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Faculty of Graduate Studies

“The Attitudes of Palestinian Teachers toward the Inclusion of children with autism spectrum disorder (ASD) and factors influence their attitudes: A cross-sectional study”

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Thesis Approval

"The Attitudes of Palestinian Teachers toward the Inclusion of children with autism spectrum disorder (ASD) and factors influence their attitudes: A cross-sectional study"

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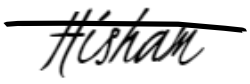
1- Dr. Hisham Arabalkabyeh: Supervisor	
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Declaration

I, Bashaer Majed Abu Khadeja, hereby affirm that the thesis entitled " The Attitudes of Palestinian Teachers toward the Inclusion of children with autism spectrum disorder (ASD) and factors influence their attitudes: A cross-sectional study " is a product of my independent work and effort. To the best of my knowledge, this thesis has not been submitted, either in part or in whole, to any other institution in any form for the purpose of obtaining a degree, diploma, or any similar qualification.

Furthermore, I confirm that all sources of information and references used in this thesis have been duly acknowledged, and I have adhered to the appropriate academic standards in citing them.

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Abstract

Background: Teachers' attitudes toward the inclusion of children with special needs play an important role in the implementation of the inclusion process, besides their attitudes can influence the success or failure of the process. Children with special needs specifically children with autism spectrum disorder (ASD) face many challenges to be within an educational context.

Objective: This study aims to explore the attitudes of Palestinian teachers toward the inclusion of children with ASD and the factors that could influence or create their attitudes.

Methods: A cross-sectional study was conducted, involving a convenience sample of 356 Palestinian teachers residing in the West Bank governmental schools and kindergartens working with children aged 3 to 13. The current study will use the Teachers' Attitudes Towards Inclusion Scale (TAIS) to survey the attitudes of teachers toward inclusive education and the Autism Attitude Scale for Teachers (AAST) to survey their attitudes toward inclusive education for ASD children in specific were used as the main outcome measures. Data analysis was performed using SPSS version 26.

Results: The findings revealed that teachers hold an overall positive attitude towards the inclusion of children with ASD. A statistically significant low positive association ($r = .40$, $p < .05$) was found between the teachers' attitudes toward inclusion of children with special needs in general and teachers' attitudes toward inclusion of children with ASD in specific. Teachers efficacy ($r = .51$, $p < .05$), educational category ($p = .00$), living area ($p = .04$), general experience with children with ASD ($p = .00$) , and training ($p = .00$) were found to have an impact on teachers' attitudes toward including children

with ASD. However, no correlation was found between teachers' attitudes and knowledge, perception, age, marital status, work directorate, academic level, teaching level, educational experience, teaching specialty, type of teaching experience for children with ASD, and the duration of experience with children with ASD.

Conclusion: The current study demonstrated that, overall, Palestinian teachers showed positive attitudes toward including children with ASD. The study highlights that their attitudes are associated with teachers' efficacy, educational role, experience with students with ASD, severity of behavioral symptoms, and training. In contrast, other variables such as knowledge of ASD, perception of inclusive practices, age, gender, type of disability, teaching experience, type of material, academic qualifications, teaching level, and duration of experience in teaching students with ASD are not correlated with teachers' attitudes.

Keywords: *ASD; Attitudes; inclusive education; teachers.*

Table of Contents

Thesis Approval ……..…….. I

Declaration ……..……. II

Acknowledgment …..……..… III

Abstract ……..……. IV

List of Tables ……... IX

List of Figures ……... X

List of Appendices …….. XI

List of Abbreviations ……..…… XII

Chapter 1 Introduction and Background 1

1.1 Chapter Overview..... 1
1.2 Background and rationale..... 1
1.3 Research Problem..... 5
1.4 Research Objectives 7
1.5 Research Significance..... 7

Chapter 2 Literature review 8

2.1 Chapter Overview..... 8
2.2 The Concept of Inclusion..... 8
2.3 The Historical background for inclusion 9
2.4 The inclusion of children with ASD 10

2.4.1 The concept of ASD..... 10
2.4.2 History 11
2.4.3 Etiology..... 12
2.4.4 Symptoms..... 13
2.4.5 Clinical evaluation..... 15
2.4.6 Epidemiology 15
2.4.7 Including children with ASD in educational settings 16
2.4.8 The positive effects of inclusive education for children with ASD 17
2.4.9 Barriers to the inclusion of children with ASD..... 19

2.5 Enrollment of Children with Disability and ASD in Palestinian Schools 21
2.6 The occupational therapy (OT) role with ASD and inclusion 28

2.6.1 School-Based Occupational Therapists 32
2.7 Teachers attitudes toward inclusion 33
2.7.1 The concept of attitude 35
2.7.2 Levels of Teachers' attitudes toward inclusion of children with ASD 36
2.7.3 Factors related to teachers' attitudes toward including children with ASD 37
2.8 Summary 43
Chapter 3 Methodology 55
3.1 Chapter Overview 55
3.2 Study design 55
3.3 Patient and Public Involvement (PPI) 56
3.4 Study Setting 57
3.5 Study Population 57
All teachers, regardless of having previous experience with children with ASD. 58
3.6 Sampling and Sample Size 59
3.7 Participant recruitment procedure 59
3.8 Data collection instrument 60
3.8.1 The sociodemographic questionnaire 61
3.8.2 Teachers Attitudes Toward Inclusion Scale (TAIS) 61
3.8.3 The Autism Attitude Scale for Teachers (AAST) 62
3.8.4 The Arabic version of the teacher efficacy for inclusive practices scale (TEIP-AR) 63
3.8.5 Autism Inclusion Questionnaire (AIQ) 64
3.8.6 The Sentiments, Attitudes, and Concerns about Inclusive Education Revised (SACIE-R) Scale 65
3.9 Data collection procedure 65
3.10 Data Analysis 68
3.11 Ethical consideration 68
Chapter 4 Results 70
4.1 Recruitment 70
4.2 Statistical analysis 70
4.3 Completeness and normality of the data 70
4.4 Descriptive statistics 71

4.4.1 Sociodemographic characteristics 71
4.4.2 Attitudes toward inclusion of children with ASD 77
4.4.3 Factors related to the teachers' attitudes toward inclusion of children with ASD 82
4.5 Factors associated with the Autism Attitude Scale for Teachers (AAST) 88
4.6 The correlation between the Teachers' Attitudes Toward Inclusion Scale (TAIS) and the Autism Attitude Scale for Teachers (AAST) 96
4.7 Summary of the results 97

Chapter 5 Discussion and Conclusion 100

5.1 Discussion 100
5.1.1 Teachers' attitudes toward the inclusion of children with ASD 100
5.1.2 Factors associated with teachers' attitudes toward inclusion of children with ASD 102
5.2 Conclusion 111
5.3 Limitations 113
5.4 Future Research Recommendations and Occupational Therapy Implication . 114

References 116
Appendices 141
الملخص 162

List of Tables

Table 1 The history of the development of Autism concept and definition 11

Table 2 Autism Spectrum Disorder Diagnostic Criteria (as listed in the DSM-5).....14

Table 3 Gaps at the implementation level of inclusive education in Palestine 25

Table 4 Summary of the main cross-sectional previous Studies related to factors influencing teachers' attitudes toward inclusion of students with ASD 45

Table 5 Inclusion criteria for participants with justification 58

Table 6 Exclusion criteria for participants with justification 58

Table 7 Timetable for data collection, analysis and write research paper.....67

Table 8 Sociodemographic characteristics of the participants (n=356) 73

Table 9 Descriptive statistics for educational role and experiences in interacting with children with ASD and special needs.....75

Table 10 Participants' attitudes toward inclusion of children with ASD. 79

Table 11 Descriptive statistics for factors' outcome measures presented as means and standard deviations (mean ± SD) 83

Table 12 AAST scores and One-Way ANOVA Test Results according to Educational role, Training attendance, and Living area variables 90

Table 13 T-test results and AAST Mean Scores according to Work Experience with Children with ASD Variable.....92

Table 14 Pearson correlation between the AAST and AIQ, TEIPAR, TEIP-EMB, TEIP-EC, TEIP-EII, SACIE-Sentiments, SACIE-Concerns, and SACIE-Attitudes using Pearson correlation coefficient. Data are presented as correlation coefficient (p-value).....94

List of Figures

Figure 1: The Palestine Inclusive Policy as presented by the ministry of education. 23

Figure 2: Type of subjects that teachers teach. 77

Figure 3: AAST results chart. 78

List of Appendices

Appendix A	IRB approval	141
Appendix B	Facilitating a research mission from the AAUP	142
Appendix C	Facilitating a research mission from the Ministry of education	143
Appendix D	Outcome Measures	144

List of Abbreviations

Full name	Abbreviation
Autism Spectrum Disorder	ASD
Autism Attitude Scale for Teachers	AAST
Teachers' Attitudes Toward Inclusion Scale	TAIS
Autism Inclusion Questionnaire	AIQ
Teacher Efficacy for Inclusive Practices-Arabic	TEIP-AR
Teacher Efficacy in Managing Behavior	TEIP-EMB
Teacher Efficacy in collaboration	TEIP-EC
Teacher Efficacy in Inclusive Instruction	TEIP-EII
The Sentiments, Attitudes, and Concerns about Inclusive Education Revised Scale	SACIE-R
Sentiments Toward Inclusive Education	SACIE-Sentiments
Concerns Toward Inclusive Education	SACIE Concerns
Attitudes Toward Inclusive Education	SACIE Attitudes
Patient and Public Involvement	PPI

Chapter 1 Introduction and Background

1.1 Chapter Overview

This chapter provides a background and rational for the study. In addition, it will outline the research question, research problem, objectives, and significance of the present study.

1.2 Background and rationale

Educational inclusion is a fundamental right for every child, irrespective of their differences. It is the right of every child to have equal opportunities for education. Inclusive education is a comprehensive strategy that takes into account the diversity in education and serves the differences in educational needs and abilities of different learners (Majoko, 2018). The UNESCO views inclusion as a dynamic approach, which acts positively toward student diversity by looking to the differences as opportunities to support and enrich learning, not as challenges (UNESCO, 2005). The effective implementation of inclusive education not only ensures the provision of quality education, but also enhances students' academic achievements, while promoting sustained social inclusion (Kefallinou et al., 2020). However, even with the existence of research evidence about inclusion, all parties who engage in the inclusive education process do not share a common and obvious comprehension of the inclusion values, underlying principles, and the significance of its advantages to all teachers, learners, and even the school environment. The bridging between data from research and practice is still a challenge (Ainscow, 2020). This might affect negatively inclusion at different levels including the professional development of teachers for inclusion, policy formulation of inclusive education, fostering school-inclusive environments, inclusive strategies

implementation within classrooms, and promoting communication and collaboration with families and communities (Kefallinou et al., 2020).

The prevalence of neurodevelopmental disorders, particularly autism spectrum disorder (ASD), has been steadily increasing over the years (Zeidan et al., 2022), As reported by 'Center for Disease Control and Prevention' statistics, there is a child in 36 children who is diagnosed with ASD (Walensky et al., 2023). This increase in numbers might be a result of several factors including the improvement of awareness about the disorder, the wider recognition of typical developmental milestones and functional abilities related to ASD, the developed diagnostic techniques, and the expansion of public perception that led to easier and more successful access to necessary service (Zeidan et al., 2022). This trend highlights the need for effective educational strategies that cater to the unique requirements of children with ASD, facilitating their social development and academic success.

In light of the global emphasis on holistic education, schools strive to promote both academic and social growth, recognizing the importance of addressing the educational needs of children with ASD while fostering their social development. (Petersson-Bloom & Holmqvist, 2022). However, integrating children with ASD into mainstream schools requires additional efforts and presents challenges for school staff, particularly general teachers (Edward, 2015). Consequently, this can result in the development of negative attitudes towards inclusive education, as many teachers believe that the presence of children with ASD in regular classrooms may have a detrimental impact on the educational process, potentially impeding its progress (Conte et al., 2022). Indeed, requiring teachers to work with students with ASD exposes them to diverse student populations, developing the necessity for comprehensive support strategies and

collaborative efforts to address teachers' concerns and challenges. Including students with ASD specially in circumstances Lacking support, limited colleague and parents' cooperation, and inadequate training can foster negative attitudes toward inclusion. Hence, it's very crucial to consider the importance of support mechanisms, cooperative efforts, and training initiatives in shaping teachers' attitudes and experiences regarding the inclusive education of children with ASD (Muñoz Martínez et al., 2023).

Recognizing the significance of teachers' attitudes toward inclusive education can help ensure the inclusion process's effectiveness among children with special needs (Boyle et al., 2020). There's a widespread agreement that teachers' attitudes align with the effectiveness of inclusive education (Petersson-Bloom & Holmqvist, 2022). As teachers directly impact their students, they are considered frontline service workers in the inclusion process. Therefore, their beliefs, values, and behaviors can critically determine the success or failure of inclusive education. For instance, in the 1980s, when integration began to be implemented, teachers' attitudes emerged as a potential barrier against the integration of students with SEN into regular educational settings (Boyle et al., 2020). Through literature reports indicated that teachers who held more positive attitudes toward inclusion were more able to control the learning environment and handle the inclusion requirements in comparison with those who held negative attitudes toward inclusion (Monsen et al., 2014). Consequently, developing positive attitudes among teachers is considered a priority and is crucial to ensure the effectiveness of inclusive education for students with ASD (Petersson-Bloom & Holmqvist, 2022) (Muñoz Martínez et al., 2023).

A comprehensive review of the existing literature reveals various factors that can influence teachers' attitudes towards inclusive education for students with ASD. These factors include teachers' effectiveness, knowledge base, teaching experience, the severity

of student behaviours, and training experiences specifically related to this domain. (Gómez-marí et al., 2022). Sometimes, even when teachers initially hold positive attitudes, factors such as the presence of students with ASD facing behavioural and emotional difficulties, increasing workload and tiring, lack of cooperation and lack of resources can influence their positive attitudes and impede the inclusive education process (Monsen et al., 2014, Boyle et al., 2020).Therefore , it is important to note that a positive attitude alone is insufficient, as the lack of professional development in recognizing ASD poses a significant barrier to inclusive education. Despite teachers' positive attitudes there were instances of misconceptions about ASD. Various studies highlighted the significance of professional development in supporting teachers throughout addressing their needs, in addition to assist them to cope with the obstacles that correlates with teaching students with ASD to improve their efficacy. Thus, there is a critical need to develop strategies that adapt, enhance, and adjust the learning environment to accommodate students with ASD (Petersson-Bloom & Holmqvist, 2022). Teachers themselves emphasize the importance of collaboration when including students with ASD (Nthibeli et al., 2022), highlighting the necessity of a multidisciplinary support team, including occupational therapists, nurses, and psychologists, within the school environment to provide ongoing support and follow-up for students with ASD (Conte et al., 2022).

Furthermore, supporting teachers in recognizing students' abilities and skills is crucial for fostering their sense of effectiveness and efficacy, ultimately leading to enhanced self-esteem. (Conte et al., 2022). Occupational therapists have a vital role in supporting teachers (Brauner, 2018) by offering suitable techniques and modifications, as well as serving as models within classrooms to enhance teachers' abilities and skills in working

with students with autism and effectively managing classroom challenges throughout the school day (Rajotte et al., 2022), Furthermore, their involvement in classroom or curriculum planning (Bolton & Plattner, 2020), contributes to the successful implementation of inclusive education for students with ASD (Arendse, 2019).

In Palestine, the endeavour toward inclusive education confronts several obstacles such as occupation which hindering the economy, destroying the infrastructure, and disrupted the cohesion of the state. Furthermore, stigma, social shame, prejudice towards disabilities, coupled with widespread ignorance about children's rights, serve as significant barriers to fostering inclusivity (MacKenzie et al., 2020), which impede the successful execution of the inclusion process or even the acceptance of including children with ASD in schools (Ashbee, 2016). Recognizing the significant role of the teachers' attitudes and how are considered as priority in obtaining effective inclusion for children with ASD (Gómez-marí et al., 2022; Petersson-Bloom & Holmqvist, 2022) it became crucial to scrutinize Palestinian teachers' attitudes in addition to the factors that might potentially shape them, which in turn can foster the inclusive education of children with ASD in Palestine .

1.3 Research Problem

Children with disability especially children with autism are surrounded by several difficulties and challenges that prevent them from taking the opportunity to be educated within an inclusive environment that meets their needs. Teachers play a crucial role in establishing an effective, inclusive, and supportive environment that embraces the differences of all children. Positive attitudes among teachers are essential for fostering effective inclusion, promoting positive relationships among students, and creating an

environment that recognizes and accommodates diverse needs. Conversely, negative attitudes can hinder the effectiveness of the inclusive environment and pose challenges to the abilities and needs of children with diverse learning requirements (Beghin, 2021). Therefore, teachers' attitudes towards inclusion must be taken into consideration through the inclusion process. To the best of the researcher's knowledge, there are limited studies conducted to explore teachers' attitudes toward the inclusion of ASD children in Arab countries, and Palestine is no exception.

Furthermore, previous evidence provided contradicting findings regarding the factors that could influence teachers' attitudes toward inclusion for ASD children (Russell et al., 2022). Consequently, a study that explores and reports Palestinian teachers' attitudes toward the inclusion of ASD children and the factors that could influence teachers' attitudes is timely and warranted.

The research problem is delineated through the following primary questions

- What are the attitudes and perceptions of Palestinian teachers regarding the inclusion of children ASD in the educational process?
- What are the factors influencing the attitudes of Palestinian teachers towards the inclusion of children ASD?
- Is there significant correlation in the attitudes of teachers towards students with special needs in general compared to students exhibiting symptoms ASD specifically?

1.4 Research Objectives

In the current study, the researcher aimed to explore and report the Palestinian teachers' attitudes toward the inclusion of children with ASD in the educational process and the factors that could influence their attitudes. Moreover, to investigate whether there is a variation related to the teachers' attitudes towards the students with special needs in general and the students with ASD symptoms especially.

1.5 Research Significance

Understanding teachers' attitudes towards the inclusion of children with ASD and identifying the factors that contribute to positive and negative attitudes hold significant value for occupational therapy practice. This research is crucial for enhancing inclusive education by developing effective strategies to support the successful inclusion of children with ASD in the educational setting. It also informs the development of training programs and professional development initiatives for teachers, enabling occupational therapists to design workshops and resources that enhance teachers' knowledge and skills in supporting children with ASD. Additionally, the findings contribute to evidence-based recommendations for policy decisions related to inclusive education, advocating for supportive policies addressing training needs, resource allocation, and the creation of inclusive environments. Moreover, understanding teachers' attitudes fosters collaboration between occupational therapists and educators, facilitating the creation of inclusive classrooms that meet the diverse needs of students with ASD. Overall, exploring teachers' attitudes and the factors influencing them has important implications for occupational therapy practice, positively impacting inclusive education efforts.

Chapter 2 Literature review

2.1 Chapter Overview

This chapter presents a review of literature aimed at clarifying the concept of inclusion and its historical underpinnings. Additionally, it highlights the inclusion of children with ASD, exploring both the positive effects of their integration as well as the barriers encountered. Furthermore, the chapter sheds light on the role of occupational therapy in supporting the inclusion of individuals with ASD. The current state of inclusive education in Palestine is also examined. Finally, the chapter discusses the existing literature regarding teachers' attitudes towards the inclusion of children with ASD and the factors associated with these attitudes.

2.2 The Concept of Inclusion

The inclusion mainly focused on the equal rights of all children regarding access to various education levels alongside their peers. This entails recognizing and embracing the diversity among children and integrating them into the mainstream educational environment. Regardless of their individual differences, all children should be embraced and welcomed in the educational setting (Hodkinson, 2005). It is worth noting that inclusion, as discussed by Hodkinson (2011), is not an unexpected phenomenon or a sudden occurrence; rather a phenomenon that has evolved over time in various forms (Hodkinson, 2011), the progression through different developmental stages, namely segregation, integration, and inclusion, has exhibited varying rates across different countries, as observed by (Ainscow et al., 2014).

2.3 The Historical background for inclusion

During the 19th century, educators in multiple European countries advocated for the rights of children to receive education and have access to quality educational opportunities (Reynolds & Ainscow, 1994) . This made some voluntary institutions to establish special schools which were separate from mainstream schools for typical children. Yet, this provision had not been adopted by the national governments until a later period (Reynolds & Ainscow, 1994). In the latter half of the 20th century, there was a significant emphasis on the inclusion of children with disabilities or difficulties within mainstream schools, aiming to provide them with educational opportunities. This process was led by recognizing the exclusion and insufficient support for specific students. At the same time, special educators gave a great attention to the importance of incorporating segregated children groups into typical and local schools (Pijl & Meijer, 1991). Lately, there has been an increased emphasis on inclusive education, representing a serious development along the historical path in the trials for achieving "education for all" and growing the mainstream's capacity to meet the diverse needs of all students (Ainscow et al., 2014). However, as historical progress unfolded, there was a shift from a stage of segregation, where students with learning difficulties were placed in separate schools, to a stage of integration, where learners were placed in school settings without being categorized or distinguished based on their specific needs. The last stage which is the present-day stage is characterized by inclusive education (Ainscow et al., 2014) which emphasizes creating an environment that can provide equal opportunities for all students including those with special needs to learn and access education with the sense of being appreciated and embraced, besides being supported to share their abilities and skills with

others and having the chance to participate in regular educational settings activities and functions (Qian & Rong, 2023) .

