# Exploring Directors' and Teachers' Knowledge of Inclusive Education for Children with Autism Spectrum Disorder: A Pilot Mixed-Methods Study in Saudi Arabia

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**Abstract**
Inclusive education for children having autism spectrum disorder is considered as significant worldwide however, studies in Kingdom of Saudi Arabia regarding knowledge of inclusive measures possessed by school leaders and educators is insufficient. Understanding the attitudes and readiness of school leaders and teachers is vital for encouraging effective inclusion. The major purpose of this pilot study is to understand the feasibility of an extensive mixed-methods studies exploring the willingness, attitudes, and knowledge of school leaders and teachers regarding the inclusion of ASD children in mainstream schools of KSA. In this study, a mixed methods design was used. Quantitative data was gathered using an 18-item Likert-scale survey. 32 participants including 24 directors and 8 school directors from mainstream schools of Riyadh completed the survey. Qualitative data was collected employing semi-structured interviews with 6 respondents. Thematic analysis and descriptive statistics were developed. Findings showed a moderate knowledge level, and largely positive inclination towards inclusion. However, respondents revealed that there exist insufficient formal training and inadequate resources for successful execution. Feasibility analysis indicated appropriate recruitment potential and instrument reliability (Cronbach's $\alpha$ = .82).
**Keywords**: Autism Spectrum Disorder, Inclusion, Teacher Knowledge, Mixed-Methods, Saudi Arabia, Pilot Study

## Introduction
Inclusive education is regarded as a fundamental pillar of international educational transformations, highlighting the rights of all students to get involved completely in mainstream education (Subban et al., 2022). Among distinct student groups, ASD students posit diverse challenges for inclusion owing to their mixed behavioural, social, and

communication profiles (Obrovská et al., 2025). During the past few decades, global models like Sustainable Development Goal 4 and Salamanca Statement have focused on fair and quality education for all the people, having any kind of ability or disability (UNESCO, 1994). However, converting these global commitments into successful classroom measures relies greatly on the attitudes, awareness, and abilities school leaders and teachers.

*ASD and Inclusion in International Context*
Internationally, education systems have shifted towards inclusion from segregation, exhibiting a paradigm shift from comprehending disability as a deficit to identifying diversity as a power (Stack et al., 2021). For ASD students, inclusion necessitates that educators hold not only a basic comprehension of ASD but also effective approaches to cater to individual requirements. Research across different contexts reveal that educators' attitudes and knowledge towards inclusion greatly impact execution efficacy (Pereira et al., 2025). Teachers who have sufficient confidence and training are inclined to exhibit increased effectiveness in inclusive classrooms, while those possessing inadequate knowledge usually show resistance (Peña et al., 2025).

*The Context of Kingdom of Saudi Arabia*
In KSA, the Education Ministry has emphasized inclusive education as a key component of the Vision 2030, which focuses on contemporary educational measures ad foster equality (Alrudayni, 2025). Though policy related models encouraging inclusion exist, studies indicate that execution appears to be unequal across schools. Some of the mainstream schools have commenced incorporating ASD children, however management and educators usually report insufficient specialized training, scarce resources, and problems in classroom management (Mohiuddin et al., 2023). Such obstacles weaken the inclusion' objectives, specifically when personal don't possess required knowledge regarding ASD traits and inclusive teaching techniques (Halah Al-Korbi et al., 2024)

*Knowledge and Attitudes of Educators*
Knowledge regarding ASD and attitudes towards inclusion are interrelated constructs impacting teacher's willingness to execute inclusive practices (İpek Gülsün et al., 2023). Knowledge is about factual and practical comprehension of ASD and suitable educational approaches while attitudes show beliefs and outlooks towards inclusion. Studies show that schools leaders and educators possessing increased knowledge levels regarding ASD are more probable to encourage inclusive measures (Yang et al., 2024). On the other hand, inadequate knowledge results in misconceptions, decreased expectations, and refusal to accept inclusive policies (Yang et al., 2024).

