



The Influences of Feeling of Preparedness, Mentors, and Mindsets on Preservice Teachers' Value of Teaching Practice

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Abstract

The present study examined how preservice teachers' perceived value of teaching practice is influenced by their feeling of preparedness, perception of student growth mindset, growth mindset about teaching ability, and the support they receive from mentor teachers. We analyzed data from 227 preservice teachers from three universities in Southwest Nigeria for this study. In line with extant literature, perception of mentoring positively mediates the relationship between the feeling of preparedness and value of teaching practice experience. In essence, the more PTs feel prepared, the more they are likely to positively perceive and benefit from mentoring and, consequently, value their teaching practice experience. Additionally, we found that the more PTs feel prepared, the higher they believe they could positively change their teaching to influence student success. Consequently, the more they value their teaching practice experience. We also observed that the relationship between PT's perception of students' growth mindset and value of teaching practice is positively mediated by growth teaching mindset, however when holding feeling of preparedness constant, the two variables were not significantly related, except through the influence of the mediator. We concluded with implications of findings, recommendations, and direction for future research.

Keywords

Feeling of Preparedness, Growth Mindset, Mentoring, Values, Teaching Practice

1. Introduction

The expectancy-value theory has been used to explain the relationship between achievement-related choices and students' expectations for success and subjective task value in different domains, with a key focus on student learning (Eccles & Wigfield, 2000; Eccles, 2005; Wigfield et al., 2009). The expectancy-value model posits that an individual's motivation towards a given outcome is contingent upon two primary factors: the perceived significance or value of the outcome and the perceived probability of successfully achieving it (Wigfield & Eccles, 2000; Wigfield, 1994). This theoretical framework has been extensively studied within the field of psychology and has been shown to have significant applications in understanding and predicting human behavior. Although researchers are increasingly applying this theory to teaching and understanding teacher behaviors (Fielding et al., 2022; Richardson & Watt, 2014; Kuhn et al., 2022; Thomson & Palermo, 2018), there is still a lot to be known. In the present study, we examine how preservice teachers' feelings of preparedness as a proxy of expectancies for success relate to the perceived value of their teaching practice experience.

1.1. Value of Teaching Practice

Teaching practice is one of the ways that teacher education programs afford preservice teachers the opportunity to experience real-world teaching and perhaps the closest approximation of practice (Schutz et al., 2018; Grossman et al., 2009). Hence, it is a necessary experience every future teacher must have and a critical component of teacher preparation. However, the teaching practice's success largely depends on the value that preservice teachers derive from participating in the apprenticeship experience (Brown et al., 2021). For instance, Bulough et al. (2002) observed that preservice teachers who participated in partnership placements had a more positive experience and valued their teaching practices more than those in single-placement teaching. They felt better supported and could take greater instructional risks in the classroom, resulting in their students reporting relatively better learning experiences. Mentors in partnership placements were found to be more flexible and trusting. In another study, Anderson et al. (2005) found that a combination of guided observations of peers and unguided observations of cooperating teachers during early field experiences had great value for preservice teachers. The authors further suggested that training in guided observation techniques may provide a foundation for making this experience more valuable for future teachers. Additionally, the preservice teachers valued the peer-observation experience, which, according to the authors, may lead them to seek additional observation opportunities as in-service

teachers. Based on the literature, we know there is variation in the values that preservice teachers derive from their teaching practice experience (Darling-Hammond et al., 2002; Brown et al., 2021).

Research suggests that people are more likely to undertake an activity if they expect to do well and value the activity (Wigfield et al., 2015). Additionally, expectations for success and task value are influenced by a combination of factors, including personal characteristics such as abilities, experience, goals, self-concepts, and beliefs. Likewise, they can be influenced by environmental factors such as cultural contexts, social beliefs, and behaviors (Leaper, 2011; Eccles & Wigfield, 2002). Hence, we assume that the relationship between factors that foster expectations for success, such as preservice teachers' feelings of preparedness and their value of teaching practice, is somewhat multiprong and not necessarily a simple relationship. In this study, we examine, in addition to preservice teachers' feelings of preparedness, how preservice teachers' ability beliefs and perception of mentoring influence this relationship. In particular, we focus on growth mindset about teaching ability (henceforth called growth teaching mindset, Frondozo et al., 2020) and perception of mentoring as the two mediating factors in the relationships in the present study.

Research has shown that the relationship between self-beliefs and values is complex. While initial accounts by Atkinson (1957, 1964) suggested that expectancies and values were inversely related, recent empirical research has indicated a positive correlation, which increases in strength as individuals age. This new evidence has sparked a debate as to which of these two factors, self-beliefs or values, exerts a causal influence on the other. A widely accepted position in scholarly literature is that self-beliefs shape values. For instance, studies have demonstrated that students tend to value tasks in which they are proficient and tend to value tasks in which they believe they can perform exceptionally well. This perspective is consistent with Bandura's (1977) theory, which posits that people derive pleasure from activities they perceive themselves as competent (Bandura, 1997, 2000). Self-beliefs are considered a causal precursor to an individual's value system. Hence, in this study, we examine how preservice teachers' perceived value of teaching practice is influenced by their feeling of preparedness, perception of student growth mindset, growth teaching mindset, and the support they receive from mentor teachers.