Moreover, there was a major push towards the strategy of inclusive education by the United Nations “education for all” all around the world. As a result, various countries are making considerable efforts to meet the needs of the disadvantaged, disabled , and excluded individuals (Ainscow et al., 2014). Later on, this energy was catalyzed by the “Salamanca Statement” (UNESCO, 1994) which established a framework for changing policy and practice that defends for the right of every child to obtain education with paying attention to each child’s unique interests, characteristics, and learning needs. The statement mainly emphasizes creating new educational programs and systems that are specially made for accommodate diverse needs, arguing the right of children with learning difficulties to join regular schools. Moreover, this statement highly recommends adapting the “child-centered pedagogy” in these schools, so they can deal with each child’s special needs efficiently (UNESCO, 1994). Many countries responded to Salamanca’s call for inclusive education; all of them have committed to give the opportunity to all children to attend regular schools. Palestine is one of them besides ninety-two other countries (UNESCO, 1999).

2.4 The inclusion of children with ASD

2.4.1 The concept of ASD

It is a neurodevelopmental disorder that appears in early childhood stages and undergoes throughout one’s life (Kidd, 2002). Impairment in both verbal and nonverbal communication is what identifies Autism. Also the child’s behaviors are another sign,

such as the occurrence of repetitive, restricted or distinctive behaviors. Another symptom of this disorder is the challenges that a child faces in social interaction (Volkmar et al., 2005).

2.4.2 History

Autism history is characterized by a journey from early observation of unusual behaviors to the recognition of autism as a spectrum disorder. This reflects the joint endeavors of clinicians, researchers, and advocates to improve the understanding, diagnosis, and support of people with autism (see table below).

Table 1: The history of the development of Autism concept and definition.

Time	Development
The Early Days	Several psychologists and psychiatrists in the early 20th century noticed children displayed communication and social challenges.
In 1911	The term “autism” was invented by a Swiss psychiatrist called Eugen Bleuler intending to describe a symptom of schizophrenia referring to a departure from reality.
1940	Leo Kanner who is an influential American psychiatrist created meaningful contributions regarding the comprehension of autism. In fact, in 1943 he published a paper to describe a group of children who exhibited “early infantile autism”, emphasizing their repetitive behaviors and social withdrawal. At the same period, a similar

	condition was identified by Hans Asperger in Austria, which eventually gained recognition as Asperger's syndrome.
1960 – 1980	In the years between 1960-1970, elevated awareness and research regarding autism were observed. In 1980, the (DSM-III) officially acknowledged "autistic disorder" as a separate diagnosis. Which shifts the recognition of autism as a type of childhood schizophrenia to a unique developmental disorder.
In 2013	The concept of "spectrum" was invented to be part of the autism concept, as the recognition of autism enlarged to incorporate spectrums of disorders with different levels of severity. For that reason, in 2013, the DSM-5 incorporated various autism-related disorders including pervasive developmental disorder-not otherwise specified (PDD-NOS) and Asperger's syndrome, under the umbrella term Autism Spectrum Disorder (ASD). (Golt & Kana, 2022)(Evans, 2013)

DSM- Diagnostic and Statistical Manual of Mental Disorders

2.4.3 Etiology

The research involves the etiology of ASD and its correlation with two basic factors: the child's surrounding environment and his\her genes, whereas both of them influence brain development. Until now, there is no establishment of conclusive evidence regarding ADS

risk and its definitive causes; however, there are ongoing efforts to identify factors that are linked with it (Hodges et al., 2020).

2.4.4 Symptoms

According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth edition (DSM-5) criteria, individuals with autism should exhibit deficits in social communication and interaction skills in addition to presenting repetitive and restricted behaviors. Social interactions and communication impairments might include social-emotional deficits such as demonstrating difficulties in sharing emotions and interests in addition to the inability to lead or react to social interactions. Furthermore, Individuals with autism exhibit deficits regarding non-verbal communication skills including abnormal body language and poor eye contact. They are prone to misinterpret nonverbal interactions in addition to exhibiting challenges in developing friendships and social relationships (American Psychiatric Association, 2013). Symptoms related to repetitive and restricted behaviors might include stereotypic speech such as performing echolalia besides stereotype movements such as flapping or lining up tools. However, they are prone to adhere to routine and display fixed and inflexible interests. It's worth mentioning that the intensity of the symptoms varies among individuals with ASD. Moreover, ASD symptoms should occur in early childhood (del Barrio, 2004).

Table 2: Autism Spectrum Disorder Diagnostic Criteria (as listed in the DSM-5)

According to the DSM-IV, the ASD diagnostic criteria are described as the followin	
A. Persistent deficits in social comn and social interaction across multip as manifested by the following, cur history	• Deficits in social-emotional reciprocity. • Deficits in nonverbal communicative behav social interaction. • Deficits in developing, maintaining, and un relationships
B. Restricted, repetitive patterns of interests, or activities, as manifeste two of the following, currently or b	• Stereotyped or repetitive motor movements objects, or speech. • Insistence on sameness, inflexible adherenc routines, or ritualized patterns or verbal nor behavior. • Highly restricted, fixated interests that are a intensity or focus. • Hyper- or hypo reactivity to sensory input c interests in sensory aspects of the environm
C. Symptoms must be present in the early developmental period.	
D. Symptoms cause clinically significant impairment in social, occupational, or othe areas of current functioning.	

E. These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay

(American Psychiatric Association, 2013).

The (DSM-5), released by the American Psychiatric Association in 2013, serves as a standardized reference for healthcare professionals in diagnosing mental and behavioral conditions, including autism (American Psychiatric Association, 2013).

2.4.5 Clinical evaluation

There are two stages processes of diagnosing the Autism Spectrum Disorder (ASD), starting with identifying at-risk children by the developmental screening. Of course, the reference of this process is the professionals who lead to this specific and comprehensive diagnosis using various evaluation tools such as observational and neuropsychological. Another stage which considered as a part of initial medical evaluation that is highly recommended is the clinical genetic testing (Hodges et al., 2020).

2.4.6 Epidemiology

The spread of ASD increases very fast, this might be a result of some factors such as the rising awareness of the disorder, the wider realization of typical developmental milestones and functional abilities related to ASD, the improvement of diagnostic techniques, and the expansion of public perception that led to easier and more successful access to necessary services (King & Bearman, 2009; Zeidan et al., 2022). As reported by ‘Centers for Disease Control and Prevention statistics, there is a child in 36 children who are diagnosed with ASD (Walensky et al., 2023). It is worth mentioning that girls are affected four times less than boys who get affected more frequently (Maenner et al.,

2021), Furthermore, the surveys showed that 17% or 1 in 6 children aged 3-7, were diagnosed with developmental impairments, including Attention-deficit/hyperactivity disorder (ADHD), ASD, Cerebral palsy (CP), and blindness (Centers for Disease Control and prevention, 2018). In the Arab world, few studies estimated the prevalence of children with ASD, as the study conducted in Qatar in 2019, targeted children aged 6-12. showed that approximately 1.14 children out of every 100 children within this age group were diagnosed with ASD (Alshaban et al., 2019). Another study conducted in Makkah and Jeddah found that the prevalence of children with ASD aged 6 to 12 years who enrolled in schools or received care at ASD rehabilitation centers was 2.81 per 1000 children (Sabbagh et al., 2021). In Egypt, the research showed huge variability in the prevalence of ASD ranging from 5.4 per 1000 (Yousef et al., 2021) to 3.6% (Seif Eldin et al., 2008). In the occupied interior of Palestine, the prevalence of children who have ASD is found to be 6.55% and it varies among different areas (Hassan, 2022). However, in Arab countries, there is a significant variation in ASD prevalence due to the differences in study methodologies, approaches to case identification, participant ages, and the diagnostic tools utilized as there is a lack of standardized and unified screening methods for ASD to this date, which presents a challenging situation (Metwally et al., 2023).

2.4.7 Including children with ASD in educational settings

In recent years, the trend toward including children with ASD in regular educational settings has gained momentum, reflecting a broader societal shift toward fostering inclusivity and embracing diversity in education (Paraskevi, 2021). This movement was empowered by the growing recognition of the advantages of inclusive practices for children with ASD revealed by advocacy efforts and research findings. Those advantages

include improved social skills, academic performance, and overall well-being for children with ASD (Paraskevi, 2021). Moreover, previous studies showed that inclusion promotes understanding, acceptance, and empathy among typically developing peers, creating a more inclusive school environment and, thus, an inclusive culture (Dyer, 2022). the legislative frameworks ensuring the rights of individuals with special needs to receive education have further supported the push toward inclusive education (Devenish et al., 2020). Previous studies emphasized the significant role of implementing the appropriate accommodations and support that are tailored to the unique needs of each child with ASD within inclusive educational environments (Ferguson, 2019). Despite the challenges including the need for special training and resource limitations, the research emphasizes the moral and ethical imperative of inclusive education for children with ASD, promoting a more inclusive and equitable society where all children have the opportunity to learn together (Ahlers et al., 2023).

2.4.8 The positive effects of inclusive education for children with ASD

The prevalence of students with ASD is increasing continuously (Dyer, 2022), Research, including insights from Beghin in 2021, emphasized the multiple advantages of inclusive education for children with ASD, extending to the child himself, peers, and teachers (Beghin, 2021), For these advantages to come to fruition, many essential components need to be in place, as underscored by (Dyer, 2022). Engaging all students within an inclusive setting can create significant positive effects, specifically when teachers, parents, and support staff collaborate effectively for the inclusion of all students, as emphasized by (Beghin, 2021; Coelho, 2019; Kwofie, 2018). It is not only the Children with ASD who acquire knowledge and benefit from the inclusion process, however, their

peers are benefiting also through having the opportunity to have a better understanding of autism and acceptance of differences. Which in turn aids in diminishing the stigma surrounding ASD, and encouraging more supportive attitudes toward the inclusion of children with ASD, This insight is shared by (Beghin, 2021) and (Dyer, 2022). Crucially, all students, regardless if they are with ASD diagnosis or not, need opportunities to experience and learn positive interactions with others to recognize, understand, and respect differences. This essential for developing respectful relationships between all students within school classrooms, as highlighted by (Beghin, 2021; Kwofie, 2018).

Teachers also gain positive skills from ASD-inclusive education as they become more knowledgeable about the disorder acquiring new strategies to accommodate the educational environment to meet all student's needs (Beghin, 2021). In conclusion, the inclusive education of children with ASD, can affect positively the all parties in the inclusion process, however, the greatest benefit relates to the child with ASD, as inclusive classroom play a vital role in supporting children with autism to meet their talents and interests (Beghin, 2021) in addition to promote the child's academic success (Kwofie, 2018). Furthermore, it supports the child's social interaction skills (Coelho, 2019) as well as their emotional behavioral development (Kwofie, 2018), as the PMI ''peer-mediated intervention'' which is often adopted within the inclusive classrooms is considered a hopeful treatment for ASD children through to its positive effects on both increasing the child social interaction abilities with their peers and supporting peers' social abilities, which in turn lead and encouraging effective inclusion (Aller, 2017).

In fact, the advantages of inclusion are not limited to the classrooms only but extend to society. Having the opportunity and experience to interact positively with peers in classrooms with appropriate guidance and modeling, leads to promoting the child's ability

to participate within the community, indeed, community perception is enhanced when schools adopt more successful programs regarding inclusion (Dyer, 2022).

2.4.9 Barriers to the inclusion of children with ASD

A qualitative study by Al Jaffal (2022) examined the barriers obstructing the inclusion of children with ASD. The feelings of teachers were expressed in this study, where it turned out that they are unprepared and they lack of experience and training (Al Jaffal, 2022; Salceanu, 2020), This leads to frustration in dealing with ASD children's behavior, such as resorting to inappropriate solutions, for instance giving them time-outs instead of applying more helpful techniques. The survey showed the absence of collaboration with experienced specialists in ASD and a lack of resources, involving Individualized Education Plans (IEPs), as fundamental challenges (Al Jaffal, 2022), as teachers believe that the existence of comprehensive assessment can support them in recognizing the needs and strengths of their students who have ASD (Salceanu, 2020). Other studies showed that the aggressive behaviors presented by children with ASD, hyperactivity behaviors, being easily distracted and forgetful, unacceptable emotional reactions such as screaming, inappropriate stereotype physical movements, and inability to follow instructions are considered difficulties that prevent teachers from implementing inclusion practices (Dimogianni, 2023; Pisano, 2022). On the other hand, the learning environment readiness, the need for appropriate education methodology, and the need for supporting resources and facilities were considered as challenges that hinder inclusion practices (Van Tran et al., 2020). Overcoming these barriers is crucial for fostering acceptance of inclusion among teachers (Al Jaffal, 2022). Emphasizing the responsibility of policymakers, staff,

and commissioners, in addition to stressing the need for systematic changes to effectively enhance inclusion for children with ASD (Hasson et al., 2022).

To support their educational rights, a 2022 systematic review of qualitative research focused on strategies for inclusive education for students with autism. This research focused on the importance of fostering positive teachers' attitudes as an essential strategy that goes with the effectiveness of inclusive education. It also showed a factor that could act as a barrier to inclusion which is the lack of professional understanding about autism (Lu et al., 2020), obstructing the strategies' implementation to adapt and modify the educational environment (Petersson-Bloom & Holmqvist, 2022). Moreover, the challenges that ASD children face with their peers and the severity of autism symptoms were also identified by this review, which meet the findings of another study conducted by (Jury et al., 2021). To elaborate on these challenges, the review highlighted the need for a holistic approach to applying inclusion for children with ASD. It also emphasized the requirements of inclusive education such as systemic changes, encompassing school structure, multiple strategies, various approaches, and pedagogical content (Lu et al., 2020; Salceanu, 2020). As effective inclusion of children with ASD needs to adopt multisensory learning, and predictable routines, in addition to handling evidence-based practices and materials that serve the individual needs of students with autism (Pisano, 2022), The significant role of creating correlations between research and practice was underscored for better outcomes in inclusive education for students diagnosed with autism (Petersson-Bloom & Holmqvist, 2022).

2.5 Enrollment of Children with Disability and ASD in Palestinian Schools

In primary schools in Palestine, a significant number of children experience diverse learning disabilities. According to data from the Palestinian Center Bureau of Statistics, 15% of children between the ages of 5 and 17 years old are affected, with 17% in the West Bank and 13% in the Gaza Strip (Palestinian Central Bureau of Statistics, 2020). As reported by the Ministry of Education and Higher Education, during the 2015-2016 academic year, a total of 4,832 children with learning difficulties were enrolled in government schools across different grades ranging from 1 to 10 in the West Bank. Additionally, approximately 2,006 children with learning difficulties were enrolled in schools in Gaza during the same period. (MoEHE, 2017). The enrollment of students with disabilities in government schools underwent changes in subsequent years. In 2019, the number of enrolled students in the West Bank rose to 6,135, while in Gaza, the figure reached 3,254 by 2020 (Palestinian Central Bureau of Statistics, 2020).

Recently, there has been growing focus and awareness regarding ASD in Palestine, which subsequently has prompted the development of new programs that are tailored to the needs of children with ASD (Shawahna, 2015). a noteworthy study conducted by Basha in 2014 aimed to investigate the knowledge of Palestinian people toward ASD, and the study results revealed that people have sufficient awareness regarding the disorder's causes and characteristics, however, the study revealed concerning beliefs, as 19.1% of people showed ASD as a psychological disorder, while 35.5% of them thought it was a behavioral issue, which indicates the need to educate people more about ASD (Basha, 2014). Substantial support is necessitated in Palestine for the inclusion of children with disabilities. “Education for all” was embraced by the Ministry of Education in 1994,

followed by the acceptance of “inclusive education” in 1997, targeting the inclusion of all students within the regular education system despite their distinctions. A significant divergence appeared between the current inclusive education approach and the “education for all” initiative that the Ministry of Education adopted, causing a gap between practical implementation and what was planned theoretically (Al Masri, 2021).

The establishment of the Palestinian inclusive education policy was in 2015, highlighting ten goals, which are presented in (Figure 1):

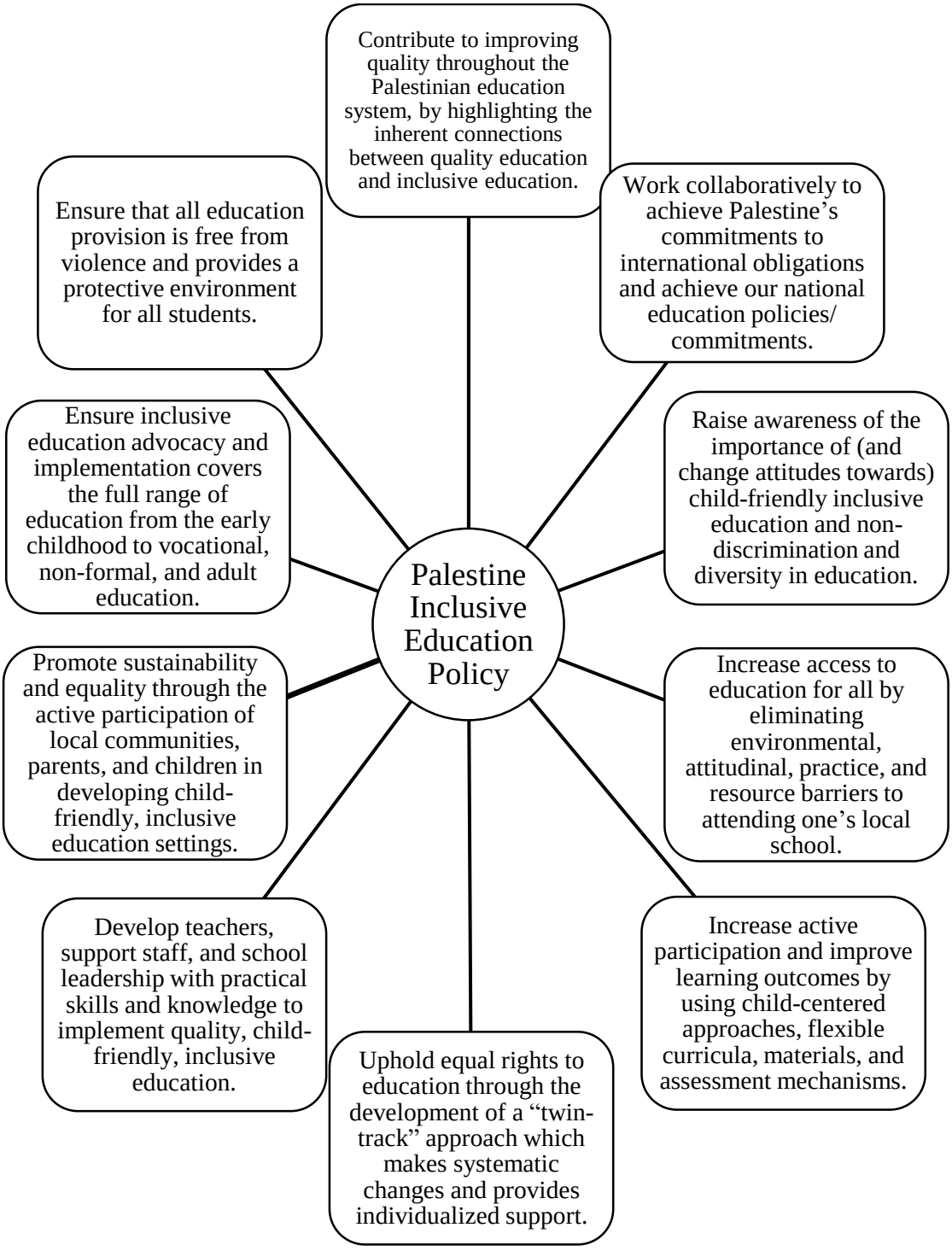


Figure 1: The Palestine Inclusive Policy as presented by the ministry of education (Al Masri, 2021).

Despite established policies on inclusive education, persistent challenges affect the quality of education for children with disabilities in Palestine (MacKenzie et al., 2020). These challenges span decision-making and legal policy levels, as well as implementation issues. Key concerns include the lack of unified criteria and techniques for identifying individuals with disabilities and addressing their needs. Implementation issues involve insufficient context-specific measures, detailed procedures in strategic plans, and effective monitoring at educational institutions (Al Masri, 2021).

The continual challenges influenced the quality of Palestinian children with disabilities, despite the establishment of inclusive education policies (MacKenzie et al., 2020). These challenges encompass decision-making and legal policy levels and implementation issues. The lack of identifying techniques of individuals with disabilities and their needs and unified criteria were the core concerns. Insufficient context-specific measures and other implementation issues such as effective monitoring at educational institutions and specified procedures in strategic plans (Al Masri, 2021). There is a lack of clear specifications of multiple aspects such as basic services for children with disabilities, provision of assistive tools and the infrastructure's preparation. There are no regular updates of the individuals' number who have educational disabilities among various learning levels. Another challenge is the limited efforts to secure additional funds from international and local donors while there is an absence of a specialized budget in the first place. So, there is a crucial need for comprehensive improvements in the inclusive educational system in Palestine, and this is the main obstacle in the current time (Al Masri, 2021).

There are considerable obstacles that persist at both levels; implementation and policy, in the realm of inclusive education in Palestine. Four significant gaps were identified at the implementation level as follows:

Table 3: Gaps at the implementation level of inclusive education in Palestine:

Availability Gap	This includes the shortage of assistive and mobility devices, besides the unequal sharing of available services. Moreover, the failure of existing services in meeting the different needs of individuals (Al Masri, 2021).
Accessibility Gap	Hurdles in physical access, challenges in transportation, and there is not enough accessible data on existing services, for instance braille systems, easy reading materials, and sign language which obstruct their effective utilization (MacKenzie et al., 2020).
Affordability Gap	Private sectors and NGOs provided various services for children with special needs which cost high funds for individuals. Also, a main factor that further contributes to the affordability challenge is the expense of accessing these services by transportation (Al Masri, 2021)
Accountability Gap	The lack of awareness by decision-makers and service- providers of rules and requirements that guarantee clients the chance to evaluate and give appropriate feedback on available services. A

	lot of service providers do not feel chargeable for implementing these actions although they are significant (Al Masri, 2021)

Extensive encouragement for inclusion in Palestine authority was confirmed by a study conducted in 2016, but it showed misunderstanding and misconception about the term. Especially, the difference between inclusion and integration was not identified comprehensively, because integration basically involves placing students with special needs inside the academic framework but with no adaptation of the child's environment for inclusivity. However, there is a significant rise in paying attention to inclusion in Palestine, with considerable efforts to understand and face challenges. This aimed to ensure the child's positive and active participation and social belonging (MacKenzie et al., 2020; Ashbee, 2016).

