

## **Emotional Intelligence as a Predictor of Pre-service Science Teachers' Willingness to Implement Inclusive STEM Education in Anambra State, Nigeria**

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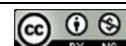
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### **Abstract**

This study investigated pre-service science teachers' (PSTs) willingness to implement inclusive Science, Technology, Engineering, and Mathematics (STEM) education in Anambra State, Nigeria, as predicted by their emotional intelligence. Three research questions and three null hypotheses guided the study. A predictive correlational research design was adopted. The population consisted of 1,864 PSTs at Nnamdi Azikiwe University, Awka, from which a sample of 330 participants was drawn. The instrument for data collection was the 'Preservice Science Teachers' Emotional Intelligence and Willingness for Inclusive STEM Education Questionnaire' (PSTEIWISQ), adapted from the Brief Emotional Intelligence Scale (BEIS-10) of Davies et al. (2010) and the Sentiments, Attitudes, and Concerns about Inclusive Education Revised (SACIE-R) Scale by Forlin et al. (2011). The instrument was validated by three experts. The reliability of the instrument was established using the Cronbach's Alpha technique, which yielded a strong overall coefficient of .912, with subscale reliabilities ranging from .752 to .864. Data were collected through a hybrid of digital and in-person methods and analyzed using Pearson Product-Moment Correlation (R), coefficient of determination (R<sup>2</sup>) and regression analyses. The findings revealed that emotional intelligence was a significant predictor of all three components of willingness. Specifically, higher emotional intelligence significantly predicted more positive sentiments, more favourable attitudes, and lower practical concerns about implementing inclusive STEM education. Based on the findings, it was recommended that teacher training institutions should make mandatory, practical emotional intelligence development modules a part of their core curricula to better prepare future teachers for the multifaceted demands of inclusive classrooms.

**Keywords:** *Emotional Intelligence, Inclusion, Pre-service Science Teachers (PSTs), STEM, Willingness*



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### **INTRODUCTION**

With over 10.5 million out-of-school children in Nigeria (The IREDE Foundation (TIF), 2021; Nwoke et al., 2024), the nation's educational system appears to be grappling with the realization of its own National Policy on Education (FRN, 2013) and international policies, like the 1948 Universal Declaration of Human Rights (Brown, 2016) and the 1989 Convention on the Rights of the Child (UNICEF, 2025). These policies emphasize inclusive education for every child, irrespective of perceived distinguishing factors. However, it appears this exclusion is worse for children living with disabilities, as TIF asserted that more than half of the 10.5 million out-of-school children have special needs.

Special needs children are those with conditions, ranging from learning disabilities to sensory impairments and autism spectrum disorders (American Psychiatric Association (APA), 2013; Gargiulo, 2015). These children require additional support and adaptive pedagogical methods, an assertion that emphasizes pedagogical flexibility, rather than any perceived deficits in the children. Globally, the perspective on educating special needs children has shifted from the initial approach of segregation to a rights-based philosophy of

inclusion (Taket, 2022). This evolution represents a positive shift in educational philosophy. This change, heavily influenced by agreements like the UNESCO Salamanca Statement in 1994, promotes a social model wherein disability is understood as a result of societal barriers (Centre for Studies on Inclusive Education, 2020), a powerful reframing that places the responsibility for change on the system, and not the individual. This educational approach ensures all students, regardless of their abilities, backgrounds, or disabilities, learn together in the same classrooms (Poed, 2020; UNESCO, 2025).

