



Teacher preparedness and student outcomes: A study on the effectiveness of special education instructional practices

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Abstract

Behind every successful student is a well-prepared teacher. This quantitative study investigates how Saudi preservice special education teachers perceive their preparedness in relation to their peers regarding teaching students with disabilities in inclusive classrooms. The research analyzed three dimensions: overall perceived readiness, gender differences, and differences based on specialization (mild intellectual disability, learning disabilities, and hearing impairment). An instrument comprising 29 items was distributed to a sample of final-year preservice special education teachers. The data were analyzed statistically using SPSS, employing descriptive statistics, t-tests, and one-way ANOVA. The findings revealed a high overall perceived readiness (M = 3.21), particularly in areas such as classroom management, differentiated instruction, collaboration with general educators, and awareness of evidence-based practices (EBPs). However, the respondents rated their practical skills, such as developing Individualized Education Programs (IEPs) and actively implementing EBPs, relatively low, indicating notable gaps in their training. Additionally, no statistically significant differences were found based on gender (p = 0.455) or faculty track (p = 0.342), suggesting that students perceive a similar level of preparedness regardless of demographic factors. These findings imply that current training programs provide a foundational understanding of inclusive pedagogical management, demonstrating some effectiveness. Nonetheless, they emphasize the need for enhanced practical training, particularly in tailoring educational strategies to meet the diverse needs of students.

Keywords: Evidence-based practices (EBPs), inclusive education, Individualized Education Programs (IEPs), perceived preparedness, pre-service teachers.

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1. Introduction

In the context of contemporary, inclusive education, the challenge of consistently preparing special education teachers has become increasingly pronounced. Comprehensive teacher preparation programs must prioritize equipping their graduates with the requisite skills and professional self-efficacy to effectively teach students with disabilities across diverse educational settings. These programs are expected to provide well-documented instruction and research engagement that adheres to evidence-based practices (EBPs) and the mandated instructional Individualized Education Programs (IEPs). Despite these aspirations, a growing body of research indicates that a substantial number of preservice teachers feel inadequately prepared to meet these demands, particularly in real-world teaching environments [1, 2].

Educators' self-efficacy significantly influences their decision-making, persistence, and adaptability within the classroom [3, 4]. Self-efficacy reflects an educator's perception of their capacity to fulfill various teaching responsibilities. Current literature suggests that teacher preparation programs often fall short in fostering positive self-efficacy beliefs, particularly in the special education domain, where there are substantial demands for planning, individualized instruction, and multifaceted teaching approaches [5, 6].

In Saudi Arabia, many teachers have expressed that they are not well enough prepared regarding the lack of EBPs and effective IEPs [7]. This issue persists despite the education system's goal to adequately prepare preservice teachers for inclusive instruction. The contentious status of IEP quality in Saudi Arabia has revealed a disconnect between preservice training and the real challenges encountered in the classroom. Consequently, the gap between perceived readiness to implement EBPs and the ability to prepare functional IEPs among preservice teachers prompted the authors to conduct a quantitative study. The study aimed to investigate preservice special education teachers' perceptions of their preparedness to instruct students with disabilities in inclusive classrooms, uncovering central themes related to self-efficacy, perceived adequacy of training in EBPs, and confidence in developing and implementing IEPs.

2. Research Questions

- 1. What is the perceived level of preparedness among preservice special education teachers to teach students with disabilities in inclusive settings?
- 2. Are there statistically significant differences in the perceived level of preparedness among preservice special education teachers based on gender?
- 3. Are there statistically significant differences in the perceived level of preparedness among preservice special education teachers based on their professional track (intellectual disability, learning disabilities, or hearing impairment)?

