Furthermore, intrinsic motivation negatively correlated with passive motivation, while maintaining a positive association with extrinsic motivation, illustrating a nuanced interplay among motivational sub-factors. Finally, career decision self-efficacy was found to positively correlate with career resilience, underscoring the interconnectedness of these constructs in shaping the preparedness and adaptability of future early childhood educators. These findings provide critical insights into the motivational and psychological factors that influence pre-service teachers' career trajectories.

Table 3. Correlation analysis among motivation for choosing a teaching career, career decision self-efficacy, and career resilience (N = 305)

Variables	Intrinsic Motivation	Extrinsic Motivation	Passive Motivation	Career Decision Self Efficacy	Career Resilience
Intrinsic motivation	-.35**				
Extrinsic Motivation	-.33**	-			
Passive Motivation	.48**	.22**	-		
Career Decision Self Efficacy	.47**	.24**	-.14**	-	
Career Resilience		.29**	-.16**	-.73**	-

\*p<.05, \*\*p<.01, \*\*\*p<.001

### Mediating effect of career decision self-efficacy in the relationship between motivation for choosing a teaching career and career resilience

To investigate the mediating role of career decision self-efficacy in the relationship between pre-service early childhood teachers' motivation for choosing a teaching career and their career resilience, structural equation modeling (SEM) was employed. Mediation effects were examined under the condition that the independent variable significantly influenced the mediator, the mediator significantly influenced the dependent variable, and the direct effect of the independent variable on the dependent variable was either reduced or became insignificant when the mediator was introduced.

Table 4. SEM analysis of motivation for choosing a teaching career, career decision self-efficacy, and career resilience (N = 305)

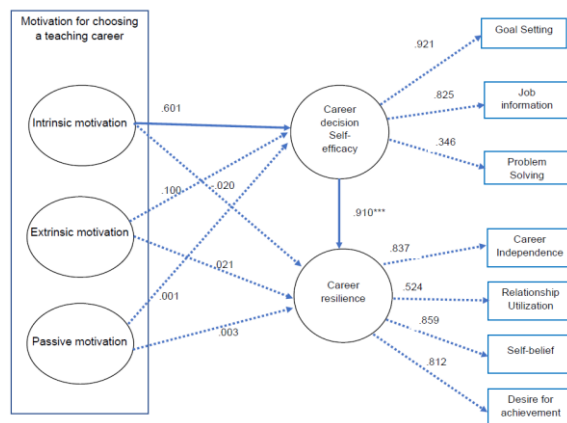
Direction	Non-standardized coefficient (B)	Standard Error	Standardized coefficient (β)	t	p
Career Decision Self Efficacy → Intrinsic motivation	.57	.10	.60	5.75	***
Career Decision Self Efficacy → Extrinsic Motivation	.08	.08	.10	1.23	.21
Career Decision Self Efficacy → Passive Motivation	.00	.10	.00	.01	.98
Career Decision Self Efficacy	.63	.09	.91	7.81	***
Career Resilience → Intrinsic motivation	-.01	.08	-.02	-.20	.83
Career Resilience → Extrinsic Motivation	.01	.04	.02	.22	.81
Career Resilience → Passive Motivation	.00	.06	.00	.04	.95

\*\*\*p<.001

### Path Analysis Results

The path analysis results, as detailed in Table 4 and illustrated in Figure 1, provide critical insights into the relationships among motivational factors, career decision self-efficacy, and career resilience. Intrinsic motivation emerged as a significant predictor of career decision self-efficacy, with a strong positive effect ( $\beta = .60, t = 5.75, p < .001$ ), underscoring its pivotal role in fostering confidence in career-related decision-making among pre-service teachers. Moreover, career decision self-efficacy demonstrated a substantial positive impact on career resilience ( $\beta = .91, t = 7.81, p < .001$ ), highlighting its importance in enhancing adaptability and persistence in career challenges. In contrast, neither extrinsic nor passive motivation exhibited significant effects on career decision self-efficacy or career resilience, suggesting that these motivational dimensions may have limited influence in shaping the confidence and resilience required for career success in this context. These findings emphasize the centrality of intrinsic motivation in strengthening the psychological mechanisms that underpin effective career decision-making and resilience, while questioning the role of extrinsic and passive motivational factors in fostering these attributes.