*Research Question*
*Is the suggested mixed methods design viable and effective for evaluating the knowledge, attitudes, and perceived readiness of teachers and directors about the inclusion of children with autism spectrum disorder in mainstream schools of KSA?*

*Rationale for the Study*
Though previous studies in KSA have examined educators' perceptions regarding inclusion extensively, there exists insufficient practical evidence particularly addressing the knowledge of school leaders and educators about ASD inclusion (Yang et al., 2024). School leaders play a

fundamental role in influencing inclusive school cultures by establishing priorities, assigning resources, and displaying inclusive values (Alkhunini & Alsawalem, 2025). Thus, assessing both groups altogether provides a thorough comprehension regarding inclusion' readiness in KSA's mainstream schools.

Moreover, some studies have applied mixed methods design in the context of KSA to acquire both the qualitative and quantitative comprehensions regarding perceived issues and problems. Performing a pilot study was vital to assess the viability of extensive national research, evaluate the feasibility of instruments, and improve data collection processes appropriate for local educational context (Rodney Turner, 2005).

*Aim and Objectives*
This pilot study seeks to test the viability of performing extensive mixed-methods research examining the attitudes, knowledge, and readiness of school leaders and educators about the inclusion of ASD children in Saudi mainstream schools (Rodney Turner, 2005). The key objectives were as follow.
- Evaluate school directors and educators' knowledge level and attitudes towards ASD inclusion.
- Recognize perceived obstacles and facilitators to executing inclusive education for ASD children.
- Assess the recruitment' feasibility, data collection mechanisms, and analytical techniques for larger national research.

This study aimed at offering fundamental evidence to assist future large-scale research and support professional growth approaches resonated with inclusive educational agenda of KSA.

**Literature Review**
*International Perspectives regarding Autism and Inclusive Education*
Inclusive education has transformed into a pedagogical approach from an ethical and rights-oriented tactic for enhancing learning related results for all learners (Zanuttini, 2023). The inclusion of ASD children in mainstream schools is a widespread concept, backed by international frameworks like Convention on the Rights of Persons with Disabilities (Abdulmalik Alkhunini, 2025). However, inclusion necessitates that schools offer suitable accommodations and that teachers hold the necessary skills and knowledge to respond to distinct requirements.

International studies show that knowledge of teachers regarding ASD greatly impacts their readiness and confidence to incorporate ASD students in mainstream classrooms (Abdulmalik Alkhunini, 2025). When educators comprehend the ASD related traits like variations in social collaboration and communication, they become competent to develop supportive classroom settings. On the other hand, insufficient knowledge can result into misconception, and unsuitable teaching approaches (Fitriyani & Haryono, 2025).

Also, the attitudes of educators play an integral role in inclusion-related results (Keenan et al., 2025). Positive attitudes are linked with better openness to embrace curricula and interact with experts. On the other hand, negative attitudes, usually embedded in lack of training, and resource obstacles, can hinder inclusion measures (Keenan et al., 2025). Therefore, global

literature focuses on the requirement for systematic professional growth related to ASD awareness, evidence-based measures, and inclusive pedagogy.

*Knowledge and Training of Teachers*
Teacher preparation is regarded as a predictor of effective inclusion. Studies, conducted in Australia and USA, revealed that pre-service and in-service training about ASD augments skills, competence, and self-efficacy of the educators (Baek et al., 2024). However, many teachers, regardless of augmented awareness, display inadequate exposure to specialized training.

Further, professional development schemes are usually short-term and knowledge-oriented instead of experiential, restricting long-term behavioural alteration. It shows that improving knowledge only may not be adequate unless supplemented with mentoring, managerial assistance, and classroom practice (Van Der Steen et al., 2020).

*The Role of School Leadership in Inclusion*
School leadership plays an imperative role in encouraging inclusive practices (Feng et al., 2025). School directors influence established attitudes, assign resources, and develop supportive environments for educators to execute inclusive practices. Studies indicate that when leaders exhibit vibrant commitment to inclusion, educators are more stimulated and authorized to adapt curricula for children with disabilities (Rafiq Dar et al., 2022)

However, research shows that majority of leaders don't possess particular expertise regarding inclusive and ASD pedagogy. Without sufficient comprehension, leaders might face problems in guidance, assign right personnel, or assess inclusive teaching efficacy successfully (Feng et al., 2025). It shows the significance of evaluating both leaders' and educators' knowledge simultaneously, a gap that stays unexamined in the educational studies of the middle East (Massiah et al., 2024).