A critical component of education is the training of preservice teachers to identify and address the diverse needs of their students. This training must integrate coursework that features research-based strategies and field experiences that allow students to engage with evidence-based practices (EBPs). To maximize the benefits of this training, educators should be provided with resources and experiences from multiple perspectives, empowering them to positively influence student outcomes. Merely supplying preservice teachers with a list of methods or practices is insufficient; it is essential to guide them in becoming knowledgeable professionals who are aware of their strengths and the impact of their environment on their teaching decisions. Furthermore, they must recognize that their teaching style significantly affects their effectiveness and the material they present [8].

Teacher preparation programs are designed to equip preservice teachers to meet the diverse needs of all students, including those with disabilities. Effective ongoing teacher preparation combines research-based coursework with field experiences that facilitate the application of EBPs in real-world instructional contexts. However, simply providing a catalog of strategies or resources is inadequate; preparation should cultivate professionals who comprehend their teaching contexts, acknowledge the influence of their instructional styles, and make informed decisions accordingly [8].

The identification and application of EBPs represent a fundamental empirical technique for effective teaching. Detrich and Lewis [9] emphasized the necessity of applying EBPs as intended, while Maheady et al. [10] advocated for a broader interpretation that incorporates professional judgment alongside the best available evidence. Griffin and Kilgore [11] conducted a study that provided in-depth insights, revealing that strategies can be implemented during a teacher's first year. However, entrenched practices highlighted the importance of foundational training in EBPs. Kretlow and Helf [12] argued that sustainable application of EBPs can be achieved through (a) enhancing preservice teachers' understanding and proficiency and (b) delivering instruction through effective pedagogical methods that include feedback and support.

Huang et al. [13] defined teacher preparedness as preservice teachers' confidence, skills, and commitment to effective teaching, aligning with Bandura's self-efficacy theory, which posits that individuals' beliefs in their abilities significantly influence their motivation, performance, and persistence [14]. Higher levels of self-efficacy correlate with improved classroom engagement, effective instructional methods, and resilience [4]. Furthermore, research has established a positive association between self-efficacy and instructional readiness [5, 6].

While studies on teacher preparation in special education have not been extensively explored, there has been a growing focus on this area since 2011, recognizing its integral role in delivering high-quality teaching [7, 15, 16]. Nonetheless, many

general education teachers report feeling inadequately prepared to support students with disabilities [1, 7]. A recommended approach to address this issue is to integrate training that emphasizes sociocultural and environmental factors affecting learning and behavior, thereby equipping teachers to support diverse learners in inclusive settings [17]. Consequently, preservice training has a significant impact on attitudes toward inclusive education. Research by Harvey et al. [18] and Johnson and Howell [19], Killoran et al. [20], and Royster et al. [21] has demonstrated that training courses can influence beliefs about inclusion and enhance confidence for teachers working with students with disabilities.

In inclusive education, teachers face significant demands for specialized knowledge and adaptability. Research has thoroughly examined the importance of flexibility, innovation, and collaboration in special education environments, particularly in authentic inclusive settings [7, 22, 23]. Additionally, educators must understand the characteristics of various disabilities and effectively manage complex classroom dynamics [24, 25]. Creating inclusive classroom cultures that foster cooperation and shared objectives is essential for achieving positive outcomes for students with disabilities [26].

Aldabas [27] investigated special education teachers' perceptions of preparedness in inclusive classrooms, revealing that teachers lacking experience felt inadequately prepared and highlighted the need for enhanced preparation and ongoing professional development. The development of high-quality, compliant IEPs in Saudi Arabia remains a persistent challenge, often attributed to insufficient training and a lack of procedural knowledge. Blasko et al. [2] explored this issue by surveying 218 special education teachers regarding their preservice training and professional needs related to IEP development. Their findings underscored the necessity for comprehensive training programs and support systems to enhance teachers' capabilities in developing effective and legally compliant IEPs, thereby highlighting critical areas for improvement in teacher preparation curricula and in-service professional development.

3. Methodology

3.1. Research Design

The study employed a quantitative, cross-sectional survey design to examine preservice special education teachers' perceptions of their readiness to teach in inclusive classrooms. This methodology facilitated the collection of numerical data for analyzing relationships between variables such as self-efficacy, perceived training in evidence-based practices (EBPs), and confidence in developing Individualized Education Programs (IEPs).

