Saudi Teachers’ Attitudes towards the Inclusion of Students with Special Needs in Regular Classes

Wafa Naif Almutairi

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Saudi Teachers’ Attitudes towards the Inclusion of
Students with Special Needs in Regular Classes

Wafa Naif Almutairi

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This thesis is presented as part of the requirement for the conferral of the degree:
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Abstract

The ongoing transition towards greater implementation of inclusive education in mainstream schools in Saudi Arabia has meant that general education teachers are increasingly responsible for ensuring that the academic and social needs of students with special needs are met in their classrooms. Notwithstanding the positive intent of inclusive policies, little is understood about Saudi teachers’ attitudes, beliefs, and intentions to implement inclusive education. Further understanding in this area is vital to improve inclusive policy as well as the ability of staff to implement these policies and support implementation of the academic and social benefits of inclusive education for students with special needs. With this in mind, this study explored Saudi general education teachers’ attitudes and beliefs regarding the inclusion of students with special needs in mainstream classrooms.

The theory of planned behaviour was used as a framework through which to explore the connections between mainstream teachers’ attitudes and beliefs, self-efficacy, and intentions regarding the inclusion of students with special needs. An explanatory, sequential, mixed-methods design was adopted to gain more understanding of teachers’ attitudes, beliefs, and perceptions about the inclusion of students with special needs in mainstream classrooms. Three hundred and sixty mainstream teachers in Saudi Arabia completed an initial survey consisting of Likert-scale and open-ended questions. Following analysis of the survey data, semi-structured interviews were conducted with a subset of 15 teachers to gain insight into the nuances of teachers’ beliefs about the inclusion of students with special needs in mainstream classrooms and the factors influencing these beliefs.

A number of key findings emerged from the triangulation of the three data sets in this study. Saudi teachers believed that the inclusion of students with special needs in mainstream
classes was forced and not feasible. Teachers believed that they did not have a choice in the implementation process and that students with special needs were just placed in their classrooms without adequate preparation, which included lack of training, perceived lack of knowledge about students with special needs and inclusive education, and lack of access to resources. Participants also felt overwhelmed by others’ expectations, including system pressure and demands put on them in their classrooms such as dealing with large class sizes, extra workload, and rigid curricula. Participants who did express positive intentions toward the inclusion of students with special needs in mainstream classrooms were found to be significantly influenced by two factors: previous experience with individuals with special needs and their own religious beliefs. Participants’ attitudes and feelings of self-efficacy related to their intentions and actions in teaching students with special needs. The findings revealed that they provided simplified lessons, tried different teaching methods, and modified the curricula to support students with special needs in their classrooms.

The current study offers two unique and innovative contributions to the research field on inclusive education, specifically in Saudi Arabia. First, the findings enabled the researcher to expand on the theory of planned behaviour by adding external influences such as previous experiences with individuals with special needs and religious beliefs. Second, adopting a mixed-methods approach provided more insights into the systematic factors that influenced teachers’ attitudes and intentions regarding inclusive practice.
Acknowledgments

I would like to praise and thank Allah for giving me the ability, wisdom, and patience to undertake this study.

I am indebted to many people that helped and supported me to complete my journey. Words cannot express my great sincere thanks and gratitude to my supervisors, Dr Amanda Webster and Dr Lynn Sheridan, for their valuable insights, support, commitment, advice, feedback, and encouraging remarks throughout my PhD journey. My gratitude is extended to the government of Saudi Arabia and the University of Wollongong for their support. I would also like to acknowledge the professional editorial assistance of Dr Laura E. Goodin. Special thanks also to my editor Robert who has been with me since the beginning of my journey and dealing with last-minute editing. I am so grateful for all his effort and support.

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I could hardly find the words to express my sorrow and how much I miss my dear beloved father, Dr Naif, who suddenly died during the Covid-19 Pandemic. I know how much he was waiting for this moment to see me finally complete my thesis. I can only pray for him and dedicate this thesis to my father for his great role of encouragement and inspiration in my life, his pure love, and the joy I always had when I was around him. I would
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Certification

I, Wafa Naif Almutairi, declare that this thesis submitted in fulfilment of the requirements for the conferral of the degree Doctor of Philosophy, from the University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. This document has not been submitted for qualifications at any other academic institution.

______________________________

Wafa Naif Almutairi

30th August 2022
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Chapter 1: Introduction

The landscape of special education across the world has changed dramatically since its early years, with an increasing demand that education support the right of students with disabilities to receive the same opportunities and education as their peers (Ainscow et al., 2013). In Saudi Arabia, this demand was triggered by the signing of the Salamanca Statement (1994), with the intent to support the inclusion of students with special needs within mainstream education. Commensurate with the signing of the Salamanca Statement, Saudi Arabia has started the transition from segregated schools for students with special needs to their inclusion in mainstream schools, with the support of policy and program initiatives from the Ministry of Education (Battal, 2016). Some educators consider this transition toward including students with special needs in mainstream schools to be a positive change for those students, particularly in terms of social and academic outcomes (Hwang & Evans, 2011; Kleinert et al., 2015; Mishra et al., 2018). In practice, however, Saudi schools and teachers have struggled with including students with disabilities in mainstream classrooms (Alahmadi, 2009; Alhudaithi, 2015; Alnahdi et al., 2019; Aseery, 2016). To provide every Saudi child, regardless of need, with an equal opportunity to experience inclusive education, it is important to understand general education teachers’ beliefs and attitudes on inclusion and how they shape their intentions and actions to support students with special needs in general education classrooms.