Figure 1. Structural equation construction of pre-service early childhood education teachers' motivation for choosing a teaching career, career decision self-efficacy, and career resilience



### Bootstrapping Analysis of Indirect Effects

The bootstrapping analysis, detailed in Table 5, confirmed the mediating role of career decision self-efficacy in the relationship between intrinsic motivation and career resilience among pre-service early

childhood teachers. Resampling techniques revealed a statistically significant indirect effect, affirming that career decision self-efficacy serves as a critical mechanism through which intrinsic motivation enhances career resilience. Conversely, neither extrinsic motivation nor passive motivation demonstrated significant indirect effects on career resilience through career decision self-efficacy, underscoring the limited impact of these motivational dimensions in fostering resilience. These findings highlight the pivotal role of intrinsic motivation in cultivating both self-efficacy and resilience, essential attributes for sustaining career commitment and adaptability in the dynamic field of early childhood education. The results emphasize the need for teacher education programs to prioritize strategies that nurture intrinsic motivation and build self-efficacy, ensuring that future educators are equipped to navigate professional challenges with confidence and resilience.

Table 5. Bootstrapping analysis and indirect effect among motivation for choosing a teaching career, career decision self-efficacy, and career resilience (N = 305)

Direction	Direct Effect	Indirect Effect	Total Effect	p
Intrinsic motivation → Career Decision Self Efficacy → Career Resilience	-.18	.54	.53	.14**
Extrinsic Motivation → Career Decision Self Efficacy → Career Resilience	.15	.10	.12	.31
Passive Motivation → Career Decision Self Efficacy → Career Resilience	.04	.00	.00	.92

\*\*\*p<.001

## Discussion

This study seeks to deepen our understanding of the complex relationships between pre-service early childhood education teachers' intrinsic motivation for choosing a teaching career, their career decision self-efficacy, and their career resilience. Through this investigation, we aim to elucidate how these critical psychological and motivational factors interconnect, and how they collectively influence the development of pre-service teachers. The results offer significant insights into how these factors impact teachers' perceptions of their career prospects, their ability to navigate challenges, and their overall resilience in the profession. This discussion will elaborate on the implications of these findings for teacher education programs and the broader field of early childhood education.

### *The influence of intrinsic motivation on career decision self-efficacy and career resilience*

One of the central findings of this study is the powerful influence of intrinsic motivation on both career decision self-efficacy and career resilience. Intrinsic motivation, defined as the drive to pursue teaching due to a genuine passion, personal interest, and aptitude for working with young children, emerged as a key factor that shapes pre-service early childhood teachers' perceptions of their career paths (Li, 2023). This finding is consistent with existing literature, which has highlighted the role of intrinsic motivation in enhancing various career-related outcomes. For example, numerous studies demonstrated that intrinsic motivation positively affects career decision self-efficacy (Kang et al., 2024; Lipscomb et al., 2022), while other emphasized its importance in fostering dedication to the teaching profession (Kang et al., 2024; Roiek Lazier Leão et al., 2023). Moreover, intrinsic motivation has been shown to contribute to teachers' satisfaction with their academic programs and career choices, and to enhance their perceived teaching performance (Gratacós et al., 2023; Nugroho et al., 2024).

In our study, intrinsic motivation was found to positively influence career decision self-efficacy, which refers to pre-service teachers' confidence in their ability to make informed career decisions, set appropriate goals, and successfully navigate challenges. Furthermore, intrinsic motivation also contributed to higher levels of career resilience i.e. the ability to cope with setbacks, adapt to challenges, and maintain a positive outlook during the transition into the teaching profession. These findings underscore the critical role that intrinsic motivation plays in shaping pre-service teachers' expectations of their career success and their ability to endure and thrive amidst the challenges that inevitably accompany the early stages of their careers.

Pre-service early childhood teachers who are intrinsically motivated (those who enter the profession because of a deep-seated passion for teaching and a sense of personal fulfillment) tend to approach career uncertainties with optimism and self-assurance. These individuals exhibit greater confidence in their ability to tackle professional challenges and adapt to the evolving demands of the teaching profession (Li, 2023; Ventaja-Cruz et al., 2024). This enhanced sense of self-efficacy and resilience allows them

to maintain their dedication and passion for teaching, even when faced with obstacles such as classroom management issues, administrative challenges, or professional transitions.

Given these findings, it is crucial for teacher education programs to prioritize intrinsic motivation as a fundamental aspect of candidate selection and program design. Teacher recruitment processes should incorporate measures that assess candidates' intrinsic motivations, including their personal interest in teaching, their understanding of the profession, and their alignment with the values and demands of early childhood education. Additionally, teacher education programs should cultivate and sustain intrinsic motivation throughout the training process by providing opportunities for personal reflection, meaningful engagement with teaching practice, and supportive mentoring relationships. Field training, in particular, has been identified as a key factor influencing intrinsic motivation (Reyes-Molina et al., 2023). Thus, teacher preparation programs should ensure that field experiences are structured and implemented in ways that allow pre-service teachers to see the tangible impact of their work with young children, further reinforcing their motivation to pursue teaching as a lifelong career.

