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Exploring Self-Efficacy in Special Education: A Comparative Study of Teachers for Intellectual Disabilities and Autism Spectrum Disorder

Eltaieb Youssif¹, Mohammed AbdAlgene², Rabea Ali³, Mohamed A. Elkot⁴

Abstract

In today times, societies have witnessed many rapid and successive changes in various fields. The progress of nations is measured by the progress of societies' educational processes and the services they provide for the advancement of their children, whether ordinary or with special needs. This study aimed to detect the difference in the degree of self-efficiency between teachers of students with intellectual incapacities and teachers of autism disorder, as well as the influence of sex, years of experience and the intensity of disability on their degree of self-efficiency. The study sample consisted of 139 teachers (72) of teachers with intellectual disabilities, 67 teachers of autism disorder in Qasim region, Saudi Arabia. The study used the measure of self-efficiency (the preparation of the researchers). According to the study's findings, no statistically significant distinctions existed between the averages of instructors with intellectual disabilities and the averages of teachers with autism in the degree of self-efficiency, as well as the absence of statistically notable distinctions between the averages of instructors and the averages of teachers in the degree of self-efficiency, while statistically significant dissimilarities existed between the averages of teachers on the measure of self-efficiency attributable to years of experience.

Keywords: *Autism Disorder, Intellectual Disability, Self-Efficiency, Special Education.*

Introduction

The teacher is widely regarded as the most pivotal component in the educational process and the fundamental basis upon which its aspirations are founded. The influence of the teacher is not limited to the student or the institution they are employed by, but rather extends throughout the entire society. They cultivate a generation that propels the community to unprecedented levels of advancement. Their job has expanded beyond the mere transmission of knowledge and preparation of scientific content, encompassing the explanation and delivery of information to the student. It has evolved into a role of leadership, facilitation, guidance, organization, programming, planning, and assessment, molding and evaluating the performance of their students.

So, the teacher constitutes the foundation in implementing the educational process, serving as its central axis. The success of this process relies heavily on the teacher's skills and competencies. The primary goal of the educational process is to instigate desirable and positive changes in the student's personality and behavior, guiding and directing them in a manner that serves the objectives of their community and contributes to its development. This is precisely what a competent teacher

¹Professor of special education, Department of Special Education, College of Education, Qassim University, Saudi Arabia. ORCIDID: <https://orcid.org/0009-0001-4723-3667>, Email: am.youssif@qu.edu.sa

²Associate Professor of Applied Linguistics, Department of English & Translation, College of Science and Arts, Ar Rass, Qassim University, Saudi Arabia. ORCIDID: <https://orcid.org/0000-0003-4782-9644>, Email: Mo.mohammed@qu.edu.sa

³Lecturer of Curriculum and EFL Instructions, Department of English & Translation, College of Science and Arts, Ar Rass, Qassim University, Saudi Arabia. ORCIDID: <https://orcid.org/0000-0002-2860-3941>, Email: r.ali@qu.edu.sa

⁴Associate Professor at Educational Technology Department, College of Education, Qassim University, KSA. ORCIDID: <https://orcid.org/0000-0001-6456-5957>, Email: m.alkot@qu.edu.sa

accomplishes, capable of fulfilling their tasks despite any difficulties and challenges encountered (Lord and Mcgee, 2001).

In order for the instructor to effectively execute these tasks and fulfill these roles, it is crucial that they have a high level of self-confidence, academic expertise, and professional proficiency that makes them suitable for these obligations. This obligation becomes more pronounced, especially when working with educators of individuals with intellectual disabilities and autism spectrum disorder. They interact with a group of kids who require increased work, attention, patience, dedication, and resilience in order to improve their educational and academic performance. This achievement relies on the teacher having a strong sense of self-confidence, which allows them to do their duties effectively and help this specific group of people improve their education, thereby positively influencing their communities and helping them reach their full potential.

Self-efficacy is considered a foundational confidence in the decision-making process. If an individual does not have confidence in their ability to adopt behavioral patterns that assist them in achieving their set goals, they may lack the necessary level of motivation to qualify them for the attainment of these objectives. Consequently, they may be unable to confront the challenges and problems that they encounter, which constitute an integral part of the daily life they lead (Cankaya, 2018).

Additionally, it reflects the teacher's academic, professional, and social competence, shaping their classroom environment, understanding educational content, and planning the teaching process in light of the objectives they aim to achieve. It also signifies their ability to recognize learners' potentials, create an appropriate educational environment for them, and select activities that align with their capabilities and cater to their interests, thereby motivating and refining their skills (Zaidan, 2010).