3.2. Participants

A sample of preservice special education teachers from Saudi Arabia enrolled in undergraduate teacher preparation programs at the university level was utilized. Participants were selected using a non-probability convenience sampling method from designated teacher education colleges. Inclusion criteria required participants to be in the final two years of their program and to have completed at least one practicum experience. The anticipated sample size was approximately 150 participants; however, 25 participants ultimately completed the survey.

3.3. Instrument

The authors developed a questionnaire as the primary data collection tool, consisting of four main sections aligned with the study's research questions:

- 1. Perceived preparedness for inclusive teaching
- 2. Confidence in identifying and implementing EBPs
- 3. Perceived ability to develop and implement IEPs
- 4. Self-efficacy in inclusive teaching contexts

Each section included several items rated on a Likert scale (1 =Strongly Disagree to 5 = Strongly Agree). Items were derived from existing literature, validated instruments (such as the Teacher Self-Efficacy Scale and EBP scales), and the competencies mandated by the Individuals with Disabilities Education Act (IDEA). A panel of experts in special education and educational measurement evaluated the questionnaire for content validity, and a pilot study was conducted with 20 preservice teachers to assess reliability using Cronbach's alpha.

3.4. Data Collection Procedures

Data were collected via an online survey platform (e.g., Google Forms) to ensure accessibility and ease of distribution. Participants received an informed consent form detailing the study's purpose, the voluntary nature of participation, and confidentiality measures. Data collection spanned four weeks, with reminders sent to enhance response rates.

3.5. Data Analysis

Descriptive statistics summarized participants' responses across each domain, including means, standard deviations, and frequencies. To address the research questions (RQ1 to RQ3), both descriptive statistics and one-sample t-tests evaluated the overall levels of perceived preparedness, confidence in evidence-based practices (EBPs), and skills related to Individualized Education Programs (IEPs). For RQ4, the Pearson correlation coefficient was calculated to explore the relationship between self-efficacy scores and feelings of preparedness for inclusive teaching. All analyses utilized the Statistical Package for the Social Sciences (SPSS) version 26, with a significance level set at p < .05 for inferential tests.

3.6. Research Instrument

The study utilized a questionnaire comprising 26 items aimed at measuring the perceived preparedness of preservice special education teachers to instruct students with disabilities in inclusive settings.

4. Validity of the Instrument

4.1. Content Validity (Expert Review)

To ensure content validity, a panel of ten experts specializing in special education reviewed the initial version of the questionnaire. The experts evaluated the clarity, relevance, and appropriateness of the items for the target population and research domain. The reviewers generally agreed on the soundness of the items, although they provided recommendations for deleting certain items and rewording others to enhance clarity and relevance.

4.2. Internal Consistency Validity

Internal consistency refers to the extent to which the instrument's items measure the same construct. To evaluate this, responses from 25 participants were analyzed by calculating the correlation between each item and the total score of the questionnaire. Table 1 presents the results of the internal consistency analysis for each item of the Perceived Preparedness Questionnaire for teaching in inclusive settings.

Table 1.