This thesis will present a study that was conducted to address this issue. This study aimed to gain this understanding by exploring general education teachers’ beliefs about inclusion and the factors influencing those beliefs, and their feelings of confidence towards inclusion and teaching students with special needs in general mainstream classrooms, including their beliefs about the expectations of others. The study was informed by the theory of planned behaviour in order to explore the relationships between teachers’ beliefs,
confidence and self-efficacy, the expectations of others, and their own intentions and actions to support students with special needs.

The global movement ensured that all people with disabilities have equal education opportunities in line with people in mainstream education (Al-Ahmadi, 2009; Alquraini, 2012; Alzemaia, 2019). This change in attitudes has led to the establishment of international conventions (e.g., United Nations Convention on the Rights of Persons with Disabilities, 2008, Article 24.1, p.14). For instance, Article 4 of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), established in 2008, outlines the “general obligations” of signatories to the Convention “to take into account the protection and promotion of the human rights of persons with disabilities in all policies and programmes” (Article 4c, p.5) and “to promote the training of professionals and staff working with persons with disabilities…so as to better provide the assistance and services guaranteed by those rights” (Article 4i, p.6). Well before the UNCRPD, however, countries had begun to pass legislation to protect the rights of children with disabilities in the context of education provision (Sebba & Ainscow, 1996). For instance, in 1975, the Education for All Handicapped Children Act (EAHCA) was passed in the United States of America (USA, PL 94-142). This was the first legislative action globally to establish rights for individuals with disabilities and to provide them with equal education. Over the years, the EAHCA was revised and ultimately renamed in 1990 as the Individuals with Disabilities Education Act (IDEA), which mandated that children with special needs receive free public education in the least restrictive environment.

Furthermore, legislation such as IDEA led a number of countries in 1994 to draft the Salamanca Statement. For several years, this remained one of the most important international documents in special education to endorse the concept of inclusive education (Ainscow, 1999; Rodriguez & Garro-Gil, 2015). Ninety-two governments and 25
international organisations confirmed and committed to supporting the rights and inclusion of students as outlined in the Salamanca Statement, which urged governments to confirm their commitment to promoting inclusive education and inclusive practice for students with disabilities in schools (UNESCO, 1994). The Salamanca Statement emphasised that the most effective way to achieve an inclusive society is to ensure that all children, including children with special needs, receive education in mainstream schools without discrimination (Anderson & Boyle, 2015).

The Salamanca Statement provided the impetus to education sectors around the world, including Saudi Arabia, to adopt a more proactive approach to identifying the barriers to inclusion in order to provide learners with all needs with equitable access to inclusive education (United Nations Educational, Scientific and Cultural Organisation [UNESCO], 2020). This prompted Saudi Arabia to take steps to address its own policies and practices. The global movement towards inclusive education in schools is articulated as the creation of supportive, inclusive education systems and learning environments (UN Committee on the Rights of Persons with Disabilities [CRPD], 2016; Savolainen et al., 2012). Although these international conventions have clear implications for both the formulation and implementation of inclusive education policies in Saudi Arabia, they also affect general education teachers, who are responsible for supporting and teaching all students in their classrooms (Kahn & Lewis, 2014). In particular, they highlight the need for teachers to be prepared to teach students with special needs (Alzemaia, 2019; Kahn & Lewis, 2014). In addition, as teachers’ intentions and actions have been linked to their attitudes and beliefs (Avramidis, 2006; de Boer et al., 2011; Forlin, & Chambers, 2011), it becomes important to examine Saudi Arabian teachers’ beliefs and attitudes about the inclusion of students with special needs in their classroom.
Irrespective of training background, the inclusive practices of teachers are influenced by their intentions, which are, in turn, shaped by a range of factors, including their attitudes, beliefs, and feelings of self-efficacy. Understanding teachers’ attitudes towards the inclusion of students with special needs is a complex undertaking; studies have suggested that their attitudes may be shaped by a range of teacher-related, student-related (e.g., type and level of disability), and system-related (e.g., training, resources) factors (e.g., Abed & Alrawajfh, 2017; Al Jaffal, 2019; Alnahdi et al., 2019; Alquraini, 2012; Alshahrani, 2014; Aseery, 2016). In addition to teacher attitude, implementing a successful inclusion program can also depend on the teacher’s level of confidence and perceived self-efficacy to implement inclusion practices (Loreman et al., 2014). This includes both beliefs about and confidence in their own abilities to support students with special needs, but also a consideration of how these align with their perceptions of what others expect or demand of them.

Understanding the nature and relationship of factors that shape teachers’ intention to implement inclusive practices may help to explain the struggles that teachers experience in implementing inclusive education policies (Al-Assaf, 2017; Alquraini, 2012). For instance, a teacher may have a positive attitude toward inclusion, have high confidence or perceived self-efficacy to teach inclusively, but still have no intent (i.e., be unwilling) to implement an inclusive education program. This unwillingness may stem from teachers’ beliefs about their own knowledge and skills or be related to external factors such as other demands placed upon them by the school system. To date, the attitudes, and beliefs of Saudi teachers towards inclusion and the main factors influencing their attitudes, along with their confidence and intentions to implement inclusive education, are yet largely unknown. Understanding these factors is particularly important as, for many teachers, the implementation of inclusion is a significant change from the approach historically taken in Saudi Arabia to the education of students with special needs (Al-Jaffal, 2019; Aseery, 2016).
Inclusive Education in Saudi Arabia

Historically, Saudi Arabia has taken an approach to disability, which focuses on segregated and specialised education of students with disabilities (Alkhattabi et al., 2020; Alquraini, 2011; Battal, 2016). An overview of the history of education for students with disabilities is presented in Table 1. In 1958, the first education services for students with disability were provided in Saudi Arabia when classes were established specifically for men with vision impairments (Aldabas, 2015; Battal, 2016). Over the following years, special institutes were established to provide services for both boys and girls with hearing and vision impairments.