1.2. Feeling of Preparedness

Preservice teachers' feelings of preparedness are crucial predictors of their ability to perform teaching tasks and their self-efficacy to teach. Scholars have emphasized the importance of preservice teachers' preparedness to meet the challenges of the teaching profession (Brown et al., 2021; Darling-Hammond et al., 2002). To enhance teacher preparation, there have been efforts to improve coursework and classroom experiences, with an increasing focus on the benefits of student teaching. Despite the lack of research on whether preservice teachers' percep-

tions of preparedness lead to actual preparedness in the classroom, several studies have indicated a relationship between feelings of preparedness and several teacher outcomes, such as an increased teacher expectancy, enthusiasm, and sense of teaching efficacy (Brown et al., 2021; Darling-Hammond et al., 2002; Gurvitch & Metzler, 2009; Henson, 2002). The present study focuses on how feeling of preparedness influences preservice teachers' value of their teaching practice, specifically factors that mediate this relationship.

In a study conducted by Brown et al. (2015), preservice teachers described the elements of their student teaching experience that they deemed most valuable in preparing them for their future teaching roles. The analysis yielded three main themes: hands-on teaching, observation of experienced teachers, and a supportive relationship with their cooperating teacher. The preservice teachers strongly asserted that the experience of being in a classroom and delivering lessons to actual students was a crucial component of their teacher preparation. They also highly valued the opportunity to observe how experienced teachers managed their classes and taught their lessons. The preservice teachers regarded their rapport with their mentor teacher as highly beneficial, providing valuable support, guidance, and opportunities throughout their teacher preparation. Additionally, the preservice teachers in their study emphasized the importance of practical, real-world experiences in the classroom and the significance of having a mentor teacher who is supportive and knowledgeable. These findings suggest that, in addition to teacher preparation, the quality of interaction and experience that preservice teachers have with their mentor teachers can positively influence the value they derive from their teaching practice experience. Hence, in the present study, we expect that preservice teachers' mentoring experience would mediate the relationship between their feeling of preparedness and the value that they derive from their teaching practice. Additionally, we expect that in line with the expectancy-value model, these relationships would be multiprong, influenced by beliefs-related factors such as preservice teachers' perception of student growth mindset and their growth mindset about teaching ability (growth teaching mindset).

1.3. Growth Mindset

In recent years, the concept of growth mindset (Dweck, 2006, 2014) has garnered significant attention from educators and researchers alike. This term refers to a collection of internal beliefs and assumptions regarding the malleability of one's intelligence and abilities. The academic literature highlights two primary types of intelligence mindsets: fixed mindset, which is grounded in an entity theory that views intelligence as fixed and deterministic, and growth mindset, which is rooted in an incremental theory that affords greater agency in action and outcomes. Dweck's mindset theory proposes that an individual's beliefs about their attributes, including intelligence, talent, ability, and personality, significantly impact their behavior, achievements, failures, and overall well-being (Boylan et al., 2018, Delaney, 2021). Broadly a growth mindset is associated with

an incremental theory of intelligence, while a fixed mindset corresponds to an entity theory of intelligence. However, a person's mindset may vary depending on the circumstances, and it is possible to cultivate a growth mindset over time (Dweck & Master, 2009). While research into the impact of growth mindset on student outcomes has been thoroughly explored, investigations into its applicability to teacher mindsets and instructional practices are still in their infancy, with a paucity of studies examining its associations with other teacher beliefs or teaching methods (Thayer, 2020; Frondoza et al., 2020; Bostwick et al., 2020).

In this study, we focus on two growth mindset variables that pertain to pre-service teachers: their perceptions of student growth mindset and their own beliefs about improving their teaching practices, referred to as growth teaching mindset. These variables are essential for some reasons. Firstly, we aim to investigate how preservice teachers' beliefs about student growth mindset may impact their growth teaching mindset and practices. This line of inquiry is important because studies demonstrate that growth-minded teachers recognize the potential for students' development and provide the necessary support to facilitate their improvement. They perceive errors as part of the learning process and prioritize the strategies and efforts learners employ in their education (Dweck & Master, 2009; Dweck, 2014).

Teachers' mindsets play a crucial role in their teaching practices and the academic performance of their students. According to several studies, teachers with fixed mindsets focus on high-performing students while disregarding those who struggle academically. This is due to the belief that some students possess inherent abilities while others do not. Conversely, teachers with growth mindsets view all students as capable of developing their skills and intelligence over time. They utilize more effective teaching practices and provide additional guidance to assist students encountering difficulties (Boylan et al., 2018; Delaney, 2021; Dweck & Master, 2009).

Lee (1996) examined teachers' instructional approaches based on their mindsets. The study revealed that teachers with fixed mindsets relied heavily on students' inherent intelligence and abilities, while those with growth mindsets prioritized learners' efforts and strategies in the learning process. Furthermore, fixed-mindset teachers tended to offer limited assistance to their students, whereas growth-mindset teachers provided learners with effective problem-solving strategies and greater support to aid their learning. Their findings underscore the importance of teachers' growth mindset to facilitate student success, regardless of their current levels of intelligence. This involves equipping them with the necessary strategies and support to enhance their performance (Wentzel, 2015; Dweck, 2014; Lee, 1996; Varli & Yilmaz, 2020).

Secondly, we aim to examine how growth teaching mindset influences value of teaching practice. We know that mindset influences teachers' own practices. Research suggests that teachers' mindsets are strongly associated with their preferred teaching strategies. In particular, teachers with growth mindsets offer new teaching strategies tailored to the needs of their students, while those with fixed

mindsets tend to blame students for their lack of capabilities (Swann & Snyder, 1980; Watanabe, 2006; Varli & Yilmaz, 2020). Likewise, teachers with growth mindsets are more interested in their students' effort and development, while those with fixed mindsets concentrate mainly on academic results (Gutshall, 2013, Wentzel, 2015; Dweck, 2014). According to Yeager et al.'s (2022) study, a brief intervention targeting growth mindset had a positive impact on the math grades of ninth-grade students. However, the authors found that this effect was particularly concentrated among students whose teachers also held growth mindsets. These findings highlight the importance of teachers' mindsets in shaping classroom environments and student learning outcomes.