|--|

No	Statements	Correlation Coefficient	Significant level
1	I feel confident managing a diverse classroom that includes students with various disabilities.	*0.554	0.01
2	I am prepared to differentiate instruction to meet the individual needs of students with disabilities.	*0.585	0.01
3	I have received sufficient training on inclusive teaching strategies during my coursework.	*0.570	0.01
4	I am aware of the legal responsibilities related to inclusion under IDEA	*0.579	0.01
5	I understand how to use classroom accommodations and modifications effectively	**0.4869	0.01
6	I can collaborate with general education teachers in inclusive environments	**0.645	0.01
7	I am prepared to foster a positive and accepting classroom culture for all learners	**0.664	0.01
8	I am knowledgeable about a variety of evidence-based instructional strategies used in special education	**0.628	0.01
9	I feel confident in identifying which EBPs are appropriate for specific disabilities	*0.597	0.01
10	I can implement EBPs with fidelity in a classroom setting	**0.606	0.01
11	My university program emphasized the practical application of EBPs	*0.564	0.01
12	I can evaluate the impact of EBPs on student progress using data	**0.632	0.01
13	I have practiced applying EBPs in a field placement or practicum	*0.550	0.01
14	I understand the importance of aligning EBPs with students' IEP goals	*0.423	0.05
15	I can write measurable annual goals based on student assessment data.	**0.650	0.01
16	I understand each component of a legally compliant IEP	*0.577	0.01
17	I am confident in determining appropriate accommodations and modifications for students.	**0.4869	0.01
18	I am familiar with the legal timelines and procedures required for IEP development.	*0.597	0.01
19	I can contribute meaningfully to IEP team meetings	**0.606	0.01
20	I know how to use evaluation data to identify students' present levels of performance.	*0.564	0.01
21	I feel prepared to monitor and report progress on IEP goals effectively	**0.632	0.01
22	I believe I can make a positive impact on the learning of students with disabilities	*0.550	0.01
23	I feel capable of adapting instruction when students are not progressing as expected	*0.423	0.05
24	I can stay motivated and persistent when facing challenges in inclusive classrooms	**0.608	0.01
25	I seek feedback to improve my instructional effectiveness	*0.585	0.01
26	I am confident in my ability to create a supportive learning environment.	*0.570	0.01
27	I view myself as capable of lifelong professional growth.	*0.579	0.01
28	I can manage stress and workload effectively when supporting students with diverse needs.	**0.4869	0.01
Total		**0.706	0.01

As presented in Table 1, the correlation coefficients between each item and the total score of the questionnaire ranged from 0.423 to 0.664, with all correlations being statistically significant at the 0.01 level. Notably, items 15 and 24 exhibited statistically significant correlations at the 0.05 level. These findings suggest that all items reflect acceptable internal consistency and serve as valid measures of the construct they were designed to evaluate.

4.3. Instrument Reliability

The reliability of the questionnaire pertains to its capacity to yield consistent results when administered multiple times under identical conditions. In essence, reliability reflects the stability of the questionnaire outcomes and the degree to which these results remain unchanged when the instrument is re-administered to the same sample across different time intervals.

4.4. Cronbach's Alpha Coefficient

To evaluate the internal consistency of the instrument, the authors utilized Cronbach's alpha method, analyzing responses from a pilot sample of 25 participants. The results are detailed in the subsequent table.

Table 2.

Statements	N	Cronbach's Alpha
Perceived preparedness among preservice special education teachers to teach students with disabilities in inclusive settings	29	0.911

As indicated in the preceding table, the reliability coefficients calculated for the entire questionnaire are deemed acceptable. The overall Cronbach's alpha coefficient for all items in the instrument reached a value of 0.911, reflecting a high level of internal consistency. This finding suggests that the questionnaire demonstrates strong and acceptable reliability, thereby enabling the study's objectives to be pursued with a high degree of confidence.

By employing expert validity (content validation) and assessing internal consistency, we can conclude that the Perceived Preparedness Questionnaire for Pre-service Special Education Teachers to Teach Students with Disabilities in Inclusive Settings effectively measures the constructs it was designed to assess.

5. Research Findings

The first research question posed was: What is the perceived level of preparedness among preservice special education teachers to teach students with disabilities in inclusive settings? To address this question, means and standard deviations were calculated for the perceived preparedness levels among preservice special education teachers. The results are presented in Table 3.

Table 3.