*Inclusion of ASD children in Saudi Arabia*
Since the early years of 2000s, inclusive education has advanced promptly in KSA. It is backed government related policies for fostering enrolment of ASD children in mainstream schools (Alrabiah & Almalky, 2025). Regardless of these policy commitments, execution appears to be inconsistent across different schools and regions. Research indicates that educators usually exhibit positive attitudes towards inclusion but express concerns regarding insufficient training prospects, absence of classroom assistants, and inadequate instructional content (Madhesh, 2024).

Moreover, most studies performed in KSA specifically emphasized teachers, overlooking the role of school leaders and directors in inclusion. The lack of thorough, mixed-methods study combining both qualitative and quantitative viewpoints restrict comprehension of the attitudinal and systemic obstacles to inclusion of ASD students (Madhesh, 2024).

*Identified Gaps and Justification for the Present Study*
The assessment shows different critical gaps. Though international evidence highlights the significance of the knowledge possessed by educators and directors regarding inclusive education, studies in the context of KSA remains restricted and limited (Abdulmalik Alkhunini,

2025). Also, few studies explored inclusion particularly regarding ASD children, despite growing enrolment of ASD children in mainstream schools of KSA. There exists a lack of feasibility studies evaluating the practicality of extensive data gathering in this region.

Therefore, this pilot study addresses these gaps by assessing the viability of examining attitudes and knowledge regarding ASD inclusion among educators and directors in mainstream schools of KSA. By combining both qualitative and quantitative tactics, the research provides a comprehensive understating of inclusion preparedness and highlights areas for professional growth. Also, the findings obtained through this study will assist an extensive investigation, thus playing an integral role in evidence-based progression of inclusive education in KSA.

**Methods**
*Research Design*
In this pilot study, a mixed-methods design was used to assess the viability of an extensive national-level examination regarding knowledge possessed by teachers and directors about the inclusion of ASD children in mainstream schools of KSA. The objective of choosing a mixed-method tactic is based in the requirement to gauge both the depth of viewpoints qualitatively, and knowledge breadth quantitatively, therefore facilitating triangulation of findings to reinforce validity (Junior et al., 2024).

This study executed a convergent parallel mixed-methods approach which involved collecting quantitative and qualitative data simultaneously, analysing them separately, and integrating them during interpretation. As a pilot, the objective was not generalisation instead testing the precision, reliability, practicality, and operational appropriateness of the suggested instruments, recruitment approach, and analytic processes.

*Setting*
This pilot was performed in mainstream primary and lower-secondary schools of Riyadh, KSA. The key purpose of choosing Riyadh was focused on its diversity and the active measures adopted by Education Ministry towards inclusion.

*Participants and Inclusion Criteria*
Table 1
*Sample Description*

|  | No. of participants | Directors | Teachers |
|---|---|---|---|
| **Quantitative sample** | 32 | 8 | 24 |
| **Qualitative sample** | 6 | 3 | 3 |

With respect to quantitative sample, 32 respondents including 8 directors and 24 teachers completed the pilot survey. They represented ten mainstream schools encompassing six public and four private schools.

The following inclusion criteria was used.
- Presently working in a mainstream school
- Direct participation towards instructional and administrative tasks and responsibilities
- Eagerness to participate.

With respect to qualitative sample, 6 respondents were purposively chosen from the survey participants to safeguard differences in experience, role, and school type. The sample consisted of three teachers (years 1-6), and three school directors. They were chosen based on readiness, accessibility, and representation of each school type. This sample size is regarded as suitable for a pilot, supporting comprehensive examination while upkeeping viability of transcription and analysis.

*Sampling Strategy*
This study utilized convenience sampling for collecting quantitative data, accompanied by purposive sampling for gathering quantitative data. Convenience sampling was selected as the purpose was to assess viability instead of representativeness (Etikan et al., 2016). The pilot necessitated determining whether educators were ready to get involved with the subject and whether the survey instrument was appropriate in terms of clarity and length.

Purposive sampling for interviews safeguarded that both teaching and leadership viewpoints were captured (Etikan et al., 2016). This association is significant as school leaders influence policy and resource allocation, where educators administer the practical execution of inclusion.