Furthermore, it is a crucial dimension of teachers' personalities, as highly competent teachers perceive themselves as effective in their performance, thinking, and planning for their future. They can set goals, exert effort, persevere, and overcome obstacles to achieve them (Flores et al., 2014). In contrast, those with low self-efficacy withdraw from challenging situations, struggle to confront obstacles, and may abandon their goals due to a lack of confidence in their abilities (Pajares and Valiante, 2006).

Moreover, those with greater self-efficacy are more likely to demonstrate more commitment to specific goals and find more effective strategies to achieve these goals compared to individuals with lower self-efficacy (Locke and Latham, 2002). Al-Watban (2009) argues that self-efficacy focuses on the teacher's perception of their competence and ability to control the outcomes of the educational process, aiming for the best educational outcomes regardless of external environmental factors that may influence these outcomes.

The construction of this article is commenced with the title, abstract, and keywords. Then comes the introduction which is followed by the study problem and research questions. After that comes the literature review section which is followed by the methodology and analysis of results discussion sections. Finally, the study is concluded with a conclusion and the list of references sections.

Problem of the Study

Self-efficacy is regarded as a crucial and indispensable prerequisite for teachers working with students who have special needs. This group of students necessitates additional care and attention compared to their conventional counterparts. Furthermore, effectively teaching and enhancing the academic achievement of students with special needs requires educators to possess patience and persistence. Teachers who educate kids with intellectual disabilities and autism spectrum disorders have several difficult obstacles that they must address. This particular demographic demonstrates increasing needs in several areas of social, personal, and educational domains as compared to other groups with regard to

the domain of special education. In order to fulfill these requirements, it is crucial for instructors to have a strong sense of self-efficacy, which helps them feel confident in their competence and capacity to educate these children. This, in turn, helps to improve their educational achievement and accomplish the educational objectives they aim to convey during their teaching.

By engaging with educators who work with students in special education institutes and inclusive schools, and by organizing seminars and lectures, I have noticed specific behaviors displayed by students with intellectual disabilities or autism spectrum disorders while teachers were carrying out their instructional responsibilities. Moreover, a survey administered to a cohort of these educators and postgraduate students engaged with these student collectives unveiled their grievances and challenges pertaining to the conduct exhibited by these students. Furthermore, it was discovered that their level of education fell short of the necessary benchmarks.

The researchers endeavored to determine the teachers' reactions to these behaviors, the degree of their capacity to address them, and their contribution to attaining the utmost educational standards for their students. The researchers sought to differentiate between instructors of learners diagnosed with autism spectrum conditions and those with intellectual disabilities in terms of their ability to effectively manage the difficulties they encounter when working with their students. In addition, the study aimed to ascertain any similarities or disparities in the capabilities of the two groups of teachers, as well as identify which group exhibited superior levels of patience in their interactions with students. The investigation also sought to assess the teachers' ability to effectively address problems and attain their self-established educational objectives for this particular demography. More precisely, the study sought to improve their academic performance and bring it to a level that aligns with their talents and readiness. Hence, the purpose of this investigation was to comprehend the disparities in self-efficacy levels among instructors of children with intellectual incapacities and instructors of learners with autism spectrum disorders.

Research Questions

There are several research questions to be handled in this study:

1. Do statistically significant disparities exist in the average mean scores of educators who teach learners with intellectual disabilities and those of teachers who teach students with autism spectrum disorders in terms of self-efficacy?
2. Are there statistically noteworthy variances between the mean scores of teachers in self-efficacy attributed to the gender of the teacher (male teachers - female teachers)?
3. Are there statistically substantial discrepancies between the mean scores of teachers in self-efficacy attributed to the experience of the teacher (less than 5 years of experience - 5 to 10 years of experience)?
4. Are there statistically momentous inconsistencies between the mean scores of teachers in self-efficacy attributed to the severity of the disability (mild - moderate)?

Literature Review

Self-Efficacy and Special Education Teachers

The self-efficacy of special education instructors reflects their ability to determine their motivational level and achievement capabilities, assisting their students in improving academic performance, academic progress, and increasing their self-confidence. The teacher's self-efficacy influences the amount of effort they invest in tasks with students, as well as their ability to face obstacles, work pressures, and find solutions (Nassar, 2007).

It also affects the level of emotional involvement among special education teachers with their students and

among themselves. It serves an essential function in shaping the behaviors of teachers when dealing with this category of learners with special needs (Hakan and Halis, 2014). Furthermore, it plays a prominent role in developing the teacher's ability to persevere in the face of challenges and obstacles, reflecting on their flexibility in interacting with the situations and behaviors exhibited by these children during teaching, training, and rehabilitation. This demands that the instructor possesses a high level of self-efficacy to effectively handle and navigate these behaviors with flexibility and wisdom (Hamill, 2003).