Scholars have also suggested that teachers who embrace the notion of intelligence as a malleable entity are more inclined to implement teaching practices that encourage ongoing growth and improvement. In contrast, teachers who subscribe to fixed intelligence tend to create adverse classroom environments where errors are not tolerated, and underachieving students are often overlooked (Butler, 2000; Plaks et al., 2001; Wentzel, 2015; Varli & Yilmaz, 2020). Specifically, teachers with a growth mindset tend to perceive teaching as flexible, allowing them to fulfill teaching responsibilities professionally and adaptively. Conversely, teachers with a fixed mindset tend to consider teaching a fixed trait, exhibiting risk aversion and low resilience when faced with setbacks (Yeager & Dweck, 2012; Rissanen et al., 2016, 2019; Dweck, 2014; Lin et al., 2022). Consequently, cultivating a growth mindset may enhance teachers' self-efficacy and motivate them to perform more effectively. Hence, in this study, we examine factors that influence growth teaching mindset and how, consequentially, growth teaching mindset influences the perceived value of their teaching practice experience. Interestingly, prior studies have not thoroughly examined these multiprong relationships.

1.4. Research Questions

The present study examined the multiprong relationship between preservice teachers' feeling of preparedness, their perception of student growth mindset, and the value they derive from their teaching practice. Primarily, it sought to understand the mediating roles of perception of mentoring and growth teaching mindset. In specific, the present study answers three key questions:

- 1) To what extent does preservice teachers' perception of mentoring mediate the relationship between feeling of preparedness and perceived value of teaching practice?
- 2) To what extent does growth teaching mindset mediate the relationship between the feeling of preparedness and perceived value of teaching practice?
- 3) To what extent does growth teaching mindset mediate the relationship between perception of student growth mindset and perceived value of teaching practice?

The envisioned relationships among these variables as investigated in the present study are presented in visual form in **Figure 1**.

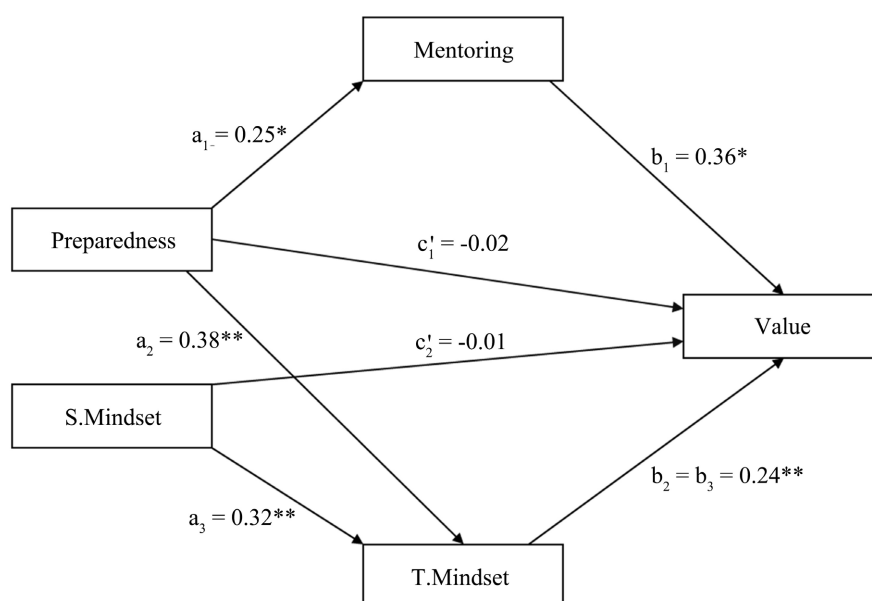


Figure 1. Mediation diagram showing the effects of feeling of preparedness and perception of student growth mindset on value of teaching practice via perception of mentoring and growth teaching mindset, $^{**}p < 0.001$ and $^*p < 0.05$, $R^2 = 0.04$, Adjusted $R^2 = 0.03$, $F(2, 224) = 4.99$, $p = 0.01$.

2. Methods

2.1. Participants

We recruited preservice teachers (PTs) from three universities in Southwest Nigeria for this study. We shared the link to the online survey (Google form) with the students, and 346 responded. After data cleaning, removing duplicate submissions, and participants less than 18 years, the final analyses were done on 227 participants, with their age range between 18 and 34 years. Among them, 165 were ages 18 - 24 (73%) and 61 were ages 25 - 34 (27%); 75 were male (33%), and 151 were female (67%). In terms of years in the program, 11 were in year 2 (5%), 71 were in year 3 (31%), and 145 were in year 4 (64%). In terms of role during teaching experience, 11 observed a mentor (5%), 46 taught a class (20%), and 170 observed and taught a class (75%); 66 taught elementary students (29%), 69 taught middle school students (30%), and 92 taught high school students (41%). Regarding experience and subject taught, 107 have done one teaching practice (47%), 114 have done two teaching practices (50%), and 6 have done three teaching practices (3%); while 16 taught mathematics (10%), 37 taught science (23%), 46 taught literacy (29%), 4 taught sports (2%) and 58 taught social studies/government (36%). We present participant demographics in **Table 1**.