In subsequent years, the Department of Special Education was established by the Ministry of Education to help improve the education of, and services for, individuals with vision and hearing impairments; other services were added for students with intellectual disabilities (Aldabas, 2015; Battal, 2016). By 1990 the Ministry had established 54 special education schools across the country for students with vision impairment, hearing impairment, and intellectual disabilities. In 2019, the number of special education schools continued to increase across the country, reaching 3,100 institutes and special education classes and programs (General Authority for Statistics Kingdom of Saudi Arabia, 2022). It is only in very recent years that Saudi Arabia has begun to develop an approach to inclusion of students with special needs in mainstream schools.

Table 1

Key Milestones in Education for Students with Disabilities in the Kingdom of Saudi Arabia

<table>
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<th>Year</th>
<th>Disability</th>
<th>Education Milestones</th>
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<tr>
<td>1958</td>
<td>Vision impairment—men only, aged 18 to 50 years</td>
<td>Private place/non-profit group to initiate use of the Braille system.</td>
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The Ministry of Education in Saudi Arabia defines inclusion as educating students with special educational needs in mainstream schools and providing them with special education services (Ministry of Education [MoE], 2002, p. 8). Alhudaithi (2015) has noted, however, that the term “inclusion” is often used in Saudi Arabia and, particularly by teachers, in ways that are more indicative of integration. Currently in Saudi Arabia the terms “full mainstreaming” or “full inclusion” are often used to refer to students who are enrolled in mainstream classes for more than 50% of the time. These students may receive support in resource rooms or through the provision of an itinerant special education teacher, or they may receive no support other than that provided by the teacher (Al-Mousa, 2010). In addition, the current situation in Saudi Arabia is that students with mild disabilities spend a great deal of

<table>
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<tr>
<th>Year</th>
<th>Category</th>
<th>Description</th>
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<td>1960</td>
<td>Vision and hearing impairments—boys, aged 7 to 16 years</td>
<td>Opened special day schools (Al-Noor Institute &amp; Al-Amal Institute) to teach Braille.</td>
</tr>
<tr>
<td>1971</td>
<td>Intellectual disabilities—boys and girls, aged 7 to 16 years</td>
<td>Added special day schools and residential schools for intellectual disabilities.</td>
</tr>
<tr>
<td>1990</td>
<td>Vision and hearing impairment, intellectual disability—boys and girls, aged 5 to 16 years</td>
<td>Increased number of special day schools nationwide.</td>
</tr>
<tr>
<td>1994</td>
<td>Students with any type of disability or need—boys and girls aged 5 to 16 years</td>
<td>Signed the Salamanca Statement to support the rights of students with disabilities to access inclusive education.</td>
</tr>
<tr>
<td>2000</td>
<td>All ranges of disabilities—boys and girls aged 5 to 16 years</td>
<td>Added full-time special education classrooms for students with disabilities in some mainstream schools. Added provision of resource rooms and support for students with disabilities in some mainstream schools.</td>
</tr>
</tbody>
</table>

time in resource rooms, and students with moderate to severe disabilities are provided services in special education classrooms as an educational placement within mainstream schools (Alhudaithi, 2015).

Indeed, there is a great deal of inconsistency as to whether schools offer services or support to the students with disabilities who attend them. Nonetheless, schools with designated classes or supports for students with disabilities are often referred to as “inclusion programs”. Furthermore, the terms “partial mainstreaming” or “partial inclusion” are typically used to denote students who attend special education classes within mainstream schools. These students are taught by special education teachers and share noncurricular activities and school facilities with their typically developing peers (Al-Mousa, 2010; Alquraini, 2011). However, it should be noted that with limited policies to guide the equitable provision of these services, the placement of students is often related not just to their disability type but also to what is available in their local area (Al-Ahmadi, 2009; Alkhateeb et al., 2016; Alnahdi, 2020). This means that additional expectations are placed on general education teachers, particularly in mainstream schools; not surprisingly, teachers experience varying degrees of responsibilities or support for students with special needs (Alzemaia, 2019). Hence, further evidence of what affects teachers’ attitudes to teach in inclusive settings (or not), combined with further insights into teachers’ actual inclusive practices, are arguably important areas of focus in understanding how to achieve the successful provision of inclusive education in Saudi Arabia.

**Implications for Research**

Teachers’ beliefs can significantly influence their attitudes towards inclusion and shape their attitudes inclusive practices (Avramidis & Norwich, 2002). That includes, a teacher’s religious beliefs. Saudi Arabia is an Islamic country in which the laws and social policies, including its education policies, are driven by a monarchy government influenced by
Islamic religious values (Alshahrani, 2018). This means that religious Islamic values are embedded in all aspects of everyday life and are an integral part of the educational system. Indeed, education provision at all levels is based on Islamic religious values, which include treating all students equally; that is, giving the same rights in education and society to students with special needs as to their peers (MoE, 2016). Within this context, students of all levels are taught compulsory subjects in Islamic religion in addition to general subjects such as mathematics, geography, history, science, physics, physical education, and the arts (Alquraini, 2011).