The concept of self-efficacy

It comprises a collection of convictions issued by an individual, expressing their convictions about their ability to perform specific behaviors, their adaptability in dealing with challenging situations, and their perseverance towards achievement (Shaarawi, 2000). Abu El-Ala (2004) defines teacher self-efficacy as the instructor's confidence in their capacity to execute pedagogical duties and have a positive effect on their students' learning, irrespective of their level. This positive impact extends at least to their response and motivation. It also involves the teacher's ability to control environmental factors that affect student learning.

Skaalvik and Skaalvik (2007) characterize self-efficacy as the teacher's beliefs regarding their capacity to positively influence their students in all educational, social, and behavioral aspects. These beliefs are linked to the teacher's and student's behavior, making it a significant variable influencing the educational process.

Self-efficacy, in the context of special education instructors dealing with individuals who have intellectual disabilities and autism spectrum disorder, refers to the teachers' understanding and assessment of their own abilities and potential to deliver comprehensive educational services to students with intellectual disabilities and autism. It entails pushing their academic abilities and preparedness to the highest possible degree, surmounting any difficulties and challenges encountered during the learning process, and presenting viable answers for them.

Beyouiti and Hamdi (2012) identified three dimensions of self-efficacy:

1. **Cognitive Self-Efficacy:** This dimension denotes the personal perception of their ability to control and manage their thoughts and beliefs during their daily activities.
2. **Behavioral Self-Efficacy:** This dimension involves the assessment of an individual's self-behaviors through their social skills and actions exhibited during their interaction with daily life events.
3. **Emotional Self-Efficacy:** This dimension relates to a person's beliefs about performing actions that may impact their emotional and mood states (Al-Bahnasawy et al., 2022).

According to, Al-Qabbali and Al-Shmayleh, 2022 teachers' self-efficacy is shaped by four sources:

1. **Performance Accomplishments (Past Achievement):** This includes all the individual's achievements and successes in their educational life. The more one feels successful in their performance, the higher their level of self-efficacy. Success in previous achievements positively influences one's belief in their own competence, contributing to the expectation of outstanding performance and success in future tasks and facing challenging situations.
2. **Vicarious Experiences:** This source relies on learning through observation or modeling by observing social models, such as teachers, in the individual's surroundings. Observing the success of these models in facing challenges allows the individual to expect similar behavior and capability in themselves. Monitoring and observing other teachers influence one's beliefs about their self-efficacy, especially when the successes of these teachers resemble the circumstances of the observing teacher and align with their performance.
3. **Verbal Persuasion:** This involves verbal persuasion received by teachers from credible others who believe in their ability to perform a specific behavior. Positive persuasion influences their behavior, making them feel capable and competent during their attempts to carry out their tasks. Verbal

persuasion provides teachers with details regarding the essence and characteristics of teaching and equips them with strategies to help them overcome difficulties and obstacles.

4. **Emotional States:** The emotional state of the teacher affects the judgment of their competence. Fear and anxiety can negatively impact their efficacy, especially when facing tasks, they perceive as difficult and believe they are unable to perform. Conversely, positive emotions such as enthusiasm, determination, and resilience are qualities that enhance self-efficacy, particularly when dealing with learners with special needs.

Characteristics of Instructors with High Self-Efficacy

Instructors with high self-efficacy exhibit distinct characteristics that manifest in various aspects of their behavior. These characteristics include:

1. **High Sense of Achievement and Learning:** Teachers with high self-efficacy believe in their ability to achieve their tasks. They perceive their work with students as meaningful and impactful.
2. **High Capacity to Confront Challenges:** These teachers possess a high ability to face challenges, demonstrating perseverance and determination in their pursuit of specific goals. They confront obstacles that hinder their progress and success, investing greater effort to achieve these goals. They also strategically choose strategies to overcome challenges.
3. **Optimal Task Selection:** Educators with high self-efficacy tend to choose activities and tasks that they believe they can succeed in. Conversely, they avoid activities and tasks where they perceive a higher likelihood of failure. They exhibit high levels of planning, organization, professional commitment, and enthusiasm for teaching (Bandura, 2000).

Hence, it is evident that the self-efficacy of instructors who interact with learners having intellectual impairments and autism spectrum disorders has a substantial influence on their performance with these specific student groups. If these beliefs are optimistic, these educators can proficiently fulfill their responsibilities in instructing these children with great efficacy. Individuals have the ability to accomplish their objectives, apply extra exertion to reach them, confront obstacles with ideal solutions, and improve the educational levels of their students, ultimately achieving the desired results from their instruction.