*Recruitment Procedures*
School recruitment took place via formal email invitations delivered to school directors followed by phone calls. Potential respondents, after institutional acceptance, were contacted through staffroom announcements, reliant on preference of each school. Respondents were provided with information sheet describing the research objective, private processes, and voluntary aspect of participation. informed consent in a written format was obtained from the participants prior to research commencement.
The completion of survey took almost 12-14 minutes while interviews necessitated approximately 30 minutes. The rate of participation was high-100 percent response rate which showed strong viability for an extensive future study.

**Instruments**
*Quantitative Instrument: Inclusion Preparedness and ASD Knowledge Questionnaire*
Table 2
*Quantitative Instrument Description*

| Survey Domains` | Number of Items |
|---|---|
| Knowledge of ASD traits | 6 |
| Attitudes toward inclusion | 6 |
| Perceived preparedness and training requirements | 6 |

The survey involved a 5-poit Likert scale ranging from strongly disagree (1) to strongly agree (5). Higher scores show better knowledge, improved attitudes, and increased perceived preparedness.  Also, it encompassed demographic details such as role, gender, school type, years of experience, and training history.

*Pilot Instrument Reliability*
Cronbach's alpha was used to evaluate internal consistency reliability. For the overall scale, the value of $\alpha = .82$ indicates an increased reliability for a pilot study. The range of subscale

alpha was .76-.83. four participants mentioned that the three items were 'too identical', offering valuable information for the improvement before carrying out the main study.

## Qualitative Instrument: Semi-Structured Interviews

The semi-structured interviews were conducted to examine viewpoints and experiences in increased depth. It consisted of 6 open ended queries. Probes were utilized to foster description and provide insights.

## Data Collection Processes

### Quantitative Data Collection

Surveys were shared with the participants electronically via emails. Respondents filled up the survey individually and were stimulated to ask questions for clarification, if required. An increased emphasis was given on confidentiality of the data, ensuring anonymity.

### Qualitative Data Collection

Interviews were carried out via encrypted zoom meetings or face-to-face in school's meeting rooms, depending on the ease and convenience of the participant. the interviews were audio-recorded, after taking written consent from the participants, and transcribed accordingly. The researcher maintained a reflexive journal all through the procedure, recording potential problems, and procedural changes related to the future full-scale research.

## Data Analysis

### Quantitative Analysis

The quantitative data was analysed utilizing descriptive statistical tactics aligned with the goals of a pilot feasibility study. Preliminary screening encompassed gauging missing responses, and trends indicating item misinterpretation however, no issues were found. Descriptive analysis was performed to review central tendencies and differences for every survey scale, encompassing calculating averages, standard deviation, and frequency distributions. These analyses facilitated an evaluation of the spread of items all through the sample.

Cronbach's alpha was used to examine the internal consistency reliability and determine the responses' stability with respect to each subscale. Reliability coefficients were present within a satisfactory range for pilot study, depicting that measure performed sufficiently in the existing context. Also, survey administration time and brief respondents' comments were examined to assess the applicability of administering the instrument in extensive research.

In relation to the exploratory facets of pilot study, no inferential testing was performed instead the analysis emphasized determining if the instrument yielded valuable, interpretable data and utilized feasible procedures. The outcomes indicated that the quantitative constituent is methodologically viable and appropriate for performing a large-scale study.

### Qualitative Analysis

Qualitative data was analysed utilizing reflexive thematic framework based on Braun and Clarke's model (Ahmed et al., 2025). Transcripts were analysed multiple times, coded effectively, and divided into initial themes, where were then processed and vibrantly defined. The objective was to explore whether the semi-structure interviews yielded related and

significant data instead of attaining complete thematic saturation. Three consistent themes including inadequate knowledge and misconceptions regarding ASD, positive attitudes but practical problems, and the reduced confidence and readiness to execute ASD inclusion emerged, showing that the qualitative processes were reasonable and viable for expansion in the full-scale study.

*Ethical Considerations*
Ethical consent was obtained from the relevant authorities. Respondents were assured regarding information privacy, voluntary participation, and the right to leave at any time. Survey data kept confidential; interview data was pseudonymised upon transcription. Based on the hierarchical aspect existent in the school's culture. directors were asked not to pressurize teachers regarding participation the research, and recruitment underscored voluntariness.