More specifically, people’s beliefs towards individuals with disabilities are also influenced by Islamic religious beliefs, which call for obedience to Allah (Al-Mosa, 2010), and which are, in turn, shaped by the Holy Qur’an (Al-Aoufi et al., 2012). As such, Islamic values dictate that all individuals should be afforded basic human rights and be treated equally. There is no difference between individuals based on gender, race, or disability, but only on people’s piety and devotion to Allah. This is stated in the Qur’an: “O mankind, indeed We have created you from male and female and made you peoples and tribes that you may know one another. Indeed, the most noble of you in the sight of Allah is the most righteous of you” (49, 13). This is also highlighted in the Hadith mentioned by Prophet Muhammed (peace be upon him), who said “Verily, Allah does not look at your bodies nor at your faces, but He looks into your hearts” (32, 6220). Research conducted in Brunei by Haq and Mundia (2012), for instance, found that the majority of Malay Muslim teachers working there indicated positive attitudes towards inclusion. Research is lacking, however, in regard to the extent to which Islamic beliefs play a role in shaping Saudi teachers’ attitudes towards inclusion of students with special needs in mainstream classrooms, and their intention to implement inclusive education programs.
The second implication is that the provision of inclusive education in Saudi Arabia is at a point of transition, with the government having launched its National Transformation Plan (NTP) in 2016 as part of the Saudi Vision 2030. Currently there is little understanding of how this transition is being received and implemented by general education teachers. Little is known about Saudi teachers’ attitudes, confidence and self-efficacy perceptions, and intentions and perceptions of their actions as a result of Saudi Arabia governments National Transformation Plan (NTP). This included the goal to ensure that all students with disabilities are included in society and receive the same education opportunities as other students (Al-Assaf, 2017; Binmahfooz, 2019). The NTP 2020 then included the Ministry of Education’s first strategic objective to provide education services to all student segments by raising the number of Saudi students (6-18 years old) with disabilities who could benefit from the programs in mainstream schools from 77,575 to 200,000 (Alzemaia, 2019).

The Ministry of Education is also responsible for issuing and implementing educational policies, evaluating educational processes, and providing teachers with training. Thus, it is responsible for implementing inclusive education in mainstream schools, including providing schools and teachers with the support, equipment, and materials they need (MoE, 2016). However, even though the Ministry of Education has oversight of inclusion programs in mainstream schools, they have provided support only to special education teachers. Hence, even though the Ministry and the NTP goals endorse the implementation of inclusive education in mainstream schools, they have not outlined the roles and responsibilities associated with this approach for general education teachers’. Moreover, it remains the case that most general education teachers receive little to no training related to teaching students with disabilities (Alanazi, 2012; Alothman et al., 2014; Alzaidi et al., 2017). The first bachelor’s degree program in special education was established in 1985 at the King Saud University in Riyadh (Al-hano, 2006) in recognition of the need for teachers with training in
special education. However, general education teacher preparation programs do not include compulsory subjects on special education (Yada & Alnahdi, 2021).

Hence, even though the RSEPI and NTP of the Saudi Vision 2030 demonstrate good intentions towards the inclusion of students with disabilities, research suggests that these intentions have not been realised (Al-Assaf, 2017). Indeed, teachers continue to face many challenges in practice when supporting students with special needs (Al-Ahmadi, 2009; Alqahtani, 2019; Alrubaian, 2014), which may be linked to the absence of suitable preparation programs. This arguably has the potential to influence teachers’ attitudes towards inclusion and their perceived difficulties in implementing inclusion programs in mainstream classrooms. Therefore, an opportunity exists to respond to the gap in our understanding of Saudi general education teachers’ attitudes and beliefs and their intentions to practice inclusive education in mainstream classrooms in light of the pressures to achieve the national inclusive education policy objectives and the NTP goals.

**Researcher’s Positionality**

It is important to reflect on and clarify the researcher’s positionality to reduce subjectivity (Bourke, 2014). Therefore, during the research process, the researcher’s positionality is considered. In this study, the researcher is seen as both an insider and an outsider to the research setting. The researcher as a Saudi and Muslim mainstream teacher brings an insider perspective. Being a mainstream teacher in Saudi schools the researcher was familiar with the Saudi educational system. This insider perspective was important in drawing inferences in this study.

However, the researcher was also an outsider as she had no direct experience with inclusion of students with special needs in her classroom. The researcher was aware of the difficulties faced in the classroom but not personally connected to the daily practice of supporting students with special needs in schools. This was useful as it enabled her to view
the teachers’ perspectives from a distanced and an outsider’s perspective, decreasing the potential of influence.

**Aim and Theoretical Foundations**

In response to the aforementioned gaps in the research, this thesis presents the results of a study that aimed to explore Saudi teachers’ attitudes and beliefs, self-efficacy and confidence, and intentions and actions to implement inclusive education, and the factors that influenced them. The theory of planned behaviour was used as a means to understand how teachers’ beliefs and their feelings of self-efficacy shaped their intention and actions to support students with special needs in their classrooms.

The theory of planned behaviour (TPB), developed by Ajzen (1991), offers a useful lens because it seeks to predict and explain individual behaviours. Broadly speaking, the theory posits that teachers’ intentions and behaviours are influenced by their attitudes and beliefs, the beliefs of others, and their perception of control to plan their own behaviours and outcomes. Ajzen (2011) asserts that an individual’s personal beliefs are influenced by personal (e.g., feelings), social (e.g., gender, age), and informational (e.g., previous experience and knowledge) factors. The theory further posits that individuals “usually behave in a sensible manner; that they take account of available information and implicitly or explicitly consider the implications of their actions” (Ajzen, 2005, p. 117).