In addition to issues related to inclusion, autism is often subject to misconceptions in the Palestinian context, where it is predominantly understood within the medical model, as indicated by recent findings (MacKenzie et al., 2020). his perspective contradicts the conclusions of Albasha's study (Basha, 2014). Consequently, public attitudes are significantly influenced by this prevailing viewpoint. The acceptance of children with autism and inclusion is not spread enough, as a result of the lack of awareness toward the essential social dimensions required. Moreover, this perspective contributes to the stigma surrounding autism, causing the appearance of social isolation of individuals with ASD and their families (MacKenzie et al., 2020). While there is a growth of interest regarding autism noticed in the Palestinian context despite all of these hurdles, showing a positive shift in Palestinians' attitudes (Ashbee, 2016). However, various obstacles exist regarding including ASD children in academic settings, even though some of them are enrolled within an inclusive academic frame. The main challenge is the lack of specialists and

training, which causes inadequate knowledge in dealing with children diagnosed with ASD. Also, not offering in-depth courses by Palestinian universities plays a negative role.

Further challenges that ASD inclusion faces are insufficient environmental adaptations and resources. For instance, quiet spaces and breaks are required for students with sensory over-responsiveness throughout the school day. While one of the potential solutions is resource rooms, using and realizing them might pose exclusion risks and often do not meet the needs of children with ASD. Another hurdle that faces educational inclusion in Palestine is the gaps and obstacles in collaboration among teachers, parents, government departments, professionals, and communities (Ashbee, 2016). Moreover, the infrastructure and achievements of inclusive education are obstructed by the chronic occupation in Palestine (MacKenzie et al., 2020).

Eventually, the obstructing of opportunities and perpetuating segregation and discrimination of children with disabilities including children with ASD is due to the low expectations of their rights and the lack of respecting these rights, affected by teachers' attitudes (MacKenzie et al., 2020). Conversely, promoting a positive attitude regarding these children and spreading the belief in their ability to learn and succeed may lead to inclusive and proper education. Adopting flexible curricula, various learning techniques and creative teaching methods that are designed to meet individuals' needs, learning styles and abilities is required to achieve a successful and equal inclusive education (MacKenzie et al., 2020). It is significant to emphasize on the capacities and genuine aspirations of students with ASD instead of paying the whole attention to content only. It is essential in the Palestinian context to create an accessible educational environment with needed modifications and suitable designs, taking into consideration visual, noise, lighting, and tactile factors, besides therapeutic objects. It is also important to provide

suitable accommodations, proper support, and early intervention, this becomes crucial in giving learners opportunity to access their full potentials within the educational framework (MacKenzie et al., 2020).

2.6 The occupational therapy (OT) role with ASD and inclusion

Diversity and inclusion are considered issues that occupational therapy must address (Taff & Blash, 2017). Occupational therapy plays a vital role in implementing inclusive education, as presented by a study conducted in South Africa. Applying environmental modifications and adaptations that meet the diverse abilities of students is what occupational therapists focus on and aim to do, in addition to supporting children, parents, and teachers. Thus, enhancing the child's abilities and increasing the opportunity to have full academic and social participation in the school setting (Steinhoff, 2015). Further, occupational therapists support teachers and empower them by providing techniques and skills to change in an inclusive environment and teaching techniques to reach the best meeting for all students' needs. At last, the study showed the significant role of the occupational therapist in supporting the mothers of children with special needs (Steinhoff, 2015). The American Occupational Therapy Association (AOTA) emphasized the role of school occupational therapy practitioners in enhancing children's abilities to engage and participate in the activities of the school setting (Positive & Intervention, 2015).

A newly developed program called ''a professional development program'' provided by occupational therapists to support the school staff's abilities in enhancing the participation of children with autism and their peers was clarified in a study conducted by (Rajotte et al., 2022). This program adopted five methods including (1) occupational therapy presence in a regular manner, (2) needs analysis, (3) team coaching, (4) individual

coaching, and (5) content that concentrates and focused on the characteristics of inclusive educational context. The findings showed that team and individualized coaching create the opportunity for frequent communication and interaction between the school staff and occupational therapist, enhancing the collaboration needed and developing personalized and team support. In addition to implementing modern practices and techniques in collaboration with the occupational therapist, creating tangible training content that could reflect positively among all students, not just students with ASD (Rajotte et al., 2022). Thus, the modalities and methods adopted by this program were found to be promising to support the school staff in improving all students' participation including students with autism. Moreover, empowering the staff to implement changes in their practices to create a more inclusive system for ASD children within schools (Rajotte et al., 2022). To some extent, these findings were consistent with the study conducted in South Africa (Arendse, 2019) which aimed to describe and investigate how the collaboration between the occupational therapist and the teacher will affect the implementation of a classroom approach to improve inclusive education through addressing support strategies for learning. The results showed that teachers valued the existence of occupational therapists with them in classes and they become have more insight into the learning barriers and what to do to overcome those barriers and support the learners effectively (Arendse, 2019). Therefore, this study highlighted the significance of providing a hands-on approach in transferring the needed skills to teachers, since the teachers often struggle to have such kind of actual support and practice inside their classrooms rather than having workshops. Accordingly, the roles of occupational therapists are changing from working in a special school setting to providing the needed assistance and support to public mainstream school teachers. On the other hand, occupational therapists become giving

hands-on support to teachers inside their classes, thus they are not just playing a consultative role only anymore (Arendse, 2019).

Various challenges were faced by teachers when supporting the educational engagement of students with ASD. The study conducted by Grandisson et al. (2020) aimed to explore how can occupational therapists play a role in enhancing the school staff capacity through training and guidance to help children with ASD and reach the goal of improving their participation in the school context. However, this study brought to light several remarkable concerns of teachers. These included frequent tantrums, dependence on others, a lack of motivation and initiative during activities, in addition to heightened anxiety levels. In response to these challenges, the study presented a tailored practice model named Response to Intervention (RTI) (Grandisson et al., 2020), which is a based practice model that specifically designed for the educational environment in order to be welcoming and serve the ASD students' needs and differences who aged 5 to 12 years old, the This model consists of four steps including (1) presenting and defining the therapist's role, (2) assessing the needs, (3) developing and implementing the action plan, and (4) performing follow-ups (Grandisson et al., 2020). Moreover, establishing an alliance between the school staff and occupational therapist was targeted by this approach to develop a common action plan for improving children with ASD participation in the school's activities (Grandisson et al., 2020). This model played a part in the improvement of staff's understanding of the approaches that can support their practices. Thus, the support provided by the occupational therapists for varied school staff can contribute to better inclusion of children with ASD in addition to enhancing the full participation of them and their peers (Grandisson et al., 2020). It's worth mentioning that sensory processing disorders exhibited by students with ASD can also be considered a challenge

and a concern when including children with ASD, as these disorders may significantly affect their participation in valuable occupations such as learning, which in turn can lead to anxiety, distraction, and restricted participation within the school context (Jones et al., 2020). For that reason, increasing awareness toward those sensory issues and environmental adaptations to adjust the requirements of children with ASD are essential to take into account when including children with ASD (Gentil-guti et al., 2021). Consequently, in this area, the occupational therapists play a vital role in giving appropriate training for the staff regarding those sensory issues, modifying the surrounding environments to better meet the sensory needs of students with ASD, in addition to providing appropriate interventions to address students' challenges (Roberge & Crasta, 2022).

Occupational therapists believe in the significant role of early childhood inclusion as a foundation for later participation and engagement in the activities of the school's context (Riley et al., 2017). Thus, occupational therapists play a significant part in fostering preschool inclusion through collaboration with various stakeholders, including parents and educators. The aim is to enhance children's social functions, self-regulation, and overall participation in educational settings (Riley et al., 2017). Occupational therapy contributes to early childhood inclusion by putting in place the essential environmental modifications and assistive devices, considering family involvement and their priorities, enhancing emotional and social development, creating and increasing the child's opportunities to have playful learning, and employing various techniques that can support early childhood inclusion (Riley et al., 2017).

2.6.1 School-Based Occupational Therapists

Numerous studies highlighted the potential role of Occupational therapists in significantly contributing to more inclusive and effective educational practices, emphasizing the significance of collaboration, diversified research, and a shift in focus from a disability-centered to an ability-focused approach.

In 2016, the World Federation of Occupational Therapists (WFOT) issued a document advocating for inclusive education as an indisputable entitlement for children and youth. An analysis of 127 articles that focus on "occupational therapy" and "school," spanning from 1988 to 2017, reveals the United States' primary role in the field, featuring a significant number of professionals, researchers, and institutions. However, the research tends to lack diversity, often concentrating on motor rehabilitation and collaborative performance models of occupational therapists in school settings, particularly related to physical rehabilitation (De Oliveira Borba et al., 2020). Two additional studies from Switzerland and England reinforced the findings of the previous mapping review, highlighting the significant role of occupational therapists within school education teams. However, there was a divergence in the approach to OT services, with an emphasis on the holistic and comprehensive role of OT within schools (Echsel et al., 2019; Boyle & Salazar Rivera, 2020).

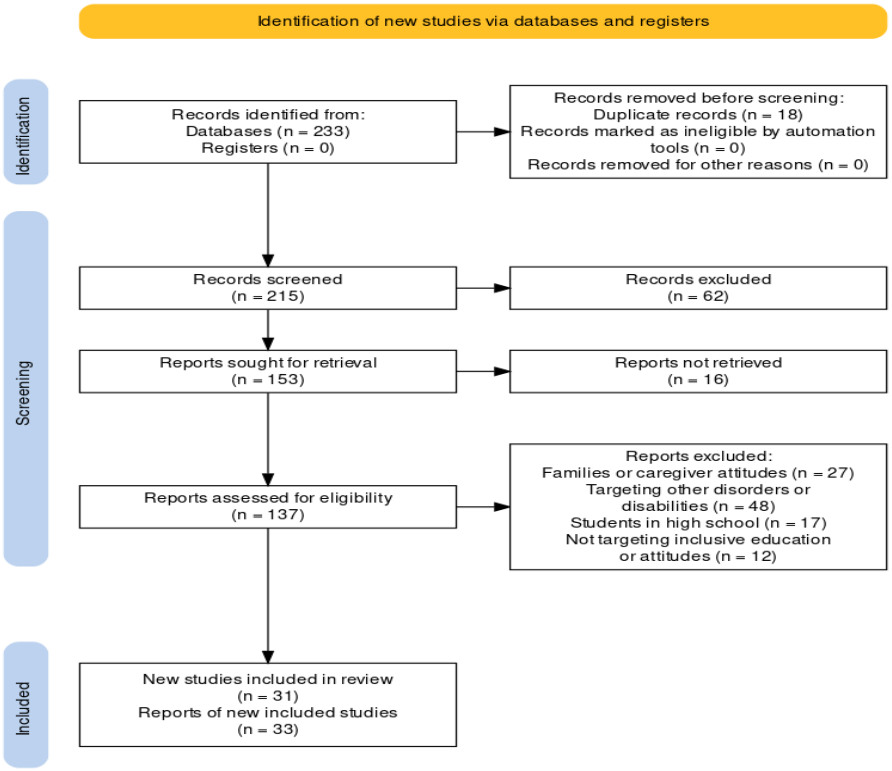
The Swiss study highlighted the importance of integrating occupational therapy professionals into mainstream school education staff, drawing inspiration from practices observed in USA, Canada, Australia, and New Zealand. School-based occupational therapists bridging the gap between home and school and between health and education systems through developing the appropriate collaboration with various essential

stakeholders in the inclusive education process (Echsel et al., 2019). Their main focus was on promoting children's participation in meaningful school-related activities, employing the practice of "reframing" to improve educational outcomes by changing perspectives and incorporating input from both parents and children. This shift from a disability-centered to an ability-focused, strength-based approach facilitated active participation in school and interaction with peers (Echsel et al., 2019). On the other hand, the study conducted in England investigated the delivery of OT in schools using a comprehensive model, primarily offering targeted and specialist support during the research period, with varying levels of involvement in universal support. It recommended adopting the three-tiered school-based OT model to enhance education for students with special needs, promote inclusive education principles, and emphasize collaboration with school staff in addition to stress addressing teachers' and teaching assistants' needs for sustainability and effectiveness (Salazar Rivera & Boyle, 2020).

2.7 Teachers attitudes toward inclusion

To allocate appropriate literature findings regarding the teachers' attitudes toward including children with ASD, a computerized literature review was conducted using both manual searches for pertinent articles and computerized searches in several databases including PubMed, MEDLINE, and CINEHAL. Mesh terms related to the targeted population and outcomes were incorporated into the search strategy. Furthermore, filters were applied for language, human studies, publication date, and age group. PubMed was the principal platform used to refine the search strategy. Finally, all chosen reference lists were reviewed and checked. All relevant articles were uploaded into EndNote, duplicate entries were systematically identified and removed. The selection of the studies was

implemented by the first researcher through checking the titles and abstracts of the relevant articles, however, 23 articles were fully reviewed due to the difficulty to make a decision between them based solely on titles and abstracts. The researcher selected all the studies that are related to the study objectives and excluded studies that targeted parents' or caregiver attitudes, studies that targeted attitudes toward other types of disabilities and disorders, the studies that have a population of teachers for students in high schools, and studies which not targeting inclusive education or attitudes. **PRISMA Flow Chart was used to clarify the selection process**.



It’s worth mentioning, that the last update for the literature were conducted on March 2024.

2.7.1 The concept of attitude

Psychologically speaking, an attitude refers to a complicated correlation of emotions, behaviors, and beliefs that targets a specific person, object, thing, or event. These evaluations or beliefs lead to being mostly positive, negative, or uncertain (Zimpardo and leippe, 1991). Attitudes often arise from personal or upbringing experiences and handle significant influence over people's actions and behaviors. Attitudes are generally constant, but this does not mean that they are immune to change (Jury et al., 2021).

The attitude's main components basically include three key aspects: First, the cognitive component, it includes the individual's convictions and thoughts toward any subject. Second, the effective component, it considers the emotional responses that get activated by some people, events, issues or objects. Third, the behavioral component, it stands for how an individual's actions are affected by their attitudes (Lautenbach & Heyder, 2019). This definition of attitude and its components was used in the field of inclusive education. It maintained that positive attitudes align with advantageous emotional and cognitive responses, leading to favorable behaviors that support inclusion (Lautenbach & Heyder, 2019). This helpful stance encourages a huge beginning to implement the required adjustments for the inclusion of all divergent students in the typical learning process (Lautenbach & Heyder, 2019). Following the planned behavior theory, attitudes toward subjective norms, behavior, and perceived behavioral control are predictive of intentions to undertake specific actions. In the educational context, the positive attitudes of teachers towards inclusion are often viewed as prerequisites or facilitators for the successful adoption of inclusive practices (Avramidis & Norwich, 2002). This recognition has pushed an increased emphasis on researching teachers' attitudes towards inclusion (Avramidis & Norwich, 2002).

2.7.2 Levels of Teachers' attitudes toward inclusion of children with ASD

Teachers' attitudes toward inclusion were widely explored and discussed through literature as their attitudes are considered the main cause behind how effective inclusion is for children with special needs (Boyle et al., 2020). Previous cross-sectional studies revealed inconclusive and conflicting findings regarding teachers' attitudes toward inclusion of children with ASD, which reflected three levels of attitudes including 1) positive attitudes. 2) neutral attitudes. 3) negative attitudes (Gómez-marí et al., 2022). The systematic review of cross-sectional studies conducted in 2022 by Gómez-marí et al, found that the attitudes of teachers varied across several studies, as they found that from 16 studies included in the systematic review, four studies ensured that teachers adopt positive attitudes toward including students with ASD in regular schools, while six studies confirmed neutral attitudes and one study found teachers holding negative attitudes toward inclusion of students with ASD (Gómez-marí et al., 2022). The majority of studies conducted in various countries demonstrated positive attitudes among teachers regarding including children with ASD ranging from slightly positive to highly positive attitudes (Al Salahat & Zaharudin, 2022; Garrad et al., 2019; Rayess, 2014; Tsegaye, 2024; Pervin, 2016) While some studies demonstrated neutral attitudes such as (Alkinj et al., 2022) conducted in Jordan, (Wittwer et al., 2023) conducted in Germany, and (Engstrand & Roll-Pettersson, 2014) which was held in Sweden. Rarely studies demonstrated negative attitudes such as a study conducted in Saudi Arabia in 2016 by (Alamri & Tyler-Wood, 2016) and a study conducted in Iraland in 2022 by (Leonard & Smyth, 2022).

2.7.3 Factors related to teachers' attitudes toward including children with ASD

Previous studies showed that the teachers' attitudes toward inclusive education may influenced by several variables and they depend on them, such as the teacher's gender, category, age, qualifications, work orientation, self-efficacy, and years of teaching (Saloviita, 2020). It is worth mentioning that the most variable found to represent a clear distinction in attitudes of teachers in children's inclusion was the teacher's category. Greater positive attitudes were shown by special education teachers (Rayess, 2014), while the lowest numbers were shown by subject teachers, and classroom teachers were in between (Saloviita, 2020). Another review that explored other variables that could affect teachers' attitudes toward inclusive education of children with ASD in specific such as culture, experience, training, and knowledge is the systematic review of cross-sectional studies that was conducted in 2022. This review found out that there is a major correlation between knowledge about inclusive education, training and positive attitudes (Gómez-marí et al., 2022) which was coherent with the results of a Saudi Arabian study that was conducted by middle school's teachers (Aldosari, 2022), besides studies conducted in Jordan (Alkinj et al., 2022) and Beirut (Rayess, 2014), as more information about inclusion that causes more comfort throughout implementation inclusion, thus, leading to more positive attitudes (Wittwer et al., 2023) (Beghin, 2021). Furthermore, it found that self-efficacy contained a positive relationship with attitudes and this finding aligned with study conducted in turkey in 2018 (Özokcu, 2018), as teachers' self-efficacy is related to the teachers belief in their abilities and skills to support and teach all students regardless of their diverse needs, in addition to their abilities to create inclusive and supportive environment that meets all students needs and foster their participation and engagement, thus, make students feels valued and welcomed (Woodcock et al., 2023). There were

contradicting findings regarding experience and its effects on the attitudes of teachers (Gómez-marí et al., 2022), however, the study conducted in Bangladesh found that teachers with more than 15 years of experience showed more positive attitudes (Pervin, 2016). Meanwhile, the culture variable findings showed that the culture could lead to either positive or negative attitudes demanding on what services are provided regarding inclusion for ASD children and the policies followed (Alamri & Tyler-Wood, 2016; Gómez-marí et al., 2022). But, diverse and helpful culture that adopts efficient policies about inclusion and spreads the awareness programs of inclusive education and ASD might influence the attitudes of teachers positively (Gómez-marí et al., 2022; Mónico et al., 2020) On the other hand, the gender variable findings showed that males have less positive attitudes than females which goes against the findings of (Pervin, 2016) which highlighted that males demonstrated more positive attitudes than females. However, a single survey showed that there is no difference between both genders' attitudes (Gómez-marí et al., 2022) which contradicts Aldosari,2022 review results that took into consideration the relationship between the attitudes of teachers and their gender (Aldosari, 2022). For the age variable, contradicting findings were discussed in the literature, as (Iliadou, 2023) highlighted that older teachers demonstrated more negative attitudes than younger ones, and this can hinder the inclusion process of children with ASD, as older teachers often have leadership roles within schools, while a study conducted by (Pervin, 2016), revealed that teachers' who were above 40 showed more positive attitudes than younger ones. However, the study performed by (Russell et al., 2022) highlighted that teachers between 20-30 Years were adopting more positive attitudes toward inclusion. A study conducted in Beirut by (Rayess, 2014) revealed no association between teachers attitudes toward including children with ASD and their

gender, age, and years of experience. Moreover, the lack of resources and funding needed for inclusion can influence teachers' attitudes negatively (Russell et al., 2022).