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No	Statements	М	SD	Level
1	I feel confident managing a diverse classroom that includes students with various disabilities.	3.53	0.689	High
2		3.47	0.690	High
3	I am prepared to differentiate instruction to meet the individual needs of students with disabilities.	3.38	0.804	High
4	I have received sufficient training on inclusive teaching strategies during my coursework.	3.35	0.773	High
5	I am aware of the legal responsibilities related to inclusion under IDEA	3.34	0.758	High
6	I understand how to use classroom accommodations and modifications effectively.	3.33	0.769	High
7	I can collaborate with general education teachers in inclusive environments	3.32	0.739	High
8	I am prepared to foster a positive and accepting classroom culture for all learners	3.29	0.745	High
9	I am knowledgeable about a variety of evidence-based instructional strategies used in special education	3.27	0.780	High
10	I feel confident in identifying which EBPs are appropriate for specific disabilities	3.27	0.805	High
11	I can implement EBPs with fidelity in a classroom setting	3.26	0.763	High
12	My university program emphasized the practical application of EBPs	2.24	0.973	Moderate
13	I can evaluate the impact of EBPs on student progress using data	2.24	0.780	Moderate
14	I have practiced applying EBPs in a field placement or practicum	2.24	0.805	Moderate
15	I understand the importance of aligning EBPs with students' IEP goals	2.23	0.769	Moderate
16	I can write measurable annual goals based on student assessment data.	2.23	0.829	Moderate
17	I understand each component of a legally compliant IEP	2.23	0.858	Moderate
18	I am confident in determining appropriate accommodations and modifications for students.	2.23	0.841	Moderate
19	I am familiar with the legal timelines and procedures required for IEP development.	2.22	0.713	Moderate
20	I can contribute meaningfully to IEP team meetings	2.22	0.573	Moderate
21	I know how to use evaluation data to identify students' present levels of performance.	2.22	0.480	Moderate
22	I feel prepared to monitor and report progress on IEP goals effectively	2.21	0.505	Moderate
23	I believe I can make a positive impact on the learning of students with disabilities	2.21	0.669	Moderate
24	I feel capable of adapting instruction when students are not progressing as expected	2.21	0.422	Moderate
25	I can stay motivated and persistent when facing challenges in inclusive classrooms	2.20	0.456	Moderate
26	I seek feedback to improve my instructional effectiveness	2.19	0.489	Moderate
27	I am confident in my ability to create a supportive learning environment.	2.16	0.425	Moderate
28	I view myself as capable of lifelong professional growth.	2.15	0.466	Moderate
29	I can manage stress and workload effectively when supporting students with diverse needs.	2.15	0.501	Moderate
Total		3.21	0.804	High

As illustrated in Table 3, the arithmetic means for the items range from 3.53 to 2.15, indicating scores that fall within a medium to high range. Most items received high ratings, with the exception of items 12 and 29, which were rated at a medium level. The overall score for the questionnaire was 3.21, suggesting a high level of perceived preparedness among preservice special education teachers for teaching students with disabilities in inclusive settings, as reported by the participants.

The authors attribute this positive outcome to the comprehensive nature of the curriculum that students engage with during their pre-graduation training, which effectively equips them for teaching in inclusive environments. Additionally, the

professional competencies of the faculty members responsible for educating and training these students significantly contributed to this result. The faculty's expertise in quality standards and their commitment to delivering the program effectively played a crucial role in enhancing the perceived preparedness of the preservice teachers.

Furthermore, the academic department's diligent monitoring of the implementation of these standards in both academic and extracurricular activities fostered a culture of attention and expertise within the institution. This, in turn, led to improved educational outcomes for the students.

5.1. Results of Research Question 2 and Interpretation

The second research question asked: "Are there statistically significant differences in the perceived preparedness level among preservice special education teachers for teaching students with disabilities in inclusive settings based on gender?" To address this question, the authors calculated the arithmetic means, standard deviations, and the t-value for independent samples to compare the perceived preparedness levels between male and female preservice special education teachers. The results are presented in Table 4.

Table 4.

Perceived Preparedness of Pre-service S	pecial Education Teach	ners for Teachin	g Students with	Disabilities in Ir	clusive Settings by G	ender.