More specifically, the theory asserts that several important components influence whether or not a person intends to engage in a particular behaviour (see Figure 1), including their evaluation of that particular behaviour (attitudes), their perception of how other people view the behaviour (the subjective norm), and the their belief in their own ability to carry out the behaviour (perceived behavioural control or self-efficacy). These components will affect the formation of the individual's behavioural intentions, which might result in the performance of the behaviour (Ajzen, 2005; Fishbein & Ajzen, 2010). In the context of
inclusive education, this may be taken to mean that teachers may be more likely to engage in inclusive practices if they have a more positive attitude and subjective norms and higher perceived behavioural control (self-efficacy and capability) (Ajzen & Cote, 2008, p. 301).

Figure 1

Theory of Planned Behaviour Proposed


Considering the different components of the theory more closely reveals that attitudes are people’s opinions of the performance of a particular behaviour, whether favourable or unfavourable. According to Ajzen (1991), a person’s attitude is shaped by behavioural beliefs, which are a set of beliefs related to the outcomes and consequences of a person’s actions. A favourable attitude leads a person to engage in a particular behaviour typically when the person views the outcomes and consequences of the behaviour as positive and advantageous (Hayden, 2009). For example, a teacher’s attitude towards the inclusion of students with
disabilities is a function of the teacher’s beliefs about the outcomes of inclusion for the student. If a teacher’s beliefs connect inclusion with favourable results for such students, it is more likely that the teacher will have a positive attitude towards inclusion. In contrast, if the teacher’s belief is that the outcomes of inclusion are more likely to be negative, then they are more likely to have a negative attitude towards inclusion and inclusive practice (Ajzen, 1991).

Similarly, a person’s intentions to engage in a particular behaviour are influenced by subjective norms. Ajzen (1991) defines subjective norms as the social pressure a person feels regarding whether to engage or not in a particular behaviour (p. 188). These subjective norms are determined by a person’s normative beliefs, which are a set of beliefs and expectations about other people’s perspectives on a particular behaviour, as well as a desire to act in accordance with others’ perspectives to meet those expectations (Ajzen, 1991; Ajzen & Cote, 2008). The TPB posits that the more normative beliefs about engaging in a particular behaviour a society exhibits, the stronger the subjective norm becomes, leading to increased intention to undertake that particular behaviour (Ajzen, 1991). An example of a subjective norm in the context of inclusive education is how a teacher’s perception that they will gain the approval (or disapproval) of the school principal, subject supervisor, colleagues, and students when they engage in inclusive practices will influence their intention to include and support students with disabilities in the classroom.

The third component in the TPB to influence a person’s intention to engage in a particular behaviour is perceived behavioural control, or self-efficacy. Perceived behavioural control refers to a person’s perceptions of their capabilities and feelings of confidence about the ease or difficulty of carrying out a particular behaviour (Ajzen, 1991). This perceived behavioural control, or self-efficacy, is presumed to be influenced by the belief a person has about the availability (or lack thereof) of factors required to accomplish the behaviour.
successfully, including support, resources, and skills. The more a person believes that they have the required support, resources, and skills, and the fewer obstacles they anticipate, the more control they tend to feel over their behaviour (Ajzen, 1991). Thus, beliefs have a moderating effect on the influence of attitude and subjective norms on intention (Ajzen, 2020). For example, teachers may have a positive attitude towards teaching students with disabilities, but may also feel they do not have adequate training or time to do so. Thus, according to the TPB, a person’s intention to perform a particular behaviour is influenced by their attitudes, subjective norms, and perceived behavioural control. A teacher’s intentions to practice inclusive education, for example, is considered to be determined by their positive attitudes and beliefs, the expectations of others, and their confidence in their own abilities and in having the required support, resources, and skills that enable them to do so (Ajzen, 2005).

**Importance of This Study**

The research focus in this study is important given that teachers’ attitudes and beliefs towards inclusion are integral to understanding the issues that encourage or deter them from implementing inclusive practices; that is, that determine their readiness and intentions to practice inclusive education. In fact, the first reason for this study is to increase understanding the complementary roles that teacher attitudes and beliefs and their confidence and perceived self-efficacy play in their intentions toward and perceptions of their own actions of inclusive education and their ability to effectively meet the unique needs of students with disabilities in mainstream classrooms. The second reason is related to understanding the implications of the context within which inclusive education is provided in Saudi Arabia for Saudi teachers’ readiness and intentions to implement inclusive education programs in Saudi Arabian schools. As previously mentioned, the TPB had been applied in previous studies to examine and measure teachers' attitudes towards inclusion, perceptions, and experiences of subjective norms, self-efficacy, and intentions towards inclusive education. However, these studies did
not look at all components of the TPB in a single study. In contrast, the current study offers a unique and innovative contribution to research on inclusive education by adopting all components of the TPB combined with a mixed-methods design. This provides a framework and platform to explore teachers’ attitudes and beliefs, the expectations of others, their own confidence and intentions, and their perceptions of their inclusive practice. As a result, it provides a new perspective on Saudi teachers’ intentions and perceptions of their practices towards inclusion and the factors that influence them.

This study also aims to contribute a greater understanding of Saudi teachers’ perceptions of the interconnected factors shaping their intentions and perceptions of their actions towards inclusive education beyond their attitudes and beliefs. That is, it shines a light on how Saudi teachers respond to socio-cultural norms and perceive the expectations of others in relation to inclusion and teaching students with special needs, and how these expectations influence their intentions and their perceptions of their own actions, and how they connect these to their attitudes/beliefs. The research problem of understanding Saudi teachers’ readiness and intentions to practice inclusive education within the Saudi context will be addressed in two important ways: first, by providing new insights into how they perceive their confidence and capabilities to practice inclusive education; and second, by providing new insights into their perceptions of the contextual factors that potentially influence their attitudes and beliefs, confidence, intentions, and perceptions of inclusive practices.