In STEM education, recent global discourse has increasingly emphasized the need for inclusive pedagogical frameworks that can address learner diversity while maintaining high-quality scientific learning outcomes (Filiz & Albay, 2025). This pedagogical framework supports the equal participation of individuals with special needs in STEM fields. Despite the proven benefits of this framework, studies worldwide (Suhirman & Prayogi, 2023; Ariza & Hernández Hernández, 2025; Bustamante-Mora et al., 2025; Sa'adah et al., 2025) have shown that systemic challenges persist in its implementation. In Nigeria, a sub-Saharan African country, these challenges include cultural misconceptions and a lack of resources (Yusuf et al., 2022; Okafor, 2023), as well as negative teacher attitudes and inadequate training (Jimoh, 2020; Obizue & Enomah, 2025). These challenges indicate that the primary barriers to educating special needs children in Nigeria are often human and systemic. Thus, teacher-related factors, particularly their emotional intelligence, play a decisive role in the successful implementation of inclusive STEM practices.

Emotional intelligence, in particular, has been identified by Todmal et al. (2023) as a critical enabler of adaptive teaching, collaborative problem-solving, and classroom inclusivity in complex learning environments. Bustamante-Mora et al. (2025), while systematically mapping studies conducted across Europe, Asia, and North America, observed that integrating emotional intelligence in STEM education improved academic performance and strengthened resilience and motivation, particularly in under-represented groups. Similarly, Mondal and Neogi (2023) observed that emotional intelligence positively correlated with teachers' attitudes towards inclusive education in India. Despite these advances, there remains a notable gap in empirical evidence from sub-Saharan Africa, where structural and systemic challenges intersect with teacher preparedness issues. Positioning this study within this global context, the present research contributes to the international body of knowledge by examining how emotional intelligence functions as a predictive factor in shaping pre-service teachers' willingness to implement inclusive STEM education in a developing educational system like Nigeria.

### **Research Objectives:**

The purpose of this study is to determine the predictive power of emotional intelligence pre-service science teachers' willingness to implement inclusive STEM education in Anambra State. Specifically, this study sought to determine the;

1. predictive power of emotional intelligence on PSTs' sentiments towards implementing inclusive STEM education in Anambra State
2. predictive power of emotional intelligence on PSTs' attitudes towards implementing inclusive STEM education in Anambra State
3. predictive power of emotional intelligence on PSTs' concerns about implementing inclusive STEM education in Anambra State

### **LITERATURE REVIEW**

The Universal Declaration of Human Rights in 1948 established education as a fundamental human right (Brown, 2016), a landmark move that legally framed education as an entitlement for all. This principle was later

reaffirmed by subsequent treaties like the Convention on the Rights of the Child in 1989 (UNICEF, 2025). These instruments sets a global standard for education by obligating states to provide education that is available, accessible, acceptable, and adaptable for all individuals without discrimination. However, a significant chasm exists between this global standard and the practical reality within Nigeria, where human and systemic challenges often undermine these noble goals. The nation's educational system grapples with profound issues that impede the realization of this fundamental right for children, with over 10.5 million children out of school (UNICEF, 2022; Nwoke et al., 2024). This staggering figure reveals a deep crisis in educational access and equity in Nigeria. In response to these challenges, the Nigerian government developed the revised National Policy on Inclusive Education in 2023, a policy document that commits to ensuring unhindered access to free quality education (Partnership for Learning for All in Nigeria, 2024; Adeoye, 2025). This policy's arrival is a watershed moment, creating a new and more demanding standard for education, especially in science, technology, engineering, and mathematics (STEM).

STEM education is a critical educational framework for fostering innovation. The National Research Council (2012) defines STEM education as an interdisciplinary approach where hands-on, problem-based learning is paramount, rather than merely teaching individual subjects. This definition is significant because it emphasizes active engagement over rote memorization. For Nigeria, embracing STEM is a necessity for future progress. Researchers like Odeyemi and Ayilara (2022) assert that future jobs will demand strong STEM foundations, an opinion that links educational policy directly to national economic security. Recognizing the necessity of STEM education, the Nigerian government established the National Policy on Science and Technology Education in 2018, aiming to build an inclusive, self-reliant, and scientifically literate nation (Federal Ministry of Education, 2020). The intersection of the call for inclusive education and the push for STEM creates the specialized field of inclusive STEM education.