*Feasibility Outcomes*
The pilot findings show higher viability for executing extensive national mixed-methods research. Recruitment was strong as the survey participation rate was 82%, and the quantitative instrument exhibited adequate internal consistency i.e. $\alpha = .82$. The interview protocol went well, necessitating reduced changes or modifications, and all the data gathering activities took place within a given timeframe. Participants showed positive involvement with both the survey and interview constituents, encouraging the applicability of performing large-scale research. Minimal adjustments are suggested for the full research, encompassing reviewing three survey items that are found to be similar and adding queries to comprehend cultural elements impacting ASD related perceptions.

**Limitations**
Regarding sample size, it was deliberately small and confined to Riyadh being a pilot study. It, therefore, restricted generalisability. Convenience sampling may impact representativeness, and measures related to self-reporting present potential soil desirability bias. However, these confinements are suitable for a pilot where objective is methodological improvement instead of influence.

**Findings**
The pilot study assessed the feasibility of performing a large-scale study regarding directors' and educators' knowledge, attitudes, and perceived willingness about the ASD children's inclusion in mainstream primary schools of KSA. The findings synchronize data from twelve participants including four school directors and eight teachers with qualitative data gathered from six participants encompassing two directors and four teachers. The outcomes evaluate data excellence, instrument performance, and primary trends towards ASD inclusion measures.

*Quantitative Findings: Survey Response*
The response rate was 100 percent as participated filled up the surveys completely and returned them, indicating vibrant engagement and viability for scaling up the research. There was no missing data, and the Likert-scale items showed satisfactory variability across responses. Regarding internal consistency testing, the three subscales including attitudes,

knowledge, and perceived willingness showed the values of Cronbach's alpha ranged between .76-.83, suggesting adequate reliability for a pilot study.

*Overall Subscale Scores*
Regarding subscales, Knowledge of ASD exhibited the lowest score i.e. M=2.68, SD=.54, indicating restricted comprehension of ASD traits, behavioural differences, and evidence-oriented inclusion approaches. Attitudes towards inclusion showed the moderately positive score i.e. M=4.12, SD=0.49, suggesting general assistance for inclusive education, even among respondents possessing inadequate training. Perceived readiness shows the lowest score overall i.e. M=2.41, SD=.62, suggesting that both directors and educators are inadequately trained or assisted to successfully include ASD children.

Table 3
*Mean Scores for the Three Subscales (n=32)*

| Subscale | Mean | Standard Deviation |
|---|---|---|
| ASD Knowledge | 2.68 | .54 |
| Attitudes toward Inclusion | 4.12 | .49 |
| Perceived Readiness | 2.41 | .62 |

*Variations between Directors and Teachers*
Though the small sample presents challenges for computing significance via formal statistical testing, descriptive contrasts offer key patterns (Table 3)

- Directors exhibited slightly better knowledge i.e. M=2.82 in comparison to teachers i.e. M=2.64, probably showing access to training about educational policy.
- Teachers showed positive attitude towards inclusion i.e. M=4.17 in contrast to directors i.e. M=3.98, indicating classroom personnel are more emotionally engrossed in inclusive measures.
- In both groups, perceived readiness was low however, teachers showed the lowest readiness level i.e. M=2.32, aligned with their inadequate training about ASD and everyday classroom related issues.

These variations underscore potential areas necessitating intervention, specifically the requirement for teacher-oriented professional growth and development.

Table 4
*Variations between Directors and Teachers*

| Subscale | Directors (X) | Directors (SD) | Teachers (X) | Teachers (SD) | Mean Difference |
|---|---|---|---|---|---|
| ASD Knowledge | 2.82 | .48 | 2.64 | .55 | +.18 |
| Attitude towards Inclusion | 3.98 | .42 | 4.17 | .50 | -.19 |
| Perceived Readiness | 2.67 | .59 | 2.32 | .63 | +.35 |

*Frequency of ASD-Related Training*
Table 5
*Distribution of Self-reported ASD Training Hours (n=32)*

| Training Hours | Percentage (%) |
|---|---|
| None | 42 |
| 1-5 | 33 |
| 6-10 | 17 |
| 10 | 8 |

42% participants reported that they did not attend any training program regarding ASD inclusion. Only 1 respondent had obtained more than ten hours training regarding ASD and professional growth. It verifies the field's readiness variation and assists the viability of enhancing training-oriented interventions.