Teachers' attitudes toward inclusive education could be influenced by the child's type of disability, as the study by Jury, Perrin, Rohmer, et al. (2021) showed. Cognitive disorders and motor impairments gained more positive attitudes from teachers than their attitudes toward the inclusion of students with ASD. Moreover, the study showed that even special education teachers' attitudes were influenced and changed according to the specificities of students' type of disability, just like the general education teachers (Jury et al., 2021). While it is evident that training of teachers is a powerful tool for fostering inclusion (Jury et al., 2021; Pervin, 2016). There was another study that was conducted in Northern Turkey by Kisbu-Sakarya and Doenyas (2021) examined how to increase the teacher's willingness to teach children diagnosed with ASD in inclusive classes by giving further and special education training. Training improved teacher's behavioral intentions about inclusive education of children with ASD as the findings of the study revealed. However, the training turned out to be not really affective in creating a fundamental change in teacher's attitudes (Kisbu-Sakarya & Doenyas, 2021) which go with the findings of systematic review of cross-sectional studies conducted by (Russell et al., 2022) who emphasized that training did not obviously lead to more positive attitudes. These findings are not in harmony with the study carried out by Jury et al.(2021) and Engstrand and Roll-Pettersson (2014) who reported that training actually led to a positive change in teachers' attitudes (Engstrand & Roll-Pettersson, 2014; Jury et al., 2021) in addition to the study conducted by (Memisevic et al., 2021) which emphasized that training and self-efficacy were significantly influenced teachers' attitudes. This goes with a systematic study in which findings showed that educating the teachers and fostering them toward ASD would

grow their capacities about the disorder, therefore, they will be able to successfully manage students with ASD and benefit them better. As a result, the children's improvement and abilities within inclusive classes will be developed (Aller, 2017). On the other hand, the necessity of revising the training content was an essential interest for the authors, because it will positively reflect the self-efficacy and teachers' attitudes (Kisbu-Sakarya & Doenyas, 2021). Even the severity of symptoms experienced by a student with ASD and the type and degree of difficulties teachers have with students determine and influence their attitudes toward inclusion for students with ASD (Jury et al., 2021). A study conducted by (Jury et al., 2021) found that teachers showed a positive attitude for the inclusion of ASD students with no difficulties or with cognitive difficulties. At the same time, they expressed a less positive attitude with children with ASD who have behavioural difficulties and behavioural and cognitive difficulties. As such, there is a suggestion to not use the concept "child with autism " when including the students without determining and specifying the students' abilities and the difficulties faced by them because that may reinforce the negative attitudes regarding their inclusion (Jury et al., 2021). In addition to the severity level, knowing about student diagnosis was found to have an effect, as in a recent mixed-method study conducted in Singapore by Nah and Tan about the effect of diagnostic labels on teachers' perceptions of behaviours of ASD students, teachers who were aware of the diagnosis and given information about ASD diagnostic labels which provide an alternative for atypical behaviour were found to express more positive attitude related to the student's behaviours in comparison with who were not aware of the diagnosis. In addition, the study highlighted the importance of teachers training to understand and support ASD students (Nah & Tan, 2021).

Another pilot study conducted in 2021 to investigate the impact of social support on teachers' attitudes toward inclusion by (Desombre et al., 2021). The study presented three types of social support: (1) instrumental support, which relates to giving assistance such as tools and services or sharing roles and responsibilities, (2) informational support, which refers to providing feedback, advice, recommendation, and problem-solving guide, (3) Emotional support relates to exchanges of concern, empathy, feeling, prompting, and motivation. Moreover, there are many resources for social support like: peers, work heads, or other resources like training, assistance from a team of experts, and support within the classroom (Desombre et al., 2021). The results showed that the support that teachers receive improves their attitude, which again highlights the importance of supporting educational inclusion (Desombre et al., 2021).

Not just teachers, the public stigma of ASD children and their peers' attitudes were also examined by a cross-sectional study conducted in elementary school in a French city (Aubé et al., 2021). Aubé and colleagues concluded that children with ASD peers have judged children with ASD to be less warm and less competent than typical children (Aubé et al., 2021).on the other hand, In a study conducted in a French city, researchers investigated peers' attitudes by creating and validating the Children's Attitudes Toward Autism Questionnaire. The findings revealed a significant to moderate association between children's attitudes within the school context and their behavioural intentions outside the school (Derguy et al., 2021). The results further indicated that attitudes toward children with ASD tended to become more positive as children aged, correlating with the development of reasoning skills and a better understanding of social norms. Gender differences were explored, showing that girls exhibited more positive attitudes than boys.

Additionally, familiarity with disability was associated with more positive attitudes (Derguy et al., 2021).

A previous study conducted by Pellicano et al. (2018) to examine the illusion of educational inclusion emphasized that two main steps must be taken to overcome some failure situations during the inclusion process for children with autism. First, making change and progress toward inclusion in practice despite the theoretical argument about inclusion definition. Second, the need to motivate and encourage changes in local policies, systems, and structures by people who are committed to ideal inclusion, to work more generally across all jurisdictions, which reflected positively and encourage cultural change toward educators, peers, and parents (Pellicano et al., 2018). It is known that supportive school leadership and peer's attitudes and awareness play a significant role in the success of inclusion (Pellicano et al., 2018). However, teachers must work from this moment on to do what they can do to support the inclusion of these children and facilitate their access to inclusive education. People who are committed to inclusion must continue to bring about cultural change. Children and young people with ASD are already excluded from many opportunities because Society does not understand what it means to be autistic. Their rights to inclusive education should not be ignored any longer (Pellicano et al., 2018).

2.8 Summary

Previous studies emphasized the importance of inclusive education for children with ASD to enhance their academic achievement and social skills, in addition to its benefits for other typical students, the school environment, and school staff. Moreover, the significant role of teachers' attitudes in the success of the inclusive education of children with ASD was highlighted. However, several factors impacted teachers' attitudes, with some factors yielding contradictory findings regarding their effect, such as age, gender, teaching experience, academic qualifications, years of ASD-specific teaching, training, knowledge of ASD, and cultural background. On the other hand, other factors were found to have a positive impact on teachers' attitudes including social support, teachers' efficacy, and belonging to the category of special education teachers. Conversely, certain factors were found to negatively affect attitudes, such as inadequate funding and resources, the type and extent of difficulties encountered by teachers, the severity of symptoms experienced by students with ASD, and belonging to the category of general teachers. Managing policies, supporting teachers, addressing difficulties they go through, and serving their needs are crucial to promoting their attitudes, thereby fostering the success of the inclusion process.

According to the literature, Occupational therapy has a significant contribution to promoting the implementation of inclusive education for students with ASD. Following tailored interventions, the OT professional can enhance the student's engagement and participation in school activities by addressing their needs and adapting the environment to foster a welcoming surrounding that accommodates their differences including their sensory needs and the utilizing of visual aids. Additionally, OT serves as a valuable resource for teachers supporting them with strategies and techniques as well as acting as

a model to enhance their skills in managing the obstacles and the behaviors of students with ASD.

Table 4: Summary of Reviewed Studies on Teachers' Attitudes Toward Inclusive Education for Students with ASD

Authors/Year	**Country**	**Study design**	**Data collection tool**	**Main results**	**Factors and their attitudes according to literature.**		**Effect on**
					Positive	**Negative**	**Contradicting findings**
(Tsegaye, 2024)	Addis Ababa, Ethiopia	Cross-sectional	The Autism Attitudes Scale for Teachers (AAST) The Autism Stigma and Knowledge Questionnaire (ASK-Q)	Teachers had slight positive attitudes towards inclusive education and adequate knowledge Teachers between the ages of 20 and 25 had 90% lower knowledge when contrasted with teachers above 40. Positive effects of knowledge were found on Teachers' attitudes	▪ Teacher Efficacy. ▪ Social support ▪ Teachers 'category (special education)	▪ The severity of symptoms experienced by a student with ASD in terms of behavioral and cognitive difficulties. ▪ The type of disability or disorder (ASD) ▪ Lack of resources and funding.	▪ Teachers 'category (general teachers). ▪ Gender. ▪ Training. ▪ Knowledge ▪ Age. ▪ Teaching experience. ▪ Culture. ▪ Years of ASD-specific teaching. Academic qualification
(Memisevic et al., 2021)	Bosnia and Herzegovina	Cross-sectional	The Autism Attitude Scale for Teachers (AAST)	Positive attitudes of teachers towards inclusion of students with ASD. Teachers who had ASD training and who felt competent to work with children with ASD had more favorable attitudes. Gender, age, and education level had no significant effect			

				on the teachers' attitudes
(Jury, Perrin, Rohmer, et al., 2021)	France	Cross-sectional	An online questionnaire. build on Mahat' work (2008).	Teachers' attitudes were more favorable toward students with MI than students with CD or students with ASD. Special education teachers had more positive attitudes than general teachers. Special education teachers expressed less favorable attitudes toward including students with ASD in comparison with students with other types of disabilities.
(Jury, Perrin, Desombre, et al., 2021)	France	Cross-sectional	aquestionnaire build on Mahat' work (2008)	Teachers demonstrated more positive attitudes toward including students with ASD with no difficulties, in comparison with those with behavioral difficulties, behavioral and cognitive difficulties. Teachers had no difference in their

				attitudes regarding including students with ASD with no difficulties in comparison with those with cognitive difficulties.
(Alkinj et al., 2022)	Jordan	Cross-sectional	knowledge of ASD (AIQ). The Autism Attitude Scale for Teachers (AAST)	Teachers hold neutral attitudes towards including students with ASD in Jordanian schools. Positive relationship between attitudes and training and knowledge in ASD. No association between attitudes and educational role, experience, academic qualification, age, gender, or school level.
(Pervin, 2016)	Dhaka City, Capital of Bangladesh	Cross-sectional	TATIS (Teacher Attitudes toward Inclusion Scale)	Teachers' attitudes toward including pupils with ASD in regular classrooms are slightly positive. Insufficient knowledge and lack of training are related to the negative attitudes.

	The attitude of the male teachers was slightly more positive than the attitudes of female teachers. Teachers with age above 40 were more supportive of inclusion than younger teachers with age below 40. Teachers with a bachelor and Masters Degree have lower attitudes than teachers with a higher secondary degree. Teachers who had teaching experience below 11 and above 15 years showed more positive attitudes. Teachers who had contact with a student with ASD in the classroom held more negative attitudes than those who did not have such exposure. Teachers who have proper training (adequate and formal training) showed more

				positive attitudes ASD compared to teachers without training.
(Garrad et al., 2019)	Australia	Cross-sectional	The Autism Attitude Scale for Teachers (AAST)	Teachers' attitudes were found to be highly positive. Low correlation was reported between attitudes and ASD-specific teaching experience, and the number of attendances to ASD-specific professional development courses. Low correlation demonstrated between training levels/years of specific experience on teachers' attitudes
(Alamri & Tyler-Wood, 2016)	Saudi Arabia (Saudi) and the United States (U.S.)	Cross-sectional	The Autism Attitude Scale for Teachers (AAST)	Saudi Arabian teachers had negative attitudes toward the inclusion of children with ASD while the U.S teachers have positive attitudes This difference could stem from disparities in their

				respective histories of providing services and inclusive education between the two countries
(Özokcu, 2018)	Turkey	Cross-sectional	Sentiments, Attitudes, and Concerns about Inclusive Education Scale (SACIE-R) and the Teacher Efficacy for Inclusive Practice (TEIP) Scale.	Positive significant relationship between teachers' attitudes and self-efficacy for inclusive practices. teacher self-efficacy is considered as a significant predictor of teachers' attitudes toward inclusive education.
(Wittwer et al., 2023)	Germany	Cross-sectional	Autism Stigma and Knowledge Questionnaire (ASK-Q). The Self-Efficacy for Autism	Teacher's attitude toward the inclusion of autistic students was, on average, rather positive. Teacher trainings lead to teacher's positive attitude. Experience with teaching autistic students, knowledge and

			Scale (TSEAS) The Autism Self-Efficacy Scale for Teachers (ASSET) Autism Attitude Scale for Teachers (AAST)	self-efficacy associated with more positive attitudes.
(Gómez-marí et al., 2022)	. Valencia	Systematic Review of cross-sectional studies	ATIAC: Attitude Toward the Inclusion of Autistic Children; AAST: Autism Attitude Scale for Teachers; STATIC: Adaptation of Scale of Teachers' Attitudes Toward Inclusive	The results revealed inconclusive levels in teachers' attitudes: Some of the teachers reported positive attitudes, some neutral, and some negative. Higher levels of self-efficacy are associated with more positive attitudes toward inclusion. Experience influenced attitudes positively. Training lead to more favorable attitudes toward including children with ASD.

			Classrooms. Attitude Toward the Inclusion of Autistic Children Impact of Inclusion Questionnaire (IIQ).	knowledge regarding autism was found to positively influence attitudes. Gender: Some studies found that female teachers exposed more positive attitudes, while other studies found the opposite. and some studies did not find any differences in attitudes between the two genders. Culture: the results are inconclusive. However, it is clear that a diversity-friendly culture, with inclusive policies, that enhance and disseminate awareness programs on ASD, may lead to a enhancement in teachers' attitudes.
(Iliadou, 2023)	Greek	Cross-sectional	My Thinking About Inclusion Scale.	Teachers demonstrated moderately positive attitudes on the inclusion of students with ASD

				Age was found to significantly influence teachers' views. Specifically, that older teachers had much more negative attitudes about the including students with ASD
(Salo viita, 2020)	Finland	Cross-sectional	Teachers 'Attitudes towards Inclusion Scale (TAIS) Teachers' Sense of Efficacy Scale (TSES)	General teachers showed negative attitudes. The special-education teachers showed positive attitudes. Teachers' work orientation and self-efficacy had low associations with their attitudes.
(Rayess, 2014)	Mount Lebanon and Beirut	Cross-sectional	The Autism Attitude Scale for Teachers (AAST)	Teachers' attitudes are generally positive Special educators had significantly more positive attitudes than general educators. Teachers with in-service or formal training in educating students with ASD held more positive attitudes. Gender, age, and years of experience

				did not yield significant difference in teachers‟ attitudes
(Leonard & Smyth, 2022)	Ireland	Cross-sectional	Impact of Inclusion Questionnaire (IIQ) designed by Hastings and Oakford (2003).	Teachers had predominantly negative or neutral attitudes Gender, training in Special Educational Needs (SEN) and/or inclusion or type of training in SEN and inclusion, number of years teaching experience, did not influence attitudes Teachers who had adequate resources to implement inclusion were significantly had more positive attitudes.

Chapter 3 Methodology

3.1 Chapter Overview

This chapter provides a detailed account of how the research study was conducted. The chapter is divided into several sections: study design, study setting, study population, sampling method and sample size, participant recruitment procedures, data collection instrument, data analysis, and ethical considerations. Each section will be thoroughly explained to offer a comprehensive understanding of the research methodology employed in this study

3.2 Study design

To address the study objective of examining the attitudes of Palestinian teachers towards the inclusion of children with ASD, a cross-sectional research design was employed. This design allowed for the collection of data at a single point in time, enabling a comprehensive exploration of the teachers' attitudes within the given context (Levin, 2006). The utilization of a cross-sectional research design in this study offers several advantages. First, it enables cost and time savings as it does not require follow-up data collection. Second, the design allows for the evaluation of multiple variables and outcomes, providing a comprehensive understanding of the research topic. Lastly, when the sample is drawn from the entire population, a cross-sectional design permits the estimation of the prevalence of desired results. These advantages make the cross-sectional design a valuable approach in addressing the research objectives of this study (Wang & Cheng, 2020). Nevertheless, limitations exist,

including difficulties in developing cause-and-effect relationships (Setia, 2016), potential outcome variations across different timeframes of the study, and the need for a large sample size to ensure the precision of the study (PHAST, 2017; Levin, 2006; Wang & Cheng, 2020).

3.3 Patient and Public Involvement (PPI)

It is important to involve PPI representatives to add value to the current study. Involving PPI in research has both pragmatic and moral reasons (Bagley et al., 2016). From a moral perspective, the public who is involved in the study has the right to share their thoughts and make a decision toward the research (Bagley et al., 2016). Which include the study design, study procedure, and how the study results will be generalized and implemented when the study is completed. From a pragmatic perspective, public involvement adds advantages to the research in terms of relevance, and the research is conducted ethically (Bagley et al., 2016). In the current research, the PPI representatives served as collaborators rather than participants to support the researcher. As they were three teachers and two of special education colleagues from the Department of Education and Guidance in the Ministry of Education. The PPI was asked to read and fill out the questionnaires to note any details regarding the suitability, clarity, and even design of the questionnaires. In addition, the researcher clarified the details of the research process so that they could express their opinion on any modifications that make the research more appropriate.

3.4 Study Setting

The research was conducted in Governmental schools and kindergartens across different cities in Palestine, encompassing all cities in the West Bank. The deliberate inclusion of all West Bank cities aimed to achieve a substantial sample size crucial for the research's accuracy. However, the Ministry of Education took an essential role in identifying eligible schools and teachers according to the inclusion criteria. It provided the researcher with information about all West Bank schools and kindergartens including the area, the class levels, the schools' gender, and others, besides the emails of the schools and kindergartens to facilitate the distribution of the survey to all targeted participants.

3.5 Study Population

A total of 356 Palestinian teachers working in governmental schools and kindergartens across various cities in the West Bank, namely Nablus, Jenin, Tulkarem, Qalqilia, Ramallah, Jericho, Hebron, Bethlehem, and Jerusalem, were selected to participate in this study. The survey was sent to all West Bank schools via email, and a total of 487 schools and kindergarteners located in nine directorates responded to the sent emails. While 462 participants attempted to complete the survey, 356 of them completed the survey successfully.

Inclusion/Exclusion: Participants were deemed eligible to participate if they met the following conditions:

Table 5: Inclusion criteria for participants with justification

Inclusion	**Justification**
Teachers with more than one year of experience.	Having sufficient experience in teaching.
All teachers, regardless of having previous experience with children with ASD.	*To explore whether there are variations in attitudes based on prior experience in teaching children with ASD. *The lack of a unified and standardized diagnostic tool adopted by the Ministry of Education for diagnosing children with ASD may hinder the accuracy of statistics regarding the included children with ASD in schools and kindergarten, besides raising concerns about whether these children receive appropriate diagnoses or not.
Special education teachers, inclusive education officials, and educational counselors	To explore whether the knowledge, educational background, perception, awareness, and having enough resources about the disorder and inclusive education could influence attitudes

Table 6: Exclusion criteria for participants with justification

Exclusion	**Justification**
Teachers who are dealing with students who are above the age of 13.	The study solely focused on children aged 3 to 13.
Teachers with less than one year of experience.	Insufficient teaching experience may hinder the development of suitable attitudes.

3.6 Sampling and Sample Size.

This study aimed to recruit a convenience sample of Palestinian teachers. The convenience sampling procedure which is also called ‘’accidental sampling’’ is a common form of nonprobability sampling, as in this sampling method, the participants are chosen depending on their availability (Andrade, 2021). In the convenience sample, there is an unknown frame of the population, as it is not possible to access all participants and identify them individually (Andrade, 2021).

Sample size: The standard deviation of the TAIS among teachers has been reported to be ± 5.95. Therefore, the sample size was calculated using the assumptions of a total population of 40000, a 95% confidence interval, and a margin of error of 5%, yielding a sample of 370 teachers required to achieve the study objectives.

3.7 Participant recruitment procedure

In this section, the researcher, in collaboration with PPI, determined the appropriate method for data collection. After the approval from the Ministry of Education, the ministry notified potential schools and kindergartens meeting the inclusion criteria to facilitate the researcher's mission. Following that, the researcher received a list of these institutions. Furthermore, the Ministry of Education requested the transformation of surveys to Google Forms aligning with its policy which prohibits the researchers from being present in schools during operational hours. To distribute the surveys, the Ministry provided the researcher with email addresses for all schools in the West Bank, which were subsequently received by the school directors, who in turn disseminated the survey link to the targeted participants. The forms were

accompanied by a shortened version of the participant information sheet, translated into the Arabic language choosing clear and appropriate words that meet Palestinian culture (see Appendix D), in addition to a small paragraph to ask the participants if they agree to participate or not instead of the consent form to confirm their agreement before starting the online questionnaire. The researcher emphasized participants have the full right to decide whether to participate or not, without the need to give any reasons, and assured their ability to withdraw at any moment without any explanations or justifications. The eligibility criteria were provided in a form of question before participants began the questionnaires. If a participant did not meet the criteria, then the questionnaire was terminated. Once the questionnaires were completed by the participants, the results were sent to the researcher via email. It's noteworthy that before disseminating the questionnaires, the researcher conducted a pilot involving 5 participants, and their feedback regarding suitability, clarity, and even design of the questionnaires was provided to the researcher.

In this phase of the study, the PPI supported the process flow based on their familiarity with the ministry strategies. Furthermore, they assisted in ensuring that the research is conducted ethically and acceptably, and respects the participant's needs.

3.8 Data collection instrument

The online survey used consisted of six sections including 1) demographic information, 2) attitudes of teachers toward inclusive education, 3) attitudes of teachers toward including children with ASD, 4) the teachers' efficacy in inclusive practices, 5) knowledge of ASD, and 6) perception about inclusion.

3.8.1 The sociodemographic questionnaire

The sociodemographic questionnaire comprises two sections: the first section includes the participant information which contains questions related to the participant's age, gender, work directorate, living area, marital status, and academic level. The second section includes information regarding the educational role and experiences in interacting with children with ASD and special needs, which contains educational experience, educational role, type of learning subjects they managed, teaching level, general experience of ASD, duration of Experience in dealing with children with ASD, training attendance or interest in the inclusion of children with ASD, and type of teaching experiences for children with special needs (see Appendix D).

3.8.2 Teachers Attitudes Toward Inclusion Scale (TAIS)

To measure the attitude of the participants toward including children with special needs, the researcher used the Teachers Attitudes Toward Inclusion Scale Questionnaire. This questionnaire is derived from the Opinions Relative to Mainstreaming Scale (ORMS), TAIS contains a ten-point Likert-type scale emphasizing some themes such as the value of inclusion, child rights, predictable outcomes, and teacher's workload (see Appendix D). Scoring involves summing up items with values ranging from 1 to 5, with particular elements reserved before summation including the following items of the scale "1,3,5,6,8,9". Good reliability for TAIS was demonstrated in previous studies, with Cronbach's alpha ranging from α=.81 to .91. While lower reliability (α=0.69) was shown in the Arabic version in Saudi Arabia. Confirmatory Factor Analysis (CFA) was used to assist the construct validity for the

Arabic version of TAIS. However, the chi-square statics did not support the single-factor structure, but there were acceptable ranges for other fit indicators, and some potential impacts were acknowledged by a large sample size. With a positive correlation with attitudes and a significant negative correlation with concerns on the SACIE-R Revised Comprehensive Education Scale, there was a confirmation of convergent validity for the Arabic version. TAIS stands out for its feasibility as it is cost-free and available in English and Arabic versions, with clear scoring instructions (Saloviita, 2015).