2.2. Measures

2.2.1. Feeling of Preparedness

This study measured preservice teachers' feeling of preparedness using the perceptions of preparedness scale (Darling-Hammond, 2006). The scale has twenty-nine items and five subconstructs, which include 1) Design curriculum and

Table 1. Participant demographics.

Variables	Subgroups	Frequency	Percent
Gender	Male	75	33
	Female	151	66.5
	Total	226	99.6
Age	18 - 24	165	72.7
	25 - 34	61	26.9
	Total	226	99.6
School year	Year 2 (200 Level)	11	4.8
	Year 3 (300 Level)	71	31.3
	Year 4 (400 Level)	145	63.9
	Total	227	100
Teaching practice role	Observed a mentor	11	4.8
	Taught a class or lesson	46	20.3
	Observed and taught a class	170	74.9
	Total	227	100
Grade taught	Elementary or Primary school	66	29.1
	Middle or Junior School	69	30.4
	High or Senior School	92	40.5
	Total	227	100
Subject taught	Mathematics	16	7.0
	Science/Chemistry/Physics	37	16.3
	Literacy/Art/Language	46	20.3
	Sports	4	1.8
	Social studies/Government	58	25.6
	Total	161	70.9
Teaching practice times	One	107	47.1
	Two	114	50.2
	Three	6	2.6
	Total	227	100

instruction (9 items, $\alpha = 0.92$), 2) Support diverse learners (6 items, $\alpha = 0.88$), 3) Use assessment to guide learning and teaching (4 items, $\alpha = 0.83$), 4) Create a productive classroom environment (6 items, $\alpha = 0.86$), and 5) Develop professionally (4 items, $\alpha = 0.87$). All candidates rated their preparation in response to the question “How well do you think your teacher preparation prepared you to...” on a 4-point scale, where 1 = “Not prepared,” 2 = “Somewhat prepared,” 3 = “well prepared” and 4 = “very well prepared.” An overall Cronbach’s alpha value of 0.96 was obtained for the perceptions of preparedness in the present study. We present all items and subconstructs of the feeling of preparedness scale used in this present study in **Table 2**.

Table 2. Feeling of preparedness.

Feeling of preparedness items	<i>N</i>	Mean	<i>SD</i>	Min.	Max.
Design curriculum and instruction					
1. Develop curriculum that builds on students' experiences, interest, and abilities.	227	3.19	0.75	1	4
2. Teach the concepts, knowledge, and skills of your discipline in ways that enable students to learn.	227	3.24	0.68	1	4
3. Evaluate curriculum materials for their usefulness and appropriateness for your students.	227	3.14	0.69	2	4
4. Create interdisciplinary curriculum.	226	3.03	0.74	1	4
5. Use instructional strategies that promote active student learning.	227	3.26	0.71	2	4
6. Relate classroom learning to the real world.	225	3.29	0.71	1	4
7. Provide a rationale for your teaching decisions to students, parents, and colleagues.	224	3.13	0.70	1	4
8. Develop students' questioning and discussion skills.	225	3.18	0.74	1	4
9. Use knowledge of learning, subject matter, curriculum, and student development to plan instruction.	226	3.16	0.67	1	4
Support diverse learners					
10. Understand how different students are learning.	226	3.23	0.62	2	4
11. Understand how students' social, emotional, physical, and cognitive development influences learning.	226	3.25	0.69	1	4
12. Engage students in cooperative work as well as independent learning.	227	3.14	0.69	1	4
13. Teach students from a multicultural vantage point.	227	3.04	0.77	1	4
14. Encourage students to see, question, and interpret ideas from diverse perspectives.	226	3.15	0.73	1	4
15. Understand how factors in the students' environment outside of school may influence their life and learning.	226	3.15	0.67	1	4
Assessing student learning					
16. Work with parents and families to better understand students and to support their learning.	226	3.00	0.80	1	4
17. Use variety of assessments (e.g., observation, portfolios, tests, performance tasks, anecdotal records) to determine student strengths, needs, and programs.	226	3.16	0.70	1	4
18. Give productive feedback to students to guide their learning.	225	3.21	0.71	1	4
19. Help students learn how to assess their own learning.	226	3.17	0.74	1	4
Create a productive classroom environment					
20. Set challenging and appropriate expectations of learning and performance for students	227	3.04	0.73	1	4
21. Help all students achieve high academic standards.	225	3.08	0.75	1	4
22. Teach in ways that support new English language learners.	225	3.06	0.76	1	4
23. Help students become self-motivated and self-directed.	227	3.19	0.69	1	4
24. Use effective verbal and nonverbal communication strategies to guide student learning and behavior.	226	3.15	0.73	1	4
25. Maintain discipline and an orderly, purposeful learning environment.	226	3.23	0.66	1	4
Develop professionally					
26. Use technology in the classroom.	225	3.05	0.88	1	4
27. Resolve interpersonal conflicts.	226	3.10	0.73	1	4
28. Plan and solve problems with colleagues.	227	3.15	0.77	1	4
29. Assume leadership responsibilities in your school.	226	3.13	0.79	1	4
Overall Question					
30. Overall, how well do you feel your program prepared you for teaching?	225	3.27	0.70	1	4

2.2.2. Perception of Mentoring

The present study measured PT's perception of mentoring using an adapted version of the 15-item measure called the Learning Climate Questionnaire (Williams et al., 1994), which asks students to respond to questions on Likert-type scales regarding the extent to which they feel supported by their mentor teacher during teaching practice. Examples of questions include, "I feel that my mentor teacher provides me choices and freedom to use my initiatives." and "I feel understood by my mentor teacher." The LCQ has a single underlying factor with high internal consistency (Williams & Deci, 1996). The Learning Climate Questionnaire (LCQ) score is calculated as the average of the 15 items. The items in the questionnaire, as shown in Table 3, were rated on a 7-point Likert scale (Strongly disagree, disagree, somewhat disagree, neither agree nor disagree, somewhat agree, agree, and strongly Agree), and a Cronbach's alpha value of 0.89 was obtained for this questionnaire in the present study.