*Subscale Score Distribution*
The Bar Chart of Subscale Means (Fig 1) demonstrates a vibrant inclination across constructs: respondents exhibited more positive attitudes in contrast to readiness and knowledge. It indicates that though respondents understand and value inclusion conceptually; they do not possess self-efficacy and knowledge to execute it successfully. It resonates with the qualitative outcomes, where respondents encouraged the concept of inclusive education however, they underscored the absence of expertise and resources simultaneously.
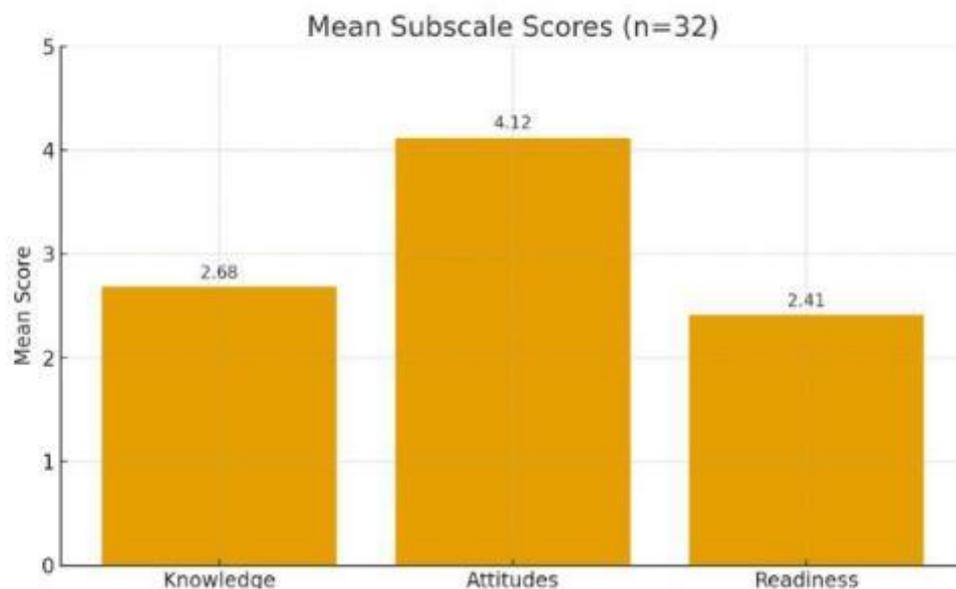


Figure 1: Subscale Means

*Qualitative Findings*
The interview data offered thorough comprehensions regarding the experiential and contextual facets regarding ASD inclusion in mainstream schools of KSA. Three major themes were developed, each showing particular issues and prospects for executing inclusive measures.

*Theme 1-Inadequate Knowledge and Misconceptions Regarding ASD*
Respondents showed inconsistent comprehension of ASD traits. Some precisely recognized common characteristics like sensory and communication related issues, while others reported that ASD appears to be a type of intellectual disability or a behavioural problem originated by indigent home training.

A director (D2) expressed
*"Teachers usually confuse ASD with general learning problems. They consider that the student is stubborn or slow. "(D2)*
Teachers confirmed this gap, emphasizing a vibrant need for training but absence of opportunities.
*"We necessitate formal training. I only understand few things but from using social media platforms." (T4)*
These results strengthen the Knowledge scores attained from the quantitative analysis and demonstrate the existence of misconceptions that may damage classroom measures.

*Theme 2-Positive Attitudes but Practical Problems*
Regardless of knowledge variations, interviewees repeatedly showed positive attitudes towards incorporating ASD children, describing religious, ethical, and educational motives.
One teacher (T3) noted
*"Every child has a right to learn with other students. This is a core component of our values." (T3)*
However, positive attitudes were escorted with reports of considerable practices barriers including absence of teaching assistants, restricted collaboration with the parents/guardians, reduced interaction with education specialists, and lack of Individual Education Plans.
Directors recognized a detachment between policy outlook and real-work capability. D1 acknowledged.