It's worth mentioning that TAIS scale mean scores as overall or per item are interpreted based on the following criteria: 1.0 to 1.79 (Negative Attitude), 1.8 to 2.59 (Somehow Negative Attitude) 2.6 to 3.39 (Neutral), 3.4 to 4.19 (Somehow Positive), and 4.2 to 5.0 (Positive Attitude) (Adnil et al., 2022).

3.8.3 The Autism Attitude Scale for Teachers (AAST)

The researcher employed the Autism Scale for Teachers (AAST) to explore participants' attitudes toward inclusive education for students with Autism Spectrum Disorder (ASD), and (AAST) was initially improved by Olley et al.(1981). High internal consistency was revealed in the original study with a Cronbach's alpha of α=.91. Further studies, such as the studies that were conducted by Park,Chitiyo,and Choi (2010) (α=.87) and Park and Chitiyo(2011) (α=.87), revealed close high internal consistency. While a survey by Alkinj et al. (2022) reported a somewhat lower internal consistency of .70 (Alkinj et al., 2022).

Fourteen items rated on a 5-point Likert scale were comprised by AAST as follows: 1-strongly disagree, 2-disagree 3-unsure 4-agree, and 5-strongly agree (Low et al., 2020) (see

Appendix D). AAST scoring involves summing up the individual items' scores, however, all the scores of the negatively worded items in the scale should be converted to positive scores through reverse scoring before calculating the total score of the scale (Olley et al., 1981).

Exploratory factor analysis (EFA) examined the construct validity of the Arabic version of AAST by applying principal component analysis (PC), resulting in eigenvalues higher than one for each factor. For instance, a Laiser-Meyer-Olkin (KMO) value exceeding 0.50, and a substantial Bartlett's Test of Sphericity at α=0.05.A high level of construct validity was indicated by these findings (Alkinj et al., 2022). The AAST Arabic version revealed a Cronbach's alpha coefficient of 0.819 regarding reliability and a value of 0.776 regarding split-half reliability, both exceeding the accepted threshold of 0.70. As a result, it affirmed these findings that the Arabic version of AAST exhibits high reliability (Alkinj et al., 2022).

3.8.4 The Arabic version of the teacher efficacy for inclusive practices scale (TEIP-AR)

The researcher employed the Teachers Efficacy for Inclusive Practices Scales (TEIP-AR) to examine teachers' efficacy and its relationship with their attitudes. This scale comprises 18 items, using a 6-point Likert-type scale (see Appendix D). , to elaborate on three aspects: (1) efficacy in inclusive education, (2) efficacy in managing behavior, and (3) efficacy in collaboration (G. H. Alnahdi, 2019).

The reliability and validity across different cultures were demonstrated by the TEIP scale, with Cronbach's alpha ranging from α=0.85 to α=0.91 in different research conducted globally (Cardona-Molto et al., 2020).

Cronbach's alpha coefficients assisted the TEIP reliability in the Arabic version, resulting in .928 for the overall scale, .825 for the efficacy in managing behavior (EMP) subscale, .824 for the efficacy inclusive instructions (EII) subscale, and .822 for the efficacy in collaboration (EC) subscale, good internal consistency is indicated by these values. . The Rasch analysis, the exploratory factor analysis (EFA) statistics, and the confirmatory factor analysis (CFA) statistics were utilized to examine the psychometric properties of the proposed scale structure for the TEIP Arabic version. Based on those values, the scale showed an acceptable fit in terms of validity and reliability (G. H. Alnahdi, 2019) (see Appendix D).

3.8.5 Autism Inclusion Questionnaire (AIQ)

A questionnaire that examines the teacher's knowledge of ASD. The adapted Arabic version of the Autism Inclusion Questionnaire (AIQ) takes into consideration the teacher's knowledge across three aspects: (1) etiology, (2)diagnosis, and (3) intervention, containing 15 True\False questions (Alkinj et al., 2022) (see Appendix D).

To access validity, two initial methods were employed by the researcher. Firstly, studies rooted in DSM-IV criteria drew knowledge items for pervasive developmental disorders and studies evaluating ASD knowledge. Secondly, high accuracy in responding to knowledge items was exhibited by experts and researchers in the ASD field, specifically during an initial item tryout. Cronbach's alpha measured the internal reliability as α=.86 (Segall, 2008). However, the Arabic version of AIQ was found to be valid and reliable for measuring teachers' knowledge (Alkinj et al., 2022).

3.8.6 The Sentiments, Attitudes, and Concerns about Inclusive Education Revised (SACIE-R) Scale

The researcher employed the Sentiments, Attitudes, and Concerns about Inclusive Education Revised (SACIE-R) Scale, to examine and explore teacher's perceptions. 15 items were included in this scale to utilize a four-point Likert-type scale from 'strongly disagree' (score 1) to 'totally agree' (score 4) (see Appendix D). Good internal reliability for combined scales was demonstrated by SACIE with an alpha of α=.74. Moreover, acceptable to good internal reliability was shown by individual subscales with Cronbach's alpha values of α=.75 for sentiments, α=.67 for attitudes, and α =.65 for concerns (Forlin et al., 2011).

SACIE Arabic version was established to be both reliable and valid, with Cronbach's alpha of α=0.727 for the overall scale and α=0.793, α=0.636, α=0.611 for sentiments, attitudes, and concerns, respectively. Moreover, all items showed acceptable corrected item-total correlations that start with 0.33 and end with 0.550 (Alhumaid et al., 2022). To examine the factorial validity of Arabic version items, the Exploratory Factor Analysis (EFA) was used.

3.9 Data collection procedure

The researcher transformed the questionnaire into Google Forms in order to go with the policies of the Ministry of Education. Subsequent to obtaining the email list of West Bank governmental schools and kindergartens, the researcher distributed the online survey via emails, and all eligible schools and kindergartens were invited to participate in the study, as emails were sent to all the kindergartens and schools that have teachers who educate children aged from 3-13 years old. This procedure was continued until the desired number was

reached (convenient sampling). Governmental schools and kindergartens in the West Bank were the settings where the study was held.

Procedure: the researcher developed the research proposal during September and October 2022. After one month, specifically, in November 2022 the researcher filled out the electronic IRB and submitted the proposal to gain the ethical approval from the Arab American University (AAUP) Scientific and Ethics Committees. However, the researcher received permission to begin work on the study with the Ministry of Education on 26 May 2023, (AAUP-IRB Code NO.:2023/A/87/N, (see Appendix A). following that, in 14 of August, the researcher received the Facilitating a research mission letter from the AAUP (see Appendix B), however, on 30 August 2023, the researcher obtained permission from the Ministry of Education to begin the research at schools and kindergartens following their policy (see Appendix C).

In August 2023, the cross-sectional study took place. The Ministry of Education requested the transformation of surveys to Google Forms aligning with its policy which prohibits the researchers from being present in schools during operational hours. Before disseminating the questionnaires, the researcher conducted a pilot involving 5 participants, and their feedback regarding suitability, clarity, and even design of the questionnaires was provided to the researcher. Subsequently, the survey was distributed to the eligible schools and kindergartens. Participants were given a brief explanation regarding the study, in addition to a small paragraph to ask the participants if they agreed to participate or not instead of the consent form to confirm their agreement before starting the online questionnaire. Moreover, the eligibility criteria were provided before participants began the questionnaires. If a

participant did not meet the criteria, then the questionnaire was terminated. It is worth mentioning that the Internet protocol (IP) addresses were examined to ensure that no participant took the survey more than once. Each eligible participant who agreed to participate in the research completed six questionnaires including the sociodemographic questionnaire, the TAIS, the AAST, the AIQ, the TEIP-AR, and the SACIE-R forms. Once the questionnaires were completed by the participants, the results were sent to the researcher via email. In order to protect participant privacy, all collected data was kept anonymous, with each file assigned a code rather than names. The researcher stored all data on a password-protected laptop and the researcher is the only person authorized to access it. From November 2023 until January 2024, data entry was completed in addition to the analysis of these data by using the SPSS version 25c. By January 2024 a comprehensive results chapter was written.

Table 7: Timetable for data collection, analysis and write research paper.

Task	**2023-2024**									
	Aug.23	**Sep.23**	**Oct.23**	**Nov.23**	**Dec.23**	**Jan.24**	**Feb.24**	**Mar.24**	**Apr.24**	**May.2024**
Data collection										
Data analysis										
Write research paper										

3.10 Data Analysis

The researcher used the IBM SPSS Statistics for Windows, Version 26.0 for statistical analyses. Categorical data was presented as frequencies and percentages. While continues data was presented as mean ± standard deviation (SD) or median (interquartile) based on data normal distribution. The Kolmogorov-Smirnov normality test was used to determine whether variables are normally distributed parametric tests (Independent t-test and ANOVA test) to compare groups or non-parametric testing (Mann Whitney U test and Kruskal Walis test) was used to explore the association between attitudes and factors based on data normality. $p < 0.05$ indicated statistical significance.

3.11 Ethical consideration

This study was approved by the Arab American University ethical committee, NO.:2023/A/87/N, (see ethical approval letter, Appendix A). Permissions were obtained from the Palestinian Ministry of Education to conduct the study in accordance with the applicable regulations. Participants in this study provided informed consent electronically, as they were given the option to either participate or decline involvement in the research from the beginning of the online survey. Additionally, participants were explicitly informed about their right to withdraw from the study at any point without the need for providing a justification. They were assured that their decision to withdraw would not result in any adverse effects. In order to ensure participant privacy, all identifiable data collected through the electronic survey was anonymized. No personal names or identifiable information were used in the survey. Participants were informed about these measures to protect the

confidentiality and anonymity of their data. The researcher stored all data on a password-protected laptop and the researcher is the only person authorized to access it. The study data was used for the study purpose only and it was not discussed or shared with any irrelevant persons (just the researcher and the supervisory team). At last, study data will be stored for 10 years, in line with the data management policy at AAUP.

Chapter 4 Results

4.1 Recruitment

Participants recruitment commenced in August 2023 and concluded in November 2023. Convenience sampling was employed in the current study for participant's recruitment who are working in West Bank governmental schools and kindergartens. The online survey was distributed to a total of 487 schools and kindergartens located in nine directorates. A total of 462 individuals attempted to complete the online survey, and out of those, 356 individuals successfully finished and submitted the survey. This corresponds to a completion rate of 76.8%.

4.2 Statistical analysis

The lead researcher completed all of the statistical analysis in consultation with the supervisory team. Data were organized in a Microsoft Excel database and analyzed utilizing SPSS version 25.

4.3 Completeness and normality of the data

No missing data occurred due to the online survey's design, which required participants to answer all questions for submission. Subsequently, no instances of missing data were detected.

Large sample sizes allow for the application of parametric procedures despite deviations from normality. The central limit theorem asserts that, within large samples, the sampling

distribution converges towards normality, irrespective of the initial shape of the data (Ghasemi & Zahediasl, 2012). However, before conducting statistical analyses, a thorough assessment of the data distribution for normality was performed using a comprehensive approach. This procedure involved examining the data through various methods, including visual inspection using histograms, assessment of skewness and kurtosis, and conducting a formal normality test, specifically the Kolmogorov-Smirnov test. By employing these three approaches, potential discrepancies between visual inspection and formal tests can be addressed, thereby enhancing the accuracy of decisions regarding data distribution (Kim, 2013). Statistical tests and visual inspection of data showed that the majority of data were normally distributed. Therefore, suitable parametric tests were employed for further analysis.

4.4 Descriptive statistics

In the context of descriptive statistics, categorical demographic data were presented as frequencies and percentages while continuous data were represented as means and standard deviations (mean ± SD).

4.4.1 Sociodemographic characteristics

The sociodemographic characteristics of the study sample are presented in Table 8. The study included 356 participants, aged 22 to 65 years. The majority of the participants (36.0%) were in the 30-39 age range. More than half of the participants (*n* =232, 65.2%) were female (*n*=232, 65.2%), resided in urban areas (*n* =179, 50.3%), married (*n* =254,

71.3%), and held a bachelor's degree (*n* =294, 82.6%). Additionally, the majority of participants (20.8%) were employed in the directorates of Nablus and had more than 10 years of educational experience (*n* =160, 44.9%) (see table 8).

Concerning educational roles, a substantial proportion of the participants assumed the position of regular class teachers (*n* =219, 61.5%), primarily engaged in teaching primary-level students (*n* =201, 56.5%). Notably, the majority of the participants (*n* =197, 55.3%) had no prior experience in addressing the needs of children with Autism Spectrum Disorder (ASD). Out of the participants with experience in addressing the needs of ASD children, the majority (*n* =78, 49.1%) reported having 1-2 years of experience in this area. In terms of training, around half of the participants in the current study, constituting 50.3% (*n* =179), expressed a desire for training specifically related to Autism Spectrum Disorder (ASD), despite not having received any prior training. Moving on to experiences with students having special needs, a significant number of participants reported having taught students with special needs who were integrated into regular classes (*n* =108, 30.3%) (see table 9). Furthermore, the majority of the participants were primarily responsible for teaching the Arabic language subject (*n* =83, 23.3%) (see figure 2).

Table 8: Sociodemographic characteristics of the participants (n=356)

Variable	***n* (%)**
Age	
22-29	82 (23%)
30-39	128 (36%)
40-49	110 (30.9%)
50-59	32 (9%)
60-65	4 (1.1%)
Gender	
Male	124 (34.8%)
Female	232 (65.2%)
Work directorate	
Nablus	74 (20.8%)
Tulkarm	30 (8.4%)
Qalqilia	60 (16.9%)
Jenin	49 (13.8%)
Ramallah	43 (12.1%)
Hebron	25 (7%)
Bethlehem	46 (12.9%)

Jericho	17 (4.8%)
Jerusalem	12 (3.4%)
Living area	
City	179 (50.3%)
Village	137 (38.5%)
Camp	40 (11.2%)
Marital status	
Married	254 (71.3%)
Single	83 (23.3%)
Separated	9 (2.5%)
Divorced	10 (2.8%)
Academic level	
Diploma	11 (3.1%)
bachelor's	294 (82.6%)
Master	48 (13.5%)
Ph.D	3 (.8%)

Table 9: Descriptive statistics for educational role and experiences in interacting with children with ASD and special needs.

Variable	***n*(%)**
Educational experience	
1_2 years	44 (12.4%)
3_5 years	84 (23.6%)
6_10 years	68 (19.1%)
More than 10 years	160 (44.9%)
Educational role	
Regular class teacher	219 (61.5%)
Resource room teacher	42 (11.8%)
Special education teacher	39 (11%)
Educational counsellor	37 (10.4%)
Inclusive education official	19 (5.3%)
Teaching level	
Kg level	46 (12.9%)
Primary level	201 (56.5%)
Preparatory level	95 (26.7%)
More than one level	14 (3.9%)
General experience of ASD	
Yes	159 (44.7%)
No	197 (55.3%)

Duration of Experience in dealing with children with ASD	
1_2Y	78 (49.1%)
3_5Y	44 (27.7%)
6_10Y	19 (11.9%)
More than 10Y	18 (11.3%)
Training attendance or interest in the inclusion of children with ASD	
I already had training	98 (27.5%)
I am interested and I have never received training	179 (50.3%)
I am not interested and I have never received training	79 (22.2%)
Type of teaching experiences for children with special needs	
I previously taught people with special needs in a resource room.	33 (9.3%)
I taught children with special needs who were included in regular classes.	108 (30.3%)
I volunteered to work with children with special needs	10 (2.8%)
Indirect communication with children with special needs who are included in another class in my school.	24 (6.7%)
I learned about people with special needs at university	37 (10.4%)
None	85 (23.9)
More than one area	59 (16.6)

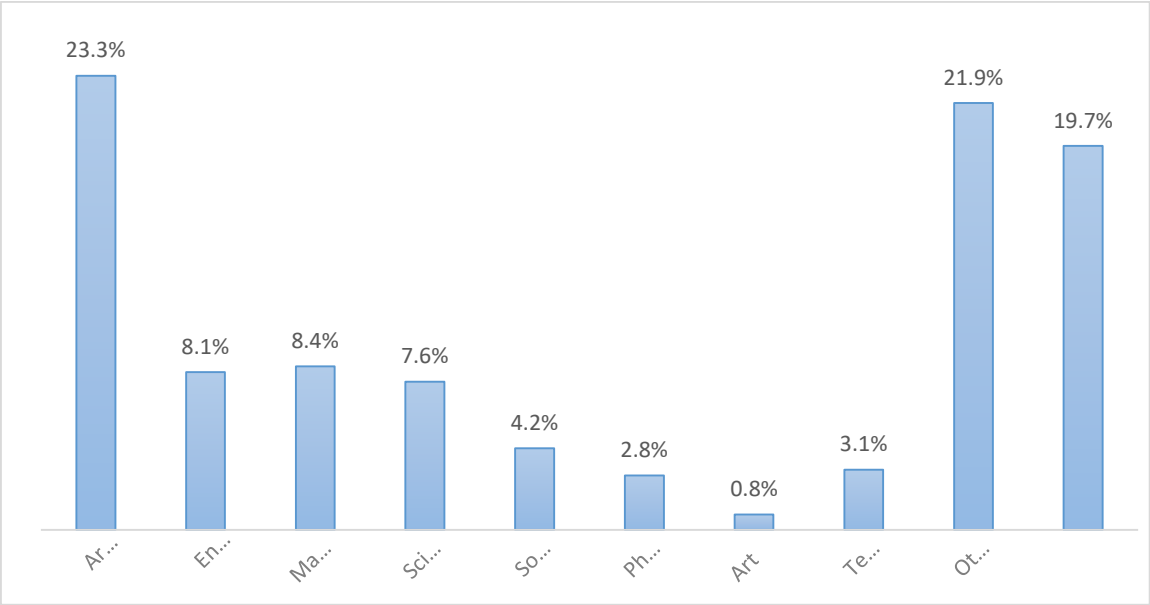


Figure (2): Type of subjects that teachers teach.

4.4.2 Attitudes toward inclusion of children with ASD

The following sections provide a descriptive analysis of teachers' attitudes towards the inclusion of children with ASD and special needs.

4.4.2.1 Autism Attitude Scale for Teachers (AAST)

The mean score on the AAST was 41.79 (SD=8.63), which is above the midpoint of the scale. This suggests that the surveyed participants hold an overall positive attitude towards the inclusion of children with ASD. The scores obtained on the AAST ranged from 18 to 66, indicating a diverse range of attitudes among the participating teachers.

The participants showed more negative attitudes toward items 1, 2, and 8 (see Figure (3)). Those items revolve around the teachers' ability to handle children with ASD without gaining specialized training. In addition to their concern about how children with behavioral challenges may affect the behavior of other typical children in the class.

Conversely, the participants showed more positive attitudes toward items 5, 9, 12, and 13, (see Figure (3)), as those items reflect the need of children with ASD for competent teachers to assist them to learn. Besides, the ability of children with ASD to successfully socialize with other typical children and obtain advantages from participating in regular class activities. For presentation purposes responses on the AAST were merged, as shown in Table 10.

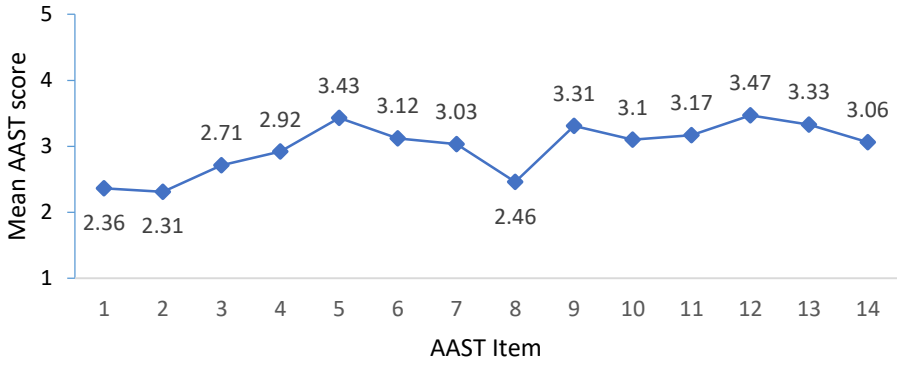


Figure (3): AAST results chart .

Table 10: Participants' attitudes toward inclusion of children with ASD.

Statement	Strongly disagree or disagree	Neutral	Agree or strongly agree	Mean (SD)	Estimate
1	Teachers with and without extensive special education training can help a child with ASD.				
	230 (64.6%)	63 (17.7%)	63 (17.7%)	2.36 (.97)	Negative
2	Mealtime behaviors of children with ASD are not disruptive and do not negatively influence the behavior of children around them.				
	242 (68.0%)	69 (19.4%)	45 (12.6%)	2.31 (.92)	Negative
3	Schools with both typically developing children and children with ASD enhance the learning experiences of typically developing children.				
	164 (46.1%)	103 (28.9%)	89 (25.0%)	2.71 (.97)	Positive
4	Typically developing children and children with ASD should not be taught in separate schools.				
	154 (43.3%)	62 (17.4%)	140 (39.3%)	2.92 (1.12)	Positive
5	Children with ASD can learn from a good teacher.				
	66 (18.5%)	85 (23.9%)	205 (57.6%)	3.43 (.94)	Positive
6	Regular schools are not too advanced for children with ASD.				
	101	103	152	3.12	Positive

	(28.4%)	(28.9%)	(42.7%)	(1.01)	
7	I do not mind that other children share class with their peers with ASD.				
	138	55	163	3.03	Positive
	(38.8%)	(15.4%)	(45.8%)	(1.15)	
8	Teachers not specifically trained in special education can be expected to deal with a child with ASD.				
	199	93	64	2.46	Negative
	(55.9%)	(26.1%)	(18.0%)	(1.02)	
9	Students with ASD are not too impaired to benefit from the activities of a regular school.				
	84	83	189	3.31	Positive
	(23.6%)	(23.3%)	(53.1%)	(.95)	
10	Schools with both typically developing children and children with ASD enhance the learning experiences of students with ASD.				
	106	96	154	3.10	Positive
	(29.8%)	(27.0%)	(43.3%)	(1.00)	
11	If I had the choice, I would not mind teaching in a school in which there were children with ASD.				
	119	60	177	3.17	Positive
	(33.4%)	(16.9%)	(49.7%)	(1.13)	
12	A good teacher can do a lot to help a child with ASD.				
	66	75	215	3.47	Positive
	(18.5%)	(21.1%)	(60.4%)	(.98)	
13	Children with ASD can socialize well enough to benefit from contact with typically developing children.				