The implementation of policies on inclusive and STEM education in Nigeria is hindered by factors, such as underfunding and infrastructural deficits (Chineta, 2023; Ayoko et al., 2023), a recurring theme that illustrates the gap between policy formation and execution in the country. Within this policy implementation crisis, Anambra State has articulated a vision to transcend these limitations, with the Anambra State Universal Basic Education Board (ASUBEB) setting a mission to ensure accessible, equitable, qualitative, and gender-responsive functional education (Amobi & Oraelosi, 2016; ASUBEB, 2025). Also, the state has launched programs like the "One Youth, Two Skills" initiative and AI-driven Smart Schools (Anambra State Ministry of Youth Development, 2023; Ovat, 2025), in a bid to advance STEM education in the country. This agenda of the state creates a unique pressure point for its teachers, especially pre-service teachers, who must become implementers of inclusive STEM education policies in the classroom, a task requiring immense adaptability.

A pre-service teacher, also known as a teacher candidate, is defined as an individual enrolled in a teacher preparation program who has not yet completed the full requirements for professional certification, including coursework and supervised teaching practice (Nguyen, 2018; Nwune et al., 2024). This definition clarifies their status as professionals-in-training. Walsh (2015) identifies them as the critical fulcrum of change, an assertion that correctly places immense responsibility on their initial training and development. However, the preparation of these future teachers in Nigeria is fraught with weaknesses. For example, research by Olushola and Adewumi (2022) indicates that teacher education programs are frequently criticized for being excessively theoretical. Also, Girvan et al. (2016) highlighted that short teaching practice exercises fail to provide adequate professional experience for PSTs. These challenges are particularly acute in the preparation of teachers in STEM. This category of teacher candidate are referred to as pre-service science teachers (PSTs). Aina (2022) noted that a lack of resources leads to the use of traditional teaching methods that stifle critical thinking, leaving PSTs ill-equipped to meet modern STEM demands. Their preparation for inclusive education is even more deficient. A GPE/KIX project report (2025) notes that Nigerian pre-service education has neglected inclusive pedagogy,

creating a "constrained innovator" paradox where teachers are expected to be agents of change without the requisite skills. This systemic failure places the burden of adaptation squarely on the teachers. Amidst these challenges, PSTs' emotional intelligence (EI) emerges as a crucial internal resource for their navigation of the challenges.

Salovey and Mayer (as cited in Johnston, 2025) first defined EI as the ability to monitor one's own and others' feelings and emotions and to use this information to guide one's thinking and actions. This foundational definition casts EI as an active, cognitive skill set. Another comprehensive framework comes from Reuven Bar-On, as cited in Anand et al. (2023), who conceptualized EI as an array of emotional and social competencies that determine how effectively individuals understand and express themselves, relate to others, and adapt to daily demands. This model is structured around five meta-factors: self-awareness and expression, social interaction skills, emotional regulation, adaptability, and self-motivation. In a more popular context, Daniel Goleman's (cited by Cole, 2025) influential model proposed five core components: Self-Awareness, Self-Regulation, Motivation, Empathy, and Social Skills. This framework provides a practical and comprehensive map of the domains of emotional competency. The importance of these skills in teaching is immense. Research consistently shows that teachers with higher EI build stronger student relationships and demonstrate greater resilience against burnout (Kusmawan, U. et al., 2026; Wang, 2023; Li & Zhang, 2024), providing clear evidence of EI's positive impact on the classroom climate. EI is particularly vital for inclusion. As Todmal et al. (2023) note, EI skills are essential for teachers to cope with the pressures of diverse classrooms, underscoring the affective, rather than purely technical, demands of inclusive teaching. Antonopoulou (2024) argues that empathy and self-regulation are key to managing the frustrations that can arise from the demands of inclusive teaching, suggesting that emotional intelligence is a direct prerequisite for effective inclusive practice. While such internal resources as EI are vital for inclusive STEM education policy implementation, the ultimate success of the policy hinges on how EI translate into teachers' willingness to implement it.