2.2.3. Growth Mindset about Teaching Ability

The preservice teachers completed the Teacher Growth Mindset scale (part of the Panorama Teacher and Staff Survey) developed by Moulton and Gehlbach (2014). As shown in Table 4, the scale consists of eight items, and sample items include "To what extent can teachers increase how much their most difficult students learn from them?", "How much can teachers improve their classroom management approaches?" and "To what extent can teachers change their intelligence

Table 3. Perception of mentoring questionnaire.

Perception of mentoring questionnaire items	<i>N</i>	Mean	<i>SD</i>	Min.	Max.
1. I feel that my mentor teacher provides me choices and freedom to use my initiatives.	227	5.68	1.49	1	7
2. I feel understood by my mentor teacher.	227	5.74	1.29	1	7
3. I am able to be open with my mentor teacher during my field experience.	227	5.71	1.37	1	7
4. My mentor teacher conveyed confidence in my ability to do well as a classroom teacher.	227	5.97	1.20	1	7
5. I feel that my mentor teacher accepts me.	227	5.95	1.24	1	7
6. My mentor teacher made sure I really understood the goals of the mentorship and what I need to do.	226	5.83	1.28	1	7
7. My mentor teacher encouraged me to ask questions.	227	5.93	1.14	1	7
8. I feel a lot of trust in my mentor teacher.	226	5.62	1.24	1	7
9. My mentor teacher answers my questions fully and carefully.	225	5.91	1.02	1	7
10. My mentor teacher listens to how I would like to do things.	226	5.57	1.33	1	7
11. My mentor teacher handles people's emotions very well.	226	5.59	1.14	1	7
12. I feel that my mentor teacher cares about me as a person.	226	5.58	1.20	1	7
13. I don't feel very good about the way my mentor teacher talks to me.	226	2.77	1.78	1	7
14. My mentor teacher tries to understand how I see things before suggesting a new way to do things.	225	5.50	1.32	1	7
15. I feel able to share my feelings with my mentor teacher.	225	5.05	1.62	1	7

Table 4. Growth mindset about teaching ability.

Growth teaching mindset items	N	Mean	SD	Min.	Max.
1. To what extent can teachers increase how much their most difficult students learn from them?	225	3.96	0.99	1	5
2. How easily can teachers change their teaching style to match the needs of a particular class?	226	3.58	0.99	1	5
3. To what extent can teachers improve their implementation of different teaching strategies?	225	3.99	0.88	1	5
4. How possible is it for teachers to change their ability to work with dissatisfied parents?	225	3.66	0.97	1	5
5. How much can teachers improve their classroom management approaches?	225	4.22	0.83	2	5
6. Over the course of a school year, to what extent can teachers improve the clarity of their explanations of challenging concepts?	225	3.98	0.92	1	5
7. To what extent can teachers change their intelligence about the subjects that they teach?	223	4.11	0.90	1	5
8. How possible is it for teachers to change how well they relate to their most difficult students?	225	4.05	0.94	1	5

about the subjects that they teach?”. Responses were recorded on a 5-point Likert-type scale ranging from 1 (not at all confident/effective/easily) to 5 (extremely confident/effective/easily), and a Cronbach’s alpha value of 0.83 was obtained for this scale in the present study.

2.2.4. Perception of Student Growth Mindset

The students completed the Student Growth Mindset scale (part of the Panorama Teacher and Staff Survey) developed by Moulton and Gehlbach (2014). As shown in Table 5, the scale consists of eight items, and sample items include “How much talent they have” and “How much effort they put forth,” to which preservice teachers rated what extent they believe students have the potential to change. Responses were recorded on a 5-point Likert-type scale ranging from 1 (not at all possible to change/cannot improve at all/cannot change at all) to 5 (completely possible to change/can improve a tremendous amount/can change a tremendous amount), and a Cronbach’s alpha value of 0.76 was obtained for this scale in the present study.

2.2.5. Value of Teaching Practice

The students completed the modified version of the brief value subscale in the Expectancy-Value-Cost (EVC) Scale, consisting of three items measuring value (Kosovich et al., 2015). As shown in Table 6, the scale has three items and a sample item includes “I think my teaching practice experience is important to me.” Responses were recorded on a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree), and a Cronbach’s alpha value of 0.89 was obtained for this scale in the present study.

3. Results

3.1. Descriptive Analysis

We describe the study variables using means, standard deviation, minimum and maximum. Association between variables was measured using bivariate Pearson correlations. As shown in Table 7, the five scales used in this study had acceptable

Table 5. Perception of student growth mindset.

Student growth mindset items	<i>N</i>	Mean	<i>SD</i>	Min.	Max.
1. How much talent they have?	227	3.71	1.05	1	5
2. How much effort they put forth?	226	3.91	0.97	1	5
3. How well they behave in class?	225	4.08	0.97	1	5
4. How much they like the content in your class?	226	3.98	0.92	1	5
5. How easily they give up?	227	3.70	1.09	1	5
6. Their intelligence.	226	3.79	1.01	1	5

Table 6. Value of field experience questionnaire.