Teachers in Saudi Arabia and internationally are practicing within complex and dynamic classroom settings, which include diverse student needs and expectations. As a result, schools, policy-makers, and teachers require a good understanding of the factors contributing to the effectiveness of classroom teaching (Alkhattabi et al., 2020; Alnahdi et al., 2019). The underlying assumption in this study is that teachers’ behavioural intentions and
actions are tied to teacher-, student-, and system-related factors (Al Jaffal, 2019; Alnahdi et al., 2019). Engaging the participating Saudi general education teachers in an investigation of their attitudes, confidence levels, perceptions of expectation, and intentions to implement inclusive programs may therefore increase awareness among teachers, school leaders, and policy-makers of the main driving factors of the effective provision of inclusive education.

Lastly, the application of all components of the TPB in this study provides an opportunity to access a broader investigation of Saudi teachers’ attitudes and beliefs about inclusion and the enablers of and barriers to their inclusive practices. This is significant in providing new insights that can inform the decisions of policy-makers in Saudi Arabia towards the development of suitable inclusive education programs and provide insights into the professional learning needs of Saudi teachers. This study aims to expand the application of TPB through its use in considering teachers’ attitudes and beliefs regarding inclusion in the Saudi cultural context.

**Definition of Inclusive Education**

A useful starting point in any research effort to understand teachers’ attitudes, confidence, and understanding of expectations related to the provision of inclusive education is to determine how inclusive education is defined. The concept of inclusive education has been widely debated, and there are a number of definitions of inclusion offered in the context of education. At the international level, the most comprehensive of these definitions is included in UNESCO’s (2005) document, “Guidelines for inclusion: Ensuring access to education for all”. The document states that inclusion is “a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion from education and from within education” (p. 13).
A more succinct definition offered by Avramidis and Norwich (2002) is that inclusion is the process of fully including students with special needs in general education with their typically developed peers. Notwithstanding the diverse and somewhat nuanced definitions of inclusive education available, it is generally conceptualised as the development of systems to support and welcome all learner types, and, more narrowly, as an approach to education that aims to serve students with disabilities within general education settings (Ainscow, 2020). This study defines inclusive education as the inclusion of students with special needs in mainstream classrooms, because this is the definition commonly known by general education teachers in Saudi Arabia, as reported in previous Saudi studies (Alanazi, 2012; Alhudaithi, 2015).

**Table 2**

*Definitions of the Key Terms and Concepts Applied in This Thesis*

<table>
<thead>
<tr>
<th>Term or Concept</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td><strong>Inclusive Education</strong></td>
<td>A process of developing educational systems that welcome all diverse learners (Ainscow, 2005). Also, an approach to support and serve students with disabilities within general education settings.</td>
</tr>
<tr>
<td><strong>Mainstream or General education Teachers</strong></td>
<td>The terms “mainstream teachers” and “general education teachers” are used synonymously in this study to denote teachers in Saudi Arabia who primarily teach in general education classes in primary-school classrooms or subject-specific classes (e.g., English, science, or history) in intermediate and secondary schools.</td>
</tr>
<tr>
<td><strong>Personal Beliefs</strong></td>
<td>A person’s mental state as inferred from what she or he says or does (Alhudaithi, 2015, p.38). Due to the context-dependent nature of a belief, this study applies the concept of “teacher beliefs” and “teacher attitudes” (see definition below) interchangeably in relation to inclusive education.</td>
</tr>
<tr>
<td><strong>Attitudes</strong></td>
<td>An individual’s favourable or unfavourable disposition or response towards a specific person or object (such as people, places, and policies) as developed from previous experience (Ajzen, 1991; Greenwald &amp; Banaji, 1995). In this study, attitudes and beliefs are used interchangeably in relation to teachers’ thoughts, feelings, or views towards the inclusion of students with special needs in mainstream classes.</td>
</tr>
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</table>
**Confidence**

Feeling “sure about your abilities, qualities, or ideas” (*Collins English Dictionary* 2019). In this study confidence is considered in relation to teachers’ feelings about their ability to implement inclusive practices and teach students with special needs in their classrooms.

**Capability**

Teachers’ belief that they have the prerequisite attitude, knowledge, and skills needed to implement inclusive practices in their classrooms and to teach students with special needs.

**Self-Efficacy**

An individual’s belief in their own ability (knowledge and skills) to succeed in a specific situation (Bandura, 1997). In this study, self-efficacy encompasses both a teacher’s confidence and capability and their belief that they can use their skills to teach students with special needs in mainstream classrooms.

**Expectations of Others**

Teachers’ perceptions of what they may expect from others, or the pressures placed on them by the system, administrators, and colleagues in regard to implementing inclusive practices to teach students with special needs (Ajzen, 1991).

**Intention**

Behavioural plans that facilitate the achievement of a behavioural goal (Ajzen, 1996). In this study, teachers’ intentions are their plans in response to teaching students with special needs in mainstream classes, and thus they form the link between teachers’ attitudes and actions.

**Actions**

Actions in this study are used synonymously with behaviours as denoted in the theory of planned behaviour; they are defined by Ajzen (1991) as observable responses in particular situations about a particular aim. In this study, actions and behaviours refer to the practices teachers employ to support students with special needs in their classrooms.