Willingness is a complex psychological construct with various theoretical underpinnings. From demographic theory, Coale, as cited in Aktar and Palloni (2022), identifies willingness as one of three preconditions for adopting new behaviours. The researcher defined willingness as an individual's consideration of the action's normative acceptability and their openness to overcoming moral or cultural objections. In health psychology, the Prototype Willingness Model conceptualizes willingness as an openness to engage in a behaviour under certain circumstances, particularly through spontaneous or social-reactive processes distinct from calculated, intention-driven decision-making (Gibbons et al., 2020). However, for the context of educational reform, Forlin et al. (2011) provide a particularly valuable framework, conceptualizing a teacher's willingness toward inclusion through three distinct yet related psychological dimensions: sentiments, attitudes, and concerns. Sentiments refer to the teacher's personal comfort levels and feelings when interacting with people with disabilities (Crane et al., 2021). Attitudes relate to a teacher's professional and philosophical acceptance of inclusive education, and are considered strong predictors for the success of inclusion reforms (Charitaki et al., 2024). Concerns encompass the practical and logistical worries teachers have about implementing inclusion, often relating to a perceived lack of skills, resources, or support (Jury et al., 2023). Therefore, a teacher's willingness to implement inclusive STEM education is shaped by the interplay of these three factors.

These three components of willingness can be mapped onto the core constructs in Bandura's (1986) Social Cognitive Theory (SCT). Concerns align with low "self-efficacy", as they reflect doubts about one's capability. Attitudes correspond to "outcome expectations", representing beliefs about the positive or negative results of inclusive practices. Sentiments are a direct manifestation of the affective states that Bandura identified as a crucial influence on behaviour. Therefore, the SCT can be used to underpin the present study, as it provides a clear predictive pathway, suggesting that PSTs with higher EI will possess stronger self-efficacy (fewer

concerns), more favorable outcome expectations (positive attitudes), and more regulated emotions (healthier sentiments), thereby increasing their willingness to implement inclusive STEM education.

Although research, such as Nwosu et al. (2023), has explored these three concepts with in-service teachers in Anambra State, there is a significant gap in research focusing on PSTs, who are being trained to continue the implementation of inclusive STEM education in Anambra State. Filling this research gap is critical, as PSTs represent the next generation of teachers tasked with implementing these policies from the outset of their careers. Therefore, this study investigated PSTs' willingness to implement inclusive STEM education in Anambra State, as predicted by their emotional intelligence.

## **RESEARCH METHOD**

### **Design**

The predictive correlational design was utilized. This design is appropriate for the study, as the study sought to predict PSTs' willingness to implement inclusive STEM education, using their emotional intelligence. The design allows the researcher to collect data to measure and examine the predictive relationship between these variables as they exist in their natural setting, without any manipulation (Seeram, 2019).

### **Participants**

The population for the study comprised all 1,864 PSTs in Nnamdi Azikiwe University, Awka, Anambra State, for the 2024/2025 academic session, out of which 330 PSTs, determined using the Taro Yamane formula, were sampled.

### **Instrumentation**

The instrument for data collection was a structured questionnaire titled the 'Pre-service Science Teachers' Emotional Intelligence and Willingness for Inclusive STEM Education Questionnaire' (PSTEIWISQ). The questionnaire was divided into three sections: Section A gathered socio-demographic information from the participants, while Sections B and C contain items adapted from existing scales to address the research questions. Specifically, Section B contains 10 items adapted from the Brief Emotional Intelligence Scale (BEIS-10) by Davies et al. (2010), and Section C contains 15 items adapted from the Sentiments, Attitudes, and Concerns about Inclusive Education Revised (SACIE-R) Scale by Forlin et al. (2011).