	66 (18.5%)	103 (28.9%)	187 (52.5%)	3.33 (.94)	Positive
14	It is fair to ask teachers to accept children with ASD in their schools.				
	125 (35.1%)	77 (21.6%)	154 (43.3%)	3.06 (1.04)	Positive

Teachers' Attitudes Toward Inclusion Scale (TAIS)

The mean score on the TAIS was 38.1 (*SD* = 4.10), suggesting a somehow positive attitude toward inclusion (Adnil et al., 2022). However, the TAIS scores ranged from 20 to 50. Participants displayed favorable attitudes regarding item 1, which reflects the belief that children with special needs benefit from learning in specialized classes with qualified and trained teachers. Positive attitudes were also displayed for items 3,2,6,8 and 9, as those items underscored the right of children with special needs to be in specialized classrooms to enhance their achievement. Participants highlighted to take into account not to increase teachers' workload when including children with special needs in their classes as including them in the classes might entail extra responsibilities for teachers. Moreover, the participants supported the significance of implementing strategies to include children with ADHD, as well as, children with emotional and behavioral challenges in regular classrooms with adequate support.

4.4.3 Factors related to the teachers' attitudes toward inclusion of children with ASD

The following sections provide a descriptive analysis of the knowledge, efficacy, and perception levels of teachers regarding various aspects related to the inclusion of children with special needs, including those with ASD.

Table 11: Descriptive statistics for factors' outcome measures presented as means and standard deviations (mean ± SD)

Variables	Mean (SD)
AIQ	8.61 (1.59)
TEIP	79.23 (13.71)
TEIP-EMB Subscale	25.56 (5.13)
TEIP-EC	26.24 (5.12)
TEIP-EII	27.43 (4.61)
TEIP total	79.23 (13.71)

SACIE_R	46.37 (7.77)
SACIE-Sentiments	16.03 (3.61)
SACIE-Concerns	13.23 (3.62)
SACIE-Attitudes	15.63 (3.55)

AIQ (Autism Inclusion Questionnaire), TEIP-AR (Teacher Efficacy for Inclusive Practices-Arabic), TEIP_EMB (Teacher Efficacy in Managing Behavior), TEIP_EC (Teacher Efficacy in collaboration), TEIP EII (Teacher Efficacy in Inclusive Instruction), SACIE-R Scale (The Sentiments, Attitudes, and Concerns about Inclusive Education Revised), SACIE Sentiments (Sentiments Toward Inclusive Education), SACIE Concerns (Concerns Toward Inclusive Education), SACIE Attitudes (Attitudes Toward Inclusive Education).

4.4.3.1 Autism Knowledge Questionnaire

The responses exhibited a significant variety, ranging from 4.00 to 12.00, highlighting diversity in participants' responses. With a mean score of 8.61 (*SD* = 1.59), which suggests that participants exhibit sufficient knowledge regarding autism characteristics.

The majority of the participants (93.8% *n* =334) acknowledged that early intervention programs can positively affect individuals with ASD. Furthermore, 89% (*n* = 317) recognized that behavioral challenges besides social interaction and communication skills are considered major symptoms of ASD, and 89.9% (*n* =320) recognized behavior therapy as the most probably effective intervention for individuals with ASD.

4.4.3.2 Teacher Efficacy for Inclusive Practices (TEIP-AR) Scale

The TEIP responses, ranging from 21 to 108, displayed a significant variety in self-efficacy degrees among the participants. The mean score on the TEIP was 79.23 (*SD* = 13.71), which indicates that the participants recognized themselves as having high levels of self-efficacy in carrying out inclusive practices. However, the participants displayed higher scores regarding various items

Such as item 18, revolved around the competence in providing other possible interoperation when students are confused (*M* = 5.01, *SD* = 1.31). Additionally, item 2 reflects the proficiency to calm noisy or disruptive students (*M* = 4.60, *SD* = 1.07), similarly, item 14, showcases the ability to promote students' participation in pairs or small groups (*M* = 4.62, *SD* = .98). furthermore, item 4, which highlight the ability to support families to enhance the academic achievement of their children (*M* = 4.61, *SD* = 1.00).

4.4.3.2.1 TEIP-EMB (Teacher Efficacy in Managing Behavior) Sub-scale

The TEIP-EMB Scores ranged from 8-36, displaying a broad range of variation in participant responses. The mean score on the TEIP-EMB was 25.56 (*SD*= 5.13) which suggests a high level of teacher efficacy in their ability to manage behavioral challenges.

Participants displayed elevated scores regarding items 2, 7, and 10 which reflecting the competence in ensuring that children comply with classroom instructions *(M* =4.56, *SD* = 1.05), handling disruptive behavior that may occur within classes (*M* =4.49, *SD* = 1.07), in addition to the ability to deal with noisy or disruptive students (*M* =4.30, *SD* = 1.13).

4.4.3.2.2 TEIP-EC (Teacher Efficacy in collaboration) Sub-scale

The TEIP scores ranged from 6 to 36 with a mean score of 26.24 (*SD*= 5.12), indicating that, on average, participants exhibit a high level of teacher efficacy in collaboration. The participants scored high in items 3 and 4 which reflecte they were confident in their ability to make parents feel comfortable visiting the school (*M* =4.60, *SD* = 1.07) in addition to their competence in supporting families in improving their children's academic achievement (*M* = 4.61, *SD* = 1.00).

4.4.3.2.3 TEIP-EII (Teacher Efficacy in Inclusive Instruction) Sub-scale

Subscale scores ranged from 6 to 36, indicating variability among participants' responses. With a mean score of 27.43 (*SD* = 4.61), it is obvious that participants exhibited a high level of teacher efficacy in inclusive instruction. Precisely, participants on average were scored high in items 14 and 18 reflect confidence in their capability to promote students' participation in pairs or small groups (*M* =4.62, *SD* = 0.96). Besides, exhibiting the ability to provide alternative interpretations when students were confused (*M* =5.01, *SD* = 1.31).

4.4.3.3 The Sentiments, Attitudes, and Concerns about Inclusive Education Revised (SACIE-R) Scale

The SACIE responses ranged from 15 to 75 and displayed a significant variety in participants' perception levels toward inclusive education. With a mean score of 46.37 (*SD* = 7.77), it showed that participants exhibit a high perception toward inclusion. However, they demonstrated generally high agreement toward item 1,4,7,10, and 3, which reflect their concerns about refusing the presence of students with disabilities in classrooms by their peers (*M* =3.54, *SD* = 1.04). In addition to their concerns regarding the inability to provide appropriate attention to all students within inclusive classes (*M* =3.44, *SD* = .95), and their concerns of increasing their workload and being more stressed ((*M* =3.39, *SD* = 1.03), (*M* =3.35, *SD* = 1.04)), however, they emphasized the inclusion of children who exhibit challenges in verbal communication in regular classes (*M* =3.39, *SD* = 1.00).

4.4.3.3.1 SACIE Sentiments (Sentiments Toward Inclusive Education) Sub-scale

The mean sentiment score of 13.97 (*SD* = 3.61) slightly above the midpoint, suggests positive sentiment among participants, with wide variation in participants' responses. Participants exhibited high scores in some areas including items 9 and 2 which reflect experiencing a strong sense of distress if having a disability (*M* =3.26, *SD* = 1.11) and fear of thinking about ending up with disability (*M* =3.16, *SD* = 1.08).

4.4.3.3.2 SACIE Concerns (Concerns Toward Inclusive Education) Sub-scale

In exploring the dataset regarding participants' concerns toward inclusive education, it found that The participants' responses ranged from 5 to 25, which showed a varied spectrum of fears and opinions. On average, the concerns fall above the midpoint of the scale, with a

mean of 16.76 (*SD* = 3.62). The participants' heightened concerns in items 1 and 4 that revolved around refusing the presence of students with disabilities in classrooms by their peers (*M* =3.54, *SD* = 1.04), and their concerns regarding the inability to provide appropriate attention to all students within inclusive classes (*M* =3.44, *SD* = .95).

4.4.3.3.3 SACIE Attitudes (Attitudes Toward Inclusive Education) Sub-scale

The sub-scale, spanning from 5 to 25, reflected a diverse range of attitudes among participants. With a mean attitude score of 15.63 (*SD*=3.55) on average, participants exhibited attitudes slightly above the midpoint, indicating a prevailing positive view toward inclusive education. Participants demonstrated heightened scores in items 3 and 6 which reflect areas related to the belief that Students who exhibited challenges in verbal expression should be included in regular classes (*M* = 3.40, *SD* = 1.00). Furthermore, increased scores were apparent in participants' perspectives regarding students who exhibited inattention symptoms being better suited for regular classes (*M* = 3.33, *SD* = 0.99).

4.5 Factors associated with the Autism Attitude Scale for Teachers (AAST)

A one-way ANOVA was conducted to examine the mean difference in AAST among groups defined by age, marital status, work directorate, academic level, teaching level, educational experience, teaching specialty, type of teaching experience for children with ASD, and duration of experience with children with ASD (see table 12). The results revealed no statistically significant differences ($p > .05$) in the AAST mean scores across these groups. Conversely, a statistically significant difference in AAST means was found between living area groups, including village (*M* = 25.34, *SD* = 6.11) and camp (*M* = 27.43, *SD* = 4.58).

Tukey post hoc analysis revealed that the AAST mean increase from village to camp (-3.697, 95% CI [-7.33, -.07]), and was statistically significant (p =.04). For the educational role groups, a statistically significant difference was found in the AAST means between the regular teachers (M = 40.20, SD = 8.58) and special education teachers in resource rooms (M = 44.53, SD = 8.71), and educational counselors (M = 44.73, SD = 6.41). Tukey post hoc analysis revealed that the increase of the AAST mean from regular teacher to educational counselor (-4.533, 95% CI [-8.40, -.67]) was statistically significant (p = .01), as well as the increase of the AAST mean from regular teachers to special education teachers in resource rooms (-4.335, 95% CI [-7.16, -1.51]) was statistically significant (p = .00). Furthermore, the results showed statistically significant difference of the AAST mean between participation in inclusion training groups including participants who already had training (M = 44.79, SD = 8.77) and those interested in training but never received (M = 41.97, SD = 7.83) and those who were not interested and never received training (M = 37.70, SD = 8.66). Tukey post hoc analysis revealed that the decrease of the AAST mean from participants who already had training to those interested in training but never received (2.81, 95% CI [.37, 5.27]) was statistically significant (p = .01) as well as the AAST mean decrease from teachers who already had training to those who were not interested in training and never received (7.09, 95% CI [4.14, 10.04]) was statistically significant (p = .00). Additionally, the AAST mean was significantly different between who were interested in training but never received training before and those who were not interested and never received training. Tukey post hoc analysis revealed that the mean decrease from teachers who were interested in training but never received training before to those who were not interested and never received training (4.27, 95% CI [1.64, 6.91]) was statistically significant (p = .00) (see table 12).

Table 12: AAST scores and One-Way ANOVA Test Results according to educational role, Training attendance, and Living area variables.

Variables	Groups	N	Mean (SD)	Sum of Squares		Df	Mean Square	F/Sig
Educational role								
	Regular class teacher	219	40.20(8.58)	Between Groups	1505.47	3	501.82	7.08 /*p*=.00
	Educational counselor	37	44.73(6.41)	Within Groups	24950.55	352	70.88	
	Inclusive education official	19	42.84(8.60)	Total	26456.03	355		
	Special resource teacher	81	44.53(8.71)					
Attendance or interest in attendance for training about the inclusion of children with ASD								
	I already had training	98	44.79(8.77)	Between Groups	2209.02	2	1104.51	16.08/*p* =.00

	I am interested and I have never received training	179	41.97(7.83)	Within Groups	24247.00	353	68.68	
	I am not interested and I have never received training	79	37.70(8.66)	Total	26456.03	355		

Living Area

	City	179	42.12(8.39)	Between Groups	461.94	2	230.97	3.13 /*p*=. 04
	Village	137	40.63(8.83)	Within Groups	25994.08	353	73.63	
	Camp	40	44.33(8.54)	Total	26456.03	355		

An independent-samples t-test was computed to explore the difference in AAST scores between gender and having general experience with ASD groups. The results revealed no statistically significant difference between the gender groups ($p > .05$). However, a significant difference ($p = .00$) was observed among participants with general experience with ASD groups. Specifically, individuals with experience ($M = 44.13$, $SD = 8.73$) displayed a statistically higher AAST score compared to those without experience ($M = 39.91$, $SD = 8.09$) (see table 13).

Table 13: T-test results and AAST Mean Scores according to Work Experience with Children with ASD Variable.

Variable	Groups	Mean (SD)	t(df)	P-value
Work experience with children with ASD	Having work experience with children with ASD	44.13 (8.73)	4.71(354)	.00
	No work experience with children with ASD.	39.91 (8.09)	4.67(356.33)	.00

AAST (Autism Attitude Scale for Teachers)

A Pearson correlation coefficient was computed to examine the association between teachers' attitudes and factors that could influence their attitudes, including their knowledge of ASD, Teacher's efficacy for inclusive practices (TEIP), and their perception towards inclusive education (SACIE-R) sentiments, concerns, and attitudes.

Results indicated a negligible and non-statistically significant association between knowledge of ASD and teachers' attitudes (r = .04, p > .05). However, a statistically significant moderate positive correlation was found between Teacher's efficacy (r = .51, p < .05) and teachers' attitudes.

Further analysis revealed statistically significant low positive correlations between teachers' attitudes and the Teacher Efficacy in Collaboration (TEIP-EC) subscale (r = .54, p < .05), the Teacher Efficacy in Managing Behavior (TEIP-EMB) subscale (r = .45, p < .05), and the Teacher Efficacy in Inclusive Instruction (TEIP-EII) subscale (r = .40, p < .05).

Regarding teachers' perception toward inclusive education, a statistically significant but negligible correlation was observed with teachers' attitudes toward inclusion of children with ASD (r = .121, p < .05). Furthermore, a statistically significant negligible association was found between teachers' attitudes and the sentiments subscale of SACIE-R (r = -.14, p < .05). However, no statistically significant association was found between teachers' attitudes and the concerns subscale of SACIE-R (r = -.04, p > .05). Lastly, a statistically significant low positive correlation was found between teachers' attitudes toward inclusive education subscale and teachers' attitudes toward inclusion of children with ASD (r = .45, p < .05) (see table 14).

Table 14: Pearson correlation between the AAST and AIQ, TEIPAR, TEIP-EMB, TEIP-EC, TEIP-EII, SACIE-Sentiments, SACIE-Concerns, and SACIE-Attitudes using Pearson correlation coefficient. Data are presented as correlation coefficient (p-value).

Measure	**Correlation coefficient**	***P-value***
TAIS	.42	.00
AIQ	.04	.40
TEIPAR	.51	.00
TEIP-EMB	.45	.00
TEIP-EC	.54	.00
TEIP-EII	.40	.00

SACIE-R	.12	.02
SACIE-Sentiments	.-.14	.00
SACIE-Concerns	-.04	.41
SACIE-Attitudes	.45	.00

TAIS (Teachers' Attitudes Toward Inclusion Scale), AAST (Autism Attitude Scale for Teachers), AIQ (Autism Inclusion Questionnaire), TEIP-AR (Teacher Efficacy for Inclusive Practices-Arabic), TEIP_EMB (Teacher Efficacy in Managing Behavior), TEIP_EC (Teacher Efficacy in collaboration), TEIP EII (Teacher Efficacy in Inclusive Instruction), SACIE-R (The Sentiments, Attitudes, and Concerns about Inclusive Education Revised)SACIE Sentiments (Sentiments Toward Inclusive Education), SACIE Concerns (Concerns Toward Inclusive Education), SACIE Attitudes (Attitudes Toward Inclusive Education).

4.6 The correlation between the Teachers' Attitudes Toward Inclusion Scale (TAIS) and the Autism Attitude Scale for Teachers (AAST)

Pearson's product-moment correlation was computed to examine the relationship between teachers' general attitudes toward inclusion for children with special needs (TAIS) and their specific attitudes toward inclusion of children with ASD (AAST). The correlation between TAIS and AAST scores was statistically significant low positive correlation ($r = .40$, $p < .05$).

4.7 Summary of the results

1. Participants hold an overall positive attitude towards the inclusion of children with ASD.
2. Statistically significant positive association found between the teachers' attitudes toward inclusion of children with special needs in general and teachers' attitudes toward inclusion of children with ASD in specific.
3. There was no statistically significance difference in the AAST mean among variables including age, marital status, work directorate, academic level, teaching level, educational experience, teaching specialty, type of teaching experience for children with ASD, and the duration of experience with children with ASD.
4. A statistically significant difference in the AAST mean was found among living area groups between the village and camp.
5. AAST mean was statistically significantly different within the educational role groups, between the regular teachers and special education teachers in resource rooms, as well as between regular teachers and educational counselors.
6. A statistically significant difference in the AAST mean was found between participants who already had training about inclusion and those interested in training but never received it. In addition, a difference was found between participants who already had training and those who were not interested and never received training.

7. A statistically significant difference was found between participants who were interested in training but never received training before and those who were not interested and never received training.
8. A statistically significant difference in the AAST mean was found Among those having general experience with ASD groups, between those who have experience and those with no experience.
9. Negligible and did not reach a statistically significant association found between knowledge of ASD and teachers' attitudes toward inclusion of children with ASD.
10. Teachers' efficacy was found to have a statistically significant moderate positive correlation with teachers' attitudes toward inclusion of children with ASD.
11. A statistically significant low positive correlation was found between teachers' attitudes toward the inclusion of children with ASD and teachers' efficacy in managing behaviors, collaboration, and inclusive instructions.
12. A negligible statistically significant correlation was found between teachers' attitudes toward the inclusion of children with ASD and teachers' perceptions of inclusive education.
13. The association between teachers' sentiments toward inclusive education and teachers' attitudes toward inclusion of children with ASD was a statistically significant negligible association.

14. Teachers' concerns toward inclusive education were found to have a negligible association and not reach the statistical significance with teachers' attitudes toward inclusion of children with ASD.

15. The teachers' attitudes toward inclusive education was found to have a statistically significant low positive correlation with teachers' attitudes toward the inclusion of children with ASD.

Chapter 5 Discussion and Conclusion

5.1 Discussion

The present study aimed to explore the attitudes of Palestinian teachers' including regular classroom teachers, special education teachers, and counselors toward including students with ASD in governmental schools and kindergartens in the West Bank. This study employed the AAST scale to explore teachers' attitudes and investigated the factors that are associated with these attitudes. Furthermore, the research sought to examine whether there is a distinction between teachers' attitudes towards the inclusion of children with special needs in general and their attitudes specifically towards the inclusion of children with ASD. This chapter comprises three sections: 1) Teachers' attitudes toward including children with ASD. 2) Factors associated with teachers' attitudes. 3) Comparison between teachers' attitudes toward inclusion of children with special needs and inclusion of children with ASD.

5.1.1 Teachers' attitudes toward the inclusion of children with ASD

Exploring teachers' attitudes toward including children with ASD was the main aim of the present study. The research key results indicate that participants hold an overall positive attitude toward including children with ASD among teachers, which aligns with previous studies conducted by (Russell et al., 2022) and (Memisevic et al., 2021) who found the same findings, contradict with previous findings highlighted by Leonard & Smyth (2022) who emphasized negative attitudes were adopted by teachers for including children with ASD, In addition to the findings presented in the study conducted in Jordan in 2022 (Alkinj et al.,

2022) which reflects neutral attitudes toward including children with ASD among Jordanian teachers. This contradiction of the findings may relate to the sample size issues, as the study conducted by Leonard & Smyth (2022) included a sample consisting of 78 primary school teachers while the present study adopted a sample including 356 teachers, which indicates a large difference in the sample size between both studies. Additionally, different outcome measures were used to examine the attitudes. However, in the present study, despite their positive attitudes, 68% of the participants demonstrated negative attitudes toward students with ASD who have disruptive behavior and emphasized that those behaviors could negatively impact the behaviors of other children surrounded by the child, the same finding presented by (Jury et al., 2021). In addition, 64.6% of them were against equaling the ability of teachers with and without training to support children with ASD, and 55.9% of them were against the anticipation that teachers without specialized training could handle a child with ASD. Moreover, most of them, 42% of teachers emphasized that regular schools are not too advanced for including students with ASD. Those results reflected their awareness of their need for appropriate training and skills that may help them overcome the challenges they might face through inclusion (Graham, 2021). In addition to the importance of the existence of enriching environments and resources that can serve the needs of students with ASD (Van Tran et al., 2020). On the other hand, 57.6% of the teachers demonstrated positive attitudes toward the need of children with ASD for competent teachers to assist them in learning. And 60% of them emphasized that a good teacher has the potential to do a lot to support students with ASD. Besides, 53.1% of them believe in the ability of children with ASD to obtain the advantages from the activities that occur in regular classes. Moreover, 52.2% of them agreed

that children with ASD can successfully socialize with other typical children and obtain advantages from contact with typically developing peers. Those findings may be related to the teachers' good knowledge of ASD and the abilities that children with ASD have " as highlighted in the present study", which do not hinder their inclusion in regular classes (Ahlers et al., 2023) despite the teachers' awareness regarding the need to be a good teacher who has good skills and abilities to be competent to provide students with ASD with the support they need to in addition to learning from in the best manner (Alothaim, 2017).