On the other hand, if their ideas of their self-efficacy are pessimistic, it presents a substantial barrier to attaining their teaching objectives with these students. The lack of skill to surmount obstacles and select suitable resolutions impedes their achievement of their goals. Various research articles have specifically investigated the self-efficacy of special education instructors, with a particular focus on those who work with pupils who have intellectual disabilities and autism. These studies have highlighted the significant influence that self-efficacy has on these teachers. This influence extends to the proficiency and educational achievements of their students.

Multiple research articles including the one conducted by Sharma et al. (2014), sought to examine the influence of self-efficacy on the views of pre-service educators about the incorporation of learners with impairments into regular

classrooms. The findings revealed that men pre-service teachers exhibited a greater inclination towards embracing the integration of children with disabilities into mainstream classes, in contrast to their female counterparts. In addition, the study revealed that pre-service teachers focusing in special education did not exhibit a greater inclination towards inclusion compared to those who were preparing to teach in ordinary schools. Moreover, the findings indicated that teachers who engaged in special education training, possessed knowledge of disability legislation, and had personal teaching experience and exposure to individuals with disabilities exhibited elevated levels of self-efficacy in instructing this particular group, in contrast to their counterparts who lacked such experiences.

The research carried out by Guo et al., (2014) aimed to provide a description of the self-efficacy levels exhibited by teachers in the domain of early childhood special education. The research also investigated

the correlations among teacher self-efficacy, classroom quality, and literacy development in children with linguistic impairments. The study had a cohort of 28 teachers and 108 pupils. The researchers utilized a questionnaire consisting of 19 items to assess teacher self-efficacy. This questionnaire was adapted from Bandura's Self-Efficacy Scale for Teachers (Bandura, 1997). The study unveiled the subsequent findings:

1. Early childhood special education instructors demonstrated high levels of self-efficacy.
2. The self-efficacy of educators in this category was not significantly related to language and literacy benefits in children.
3. The relationship between the instructor's self-efficacy and classroom quality regarding language and literacy gains for children with language impairments was negative.

These findings offer valuable understanding of the fluctuations in teacher self-efficacy within the field of early childhood special education, as well as its influence on the overall quality of classroom instruction and the literacy achievements of children with language impairments.

In their research, Love et al. (2019) endeavored to develop a self-confidence assessment tool for educators who are involved in the instruction of students who have been diagnosed with Autism Spectrum Disorder (ASD). The results of the study revealed a positive and causal correlation between the self-efficacy of educators and both job satisfaction and self-regulation. Educators who possessed a strong belief in their own capabilities expressed greater job satisfaction while instructing students with ASD. Conversely, educators who lacked confidence in their own abilities reported lower levels of job satisfaction. Furthermore, the study conducted by Jaljal et al. (2019) examined the relationship between exhaustion and professional self-efficacy in the context of special education instructors. An inverse correlation was found between burnout and professional self-efficacy among special education instructors, suggesting that higher levels of professional self-efficacy were associated with lower levels of burnout.

On the contrary, Al-Huwaiti (2019) aimed to investigate the levels of self-efficacy among male and female pupils enrolled in the Special Education Department at Umm Al-Qura University. Their fundamental competencies, as assessed by the Council for Non-Regular Children, formed the basis of this evaluation. Additionally, gender, academic level, and specialized specialization were examined in relation to their impact on individuals' self-efficacy. The study's participants exhibited a moderate level of self-efficacy, according to the findings. Moreover, the findings of the research indicated that there were no significant statistical differences in levels of self-efficacy among students according to their gender, level of academic achievement, or specialized knowledge.

A correlation was examined in the research conducted by Yada et al. (2022) between the self-efficacy of educators and their perspectives on inclusive education for students with special educational needs in grades kindergarten through twelfth. The sample for this study was obtained from a compilation of research articles published between 1994 and 2018, which comprised a grand total of 41 investigations. The results of the research demonstrated a strong and reliable association between the self-efficacy of educators and their perspectives on inclusive education. Further investigation was suggested in the report regarding the integration of children from diverse contexts as a means of narrowing the evident gap between theoretical discourse and practical application.

The objective of the study conducted by Gulsun et al. (2023) was to determine how self-efficacy affected the attitudes and conduct of educators regarding inclusion and integrated students. Self-efficacy considerably predicts the conduct of educators with regard to inclusive education, according to the findings. Additionally, the study indicated that elevated levels of self-efficacy among this cohort of educators impact their attitudes toward the integration process and enable them to manage integrated children with behavioral challenges more effectively.