The instrument was validated by three experts from the Faculty of Education, Nnamdi Azikiwe University, Awka. The internal consistency and reliability of the instrument was determined using the Cronbach Alpha technique. The instrument yielded an overall reliability coefficient of .912. The individual scales also demonstrated strong reliability: the Emotional Intelligence scale had a Cronbach's Alpha of .864, the Sentiments subscale had an alpha of .752, the Attitudes subscale had an alpha of .822, and the Concerns subscale had an alpha of .843.

### **Data Collection and Analysis**

Data for this study were collected using a hybrid approach that combined digital (Google Forms) and in-person methods to maximize accessibility and participation. The data gathered were analyzed using the Statistical Package for the Social Sciences (SPSS) version 27.0. To answer the research questions, the Pearson Product-Moment Correlation coefficient (R) and the coefficient of determination ( $R^2$ ) were utilized. Regression analysis was deployed to test the hypotheses at a 0.05 level of significance.

**Decision Rule**

The following decision rules were used for data interpretation:

**For the Research Questions:**

- 0.80 - 1.00:** High predictive relationship
- 0.31 - 0.79:** Moderate predictive relationship
- 0.30 and below:** Low predictive relationship

**For the Hypotheses:** If the calculated p-value was less than or equal to the 0.05 level of significance ( $P \leq 0.05$ ), the null hypothesis was rejected, indicating a statistically significant prediction. Conversely, if the p-value was greater than 0.05 ( $P > 0.05$ ), the null hypothesis was not rejected.

**RESULT**

**Research Question 1:** What is the predictive power of emotional intelligence on PSTs’ sentiments towards implementing inclusive STEM education in Anambra State?

**Table 1:** Pearson Product-Moment Correlation and Coefficient of Determination of Emotional Intelligence on PSTs’ Sentiment towards Implementing Inclusive STEM Education

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate	Change Statistics				
					R <sup>2</sup> Change	F Change	df1	df2	Sig. F Change
1	-.452 <sup>a</sup>	.204	.202	15.671	.204	84.13	1	328	.029

a. Predictors: (Constant), Emotional Intelligence

Table 1 reveals the prediction of PSTs’ sentiments towards implementing inclusive STEM education by their emotional intelligence. The Pearson correlation coefficient ( $R = -.452$ ) indicates a moderate negative predictive relationship between PSTs’ emotional intelligence and sentiments. The coefficient of determination ( $R^2 = .204$ ) implies that emotional intelligence predicts 20.4% of the change observed in PSTs’ sentiments toward implementing inclusive STEM education.

**Hypothesis 1:** Emotional intelligence does not significantly predict PSTs’ sentiments towards implementing inclusive STEM education in Anambra State.

**Table 2:** Regression Analysis of the Prediction of Emotional Intelligence on PSTs’ Sentiments towards Implementing Inclusive STEM Education

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
EI_Total	-.489	.053	-.452	-9.17	.029	-.594	-.384

Table 2 shows the result of the regression analysis. The result showed a statistically significant prediction,  $F(1, 328) = 84.13$ ,  $p < 0.05$ . Since the p-value (.029) is less than the 0.05 level of significance, the null hypothesis was rejected. This indicates that emotional intelligence is a significant predictor of PSTs’ sentiments towards implementing inclusive STEM education in Anambra State.

**Research Question 2:** What is the predictive power of emotional intelligence on PSTs' attitudes towards implementing inclusive STEM education in Anambra State?

**Table 3:** Pearson Product-Moment Correlation and Coefficient of Determination of Emotional Intelligence on PSTs' Attitudes towards Implementing Inclusive STEM Education

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate	Change Statistics				
					R <sup>2</sup> Change	F Change	df1	df2	Sig. F Change
1	.589 <sup>a</sup>	.347	.345	11.024	.347	174.51	1	328	.018

a. Predictors: (Constant), Emotional Intelligence

Table 3 reveals the prediction of PSTs' attitudes towards implementing inclusive STEM education by their emotional intelligence. The Pearson Correlation coefficient (R = .589) indicates a moderate positive predictive relationship between PSTs' emotional intelligence and attitudes. The coefficient of determination (R<sup>2</sup> = .347) implies that emotional intelligence predicts 34.7% of the change observed in PSTs' attitudes toward implementing inclusive STEM education.