5.1.2 Factors associated with teachers' attitudes toward inclusion of children with ASD

5.1.2.1 Sociodemographic characteristics

The present study examined the potential influence of various demographic and professional factors on Palestinian teachers' attitudes towards including children with ASD. The factors investigated included age, marital status, work directorate, academic level, teaching level, educational experience, teaching specialty, type of teaching experience for children with ASD, and duration of experience with children with ASD. The results of the study indicated that none of these factors had a significant impact on Palestinian teachers' attitudes. These findings suggest that these demographic and professional factors do not play a significant role in shaping Palestinian teachers' attitudes toward the inclusion of children with ASD, similar findings were demonstrated by Alkinj et al., (2022) who highlighted no association between attitudes and educational role, experience, academic qualification, age, gender, or school level. and Memisevic et al., (2021) showed that gender, age, and education level had

no significant effect on the teachers' attitudes. Moreover (Rayess, 2014) revealed that gender, age, and years of experience did not yield significant differences in teachers‟ attitudes, while Ekom-Idorenyin Wazor, (2020) also emphasized no significant age differences in teachers' attitudes. In contrast, a study conducted by Chung et al., (2015) found that gender and academic level influence teachers' attitudes, as female teachers at the elementary level demonstrated more positive attitudes (Chung et al., 2015),and other studies that indicated males had more positive attitudes (Pervin, 2016), the present study revealed no significant gender differences in teachers' attitudes, however, males showed higher mean score than females. Furthermore, Older teachers demonstrated more negative attitudes than younger ones according to (Iliadou, 2023), while (Pervin, 2016) revealed that teachers above 40 showed more positive attitudes than younger ones. However, (Russell et al., 2022) emphasized that teachers between 20 and 30 Years were adopting more positive attitudes toward inclusion, while in the present study, despite there being no significant age differences in teachers' attitudes the mean for this age group was higher than 31-50 age group and less than 60-65 age group. In addition, the length of experience in teaching children with ASD was found to impacted positively teachers' attitudes (Garrad et al., 2019; Alshehri, 2023). Different findings revealed from the present study and other previous studies, and even between the previous studies themselves might relate to various variables such as variations in sample size and outcome measures used. However, since previous studies were conducted in different areas and countries, we can consider that culture might be the major cause, as culture played a crucial role in developing and forming teachers' attitudes based on the differences in each culture's inclusive policies adopted and followed, besides the history and

since when its start to implement, in addition to the efforts provided to support inclusion including social and community support, and barriers exist hindering practicing inclusion (Gómez-marí et al., 2022). Furthermore, gaining a unified understanding of inclusion is challenging, as the concept of inclusion might differ between different contexts and different individuals, besides the knowledge and understanding of students with ASD could vary either, which may play a role in different findings from previous studies (Hutchinson & Campbell, 2022).

Regarding living areas, the current study found that participants who lived in camps (n = 40, 11.%), demonstrated more positive attitudes than those living in villages, which may be related to the community culture and characteristics in the camps as they are considered marginalized areas with high numbers of people living jointly together (Taslak, 2006), so they learn to feel more with each other and appreciate other needs and having humanity solidarity, besides they are learning since childhood in UNRWA schools which support inclusion and work on this within their schools (Al Masri, 2021).

The present study's findings suggest that teachers who have direct experience in teaching children with ASD tend to hold more positive attitudes toward inclusion, which aligns with the following previous studies (Alexandri et al., 2017; Garrad et al., 2019). This experience provides teachers with valuable opportunities to understand and address the unique needs and challenging symptoms of children with ASD. Additionally, it enables teachers to develop effective strategies and adapt to the educational environments, thereby enhancing their skills and abilities to support the inclusion of these children (Martínez & Rueda, 2023). These

findings contrast with previous research conducted by Pervin (2016) which indicated that teachers who had contact with students with ASD in the classroom held more negative attitudes compared to those without such exposure. Further research is required to examine the factors contributing to these divergent findings.

The present study examined the relationship between teachers' attitudes towards inclusion and their training experiences. The findings revealed that attending training specifically focused on ASD and acquiring a sense of confidence in interacting with children with ASD were associated with more positive attitudes toward inclusion. Several previous studies emphasized similar findings including (Wittwer et al., 2023) (Rayess, 2014) (Gómez-marí et al., 2022) (Alkinj et al., 2022) (Memisevic et al., 2021) and (Pervin, 2016). However, There was an emphasis in those studies that the training content must be appropriate, sufficient, and serve the needs of teachers.

Conversely, a study conducted in Ireland by Leonard and Smyth (2022) found that neither training in inclusion nor training in Special Educational Needs (SEN) had an impact on teachers' attitudes (Leonard & Smyth, 2022). Interestingly, our study demonstrated that teachers who expressed interest but had not received pre-training exhibited more favorable attitudes compared to those who were not interested and had no pre-training. However, their attitudes were less favorable than those who had previous training. This contrasts with the findings of Alkinj et al. (2022), who reported no significant difference in attitudes between teachers who had received pre-training and those who were interested in training but had not yet received it. This suggests that having the desire for training alone may not be sufficient

to effectively support teachers in including children with ASD within educational settings. These findings underscore the importance of targeted training programs specifically addressing ASD and fostering teachers' confidence in interacting with children with ASD. Such training can play a crucial role in shaping positive attitudes and equipping teachers with the necessary skills to successfully include children with ASD in educational settings

In relation to the classification of teachers, special education teachers and education counselors exhibited more positive attitudes towards inclusion compared to regular teachers. This finding is consistent with a similar study conducted by Rayess (2014) while contradicting the results of Alkinj et al. (2022), who found that the educational role of teachers did not impact their attitudes. In addition, the attitudes of math teachers were found to be less favorable compared to other subject teachers when considering the attitudes of counselors and special education teachers. This discrepancy in attitudes can potentially be attributed to the inherent complexity and demands associated with the subjects of mathematics, which may pose challenges for children with ASD and their unique learning styles. These individuals often encounter difficulties in areas such as abstract thinking, language comprehension, and executive functioning. Specifically, they may struggle with maintaining adequate working memory to process multiple pieces of information or effectively plan and organize steps to solve problems. Furthermore, the abstract nature of mathematical concepts, which often require concrete examples or visual aids for comprehension, can pose additional hurdles. Moreover, proficient reading comprehension skills are essential for solving word problems, yet students with ASD may face language

difficulties that impede their ability to effectively solve such problems(Polo-Blanco et al., 2024).

Furthermore, the study revealed no significant disparities in attitudes between inclusive education officials and regular teachers. As the researcher informed by the PPI, inclusive education officials often held positions as teachers with a bachelor's degree in early childhood education or as subject teachers with additional responsibilities related to inclusion. Despite They may have greater awareness regarding inclusive practices, there is a lack of workshops and training provided to them by the Ministry of Education that does not make a difference in their inclusive skills compared to regular teachers, in addition to excessive programs and plans in delivering lessons that are put on their shoulders and thus, making them unable to have enough time to practice their roles and responsibilities towards inclusive education.

5.1.2.2 Teachers Knowledge of ASD

In the present study, there was an adequate level of knowledge regarding Autism ASD among the participants, which is consistent with previous study findings held by Tsegaye, (2024) in Addis Ababa, Ethiopia who highlighted that Teachers had adequate knowledge of ASD. However, no significant correlation was found between knowledge and attitudes, contradicting previous research conducted by Tsegaye, (2024), Alkinj et al. (2022), and Gómez-marí et al. (2022) emphasized the positive impact of knowledge on teachers' attitudes. The absence of a significant correlation between knowledge and attitudes in this study can be attributed to several factors. One possible explanation is that the participants possessed theoretical knowledge about ASD, but lacked practical

experience in applying this knowledge in real-life educational settings. It is plausible that acquiring theoretical knowledge alone may not sufficiently influence or shape attitudes toward inclusion and support for students with ASD. Attitudes are multifaceted and can be influenced by various factors, including personal beliefs, experiences, and training. Thus, it is conceivable that the participants' attitudes were not solely determined by their theoretical knowledge of ASD. Additionally, attitudes are complex and can be influenced by contextual factors, such as the level of support and resources available, the school environment, and individual differences among students with ASD. Future research could explore additional variables that may contribute to the formation of attitudes toward inclusion and support for students with ASD, such as personal experiences, exposure to inclusive practices, and the availability of professional development opportunities.

5.1.2.3 Teachers' Efficacy for Inclusive Practices

In the present study, a Moderate positive association was found between the teachers' efficacy and their attitudes, which is consistent with previous studies conducted by Russell et al., (2022) and Memisevic et al., (2021). The existence of a positive correlation emphasizes having skills in inclusive practices can, in turn, support the teachers in managing the challenges and unexpected situations when working with children with ASD within regular educational settings, thus being aside from the feeling of helplessness and unable to organize their programs, which reflecting positively to the teacher-student relationship (Bolourian et al., 2022). Moreover, the

present study highlighted a positive correlation between the teachers' efficacy in collaboration and their attitudes toward the inclusion of children with ASD, reflecting the importance of cooperation between teachers and the surrounding professionals, other expert teachers, or parents which creates the opportunity for the inclusion process parties to support each other, thus facilitating the child's involvement in the inclusive environment healthily and safely, which in turn assist in creating more favorable attitudes toward inclusion (Martínez & Rueda, 2023).

5.1.2.4 Teachers' perception toward inclusive education

The findings from the present study revealed no correlation between teachers' perceptions of inclusive practices and their attitudes toward including students with ASD. No previous studies investigated teachers' perceptions and their relation with their attitudes toward including children with ASD in particular. Furthermore, teachers' attitudes were found not to be influenced by teacher concerns and sentiments toward Inclusive Education on their attitudes, contradicting the findings from (Miesera et al., 2018) which revealed that a low concern level correlates with more positive attitudes toward inclusive education of children with special needs, besides leading to stronger desire and efforts to teach inclusively, and greater self-efficacy (Miesera et al., 2018). Despite there being no correlation found, teachers from the present study demonstrated a high level of concern and sentiment toward inclusive education, as the majority of them exhibited sentiments regarding experiencing a strong sense of distress if having a disability, and having fear of thinking about ending up with a disability. In addition,

most of them demonstrated concerns regarding rejection and non-acceptance of the presence of students with disabilities in classrooms by their peers. Additionally, having concerns regarding the inability to provide appropriate attention to all students within inclusive classes, and their concerns about increasing their workload and being more stressed. The reason why these concerns and sentiments did not affect teachers' attitudes toward including children with ASD in this study might relate to high teachers' efficacy for inclusive practices as measured in the present study which could make them able to manage their feelings and concerns effectively when implementing inclusive practices. Moreover, a low positive association was found between teachers' attitudes toward inclusive education and their attitudes toward including students with ASD in the present study, which reflects the harmony in attitudes regardless of the type of disorder or disability. Generally, Teachers who call for inclusive education believe in equitable opportunities for all children in educational settings. In addition to the belief that education should be provided to students by approaching them based on their unique differences, thus, ensuring that students are given equal opportunities in learning (Ketenoğlu Kayabaşı, 2020).

5.1.2.5 Teachers' attitudes toward the inclusion of Children with Special needs and Children with ASD in particular

The current study demonstrated a positive correlation between teachers' attitudes toward the inclusion of children with special needs and their attitudes toward the inclusion of children with ASD in particular which indicates that there is no difference in teachers' attitudes regarding the child's type of disability or disorder. This

contradicts the previous study finding conducted by (Jury et al., 2021) which highlighted that teachers held more favorable attitudes toward the inclusion of children with special needs rather than including children with ASD. Moreover, in the present study, 71.1% of teachers (n=253) emphasized not increasing teachers' workload when being asked to include children with special needs in their classes. In other words, teachers may support and realize the importance of including children with special needs in educational settings, as long as implementing inclusion does not entail an additional workload for them (G. Alnahdi, 2013). And 57.3% of them (n= 204), highlighted that children with special needs should be educated in regular classrooms, however, 79.8% of them (n = 284), indicated the necessity of the existence of adequate support for teachers when including children with behavioral and emotional difficulties. Teachers' support from principals and the provision of professional development opportunities can lead to the effective inclusion of children with social, emotional, and behavioral difficulties (SEBD), additionally, teachers will have more positive feelings (MacFarlane & Woolfson, 2013).

5.2 Conclusion

Children with special needs have the right to be within educational settings that serve their needs and make them feel valued and comfortable, according to literature, students with ASD are often going through challenges more than other students with special needs when being included in educational settings. This may reflect negatively on their psychological and emotional well-being, as well as the deterioration in their

social, communication, and academic skills. Moreover, that can put their parents in stressful situations that may lead to affecting the whole family Quality of Life (QOL). Teachers' attitudes play an essential role in determining the effectiveness of inclusive education when including children with ASD and clarifying the important role of the teacher's positive attitudes for the success of including students with ASD in regular classes is needed and essential. The current study demonstrated that overall, Palestinian teachers showed positive attitudes toward including children with ASD. The study highlights that their attitudes are associated with teachers' efficacy, educational role, experience with students with ASD, severity of behavioral symptoms, and training, whereas other variables such as knowledge of ASD, perception of inclusive practices, age, gender, type of disability, teaching experience, type of material, academic qualifications, teaching level, and duration of experience in teaching students with ASD are not correlated with teachers' attitudes.

In conclusion, Teachers' self-efficacy and training had a notable impact on fostering positive attitudes among teachers. It's noteworthy that teachers demonstrated more favorable attitudes toward items related to "the capacity of children with ASD to learn from a good teacher" and "a good teacher can do a lot to assist students with ASD". Occupational therapists can play a vital role in assisting teachers to become good teachers in terms of becoming qualified when including children with ASD through the provision of the necessary training and skills to make the teachers able to support students with ASD and becoming able to engage with those students in educational settings effectively. Such support includes managing students' disruptive behaviors,

modifying tools and curriculum, developing an appropriate system, developing individual plans, environmental adjustments, and other techniques required to address students' diverse needs.

5.3 Limitations

The current study had some limitations that would be significant to mention. According to the Ministry of Education's recent policies, the researcher was prevented from entering schools to fill out and clarify the questionnaires to the participants, and be with them for any misunderstanding; thus, misconceptions might have occurred. Based on those policies, the researcher was asked to convert the questionnaires to an online Google Form survey, which made it a long survey without having breaks as was planned when it was face-to-face, which may have hindered some participants' ability to complete and finish the questionnaires or may affect the accuracy of answers. Moreover, the lack of a unified and standardized diagnostic tool adopted by the Ministry of Education for diagnosing children with ASD may hinder the accuracy of the children's diagnoses. Furthermore, the participants' response rate was influenced by several factors such as outdated email addresses provided to the researcher by the Ministry of Education database that hindered effective communication with the targeted institutions. Teacher strikes in schools distracted teachers from participating. The existing political climate in some areas, specifically in Jerusalem, has presented difficulties to school enrollment and impacted the willingness of institutions to engage in research activities. However, despite these limitations, the current study illustrated

the prevailing attitudes of Palestinian teachers towards including children with ASD, besides; it added valuable foundation data to support Palestinian teachers when implementing inclusive practices.

5.4 Future Research Recommendations and Occupational Therapy Implication

The present study used self-report measures to explore the attitudes of teachers toward including children with ASD. Future research that targets inclusive practices for children with ASD needs to prioritize the development of standardized assessment tools tailored specifically to measure inclusive teaching practices in classrooms accommodating children with ASD. Longitudinal researches are warranted to examine the lasting impact of inclusive teaching practices on the social, emotional, and academic outcomes of students with ASD. Moreover, exploring surrounding factors such as teacher-student relationships, and classroom environment will provide valuable insights. However, qualitative research should be implemented to investigate and understand the teachers' needs and perspectives, which help in guiding the targeted interventions and professional development programs. By embracing a mixed method approach, a comprehensive understanding of the inclusive practices when including children with ASD will be provided by the research, and support teachers to become more capable of creating inclusive learning environments that can serve all students' needs.

The current study highlights the participants' need to obtain appropriate training and skills that make them capable of handling the inclusive practices of children with ASD. In the realm of inclusive education, occupational therapy interventions can empower teachers to create a supportive inclusive environment for students with ASD that can improve their social and academic skills. OTs can engage in ongoing consultation, collaboration, and personalized assistance to support Palestinian teachers, their role is not limited to training or resources. They modify classroom environments, create individualized intervention plans to improve learning experiences and provide hands-on guidance in implementing modified teaching techniques. Furthermore, OTs can support Palestinian teachers in understanding more the socio-emotional, sensory, and motor challenges experienced by students with ASD, which in turn empowers the teachers to confidently overcome the complexities when including students with ASD that can reflect positively on those students and being provided with high-quality support leading to improve their academic, social, and emotional well-being. Future research for examining the OT interventions and practices and their impact on promoting inclusive education for students with ASD in Palestine holds promise for improving the implementation of inclusive practices in Palestine, as occupational therapy is considered a cornerstone in linking the theoretical principles of inclusive education to real-world practical implementation in educational settings.

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Appendices

Appendix A IRB approval

Arab American University- Palestine
Deanship of Scientific Research
IRB committee
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الجامعة العربية الامريكية- فلسطين
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IRB Approval Letter

Study Title: The attitudes of Palestinian teachers toward the inclusion of children with autism spectrum disorder: a cross-sectional study

Submitted by: Bashaer Majed Abdalkarim Abu Khadeja

Date received: 17th April 2023

Date reviewed: 24th May 2023

Date approved: 26th May 2023

Your Study titled "**The attitudes of Palestinian teachers toward the inclusion of children with autism spectrum disorder: a cross-sectional study**" With archived number 2023/A/87/N was reviewed by the Arab American University IRB committee and was approved on 26th May 2023.

Reham Khalaf-Nazzal, MD, PhD
IRB committee chairman
Arab American University of Palestine

General Conditions:

1. Valid for 4 months from date of approval.
2. It is important to inform the committee with any modification of the approved study protocol.
3. The committee appreciates a copy of the research when accomplished.

لجنة أخلاقيات البحث العلمي في الجامعة العربية الامريكية

IRB at Arab American University

Appendix B Facilitating a research mission from the AAUP

Arab American University
Faculty of Graduate Studies

الجامعة العربية الأمريكية
كلية الدراسات العليا

2023/8/14

إلى من يهمه الامر

تسهيل مهمة بحثية

تحية طيبة وبعد،

تُهديكم كلية الدراسات العُليا في الجامعة العربية الأمريكية أطيب التحيات، وبالإشارة الى الموضوع أعلاه، تشهد كلية الدراسات العُليا في الجامعة أن الطالبة **بشائر ماجد عبد الكريم أبو خديجة** والتي تحمل الرقم الجامعي (202113215)هي طالبة ماجستير في برنامج العلاج الوظيفي وتعمل على أُطروحة الماجستير الخاصة به بعنوان:

" اتجاهات المعلمين الفلسطينيين تجاه دمج الأطفال الذين لديهم اضطراب طيف التوحد والعوامل التي تؤثر على اتجاهاتهم: دراسة مقطعية "، تحت اشراف الدكتور هشام كعبية. نأمل من حضرتكم الإيعاز لمن يلزم لمساعدتها للحصول على المعلومات اللازمة للدراسة، علماً أن المعلومات ستستخدم لغاية البحث فقط وسيتم التعامل معها بغاية السرية، وقد أُعطيت هذه الرسالة بناءً على طلبها.

وتفضلوا بقبول فائق الاحترام

عميد كلية الدراسات العليا

د. نوار قطب

كلية الدراسات العليا
FACULTY OF GRADUATE STUDIES

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Appendix C Facilitating a research mission from the Ministry of education

بسم الله الرحمن الرحيم

State of Palestine
Ministry of Education
Center for Educational Research and Development

دولة فلسطين
وزارة التربية والتعليم
مركز البحث والتطوير التربوي

الرقم: و ت / ١٣/١/٣٥٣
التاريخ: 30 /08/ 2023 م

لمن يهمه الأمر

" تسهيل مهمة بحثية "

يهديكم مركز البحث والتطوير التربوي أطيب تحية، ويرجو منكم التكرم بتسهيل مهمة الباحثة:

"بشائر ماجد عبد الكريم أبو خديجة"

من **الجامعة العربية الأمريكية** للحصول على المعلومات اللازمة لإعداد دراسة بعنوان:

" اتجاهات المعلمين الفلسطينيين تجاه دمج الأطفال الذين لديهم اضطراب طيف التوحد: دراسة مقطعية".

ملاحظات:

- تتضمن الدراسة تطبيق استبانة على عينة من معلمي المدارس ورياض الأطفال الحكومية في مديريات التربية والتعليم الآتية: (رام الله، بيرزيت، القدس، ضواحي القدس، جنين، قباطية، طوباس، طولكرم، قلقيلية، سلفيت، جنوب نابلس، نابلس، أريحا، الخليل، شمال الخليل، جنوب الخليل، يطا، بيت لحم).
- الاستجابة على الأدوات البحثية من قبل عينة المبحوثين طوعية.
- يتم تطبيق أدوات البحث عبر النماذج المحوسبة دون تواصل وجاهي مع المبحوثين.
- سنرسل العينة لإيميل الباحثة للتواصل عبر الإيميل مع العينة برابط الأداة البحثية المحوسب.

ملاحظة: مركز البحث غير مسؤول عن جودة أدوات الدراسة.