Value of field experience items	<i>N</i>	Mean	<i>SD</i>	Min.	Max.
1. I think my teaching practice experience is important to me.	226	5.30	0.92	1	6
2. I value my teaching practice experience.	226	5.28	0.86	1	6
3. I think my teaching practice experience is useful.	227	5.34	0.80	1	6

Table 7. Descriptive statistics and correlation matrix.

	1	2	3	4	5
1. T.Mindset	(0.83)				
2. S.Mindset	0.45 ***	(0.76)			
3. Prepared	0.49 ***	0.36 ***	(0.96)		
4. Climate	0.20 **	0.19 **	0.25 ***	(0.89)	
5. Value	0.29 ***	0.16 *	0.18 **	0.39 ***	(0.89)
Mean	3.95	3.86	3.14	5.51	5.33
<i>SD</i>	0.62	0.67	0.52	0.79	0.67
Min.	2.13	1.67	1.90	2.80	2.67
Max.	5.00	5.00	4.00	7.00	6.00

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Cronbach's alpha coefficients are in parentheses along the diagonal.

reliability coefficients, with Cronbach's alpha coefficients ranging from 0.76 to 0.96 (see the parentheses along the diagonal in **Table 7**). All variables observed in this study were positively correlated with each other. The two strongest correlations are between feeling of preparedness and growth teaching mindset ($r = 0.49$) and student growth mindset and growth teaching mindset ($r = 0.45$), respectively. **Table 7** presents the descriptives and correlations for the variables used in the analysis.

The twenty-nine-item **feeling of preparedness** has a mean score of 3.14 ($SD = 0.52$). Preservice teachers (PT) reported feeling most prepared to "Relate classroom learning to the real world" ($M = 3.29$, $SD = 0.71$) and similarly to "Use instructional strategies that promote active student learning" ($M = 3.26$, $SD = 0.71$), while they felt least prepared to "Create interdisciplinary curriculum"

($M = 3.03$, $SD = 0.74$). In **supporting diverse learners**, PT reported feeling most prepared to “Understand how students’ social, emotional, physical, and cognitive development influences learning” ($M = 3.25$, $SD = 0.69$), but they felt least prepared to “Teach students from a multicultural vantage point” ($M = 3.04$, $SD = 0.77$). In **assessing student learning**, PT reported feeling most prepared to “Give productive feedback to students to guide their learning” ($M = 3.21$, $SD = 0.71$), but they felt least prepared to “Work with parents and families to better understand students and to support their learning” ($M = 3.00$, $SD = 0.80$). In **creating a productive classroom environment**, PT reported feeling most prepared to “Maintain discipline and an orderly, purposeful learning environment” ($M = 3.23$, $SD = 0.66$). However, they felt least prepared to “Set challenging and appropriate expectations of learning and performance for students” ($M = 3.04$, $SD = 0.73$). In **developing professionally**, PT reported feeling most prepared to “Plan and solve problems with colleagues” ($M = 3.15$, $SD = 0.77$), but they felt least prepared to “Use technology in the classroom” ($M = 3.05$, $SD = 0.86$).

3.2. Mediation Analysis

Firstly, we report the results of the total effects of feeling of preparedness and perception of student growth mindset on value of teaching. The result of regressing value of teaching practice on PT’s perception of student growth mindset and PT feeling of preparedness showed that after controlling for perception of student growth mindset, the total effect of feeling of preparedness on their perceived value of teaching practice was significant ($c_1 = 0.14$, $p = 0.04$). However, when holding feeling of preparedness constant, the total effect of perception of student mindset on their perceived value of teaching practice was not significant ($c_2 = 0.11$, $p = 0.13$), $R^2 = 0.04$, Adjusted $R^2 = 0.03$, $F(2, 224) = 4.99$, $p = 0.01$. Hence, we examined the mediational roles of perception of mentoring and growth teaching mindset in these relationships. To do that, we conducted a parallel mediation analysis.

Secondly, we examine the mediating roles of perception of mentoring and growth teaching mindset in the relationships between value of teaching practice and the predictors, perception of student growth mindset, and feeling of preparedness. A parallel multiple mediation analysis was conducted using the JAMOVI GLM mediation model and 5000 bootstrapping samples. The mediation analysis results are presented in **Table 8** and **Figure 1**, showing the point estimates of the indirect effects (a_1b_1 , a_2b_2 , and a_3b_3) with a corresponding 95% confidence interval. We interpreted the indirect effect as significant when zero is not located between the lower and upper boundaries of the 95% confidence interval (Hayes, 2009, 2018).

3.2.1. To What Extent Does Perception of Mentoring Mediate the Relationship between Feeling of Preparedness and Value of Teaching Practice?

As shown in **Figure 1**, in the present study, the results showed that higher levels

Table 8. Indirect and total effects.