**Hypothesis 2:** Emotional intelligence does not significantly predict PSTs' attitudes towards implementing inclusive STEM education in Anambra State.

**Table 4:** Regression Analysis of the Prediction of Emotional Intelligence on PSTs' Attitudes towards Implementing Inclusive STEM Education

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound

Table 4 shows the result of the regression analysis. The result showed a statistically significant prediction,  $F(1, 328) = 174.51, p < 0.05$ . Since the p-value (.018) is less than the 0.05 level of significance, the null hypothesis was rejected. This indicates that emotional intelligence is a significant predictor of PSTs' attitudes towards implementing inclusive STEM education in Anambra State.

**Research Question 3:** What is the predictive power of emotional intelligence on PSTs' concerns about implementing inclusive STEM education in Anambra State?

**Table 5:** Pearson Product-Moment Correlation and Coefficient of Determination of Emotional Intelligence on PSTs' Concerns about Implementing Inclusive STEM Education

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate	Change Statistics				
					R <sup>2</sup> Change	F Change	df1	df2	Sig. F Change
1	-.515 <sup>a</sup>	.265	.263	13.419	.265	118.23	1	328	.041

a. Predictors: (Constant), Emotional Intelligence

Table 5 reveals the prediction of PSTs' concerns about implementing inclusive STEM education by their emotional intelligence. The Pearson Correlation coefficient (R = -.515) indicates a moderate negative predictive relationship between PSTs' emotional intelligence and concerns. The coefficient of determination (R<sup>2</sup> = .265) implies that emotional intelligence predicts 26.5% of the change observed in PSTs' concerns about implementing inclusive STEM education.

**Hypothesis 3:** Emotional intelligence does not significantly predict PSTs' concerns about implementing inclusive STEM education in Anambra State.

Table 2: Regression Analysis of the Prediction of Emotional Intelligence on PSTs' Concerns about Implementing Inclusive STEM Education

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
EI_Total	-.523	.048	-.515	-10.871	.041	-.618	-.428

Table 6 presents the result of the regression analysis. The result revealed a statistically significant prediction,  $F(1, 328) = 118.23, p < 0.05$ . Since the p-value (.041) is less than the 0.05 level of significance, the null hypothesis was rejected. This means that emotional intelligence is a significant predictor of PSTs' concerns about implementing inclusive STEM education in Anambra State.

## FINDING AND DISCUSSION

The study's finding established that emotional intelligence is a significant predictor of PSTs' sentiments towards implementing inclusive STEM education. Specifically, PSTs' higher emotional intelligence predicted more positive sentiments, meaning less personal discomfort and anxiety about interacting with special needs students. This finding can be understood through the lens of Social Cognitive Theory (Bandura, 1986), which posits that personal factors like emotional intelligence directly influence an individual's affective states. PSTs with a greater ability to understand and regulate their own emotions are better equipped to manage the internal feelings of apprehension or uncertainty that can arise when contemplating the challenges of an inclusive classroom. This emotional self-regulation allows them to maintain a more positive and composed disposition. This findings of this study is supported by Andritsouli et al. (2025), who found that the emotion regulation component of emotional intelligence was significantly correlated with fewer negative sentiments among teachers. However, the findings contradict Nwosu et al. (2022), who found no significant relationship between emotional intelligence and the sentiments of in-service teachers. This divergence may be because the sentiments of PSTs, who have less practical experience, may be more influenced by their emotional intelligence than those of experienced teachers, whose sentiments may be more shaped by years of classroom realities.