Statement	Sex	Median	SD	t	Significant
					Level
Perceived Preparedness Among Special	Male	2.89	27.961	0.822	0.455
Education Teachers Before Service for	Female	3.01	28.676		
Teaching Students with Disabilities in					
Inclusive Environments					

Table 4 reveals that the t-test value for the entire survey was 0.822, with a significance level of 0.455. Consequently, we conclude that "there are no statistically significant differences in the mean scores of teachers' perceived preparedness for teaching students with disabilities in inclusive settings based on gender." This finding indicates that both male and female special education teachers perceive themselves as equally prepared to instruct students with disabilities in inclusive environments. This parity in perceived preparedness may stem from the similar responsibilities and challenges that both genders encounter in their roles.

The authors attribute this outcome to the shared responsibilities and comparable challenges faced by male and female special education teachers when teaching and training students with disabilities. As a result, both groups exhibit a similar perceived level of preparedness for teaching in inclusive settings.

5.2. Results of Research Question 3 and Interpretation

The third research question investigates whether there are statistically significant differences in the perceived preparedness levels among preservice special education teachers for teaching students with disabilities in inclusive settings based on their professional track (intellectual disabilities, learning disabilities, or hearing impairments). To address this question, a one-way analysis of variance (One-Way ANOVA) was conducted to compare the means across three groups: teachers specializing in the intellectual disabilities track, those in the learning disabilities track, and those in the hearing impairments track. The results are presented in Table 5.

Table 5.

Perceived Preparedness by Professional Track: Means and SDs.

Statement		М	SD
	Intellectual Disability	2.93	0.721
	Learning Disability	3.055	0.805
Professional Track	Hearing Disability	2.97	0.726
Total		3.01	0.777

Table 5 illustrates noticeable differences in the arithmetic means and standard deviations of the sample's responses on the perceived preparedness questionnaire for preservice special education teachers to teach students with disabilities in inclusive settings, categorized by professional track. To assess the statistical significance of these differences, a One-Way ANOVA was conducted, the results of which are detailed in Table 6.

This analysis enables us to determine whether the perceived levels of preparedness significantly vary among the three groups: those specializing in intellectual disabilities, those focusing on learning disabilities, and those concentrating on hearing impairments. The findings from this statistical test will provide insights into how professional tracks may influence preservice teachers' perceptions of their preparedness to teach in inclusive environments.

Professional Track	Source of Variance	SS	Freedom Degree	M-Square	F	Р
	Between Groups	36.372	2	18.186	2.641	0.076
	Within Groups	660.981	1	6.885		
	Total	697.354	1			
	Between groups	10.589	2	5.295	0.647	0.526
	Within Groups	785.593	1	8.183		
Intellectual Disability	Total	796.182	1			
	Between Groups	5.272	2	2.636	2.026	0.362
	Within groups	246.567	1	2.568		
Learning Disability	Total	251.838	1			
Hearing Disability	Between Groups	10.589	2	5.295	1.026	0.362
	Within Groups	785.593	1	8.183		
	Total	796.182	1			
All of them Total	Between Groups	88.447	2	44.224	2.347	0.342
	Within Groups	3151.633	1	32.830		
	Total	3240.081	1			

The one-way ANOVA results compare mean perceived preparedness scores across professional tracks among pre-service special education teachers.

It is evident from the table that the overall F-value was 2.347 (p = .342), indicating no statistically significant differences in perceived preparedness scores among preservice special education teachers across different professional tracks. The authors attribute this outcome to the uniform methods employed in teaching students with disabilities in inclusive settings across the professional tracks (intellectual disabilities, learning disabilities, or hearing impairments). Additionally, the pregraduation curriculum included comprehensive courses on inclusive teaching, delivered under rigorous quality standards and expert supervision. Consequently, the teachers' perceived preparedness primarily reflects the institution's commitment to quality education and ongoing professional development.

6. Discussion

Table 6.