### ***The mediating role of career decision self-efficacy***

Another significant finding of this study is the mediating role of career decision self-efficacy in the relationship between intrinsic motivation and career resilience. Specifically, we found that career decision self-efficacy acts as a critical mediator, translating the positive effects of intrinsic motivation into greater career resilience. In other words, pre-service teachers who are intrinsically motivated are more likely to have higher levels of career decision self-efficacy, which in turn enhances their ability to persist in the face of challenges and setbacks.

This finding is consistent with prior research that underscores the importance of career decision self-efficacy in predicting career resilience. Studies have shown that individuals with higher levels of self-efficacy tend to engage in more proactive career behaviors, such as setting clear goals, seeking out opportunities for professional growth, and making informed decisions about their career paths (Kavgacı, 2022; Zhang et al., 2022). Moreover, career decision self-efficacy has been linked to lower levels of career-related stress, as individuals who believe in their ability to make sound career decisions are better equipped to cope with uncertainties and challenges.

The mediating effect of career decision self-efficacy highlights its crucial role in facilitating pre-service teachers' adaptation to the professional world. Pre-service teachers who possess high career decision self-efficacy are more likely to exhibit resilience in the face of career transitions, job-related stress, and professional uncertainties. They are better able to manage the demands of their roles, set realistic expectations, and proactively seek solutions to the challenges they encounter. Therefore, enhancing career decision self-efficacy among pre-service early childhood teachers should be a primary focus of teacher education programs.

### ***Implications for Teacher Education Programs***

The findings of this study offer several important implications for the design and implementation of teacher education programs. First, programs should focus on fostering intrinsic motivation from the outset. Given the pivotal role that intrinsic motivation plays in shaping career decision self-efficacy and career resilience, teacher education programs must ensure that pre-service teachers are not only passionate about their chosen profession but also equipped with the confidence and skills to navigate the challenges they will face in their careers.

To enhance intrinsic motivation, teacher education programs should prioritize engaging and meaningful teaching experiences, opportunities for reflection, and supportive mentoring relationships. Field experiences and student teaching placements should be structured in ways that allow pre-service teachers to develop a strong sense of professional identity and to connect their personal values and motivations with the real-world practice of teaching. Additionally, programs should offer tailored support to help pre-service teachers maintain their intrinsic motivation throughout their training, including regular check-ins with mentors, opportunities for peer collaboration, and stress-reducing activities.

Second, career decision self-efficacy should be a central focus of teacher education curricula. Programs should incorporate interventions and strategies that help pre-service teachers develop the confidence and decision-making skills necessary to navigate their careers. These strategies may include goal-setting exercises, workshops on career development, and counseling sessions designed to help pre-service





teachers explore their career aspirations and strengthen their decision-making abilities. Furthermore, programs should address the psychological aspects of career decision-making, such as stress and anxiety, by providing pre-service teachers with tools to manage these challenges and enhance their resilience.

## Conclusions

In conclusion, this study underscores the interconnectedness of intrinsic motivation, career decision self-efficacy, and career resilience in shaping the professional development of pre-service early childhood education teachers. The findings highlight the importance of fostering intrinsic motivation early in teacher education programs, as well as providing targeted support to enhance career decision self-efficacy and career resilience. Teacher education programs that prioritize these factors are better equipped to prepare pre-service teachers for the demands of the teaching profession and to promote long-term success and well-being.

Future research should continue to explore the factors that influence intrinsic motivation and career decision self-efficacy in pre-service teachers, including the role of institutional and cultural influences. In this regard, longitudinal studies are essential to tracking the developmental trajectories of pre-service teachers beyond their initial training and into their early professional years. Such studies could provide crucial insights into how intrinsic motivation, career decision self-efficacy, and career resilience evolve over time and how they interact with external influences such as workplace environments, mentorship opportunities, and policy frameworks. Moreover, experimental and quasi-experimental research should explore the effectiveness of specific interventions designed to strengthen intrinsic motivation and career decision self-efficacy. Examining the sustained impact of these interventions over extended periods would refine our understanding of evidence-based strategies for supporting pre-service teachers throughout their professional journeys. By adopting a longitudinal and intervention-based research approach, future studies can contribute not only to theoretical advancements but also to the development of more robust, empirically grounded policies and practices in teacher education.

Ultimately, by addressing these critical factors, teacher education programs can play a transformative role in shaping the future of early childhood education, ensuring that teachers enter the profession with the motivation, confidence, and resilience needed to provide high-quality care and education to young children.

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