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**Overview of the Chapters**

This thesis is organised into six chapters. Chapter 1 has introduced the research problem, the background of the study (inclusive education in the Saudi context), the research questions, and the selected theoretical framework. It has also presented a brief discussion of the importance of the study, along with definitions of the main concepts and constructs being applied. Chapter 2 reviews the research literature from the both the international and Saudi contexts relevant to the main areas of focus in the study: teachers’ attitudes towards the inclusion of students with special needs in regular classes; teachers’ confidence and self-efficacy perceptions; intentions and perceptions of their actions towards the implementation
of inclusion programs; and the factors that potentially influence these outcomes. The gaps in the literature are identified and discussed. Chapter 3 presents the study methodology, including the rationales for the choices made, and provides descriptions of the research instruments and the piloting methods. Chapter 4 reports the results from the survey-data analysis and includes descriptive statistics, analysis of differences among groups, and the relationships between the different study constructs (i.e., teachers’ attitudes, self-efficacy beliefs, intentions and actions). Chapter 5 reports the results of the interview-data analysis, including the main themes to emerge in relation to the main research questions, and the triangulation and summary of the study findings. Chapter 6 concludes the thesis with a discussion of the main findings in relation to the two research questions. Consideration is also given to the extent to which the findings can be explained by the TPB. Implications for the practice of inclusive education delivery in Saudi Arabia are then explored. The limitations of the study are identified and discussed, and suggestions for future research are offered.
Chapter 2: Literature Review

This chapter presents a detailed review of international and Saudi literature on teachers’ attitudes and beliefs, self-efficacy, intentions, and actions that relate to teaching students with special needs in general education classrooms. The aim of this review is to outline the current research knowledge in these areas and to identify the gaps in the current literature. Recommendations will also be made regarding areas of research needed in this area.

International Research

Teachers’ Beliefs and Attitudes towards Inclusion

A number of studies over the last 40 years have examined teachers’ attitudes towards the inclusion of students with special needs. The majority of these have been conducted in western countries with different cultures and policies to those in Saudi Arabia. These studies have reported mixed results. For example, an early systematic review by Avramidis and Norwich (2002) examined studies conducted in different countries between 1984 and 2000. The researchers reported that, overall, teachers’ attitudes towards inclusion were mixed, but generally positive. Avramidi and Norwich (2002) found that teachers who had been teaching in more-inclusive settings were more likely to hold positive attitudes towards inclusion than those who had been teaching in segregated settings, regardless of the country in which they taught. Moreover, teachers who had access to support and resources showed more-positive attitudes towards inclusion than teachers with limited or no access to support and resources. However, there have been very few studies on the type of support teachers are offered and whether this support has influenced the formation of positive attitudes towards inclusion.

Teachers’ negative attitudes towards the inclusion of students with severe disabilities emerged from teachers’ beliefs that students with special needs are often unable to adapt and keep pace with a curriculum designed for students without disabilities. Research suggests that
many teachers believe that students with severe disabilities would benefit more from attending special education settings than from inclusion in mainstream classrooms (e.g., Center & Ward, 1987; Scruggs & Mastropieri, 1996; Ward et al., 1994; cited in Avramidis & Norwich, 2002). Further research is needed on the type of support teachers receive related to inclusive education and how it influences their attitudes towards inclusion.

An important systematic review conducted by de Boer et al. (2011) examined the attitudes of primary-school teachers towards inclusion of students with disabilities. Research published between 1998 and 2008, drawn from countries including the USA, Australia, UK, Greece, Portugal, Serbia, Korea, China, India, Israel and Palestine, Zimbabwe, Turkey, Iran, and the United Arab Emirates, found that teachers who had been experiencing inclusive education were more positive than teachers who had no experience in inclusive education. Furthermore, teachers who were offered specialised training were more positive than those with limited or no specialised training. Overall, the review reported that the majority of studies indicated that primary-school teachers held either negative or uncertain attitudes towards inclusion regardless of location. de Boer et al. (2011) also reported that primary-school teachers were generally negative towards inclusion, with attitudes influenced by their beliefs about the limited benefits of placing students with special needs in their classrooms. Ultimately, de Boer et al. (2011) were unable to determine whether attitudes have a significant role in the implementation of inclusive education in primary schools.

The attitudes of teachers in the two reviews differed, with teachers in Avramidis and Norwich’s (2002) review demonstrating more-positive attitudes than those in de Boer et al.’s (2011) review. These differences in attitudes may be due to the fact that in Avramidis and Norwich’s (2002) review, most of the studies that showed positive attitudes were conducted in western countries, which had been practicing inclusive education for a long period of time, whereas de Boer et al. (2011) included studies where inclusive education had only recently
been implemented. Further research is needed to understand the significance of teachers’ attitudes in the successful implementation of inclusive education in countries other than western countries.

More recently, researchers (Hwang & Evans, 2011; Mishra et al., 2018) have reported that teachers’ positive attitudes towards inclusion are often based on their beliefs about the social benefits of inclusion, with mixed beliefs about its academic benefits. Hwang and Evans (2011) found that Korean primary-school teachers who were inclusive believed that inclusion provided students with positive role models. However, they also believed that some students with special needs would benefit academically if placed in special education classrooms. In contrast, Mishra et al. (2018) surveyed general education teachers in India and found that they had positive attitudes towards the impact of inclusion on the academic performance, social skills, and self-esteem of students with special needs.