It is evident from the information provided that special education teachers, in general, and those who instruct students with intellectual disabilities and autism in particular, must possess a robust sense of self-efficacy. Individuals with heightened self-efficacy experience an increased sense of assurance in their personal, professional, intellectual, and educational capabilities. This empowers individuals to overcome challenges through flexibility and practicality, ultimately striving to achieve their goals of maximizing the academic achievements of these pupils to the greatest degree possible. As a result, their value is elevated as substantial contributors to their respective nations and communities.

Methodology

The researchers employed a comparative descriptive methodology, chosen for its appropriateness to the nature and aims of the study. The primary objective of the study is to discern dissimilarities in self-efficacy levels between instructors of students with intellectual disabilities and teachers of students with autism spectrum disorders. The comparative descriptive approach facilitates a comprehensive examination and comparison of these two groups, allowing for a detailed analysis of the variations in self-efficacy within the context of special education. This methodology enables the researchers to provide a thorough description of the self-efficacy levels of both groups of teachers, highlighting any distinctive features or trends that may contribute to a more profound comprehension of their capabilities and effectiveness in addressing the unique needs of their respective student populations.

Participants

The study sample consisted of 139 teachers, with 72 educators dealing with students with intellectual disabilities and 67 instructors working with learners with autism spectrum disorders. The selection of participants was done randomly from special education institutes and intellectual disability classrooms attached to general education schools in the Qassim region, Saudi Arabia. Table 1 illustrates the distribution of sample individuals among teachers according to gender, years of experience, and the severity of disability.

Table 1: Distribution of Sample Individuals by Gender, Years of Experience, and Severity of Disability.

Variable	Teachers of Intellectual Disabilities	Teachers of Autism Spectrum Disorders	Total
Gender	Male	36	76
	Female	31	63
Years of Experience	Less than 5 years	35	65
	5 to 10 years	32	74
Severity of Disability	Mild	37	78
	Moderate	30	61

Self-Efficacy Scale Development by the Researchers

This article section will provide a detailed description of self-efficacy scale development.

Scale Description

The current scale was developed with the aim of assessing the level of self-efficacy among teachers of students with intellectual disabilities and teachers of students with autism spectrum disorders. The goal was to identify differences between them in this aspect, determining whether one group possesses a higher level of self-efficacy or if both groups exhibit similar levels without significant distinctions. Additionally, the research sought to examine whether self-efficacy levels are high for one group and low

for the other, and to explore the impact of teacher gender, years of experience, and the severity of disability among their students on their self-efficacy. The scale, in its final form, consists of 20 statements distributed across four dimensions, as follows:

Personal Competence

This dimension refers to the teacher's confidence in themselves and their high capacity to work with students with intellectual disabilities and autism spectrum disorders. It encompasses effective planning of goals, belief in success in teaching, training, and rehabilitating these students. Additionally, it involves possessing a serious and likable personality, both among the students and colleagues working within the institute or school.

Educational Competence and Classroom Management

Defined by the educator's capability to complete educational tasks in teaching and training this group of students. It involves overcoming obstacles and challenges encountered in achieving objectives, demonstrating patience and perseverance when dealing with them, efficiently managing the classroom, and being prepared to face all behaviors that may arise during the educational process. The teacher should also be adept at classroom control and selecting the best behavior modification methods to eliminate negative behaviors and replace them with positive ones.

Social Competence

This dimension focuses on the teacher's ability to establish positive social relationships with students in this category, gaining their trust and affection. It includes creating a desire for students to interact and engage with the teacher within the school environment. Moreover, it involves earning the trust of colleagues in the workplace and extending a helping hand, especially to beginners working with special needs students.

Emotional Competence

Refers to the teacher's ability to regulate their emotions and control their feelings effectively to confront various pressures and challenges that may arise while dealing with these students. This dimension emphasizes the importance of emotional resilience and the capability to manage emotional responses during interactions with students.

Psychometric Characteristics of the Scale

In this section there will be the validity, reliability, and score of the scale. In addition, the statistical methods section will be presented at the end of this part.

Scale Validity

Content Validity

To ensure the content validity of the scale, the initial version was presented to 13 experts in special education, psychology, and education. These experts were asked to provide their opinions and observations regarding the clarity, relevance, and coherence of the scale's items within their respective dimensions. They also assessed the overall clarity of the statements, their linguistic formulation, and suggested modifications. Based on their feedback, some items were modified and rephrased without removing any, as there were no suggestions for deletion. The final version of the scale comprises 20 statements across four dimensions.

Scale Reliability

The reliability of the scale and its sub-dimensions was assessed using Cronbach's alpha coefficient. The

following table illustrates the reliability coefficients.

Table 4: Cronbach's Alpha Coefficients for Dimensions of the Self-Efficacy Scale and the Total Score.