Type	Effect	<i>b</i>	SE	95% CI (<i>a</i>)		β	<i>z</i>	<i>p</i>
				Lower	Upper			
Indirect	Prepared \Rightarrow Mentor \Rightarrow Value (a_1b_1)	0.12	0.05	0.01	0.22	0.09	2.22	0.026
	Prepared \Rightarrow T.Mindset \Rightarrow Value (a_2b_2)	0.12	0.04	0.04	0.19	0.09	3.22	0.001
	S.Mindset \Rightarrow T.Mindset \Rightarrow Value (a_3b_3)	0.07	0.03	0.02	0.13	0.07	2.79	0.005
Component	Prepared \Rightarrow Mentor (a_1)	0.39	0.12	0.15	0.62	0.25	3.25	0.001
	Mentor \Rightarrow Value (b_1)	0.30	0.10	0.11	0.50	0.36	3.02	0.003
	Prepared \Rightarrow T.Mindset (a_2)	0.46	0.08	0.30	0.63	0.38	5.44	< .001
	T.Mindset \Rightarrow Value ($b_2 = b_3$)	0.25	0.07	0.11	0.39	0.24	3.55	< .001
	S.Mindset \Rightarrow T.Mindset (a_2)	0.29	0.06	0.17	0.41	0.32	4.74	< .001
Direct	Prepared \Rightarrow Value (c'_1)	-0.03	0.09	-0.21	0.16	-0.02	-0.30	0.763
	S.Mindset \Rightarrow Value (c'_2)	-0.01	0.07	-0.14	0.13	-0.01	-0.11	0.912
Total	Prepared \Rightarrow Value (c_1)	0.19	0.09	0.01	0.36	0.14	2.05	0.041
	S.Mindset \Rightarrow Value (c_2)	0.11	0.07	-0.03	0.24	0.11	1.52	0.129

Note. (*a*) Confidence intervals are computed with the method: Parametric bootstrap. Note. Betas are completely standardized effect sizes. Prepared = feeling of preparedness. Mentor = perception of mentoring. S.Mindset = perception of student growth mindset. T.Mindset = growth teaching mindset. Value = value of teaching practice.

of preparedness are associated with higher levels of perception of mentoring ($a_1 = 0.25$, $p = 0.01$); likewise, higher levels of perception of mentoring are associated with increased value of teaching practice ($b_1 = 0.36$, $p = 0.002$). The 95% bootstrap confidence interval for the specific indirect effect ($a_1b_1 = 0.09$) based on 5000 bootstrap samples did not cross 0 (0.00 to 0.20) and is, therefore, statistically significant. The direct effect of preparedness on value of teaching practice ($c'_1 = -0.01$) did not reach significance (-0.21 to 0.15) after controlling for perception of mentoring, growth teaching mindset, and perception of student growth mindset.

3.2.2. To What Extent Does Growth Teaching Mindset Mediate the Relationship between Feeling of Preparedness and Value of Teaching Practice?

As presented in **Figure 1** and **Table 8**, the results further showed that higher levels of preparedness are associated with higher levels of preservice teacher mindset ($a_2 = 0.38$, $p < 0.001$); likewise, higher levels of preservice teacher mindset are associated with increased value of teaching practice ($b_2 = 0.24$, $p < 0.001$). The 95% bootstrap confidence interval for the specific indirect effect ($a_2b_2 = 0.09$) based on 5000 bootstrap samples did not cross 0 (0.04 to 0.19) and is, therefore, statistically significant.

3.2.3. To What Extent Does Growth Teaching Mindset Mediate the Relationship between Perception of Student Growth Mindset and Value of Teaching Practice?

Also, the results showed that higher levels of perception of student mindset are

associated with higher levels of preservice teacher mindset ($a_3 = 0.32, p < 0.001$); likewise, higher levels of preservice teacher mindset are associated with increased value of teaching practice ($b_3 = 0.24, p < 0.001$). The 95% bootstrap confidence interval for the specific indirect effect ($a_3b_3 = 0.07$) based on 5000 bootstrap samples did not cross 0 (0.02 to 0.12) and is, therefore, statistically significant. The direct effect of perception of student growth mindset on value of teaching practice ($c'_2 = -0.01$) did not reach significance (-0.14 to 0.12) after controlling for growth teaching mindset, perception of mentoring, and feeling of preparedness.

4. Discussion

Researchers have shown that feeling of competence is positively associated with value of learning. People are more likely to value activities they feel competent about than those they have low competence in. In this study, feeling of preparedness positively predicted value of teaching practice; but PT's perception of student growth mindset did not directly affect their value of teaching practice after controlling for feeling of preparedness. The finding of the present study aligns with existing research that suggests that feeling of competence is positively related to value for learning (Wigfield et al., 2015, 2009; Brown et al., 2015).

4.1. The Importance of Positive Teacher Mentoring Experience

In line with extant literature, perception of mentoring was also found to positively mediate the relationship between feeling of preparedness and PT's value of their teaching practice experience. In essence, the more PT feel prepared, the more they are likely to benefit from mentoring and, consequently, value their teaching practice experience more. This finding underscores the importance of teacher mentors in PT's experience and value of teaching. Mentors serve as excellent reinforcers that can consolidate the work that teacher education programs do in helping PT value their experience and work as future teachers (Brown et al., 2015, 2021). Relatively, mentoring has a stronger influence on value of teaching than feeling of preparedness has on mentoring, which further underscores the influence and importance of mentoring to preservice teacher education.

4.2. The Role of Growth Mindset about Teaching Ability

This study also found that the more PTs feel prepared, the higher they believe that they can positively change their teaching to influence student success positively, and as a consequence, the more they value their teaching practice experience. In essence, teacher preparation positively influences their belief about their ability to change their practice and positively impacts their student learning. This finding reflects research indicating that instructional practices wield a relatively more powerful influence than teacher mindset on student success (Haimovitz & Dweck, 2017; Muijs & Reynolds, 2002; Darling-Hammond et al.,

2002). The influence of preparation on PT's value of their teaching practice experience is exerted through their belief in their ability to change their practice and influence their student learning. In actual fact, the direct relationship between feeling of preparation and value of teaching practice no longer held after controlling for the indirect effect of growth teaching mindset, further showing that the relationship between the two variables is indirectly determined by the teacher mindset.