*"We obtain instructions from the Education Ministry regarding inclusive measures, but schools do not possess adequately trained personnel to implement them. "(D1)*
It reflects the quantitative patterns in which Attitudes displayed increased scores in contrast to Knowledge and Readiness.

*Theme 3-Reduced Confidence and Readiness to Execute ASD Inclusion*
Respondents considered themselves as insufficiently prepared to support ASD children. Teachers stated reduced confidence in displaying behaviour and embracing instruction, and some showed apprehensions regarding mistakeably damaging the child's development owing to lack of skills and capability.
A teacher (T2) expressed.
*"At times, it is hard to comprehend the child's behaviour that may eventually lead to mishandling them." (T2)*
Similarly, directors expressed apprehensions regarding system readiness.
*"We do not possess the required resources. In the absence of training and support personnel, inclusion becomes problematic for the people involved." (D1)*
This theme resonates with the Perceived Readiness (lowest-scoring subscale), verifying the requirement for thorough training and the wide-scale capacity formation.

Table 6
*Qualitative Themes Identified in the Pilot Study*

| Theme | Description-Interview Data | Participant Quote |
|---|---|---|
| Inadequate Knowledge and Misconceptions Regarding ASD | Participants exhibited inconsistent comprehension regarding ASD, involving precise knowledge and misconceptions as well. | *"We necessitate formal training. I only understand few things but from using social media platforms."* |
| Positive Attitudes but Practical Problems | Participants showed vibrant positive attitudes but underscored the lack of practical assistances encompassing trained personnel, and Individualized Education plans. | *"We obtain instructions from the Education Ministry regarding inclusive measures, but schools do not possess adequately trained personnel to implement them."* |
| Reduced Confidence and Readiness to Execute ASD Inclusion | Participants expressed anxiety and lack of preparedness to execute ASD inclusion owing to inadequate training, limited resources, and apprehension regarding mismanaging conduct. | *"We do not possess the required resources. In the absence of training and support personnel, inclusion becomes problematic for the people involved."* |

*Convergence of Qualitative and Quantitative Findings*
The triangulation of mixed methods revealed vibrant coherence among datasets. Regarding knowledge, quantitative outcomes revealed moderately low knowledge scores which are further supported by the inadequate training, misconceptions, and dependence on informal data sources based on qualitative data. With respect to Attitudes, both the quantitative and qualitative data exhibited support toward inclusion. However, interviews showed that positive attitudes were usually engrossed in personal ethics instead of conviction in pedagogical capabilities. Readiness showed the lowest quantitative scores, and qualitative outcomes offered specific instances of lack of preparedness, including inadequate training, resource scarcity, and ambiguity in managing ASD behaviours. Thus, this pilot study exhibited alignment between two datasets and verified the feasibility of the instruments for an extensive level study.

*Feasibility Outcomes*
The pilot exhibited strong suitability across instrument performance, recruitment, and resource requirements. The hundred percent participation rate shows increased interest from both directors and teachers and reveals that obtaining a larger sample in extensive study would be easier and straightforward. Also, participants showed a vibrant inclination toward broader data collection across multiple mainstream schools.

Moreover, instrument feasibility was equally vibrant- the employed survey displayed satisfactory psychometric performance, with consistent subscales, required number of item responses, and no apprehensions about relevance. Also, interview guide supported producing rich and insightful qualitative data, emphasizing its feasibility for extracting significant comprehensions regarding director's and educator's perceptions and experiences. Resource and time feasibility enhance the study's scalability; surveys necessitated 12-14 minutes to

complete, and interviews took around 30 minutes, making it manageable and facilitate satisfactory scheduling across different sites. Therefore, the outcomes of this pilot study validate that the suggested methodology is suitable and adequately practical for execution in an extensive study within the context of KSA's mainstream schools.

**Discussion**

This pilot study explored the knowledge, attitudes, and perceived readiness of the school directors and teachers to support the inclusion of ASD children in the mainstream schools of KSA. By synchronizing quantitative survey outcomes with qualitative interview data, this study offers a preliminary but significant comprehensions of the variations, strengths, and contextual obstacles impacting the inclusion of ASD students in mainstream schools of Riyadh.