Dimensions	Cronbach's Alpha Coefficient
Personal Competence	0.659
Educational Competence and Classroom Management	0.714
Social Competence	0.802
Emotional Competence	0.749
Total Scale Score	0.815

Table (4) shows that the scale and its sub-dimensions have good and statistically acceptable reliability coefficients. Based on the above, it is evident that the scale has good statistical indicators, confirming its appropriateness for utilization in the current study.

Inter-Rater Reliability

The scale was initially reviewed by 13 experts to assess its apparent validity. Their feedback was used to modify and refine the items. However, no statements were deemed necessary for deletion. The final version of the scale was considered suitable and relevant by the experts, indicating its content validity.

Internal Consistency Reliability

The internal consistency of the scale was evaluated using Pearson correlation coefficients to examine the correlation between the score of each statement and the total score of its corresponding dimension. This analysis aimed to ensure the cohesion and homogeneity of the statements within each dimension. The correlation coefficients are presented in Table (3).

Table 2: Correlation Coefficients Between Item Scores and Total Dimension Score After Deleting the Item.

Personal Competence	Correlation Coefficients	Teaching Competence and C & M	Correlation Coefficients	Social Competence	Correlation Coefficients	Personal Competence	Correlation Coefficients
1	**0,501	2	**0,544	3	**0,460	4	**0,522
5	**0,450	6	**0,476	7	**0,498	8	**0,465
9	**0,506	10	**0,490	11	**0,507	12	**0,502
		14	**0,512	15	**0,466	16	**0,517
13	**0,419	17	**0,460	18	**0,487	19	**0,501
						20	**0,488

Function at the 0.01 significance level

From the previous table, it is evident that the correlation coefficients between the scores of the scale items and the total score of the corresponding dimension are positively correlated and statistically substantial at the 0.01 level. This confirms the reliability and homogeneity of the statements within each dimension.

Table 3: Correlation Coefficients Between Dimension Scores and Total Scale Score.

Dimension	Correlation Coefficient
Personal Competence	0.673**
Educational and Classroom Management Competence	0.726**
Social Competence	0.649**
Emotional Competence	0.704**

Significant at the 0.01 level

Scale Scoring

The Likert scale with five options (Strongly Agree – Agree – Neutral – Disagree – Strongly Disagree) was used to respond to the scale. The scores were reversed (5-4-3-2-1), with the highest score indicating

a high level of self-efficacy for the teacher.

Statistical Methods

In the current research, various statistical methods were employed using the Statistical Package for the Social Sciences (SPSS) as follows:

1. Pearson Correlation Coefficient: used to ensure the internal consistency reliability of the scale.
2. Alpha Cronbach Reliability Coefficient: employed to confirm the reliability of the scale.
3. Mean, Standard Deviation, and Independent Samples t-test: utilized to investigate the implication of variances between the mean scores of instructors of intellectually disabled students and educators of learners with autism in terms of self-efficacy.

Discussion of the Results

This section of the study deals with the discussion of the results in connection with the research questions.

The First Research Question

Firstly, regarding the results of verifying and interpreting the first research question, there are no statistically considerable discrepancies between the means of the grades of teachers of learners with intellectual impairments and the means of the grades of teachers of students with autism spectrum disorder in the level of self-efficacy.

To verify the validity of this hypothesis, the (t) test for independent samples was employed to compare the means of the grades of teachers of students with intellectual disabilities and the means of the grades of teachers of students with autism spectrum disorder. The results are presented in Table 5.

Table 5: Illustrates the Significance of Differences Between the Means of the Teachers' Grades on the Self-Efficacy Scale.

Dimensions	Type	Number	Mean	Standard Deviation	t-value	Significance Level
Personal Efficacy	Teachers of Intellectual Disabilities	72	21.56	2.53	-0.427	Not Significant
	Teachers of Autism Spectrum Disorder	67	21.37	2.50		
Educational Competence and Classroom Management	Teachers of Intellectual Disabilities	72	21.04	2.64	-0.469	Not Significant
	Teachers of Autism Spectrum Disorder	67	20.82	2.91		
Social Competence	Teachers of Intellectual Disabilities	72	21.56	2.53	-0.358	Not Significant
	Teachers of Autism Spectrum Disorder	67	21.40	2.50		
Emotional Competence	Teachers of Intellectual Disabilities	72	21.20	2.64	-0.323	Not Significant
	Teachers of Autism Spectrum Disorder	67	21.06	2.78		
Total Scale Score	Teachers of Intellectual Disabilities	72	80.67	11.14	0.289	Not Significant

The lack of statistically noteworthy dissimilarities between the mean scores of teachers in self-efficacy is evident from Table 5. The presentation of results for both dimensions and the total scale score indicates that both groups of teachers, those instructing students with intellectual disabilities and those instructing students with

autism spectrum disorder, obtained high mean scores. This suggests that both groups exhibit a high degree of self-efficacy in handling their students, whether they have intellectual disabilities or autism spectrum disorder.