The primary aim of this study was to investigate the perceived preparedness of preservice special education teachers to teach students with disabilities in inclusive settings. Based on the findings related to the teachers' professional tracks, the study identified two key areas: gender differences and variations in perceived preparedness. The following discussion addresses the results for each research question.

6.1. Perceived Preparedness of Pre-Service Teachers (RQ1)

The results for RQ1 indicated that preservice special education teachers perceived themselves as highly prepared overall, with a mean score of 3.21 on a 4-point scale. This suggests that teachers feel confident in their ability to teach students with disabilities in inclusive environments. The highest ratings were associated with managing diverse classrooms, differentiating instruction, collaborating with general education teachers, and utilizing evidence-based practices (EBPs). The authors attribute these high ratings to the comprehensive curriculum and strong emphasis on inclusive teaching strategies integrated into their academic training programs. Scheeler et al. [28] affirmed the importance of teacher preparation in promoting EBPs, noting that it is a legal requirement for preservice teachers to apply these practices. Federal and state laws mandate the use of EBPs in the classroom, particularly when working with students with disabilities [29].

However, certain aspects received moderate ratings, such as the practical implementation of EBPs and the development of measurable IEP goals. This suggests that while preservice teachers feel theoretically prepared, they may lack sufficient practical experience in applying these skills. The authors argue that enhancing training to facilitate the effective transition of theoretical knowledge into practice, particularly in complex areas like IEP development and data-driven instruction, is essential. Many preservice teachers reported feeling inadequately prepared for their responsibilities, especially when transitioning into actual classroom settings [1, 2].

6.2. Gender Differences in Perceived Preparedness (RQ2)

Regarding RQ2, the findings indicated no significant gender differences in perceived preparedness. The t-test results (t = 0.822, p = 0.455) demonstrated that both male and female teachers exhibited similar levels of perceived preparedness, suggesting that gender does not significantly influence teachers' readiness to work in inclusive classrooms.

The authors note that the differences among participants could provide insights for future analyses, particularly concerning how they manage their teaching responsibilities. The training courses they receive and their professional experiences likely play a crucial role in preparing them for teaching. Consequently, perceived preparedness may be more closely linked to the quality of training rather than gender-related factors.

6.3. Professional Track Differences in Perceived Preparedness (RQ3)

The results for RQ3 examined whether perceived preparedness varied among teachers based on their professional track (Intellectual Disabilities, Learning Disabilities, or Hearing Impairments). The One-Way ANOVA revealed no statistically

significant differences among the three tracks (F = 2.347, p = 0.342). This finding suggests that preservice teachers across all tracks feel equally prepared to teach students with disabilities in inclusive settings.

One possible explanation for this result is that the training program emphasizes inclusive teaching strategies applicable across all disability categories. Professional certification and content-specific teacher training are often seen as beneficial in promoting inclusive teaching methods, which can be influenced by demographic variables. Numerous studies have shown a significant positive correlation between understanding didactic concepts, such as differentiated instruction and grouping practices, and the extent to which these methods are implemented in the classroom [30-32].

The primary focus of special education programs is to ensure that teachers are adequately prepared to meet the learning needs of their students with disabilities. Additionally, the effective training courses adhering to quality standards provided to teachers may contribute to the lack of significant differences between professional tracks.

7. Implications and Recommendations

A comprehensive training course focused on enhancing the quality of preparedness among preservice special education teachers will effectively equip them for the challenges of teaching students with disabilities in inclusive settings. However, for study participants who received moderate ratings on specific items, it is recommended that specialized training be developed to improve their ability to apply the concepts of IEPs and EBPs. Furthermore, hands-on experiences, such as extended practicum placements or interactive workshops, should be incorporated into future curricula.

Given that no significant differences were found based on gender or professional track, it suggests that all special education teachers share similar responsibilities in inclusive settings. Future research should explore additional variables, such as the level of support or resources available in their teaching placements, to gain a more comprehensive understanding of the factors influencing perceived preparedness.

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