4.3. The Importance of Belief about Student and Teacher Growth Mindset

Furthermore, the current study showed that the relationship between PT's perception of students' growth mindset and their value of teaching practice is positively mediated by growth teaching mindset. Specifically, PTs who are more likely to believe that students can positively influence their own learning are also more likely to believe in their own ability to change their own practice to positively impact student learning and, consequently, value their teaching practice experience more (Dweck, 2014).

In essence, the influence of PT's perception of student growth mindset on their value of their teaching practice experience is reflected through their belief in their ability to change their practice and influence their student learning. In actual fact, the direct relationship between PT's perception of student growth mindset and value of teaching practice no longer held after controlling for the indirect effect of growth teaching mindset, further showing that the relationship between the two variables is indirectly determined by growth teaching mindset. It seems that PT's perception of student growth mindset is only related to their value of teaching practice because perception of student growth mindset influences growth teaching mindset, which in turn influences their value of teaching practice. Therefore, we can conclude that one of the ways that PT's perception of student growth mindset exerts its influence on value of teaching practice is through growth teaching mindset.

5. Limitation and Direction for Future Research

Although this study uncovered factors that influence PT's value of their teaching practice experience and variables through which those effects are exerted, it is crucial to consider a few limitations. First, the present study only included data from preservice teachers from three teacher education programs in Southwest Nigeria. The demography and experience of PT in other teacher education programs in other regions might be different. Second, although the scales used in the present study are carefully selected and have proven reliable and valid, data reported in the present study are based on self-report, which has its constraints regarding methodological and unavoidable biases. It is, therefore, vital for future studies to pay attention to these constraints by including more teacher education programs, extending the geographical coverage, and collecting data through

multiple means and sources, such as conducting field observations, interviews, and focused groups to help mitigate the constraints of surveys and yield more robust information for reaching more profound conclusions.

6. Practical Recommendations and Conclusions

6.1. Pay More Attention to Preservice Teachers' Areas of Incompetence

Similar to previous studies, preservice teachers in the current study rated themselves as most prepared to relate classroom learning to the real world and use instructional strategies that promote active student learning while feeling least prepared in creating an interdisciplinary curriculum, using technology to support their student learning, and working with parents to better support their students (Brown et al., 2015; Darling-Hammond et al., 2002). The Organization for Economic Co-operation and Development (OECD) has reported that only a small percentage of teachers, accounting for twenty percent, stated that their continuous professional development programs offer training for teaching in multicultural or multilingual environments, although significant cross-country differences were observed (Schleicher, 2018). This also aligns with findings by Brown et al. (2015) and Darling-Hammond et al. (2002) and suggests that there is still a lot to be done by teacher education programs and educators to equip future teachers with the knowledge, skills, and experience they need to develop competence and expertise in these areas. Additionally, there is a need to invest in technology facilities and hands-on curriculum to prepare teacher candidates to be proficient and competent in integrating technology into their lessons and classrooms. The Organization for Economic Co-operation and Development (OECD) has revealed that the integration of information and communication technology (ICT) into teaching practices is not yet prevalent among educators. For instance, among countries that participated in OECD's Teaching and Learning International Survey (TALIS), a minority of teachers, just about forty percent, use ICT in their pedagogy. School principals also attribute low technology integration to a shortage of computers, internet access, and software, which are considered significant barriers to providing quality education. Many teachers across TALIS countries have identified training in ICT for teaching and workplace technology as the second and third most crucial requirements for their professional development (OECD, 2015, 2019; Schleicher, 2018).

6.2. Equip Teacher Mentors with Skills for Socioemotional Support

The present study also suggests that the focus should not only be on improving teacher preparation but equally on providing training to teacher mentors, considering their influence on preservice teachers' teaching practice experience and growth. In the present study, PT felt their mentor teachers conveyed confidence in their ability to do well as classroom teachers but rated least their ability to

share their feelings with their mentor teacher. Hence, teacher mentors need to be better prepared and aided to support future teachers affectively, creating a safe environment for them to be vulnerable and comfortable sharing their feelings and thoughts. It is vital to equip teacher mentors with the coaching skills needed to support PT during teaching practice to instill confidence in them and help them feel heard and affirmed.

6.3. Engage Preservice Teachers' Beliefs about Teaching Ability Critically

Additionally, the relationship between feeling of preparedness and value of teaching practice was mediated by growth teaching mindset, suggesting that teacher education program and curriculum should be intentional about positively influencing preservice teachers' growth mindset about teaching ability, particularly helping them see how possible it is for them to make incremental changes to their practices that are capable of causing significant changes in their student learning and success. It might be helpful to provide classroom cases of real-world changes that expert and beginning teachers are making in the classrooms, and how those positively impact student learning outcomes (Aina & Aina, 2023; Aina et al., 2022). Preservice teachers should also be asked to regularly respond to growth teaching mindset surveys (e.g., Teacher Growth Mindset Scale by Moulton & Gahlbach, 2014) so that teacher educators can uncover critical areas needing attention, track growth over time, and monitor how that varies from person to person.

6.4. Address Negative Beliefs about Student Growth Mindset Proactively

Furthermore, growth teaching mindset also mediates the relationship between perception of student growth mindset and value of teaching practice. This suggests that preservice teachers' growth mindset beliefs—both of their students and their own teaching ability—matter. Hence, teacher education curricula should pay closer attention to preservice teachers' beliefs about their students' abilities that might negatively impact their practices and, consequently, their experience and value for teaching. As mentioned before, there is a need to continue to re-orient future etchers about ability beliefs about intelligence and talents and how those impact their practices implicitly and explicitly.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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