The Second Study Question

Secondly, regarding the results of confirming and elucidating the second study question, there are no statistically momentous variances between the means of the scores of male and female educators in self-efficacy.

To assess the validity of this hypothesis, the (t) test for independent samples was utilized to compare the means of scores between male and female teachers in self-efficacy. The results are presented in Table 6.

Table 6: Illustrates the Significance of Variances Between the Mean Scores of Teachers on the Self-Efficacy Scale in Light of the Gender Variable.

Dimensions	Gender	Number	Mean	Standard Deviation	t-value	Significance Level
Personal Efficacy	Male Teachers	76	21.43	2.54	0.088	Not Significant
	Female Teachers	63	21.40	2.43		
Educational Competence and Classroom Management	Male Teachers	76	21.74	2.41	0.671	Not Significant
	Female Teachers	63	21.46	2.42		
Social Competence	Male Teachers	76	21.59	2.46	0.395	Not Significant
	Female Teachers	63	21.43	2.40		
Emotional Competence	Male Teachers	76	22.33	2.21	0.074	Not Significant
	Female Teachers	63	22.30	2.14		
Total Scale Score	Male Teachers	76	81.79	14.71	0.135	Not Significant

From Table 6, it is obvious that there are no statistically substantial differences between the mean scores of male and female teachers in self-efficacy. Both groups exhibit a high level of self-efficacy, indicating that gender does not have a considerable impact on self-efficacy levels among teachers.

The Third Research Question

Thirdly, regarding the results of validating and explaining the third research question, there are statistically substantial discrepancies between the means of scores of teachers in self-efficacy attributed to teachers' experience (less than 5 years, 5-10 years) in favor of those with higher experience.

To assess the validity of this hypothesis, the (t) test for independent samples was employed to compare the means of scores between teachers with less than 5 years of experience and teachers with 5-10 years of experience. The results are presented in Table 7.

Table 7: Illustrates the Significance of Variances Between the Mean Scores of Teachers on the Self-Efficacy Scale in Light of the Variable of Years of Experience.

Dimensions	Experience	Number	Mean	Standard Deviation	t-value	Significance Level
Personal Efficacy	Less than 5 years	65	20.17	2.95	8.06	0.01
	5-10 years	74	23.53	1.91	-	-
Educational Competence and Classroom Management	Less than 5 years	65	19.82	2.34	10.43-	0.01-
	5-10 years	74	23.81	2.18		
Social Competence	Less than 5 years	65	21.17	2.13	7.13-	0.01-
	5-10 years	74	23.66	1.99		
Emotional Competence	Less than 5 years	65	20.80	2.67	7.85-	0.01-
	5-10 years	74	23.81	1.82		
Total Scale Score	Less than 5 years	65	78.32	10.10	6.16	0.01

From Table 7, statistically noteworthy variations are evident between the mean scores of instructors in self-efficacy attributed to years of experience. The t-values, both for individual dimensions and the total scale score, were significant at the 0.01 level. These differences favor teachers with higher experience, specifically those with 5-10 years of experience, who obtained higher mean scores compared to their counterparts with less than 5 years of experience.

The Fourth Study Question

Fourthly, regarding the results of verifying and interpreting the fourth study question, there are statistically considerable dissimilarities in the mean scores of educators in self-efficacy ascribing to the severity of disability (mild – moderate).

To assess the validity of this hypothesis, the (t) test for independent samples was employed to compare the means of scores between teachers of students with mild disabilities and teachers of students with moderate disabilities. The results are presented in Table 8. Table number (8) illustrates the significance of differences between the mean scores of teachers on the self-efficacy scale attributed to the variable of disability severity.

Dimensions	Disability Severity	Number	Mean	Standard Deviation	t-value	Significance Level
Personal Efficacy	Mild	78	22.53	2.19	4.39-	0.01-
	Moderate	61	20.66	2.83		
Educational Competence and Classroom Management	Mild	78	22.64	2.22	3.57-	0.01-
	Moderate	61	21.26	2.31		
Social Competence	Mild	78	23.08	2.01	3.08-	0.01-
	Moderate	61	21.84	2.74		
Emotional Competence	Mild	78	23.37	1.83	5.22-	0.01-
	Moderate	61	21.46	2.49		
Total Scale Score	Mild	78	94.24	7.03	6.70	0.01

There are statistically substantial variances between the mean self-efficacy scores of educators as a function of disability severity, as shown in Table 8. At the 0.01 level of significance, the t-values for both individual dimensions and the total scale score were both significant. The higher mean scores achieved by teachers of students with mild disabilities in comparison to teachers of students with moderate disabilities suggest that the disparities are in their favor.