مع الاحترام،

دولة فلسطين
وزارة التربية والتعليم

د. محمد مطر
/مدير عام مركز البحث والتطوير التربوي

نسخة: عطوفة وكيل الوزارة المحترم.
عطوفة الوكيل المساعد للشؤون التعليمية المحترم.
السادة المديرون العامون لمديريات التربية والتعليم المحترمون.
عطوفة الأخ رئيس المركز الوطني للامتحانات والقياس والتقويم التربوي المحترم.
د.هشام كعبية المحترم/المشرف على الدراسة- بريد الكتروني hisham.arabkabeya@aaup.edu
د. مطر/ن.س

Appendix D Outcome Measures

عنوان الدراسة:اتجاهات المعلمين الفلسطينيين نحو دمج الأطفال الذين لديهم اضطراب طيف التوحد (دراسة مقطعية)

تهدف الدراسة الى التعرف على اتجاهات المعلمين والتربويين نحو دمج الأطفال الذين لديهم اضطراب طيف التوحد في المدارس ورياض الأطفال في فلسطين، والكشف عن مدى ارتباط توجهاتهم في متغيرات الدراسة ، حيث أن الكشف عن مدى تأثير هذه المتغيرات والتي تشمل " الخبرة، المعرفة في اضطراب طيف التوحد، الكفاءة وغيرها". من الممكن أن يزودنا ببيانات تجعلنا قادرين في المستقبل على وضع استراتيجيات لإدارة هذه العوامل وخلق بيئة تعليمية دامجة تراعي احتياجات الأطفال والمعلمين بشكل متكامل. تراعي الدراسة كل تدابير الخصوصية والسرية اللازمة ، حيث أنه لا أحد سيتمكن من الوصول إلى البيانات الخاصة بكم سوى الباحث والفريق الإشرافي، والبيانات التي سيتم الحصول عليها ستكون مجهولة الهوية وسوف تعطى ترميزا بدلا من الاسم الصريح للمشارك.

عند مشاركتك في هذه الدراسة ، فإنك تكون قد ساعدت في خلق بيئة تعليمية دامجة تراعي احتياجات المعلمين و احتياجات الأطفال الذين لديهم اضطراب طيف التوحد في فلسطين.

وفي النهاية عزيزي/تي المشارك/ة ، لك الحق في رفض المشاركة في الدراسة ، كما يحق لك الانسحاب بعد مشاركتك في الدراسة دون إبداء أي أسباب للانسحاب.

بشائر أبو خديجة. طالبه ماجستير

الجامعة العربية الأمريكية - فلسطين

AAUP-IRB Code NO.:2023/A/87/N

استبيان المعلومات الديمغرافية

سيتم جمع البيانات الخاصة في الدراسة من خلال الاستبيانات التالية ، حيث أن الاستبيان الأول هو الاستبيان الديموغرافي والذي يشمل العمر والجنس والحالة الاجتماعية والخبرة والتعامل مع الأطفال الذين لديهم اضطراب طيف التوحد ومستوى مدارس المعلمين والدور التربوي للمعلمين ونوع المادة التعليمية. بالاضافة الى حضور الدورات التدريبية التي تتعلق بالدمج / التوحد.

أرجو من حضرتك ملأ المعلومات الخاصة بك في الاستبيان المرفق أدناه

البيانات الشخصية
العمر : .....
الجنس : ☐ ذكر ☐ أنثى
المديرية التي تعمل بها " حسب المحافظة" نابلس. طولكرم. جنين. قلقيلية. رام الله. بيت لحم. الخليل. القدس. أريحا.
مكان السكن: قرية. مدينة. مخيم.
الحالة الإجتماعية :

☐ أعزب/اء ☐ متزوج/ة ☐ منفصل/ة ☐ مطلق/ة.

المؤهل العلمي:

☐ دبلوم . ☐ بكالوريوس. ☐ ماجستير. ☐ دكتوراة .

الخبرة التعليمية :

☐ 1 – 2 سنه ☐ 3 – 5 سنه ☐ 6 – 10 سنه

☐ اكثر من 10 سنوات

ما هو دورك التربوي:

☐ معلم/ة صف عادي. ☐ معلم/ة غرفة مصادر ☐ معلم/ة تربية خاصة. ☐ مرشد/ة تربوي/ة.

☐ مسؤول/ة تعليم جامع.

المرحلة الدراسية التي تدرس بها:

☐ رياض أطفال ☐ ابتدائي ☐ إعدادي

هل لديك تجربة أو خبرة في التعامل مع الأطفال الذين لديهم اضطراب طيف التوحد:

☐ نعم ☐ لا

اذا كانت الإجابة نعم ، فكم كانت المدة:

☐ 1 – 2 سنه ☐ 3 – 5 سنه ☐ 6 – 10 سنه

☐ اكثر من 10 سنوات

الرجاء اختيار الإجابة التي تتناسب مع حضورك لتدريب او الاهتمام بحضور تدريب يتعلق بدمج الأطفال او الأشخاص الذين لديهم اضطراب طيف التوحد .

☐ سبق لي الحصول على تدريب . ☐ مهتم، ولم يسبق لي الحصول على تدريب. ☐ لست مهتما، ولم يسبق لي الحصول على تدريب.
ما نوع الخبرات التي تعرضت لها مع الطلاب ذوي الاختياجات الخاصة (الرجاء اختيار كل ما ينطبق عليك). ☐ سبق لي تدريس ذوي أحتياجات خاصة في غرفة مصادر. ☐ درست عدد من الأفراد ذوي الاحتياجات الخاصة المدمجين في الصف العادي. ☐ تطوعت للعمل مع ذوي الاحتياجات الخاصة. ☐ تواصل غير مباشر مع أطفال ذوي الاحتياجات الخاصة مدمجين في صف آخر في مدرستي. ☐ تعلمت عن ذوي الاحتياجات الخاصة في الجامعة. ☐ لا شيء مما ذكر.
نوع المادة التعليمية التي تقوم بتدريسها " يمكنك كتابة لا ينطبق في حال كونك فقط معلم/ة غرف مصادر او مرشد/ة تربوي/ة ولا تقوم/ين بإعطاء حصص دراسية" .....

النسخة العربية من مقياس TAIS

هذا الاستبيان تم ارفاقه من اجل استكشاف توجهات المعلمين تجاه دمج الأطفال الذين لديهم تحديات نمائية مع أقرانهم في المدارس ورياض الأطفال

الرجاء الأجابة عن جميع فقرات المقياس وذلك بأختيار أجابة واحدة تحدد مدى اتفاقك مع كل عبارة من العبارات الأتية:

	ما رأيك حول دمج الطلاب ذوي الاحتياجات في الفصول العادية (حيث يكون الطلاب ذوي الاعاقة مع باقي الطلاب :	أوافق بشدة 5	أوافق 4	لا أعلم 3	لا أوافق 2	لا أوافق بشدة 1
1	يتعلم الأطفال ذوي الاحتياجات التعليمية الخاصة بشكل أفضل في فصول تعليم خاصة لوحدهم حيث يكون هناك معلمين مدربين تدريبا خاصا.					
2	ينبغي تعليم الأطفال الذين يعانون من مشاكل عاطفية وسلوكية في الفصول الدراسية العادية مع توفير الدعم الكافي لهم.					
3	للطفل ذوي الاحتياجات التعليمية الخاصة الحق في أن يكون في فصل تعليمي خاص.					
4	يجب أن يتم قبول الأطفال الذين يعانون من اضطراب الانتباه / والنشاط الزائد في الفصول الدراسية العادية مع توفير دعم كافي لهم.					

5	يجب عدم زيادة عبء معلمي الفصول العادية من خلال إجبارهم على قبول الاطفال ذوي الاحتياجات التعليمية الخاصة في فصولهم .					
6	يتم تحقيق أفضل نتيجة إذا تم وضع كل طفل من ذوي الاحتياجات الخاصة في فصل تعليمي خاص يناسبه.					
7	ينبغي أن يتم تدريس الطلاب ذوي الاحتياجات التعليمية الخاصة في الفصول العادية قدر الإمكان.					
8	يؤدي دمج الأطفال ذوي الاحتياجات التعليمية الخاصة في الفصل العادي إلى إضافة عمل زائد للمعلمين في هذه الفصول.					
9	ينبغي وضع الطفل ذوي الاحتياجات التعليمية الخاصة في فصل دراسي خاص حتى نحافظ على حقوقه القانونية.					
10	من الممكن تعليم الأطفال ذوي الاحتياجات التعليمية الخاصة بفعالية في الفصول الدراسية العادية.					

مقياس اتجاهات المعلمين نحو التوحد

The Autism Attitude Scale for Teachers (AAST)

هذا الاستبيان تم ارفاقه من اجل استكشاف توجهات المعلمين تجاه دمج الأطفال الذين لديهم اضطراب طيف التوحد مع أقرانهم في المدارس ورياض الأطفال

الرجاء الأجابة عن جميع فقرات المقياس وذلك بأختيار أجابة واحدة تحدد مدى اتفاقك مع كل عبارة من العبارات الآتية:

الرقم	فقرات مقياس أتجاهات التربويين نحو دمج الطلاب الذين لديهم اضطراب طيف التوحد	لا أوافق بشدة (1)	لا أوافق (2)	غير متأكد (3)	أوافق (4)	أوافق بشدة (5)
1	يمكن للمعلمين الحاصلين أو غير الحاصلين على تدريب تعليمي خاص ومكثف مساعدة الطالب الذي لديه اضطراب طيف التوحد ..					
2	لا تعتبر سلوكيات الطلاب الذين لديهم اضطراب طيف التوحد مزعجة و لا تؤثر سلبًا على سلوك الطلاب من حولهم.					
3	تعمل المدارس التي تضم الطلاب العاديين والطلاب الذين لديهم اضطراب طيف التوحد على تعزيز الخبرات التعلمية للطلاب العاديين.					

4	يجب أن لا يتم تعليم الطلاب العاديين والطلاب الذين لديهم اضطراب طيف التوحد في مدارس منفصلة.					
5	يمكن للطلاب الذين لديهم اضطراب طيف التوحد التعلم من معلم جيد.					
6	المدارس العادية لا تفوق مستوى الطلاب الذين لديهم اضطراب طيف التوحد.					
7	يمكنني السماح بوضع الطلاب الذين لديهم اضطراب طيف التوحد في صفي مع الأفراد العاديين.					
8	يمكن للمعلمين غير المدربين بشكل محدد في التربية الخاصة التعامل مع طالب لديه اضطراب طيف التوحد.					
9	الطلاب الذين لديهم اضطراب طيف التوحد ليسوا ضعيفين للغاية للاستفادة من أنشطة المدرسة العادية.					
10	تعمل المدارس التي تضم طلاب العاديين والذين لديهم اضطراب طيف التوحد على تعزيز الخبرات التعليمية للطلاب الذين لديهم اضطراب طيف التوحد.					

11	إذا كان لدي الخيار ، لا أمانع في التدريس في مدرسة بها طلاب لديهم اضطراب طيف التوحد.					
12	يمكن للمدرس الجيد أن يفعل الكثير لمساعدة الطالب الذي لديه اضطراب طيف التوحد.					
13	يمكن للطلاب الذين لديهم اضطراب طيف التوحد أن يكونوا جيدين اجتماعياً بما يكفي للاستفادة من التواصل مع الطلاب العاديين.					
14	من الانصاف أن تطلب من المعلمين قبول الطلاب الذين لديهم اضطراب طيف التوحد في مدرستهم.					

مستوى المعرفة في اضطراب طيف التوحد

Autism Inclusion Questionnaire

الرجاء الإجابة عن الفقرات الآتية بناء على معرفتك السابقة بالتوحد وذلك باختيار (صح أو خطأ) والهدف من ذلك هو التعرف إلى مدى ارتباط المعرفة بالإتجاهات نحو دمج الطلاب الذين لديهم اضطراب طيف التوحد.

الرقم	الفقرات	صحيح	خطأ
1	معظم الأفراد الذين لديهم اضطراب طيف التوحد لا يتكلمون.		
2	التوحد هو اضطراب نمائي.		
3	يظهر التوحد في مرحلة الطفولة فقط.		
4	يظهر الأفراد الذين لديهم اضطراب طيف التوحد أعراضًا أساسية غير متشابهة.		
5	يُظهر معظم الأفراد الذين لديهم اضطراب طيف التوحد ضعفًا في القدرات المعرفية.		
6	يتمتع بعض الأفراد الذين لديهم اضطراب طيف التوحد بقدرات عقلية مرتفعة.		
7	يعد الافتقار إلى مهارات الاتصال الاجتماعي والمشاكل السلوكية من الأعراض الرئيسة للأفراد الذين لديهم اضطراب طيف التوحد		
8	تظهر بعض أعراض اضطراب طيف التوحد في سن متأخرة.		
9	التدخل السلوكي هو أكثر الأساليب فعاليةً مع الأفراد الذين لديهم اضطراب طيف التوحد.		
10	يمكن للأفراد الذين لديهم اضطراب طيف التوحد أن يتحسنوا بشكل ملحوظ مع برامج التدخل المبكر.		
11	يمكن لطريقة تدخل واحدة أن تنجح بالتأكيد مع جميع الأفراد الذين لديهم اضطراب طيف التوحد		

12	العلاج الطبي هو التدخل الأكثر شيوعًا لاضطراب طيف التوحد.		
13	يمكن علاج التوحد باستخدام طريقة تدخل مناسبة.		
14	التوحد هو اضطراب وراثي.		
15	لا يوجد سبب محدد لاضطراب طيف التوحد.		

مقياس الكفاءة الذاتية لدى المعلمين للعمل في بيئات التعليم الشامل (النسخة الكاملة 18 فقرة)

(TEIP-AR)

هذا الاستبيان تم ارفاقه من اجل استكشاف كفاءة المعلمين تجاه دمج الأطفال الذين لديهم تحديات نمائية مع أقرانهم في المدارس ورياض الأطفال.

الرجاء الأجابة عن جميع فقرات المقياس وذلك بأختيار أجابة واحدة تحدد مدى اتفاقك مع كل عبارة من العبارات الأتيه:

ما رأيك فيما يلي :	1 غير موافق بشدة	2 غير موافق	3 غير موافق الى حدما	4 موافق الى حدما	5 موافق	6 موافق بشدة
لدي القدرة على توقع سلوكيات الطلاب بشكل واضح						
لدي القدرة على تهدئة الطالب المزعج " غير المنضبط" .						
لدي القدرة على جعل أولياء الأمور يشعرون بالراحة عند زيارتهم للمدرسة.						
لدي القدرة على دعم أولياء الأمور لمساعدة أطفالهم للأداء بشكل أفضل في المدرسة						

لدي القدرة على تقييم استيعاب الطلاب لما سبق تدريسه لهم بشكل دقيق.						
لدي القدرة على وضع الطلاب أصحاب القدرات العالية أمام تحديات مناسبة لهم.						
لدي القدرة على منع السلوكيات الغير مرغوب فيها قبل ان تظهر في الفصل.						
لدي القدرة على السيطرة على السلوك التخريبي الغير مرغوب فيه في الفصل.						
لدي القدرة على جعل أولياء أمور الأطفال الذين لديهم احتياجات خاصة مشاركين في الأنشطة المدرسية الخاصة بأطفالهم						
لدي القدرة على إعطاء الطلاب الذين لديهم احتياجات خاصة مهام وواجبات تعليمية تراعي حاجاتهم الفردية						
لدي القدرة على جعل الطلاب يلتزمون بالنظام الخاص بالفصل						
لدي القدرة على العمل الجماعي مع مختصين في تخصصات أخرى لعمل وبناء خطط تربوية للطلاب الذين لديهم احتياجات خاصة.						

لدي القدرة على العمل مع مختصين وموظفين من تخصصات مختلفة بهدف تدريس الطلاب الذين لديهم احتياجات خاصة في الفصل (مع زملائه أو اقرانه في الفصل)						
لدي القدرة على جعل الطلاب يعملون في مجموعات أو ثنائيات (كل اثنين يعملون معا)						
لدي القدرة على استخدام أنواع متعددة من التقييم						
لدي القدرة على تعريف من ليس لديهم معلومات حول الأنظمة والقوانين الخاصة بدمج الطلاب الذين لديهم احتياجات خاصة.						
لدي القدرة على التعامل مع الطلاب الذين لديهم سلوكيات جسدية عدوانية						
لدي القدرة على شرح الدرس بطريقة مختلفة او تقديم مثال عندما يكون هناك طلاب لم يفهموا الدرس.						

The Sentiments, Attitudes, and Concerns about Inclusive Education Revised (SACIE-R) Scale

مقياس المشاعر والاتجاهات والمخاوف نحو التعليم الشامل "الدامج"

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هذا الاستبيان تم ارفاقه من اجل استكشاف إدراك المعلمين حول دمج الأطفال الذين لديهم تحديات نمائية مع أقرانهم في المدارس ورياض الأطفال

الرجاء الأجابة عن جميع فقرات المقياس وذلك بأختيار أجابة واحدة تحدد مدى اتفاقك مع كل عبارة من العبارات الأتيه:

اوافق بشدة (5) ..... لا أوافق بشدة (1)					
	1 لا أوافق بشدة	2 لا اوافق	3 غير متأكد	4 أوافق	5 أوافق بشدة
أشعر بالقلق بأن الطلاب الذين لديهم احتياجات خاصة لن يتم تقبلهم من باقي زملائهم بالفصل.					
أخشى من فكرة إمكانية أن يكون لدي إعاقة في المستقبل.					
يجب أن يوضع الطلاب الذين يواجهون صعوبة في التعبير عن أفكارهم لفظيا في فصول عادية مع الطلاب الاخرين.					

أشعر بالقلق من صعوبة إعطاء الاهتمام المناسب لجميع الطلاب في فصول الدمج.					
أميل إلى ان يكون التواصل مع الأشخاص ذوي الإعاقة مختصرة وتنتهي بأسرع ما يمكن.					
يجب أن يوضع الطلاب الذين لديهم مشكلة في الانتباه في الصفوف العادية.					
أشعر بالقلق من أن عبء عملي سيزيد إذا كان لدي طلاب لديهم احتياجات خاصة في فصلي.					
يجب أن يوضع الطلاب الذين يحتاجون إلى تقنيات التواصل (مثل لغة برايل / لغة الإشارة) في فصول عادية مع الطلاب الاخرين.					
سأشعر بالسوء لو كان لدي إعاقة.					
أشعر بالقلق من أني سأكون تحت ضغط نفسي أكبر إذا كان لدي طلاب لديهم احتياجات خاصة في فصلي.					
أخشى أن أنظر بشكل مباشر لشخص لشخص لديه احتياجات خاصة.					

يجب أن يوضع الطلاب متكرري الرسوب في فصول عادية مع الطلاب الاخرين					
أجد صعوبة في التغلب على صدمتي الأولى عند مقابلة أشخاص من لديهم إعاقات جسدية شديدة.					
أشعر بالقلق لعدم امتلاكي المعرفة والمهارات المطلوبة لتعليم الطلاب الذين لديهم احتياجات خاصة.					
يجب أن يوضع الطلاب الذين يحتاجون إلى برامج أكاديمية فردية في فصول عادية مع الطلاب الاخرين.					

الملخص

.تعد اتجاهات المعلمين تجاه دمج الأطفال الذين لديهم احتياجات خاصة عاملًا مهمًا في نجاح أو فشل عملية الدمج، حيث يواجه الأطفال الذين لديهم احتياجات خاصة ، وخاصة الأطفال الذين لديهم اضطراب طيف التوحد، العديد من التحديات في البيئة التعليمية. تهدف هذه الدراسة إلى استكشاف اتجاهات المعلمين الفلسطينيين نحو دمج الأطفال الذين لديهم اضطراب طيف التوحد والعوامل المؤثرة في تشكيل اتجاهاتهم.

تم إجراء دراسة مقطعية من خلال مشاركة **356** معلم/ة يعملون في المدارس ورياض الأطفال الحكومية بالضفة الغربية مع الأطفال الذين تتراوح أعمارهم بين **3** و**13** عامًا. اعتمدت الدراسة على مقياس اتجاهات المعلمين تجاه الدمج لقياس اتجاهاتهم نحو التعليم الشامل، ومقياس اتجاهات المعلمين نحو التوحد لاستطلاع اتجاهاتهم نحو دمج الأطفال الذين لديهم اضطراب طيف التوحد تحديدًا. حيث أظهرت النتائج أن المعلمين يمتلكون اتجاهات إيجابية بشكل عام نحو دمج الأطفال الذين لديهم اضطراب طيف التوحد، بالإضافة الى وجود ارتباط إيجابي ضعيف ولكنه ذو دلالة إحصائية بين اتجاهاتهم نحو دمج الأطفال الذين لديهم احتياجات خاصة بشكل عام واتجاهاتهم نحو دمج الأطفال الذين لديهم اضطراب طيف التوحد بشكل خاص. كما تبين أن فعالية المعلمين**(r = .51, p < .05)** ، الفئة التعليمية **(p = .00)**، منطقة السكن**(p = .04)** ، والخبرة العامة مع الأطفال الذين لديهم اضطراب طيف التوحد **(p = .00)**، والتدريب **(p = .00)** كانت لها تأثير على مواقف المعلمين تجاه دمج الأطفال الذين لديهم اضطراب طيف التوحد. في المقابل، لم يتم العثور على ارتباط بين اتجاهات المعلمين والمعرفة،

والإدراك، والعمر، والحالة الاجتماعية، والمديرية، والمؤهل الأكاديمي، ومستوى التدريس، والخبرة التعليمية، وتخصص التدريس، ونوع الخبرة مع الأطفال الذين لديهم اضطراب طيف التوحد ، ومدة الخبرة معهم. تشير الدراسة إلى أن المعلمين الفلسطينيين أظهروا مواقف إيجابية بشكل عام تجاه دمج الأطفال المصابين باضطراب طيف التوحد، مع تأثير بعض العوامل مثل الفعالية والخبرة والتدريب، بينما لم يكن للعوامل الأخرى مثل المعرفة والإدراك والخبرة التعليمية تأثير على مواقفهم.