The findings further revealed that emotional intelligence significantly predicts PSTs' attitudes towards inclusive STEM education, with higher emotional intelligence corresponding to more positive attitudes. From Bandura's Social Cognitive Theory perspective, this relationship is logical. A teacher's attitude is a reflection of their outcome expectations; their beliefs about the likely results of implementing inclusion. Emotional intelligence enhances a teacher's ability to understand others' perspectives, which likely fosters more positive expectations about the benefits of inclusion for all students. An emotionally intelligent PST can better envision the potential for growth and success in a diverse classroom, thus cultivating a more favourable professional belief system. This finding aligns with the work of Odo, et al. (2021), who found that the personality of teachers predicted positive attitudes. Similarly, the finding is strongly corroborated by Jiang et al. (2025), who established a significant positive effect of empathy on attitudes, and Nwosu et al. (2022) and Mondal and Neogi, (2023), who also confirmed a significant positive association between emotional intelligence and teachers' attitudes toward inclusive education.

Finally, the study found that emotional intelligence is a significant predictor of PSTs' concerns about implementing inclusive STEM education, where higher emotional intelligence was associated with lower levels of concern. This connection is explained by Bandura's Social Cognitive Theory, in which concerns are a direct manifestation of low self-efficacy; an individual's doubt in their own capabilities. Emotional intelligence acts as a personal resource that enhances resilience, problem-solving, and stress management. PSTs with higher

emotional intelligence are better able to regulate the anxiety associated with perceived challenges of teaching children with special needs, such as a lack of resources or skills, which in turn bolsters their belief in their ability to succeed. This increased self-efficacy directly mitigates their practical worries. The finding resonates with Lilly and Venukapalli (2023), who identified a significant positive relationship between emotional intelligence and self-efficacy among pre-service teachers. Furthermore, the result is related to the findings of both Andritsouli et al. (2025) and Nwosu et al. (2022), who both found that higher levels of emotional intelligence were significantly associated with fewer concerns about implementing inclusive education.

The findings of this study align with emerging international evidence that underscores the role of emotional intelligence as a foundational competency for inclusive teaching practices. For instance, studies conducted in European and Asian contexts (Bustamante-Mora et al., 2025; Mondal & Neogi, 2023) have similarly reported that higher levels of emotional regulation and empathy are associated with more positive teacher attitudes toward inclusion and reduced instructional anxiety. However, the strength of the predictive relationships observed in this study appears comparatively lower, which may reflect contextual differences such as limited institutional support and greater reliance on individual teacher capacities in the Nigerian setting. Such a perspective extends current global understanding by highlighting the differential role of teacher competencies across varying educational ecosystems.

## CONCLUSION

Emotional intelligence is a predictor of PSTs' willingness to implement inclusive STEM education in Anambra State. The findings of this study demonstrate a clear and significant relationship, showing that this internal psychological resource powerfully shapes incoming teachers' sentiments, attitudes, and concerns about working with special needs children in inclusive settings. Thus, emotional intelligence is crucial in developing a resilient and effective teaching workforce, capable of meeting the complex demands of a modern, equitable classroom.

Beyond its immediate context, this study offers important implications for international STEM education and teacher preparation programs. It reinforces the growing recognition that cognitive and pedagogical skills alone are insufficient for effective inclusive practice, and that socio-emotional competencies must be systematically integrated into teacher education curricula. From a theoretical standpoint, the findings support the extension of Social Cognitive Theory by emphasizing emotional intelligence as a critical antecedent to self-efficacy and behavioral readiness in inclusive settings. Practically, the study suggests that policymakers and curriculum designers, particularly in developing and transitional education systems, should prioritize structured emotional intelligence training as part of STEM teacher development frameworks. Such an approach has the potential to enhance not only inclusion outcomes but also the overall quality and adaptability of STEM education in diverse global contexts.

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