The findings of the research validate the lack of statistically significant disparities in self-efficacy mean scores between educators who instruct students with intellectual disabilities and those who instruct students with autism spectrum disorder. A high degree of self-efficacy is demonstrated by both categories of educators when interacting with these students. These educators' high self-efficacy signifies their capacity to surmount difficulties and barriers in the process of instructing, rehabilitating, and training these pupils. This demonstrates their aptitude for selecting efficacious strategies and activities, exhibiting perseverance and patience, and possessing self-assurance in their capacity to accomplish their educational objectives for pupils, with the ultimate purpose of attaining the most advanced academic levels that align with their cognitive capacities. Their high self-efficacy is further indicative of their competence in identifying and choosing the most optimal solutions to challenges they face.

The results of this research are consistent with a number of prior investigations that underscored the considerable self-assurance exhibited by special education instructors. Ross (2002), for instance, emphasized that educators regard themselves as competent in instructing children with special needs. In line with this, Guo et al. (2014) characterized the self-efficacy of special education instructors for young children as being quite high. In contrast, the findings presented here diverge from those of Al-Huwaiti's (2019) research, which suggested that the general degree of self-efficacy among special education department students was of a moderate nature.

With regard to the experience variable, the findings of the present research validated statistically significant disparities associated with years of experience, which exhibited a preference for individuals possessing greater experience. This indicates that the self-efficacy of these educators is enhanced by the number of years they have devoted to instructing and mentoring their pupils. It fosters improved interpersonal communication with students, goal attainment, perseverance, obstacle surmounting, and the generation of inventive resolutions to the challenges encountered.

By dedicating significant time to their students, these educators develop a more profound comprehension of their individuals, acquire a deeper understanding of their desires and needs, and as a result, are able to discern what is most suitable for them. The amassing of such experience empowers individuals to cultivate the requisite proficiencies for confronting the obstacles inherent in instructing this cohort of pupils. They develop proficiency in selecting the most suitable solutions by drawing from their experiences and the knowledge gained from assisting students with a wide range of requirements.

The results of this study are consistent with the conclusions drawn by Sharma et al. (2014), who confirmed that educators who have personal experience and teaching experience with students with disabilities have greater confidence in their ability to instruct this population than those who have no such experiences.

Conclusion

In relation to the severity of disability, there was a notable disparity in the level of self-efficacy between educators responsible for students with modest disabilities and those responsible for students with moderate disabilities. This discovery is consistent with the outcomes of the research conducted by Ross (2002), which suggested that educators' perception of their own competence in instructing children with special needs increases as the child's disability severity escalates. One possible explanation for this phenomenon is that teachers encounter more difficulties and exert more effort when interacting with students who have severe disabilities, in contrast to the comparatively simpler interactions that occur with students who have mild disabilities. Furthermore, the research indicates that students with moderate disabilities have more substantial demands and requirements in comparison to their counterparts with modest disabilities. This may potentially enhance the self-efficacy of educators who instruct students with mild disabilities, given that they encounter comparatively fewer difficulties when confronting these cases in contrast to the complexities linked to moderate disabilities.

In brief, the research emphasizes the significance of elevated self-efficacy among special education instructors, specifically those who instruct students with intellectual disabilities and autism, in attaining their scholastic objectives. A positive correlation has been observed between teachers' self-efficacy and their inclination to educate these students, with the intention of fulfilling their educational requirements and equipping them for academic achievement in accordance with their unique capacities and preparedness. In addition, heightened self-efficacy enables educators to confront obstacles with assurance, select efficacious resolutions to dilemmas, and devise appropriate methodologies, exercises, and tactics to facilitate students in attaining their objectives. Educators who possess a high level of self-efficacy exhibit a sense of assurance in their capacity to effectively manage the intricacies associated with working with students who demand additional attention and exertion, especially when compared to other student populations in the field of special education. These students frequently require consistent assistance and support in order to acclimate to their academic surroundings and engage actively in a range of educational activities, which ultimately contributes to improved academic performance and learning outcomes.

Availability of Data and Materials

All data and information recorded or analyzed throughout this study are included in this paper.

Competing Interests

The authors declare that they have no relevant financial or non-financial interests.

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Ethics Statement

Ethical review and approval were not required for the study on human participants by the local legislation and institutional requirements.

Consent Statement

Written informed consent from the [patients/ participants OR patients/participants legal guardian/next of kin] was not required to participate in this study following the national legislation and the institutional requirements.

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