*Interpretation of Quantitative Findings*

The quantitative outcomes showed vibrant variations across the key survey subscales. Respondents showed moderate attitudes, lower knowledge, and lowest readiness, indicating the notions mentioned in global literature where optimistic beliefs regarding inclusion do not directly translate preparedness for execution.

The knowledge subscale depicted the weakest Mean (X), showing teachers hold limited comprehension of ASD traits. It resonates with the studies performed in other parts around the globe including Gulf region, where teachers usually exhibit ASD related awareness but absence of thorough comprehension about communication differences, sensory requirements, behavioural conduct, and evidence-oriented classroom approaches (Alkhunini & Alsawalem, 2025). Also, this score variation indicates inconsistency across schools, probably showing inadequate access to training, and variations in established support systems.

On the contrary, the attitudes subscale displayed higher scores. Directors and teachers showed vibrant educational and ethical assistance for including ASD children which is regarded as aligned with policy direction in KSA fostering inclusive education. High attitudes regardless of low knowledge indicate that value-oriented motivation exists but competency gaps impede practical execution (Abdulmalik Alkhunini, 2025). Such attitudinal strength is a significant basis for measures related to future capacity formation.

The readiness subscale expressed the lowest mean, indicating restricted confidence in executing inclusion approaches, inadequate resources, and confined experience. Readiness scores usually exhibit systemic obstacles like training access, class size, and school-level collaboration instead of individual motivation only. These outcomes indicate that even motivated educators encounter structural obstacles that impede successful inclusion.

*Integration of Quantitative and Qualitative Findings*

The interview data greatly strengthened and contextualised the survey results. Three qualitatively themes resonated strongly with the quantitative outcomes, adding depth to the findings.

*Restricted Knowledge and Misconceptions*
Respondents' descriptions regarding ASD showed shifting levels of comprehension, with some depicting misconceptions like linking ASD with general learning incapability or poor home training. It is aligned with the quantitative finding of low knowledge scores and shows why knowledge is regarded as a foundation of inclusive practices. Misconceptions can influence recognition, and expectations; thus, managing these variations before betterment in readiness can appear.

*Positive Attitudes but Practical Issues*
Respondents frequently showed supportive and encouraging attitudes towards inclusion, aligning with the positive attitude scores. however, interviews emphasized clear obstacles encompassing the absence of individual Education Plans, reduced interaction with experts, and lack of Tas. These practical issues support describing why attitude scores did not lead to readiness scores. Educators may emphasize inclusion but feel incompetent to execute it effectively owing to excessive work pressures and inadequate institutional support.

*Reduced Confidence and Inadequate Readiness*
This qualitative theme supported the findings of readiness subscale. Educators described apprehensions regarding ASD-associated behaviours, problem in following instructions, and anxiety related to unintentionally disturbing the child's progress. Similarly, directors recognized systemic limitations. The merging of these datasets shows that readiness issues are not only individual related challenges but exhibit broader structural elements like resourcing, staffing, and professional growth accessibility (Baek et al., 2024).

*Implications for Policy and Practice*
The findings emphasize different implications for promoting ASD inclusion within the mainstream schools of KSA. There exists a requirement for evidence-based and formalized teacher training that forms precise comprehension of ASD traits, behavioural and communication support approaches, and sensory assistance. Developing reliable national training standards would support lessening the extensive differences in knowledge across schools. Enhancing school readiness necessitates system-level action, encompassing provision of TAs, augmenting access to experts of special education, and executing IEPs (Fitriyani & Haryono, 2025). These measures are vital to reinforce teacher confidence and safeguard that positive attitudes lead to effective practice. It is essential to maintain a strong communication between school leadership and educational authorities, safeguarding that directors obtain the resources, assistance, and flexibility required to execute inclusive practices in a significant manner.

**Conclusion**
This pilot study exhibited methodological viability and generated preliminary evidence that, while educators and directors in Riyadh possess positive attitudes towards inclusion of ASD children, significant differences exist in their practical knowledge and preparedness. Instrument reliability, satisfactory participation rate, and vibrant interviews support performing an extensive study. Future study ought to emphasize large sampling, better measurement, and assessment of consistent, practice-oriented professional growth. Regarding policy and practice, findings highlight the requirement for synchronized

capitalization on teacher training, and specialist support personnel to transform inclusive policy into classroom experience.

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