Overall, current studies have reported a range of inconsistent findings regarding teacher beliefs and attitudes toward inclusion. Collectively, these studies employed different research methods for data collection (i.e., survey, interviews, focus groups), with several studies finding that teachers’ attitudes towards inclusion tended to be more positive than negative. For instance, five researchers (Kosmerl, 2011; Mishra et al., 2018; O’Toole & Burke, 2013; Park & Chitiyo, 2011; Wilkerson, 2012) found that teachers responding to surveys generally reported positive attitudes towards inclusion, while other researchers have gathered more details about these positive attitudes through interviews and focus groups (Hwang & Evans, 2011; Odongo & Davidson, 2016; Wilkerson, 2012). These researchers found that although teachers may demonstrate positive attitudes towards the philosophy of inclusion, they tend to be less positive about actually implementing inclusive practices. It was noted that teachers felt they lacked the necessary experiences and skills to teach students with special needs, which made them reluctant to implement inclusive practices.
Other researchers have compared the attitudes of teachers from different countries towards inclusion of students with special needs. Yada et al. (2018) examined the similarities and differences in Finish and Japanese teachers’ attitudes towards inclusion and found that teachers from both countries held positive attitudes towards inclusion. The researchers reported that teachers’ attitudes towards inclusion were related to their experiences in teaching students with special needs, or their social contact with people with disabilities. Teachers in both countries were positively influenced by their inclusive teaching experience. Moreover, they found that although the two groups of teachers shared similar demographic characteristics, they differed in other ways. Finnish teachers’ attitudes were positively influenced by training in inclusive education, whereas training did not influence Japanese teachers’ attitudes towards inclusive education. The contrasting findings related to the influence and the type of training provided to teachers in each country. Further research is needed to expand the knowledge on the type of inclusive training or experiences that might positively influence teachers’ attitudes towards inclusive education.

The results of these studies highlight a need for more research to explore teachers’ conceptualisations of inclusion, which may or may not align with their intentions to implement inclusive practices. The following sections provide a more targeted review of the international literature to report on the influence of different factors, including teacher-, student-, and system-related factors, on teachers’ attitudes towards inclusion of students with special needs in mainstream classes. This is followed by a review of the international literature on the influence of these different factors on teachers’ confidence and self-efficacy to teach students with special needs in mainstream classrooms, and their intentions and actions regarding implementing of inclusive education practices.
Factors Influencing Teacher’s Beliefs and Attitudes

Teacher-Related Factors

The influence of teacher-related factors on teachers’ attitudes and beliefs regarding inclusion have received the most attention, with researchers exploring teacher-related factors such as gender, age, teaching position, previous experience and training, and experiences with people with special needs.

Gender and Age. The research findings are mixed regarding the influence of gender and age on teachers’ attitudes towards inclusion of students with special needs. Several researchers found that male and female teachers do not differ in their attitudes towards inclusion of students with special needs (Galović et al., 2014; Lika, 2016; O’Toole & Bruke, 2013), while others have found that they do (Dukmak, 2013; Vaz et al., 2015). Dukmak (2013) found male teachers in the UAE held more-positive attitudes than female teachers towards inclusive education. In contrast, Vaz et al. (2015) found that Australian female teachers held more positive attitudes towards inclusive education than male teachers. In both studies it was unknown why there were differences between male and female teachers’ attitudes towards inclusive education, although it may possibly be explained by their different life and work experiences, informing different attitudes.

Avramidis and Norwich (2002) and Dapudong (2014) both found that teachers’ age had no relationship to their attitudes towards inclusive education. However, other researchers have reported that younger teachers demonstrate more-positive attitudes than older teachers (Schmidt & Vrhovnik, 2015; Vaz et al., 2015). The researchers suggested that younger teachers were more likely to be exposed to more knowledge about inclusion and have greater understanding of the characteristics of students with special needs, gained through university studies. The differences in the findings of these studies of the relationship between teachers
age and their attitudes towards inclusive education, may be explained to the different knowledge and training they were exposed to during or before their teaching career.

**Teaching Qualification and Experience.** The research (Hernandez et al., 2016; Kosmerl, 2011; Odongo & Davidson, 2016) suggests that teachers’ qualifications or roles at the school may influence their attitude toward the inclusion of students with special needs, although findings also suggest that this relationship can be complex (Odongo & Davidson, 2016). Not surprisingly, researchers (Hernandez et al., 2016; Kosmerl, 2011) have shown that teachers with a qualification in special education hold more-positive attitudes towards the inclusion of students with special needs than do general education teachers. In contrast, Odongo and Davidson (2016) found that both general education and special education teachers in their study held positive attitudes towards inclusion. However, general education teachers were more positive about the philosophy of inclusion than its implementation in practice. The researchers found that challenges experienced by teachers in implementing inclusion included a lack of training on how to work with students with special needs, a lack of time to meet the learning needs of all students, challenges in managing disruptive behaviour, and issues with evaluating the work of diverse students in a classroom.

**Experience with Individuals with Special Needs.** Research that considers the broader context of the provision of inclusive education has also shown that previous experience with individuals with a disability can positively influence teachers’ attitudes towards inclusion of students with special needs. For example, Dias and Cadime (2016) in Portugal, O’Toole and Bruke (2013) in Ireland, and Wilkerson (2012) in the USA have all used surveys in their studies to find that teachers who knew someone with special needs, including a family member, relative, or friend, showed more-positive attitudes and confidence towards including students with special needs than those with no previous connections to a person with special needs. However, Parasuram (2006) in India found no
links between teachers’ attitudes towards inclusion and having a family member with special needs. This lack of consistency in the research indicates a pressing need to explore attitudes to inclusion in other contexts. Overall, international research suggests that teacher-specific factors often influence teachers’ attitudes toward inclusion, although little is known about the reasons for the variation in results across studies in differing contexts. What is known is that much of the research findings are being drawn from the dominant use of surveys, which tend to offer only limited understanding of how or why these factors may or may not influence teacher’s intentions and actions.

**Student-Related Factors**

International researchers have found that the type and severity of a student’s disability has an influence on teachers’ attitudes towards inclusion (Avramidis & Norwich, 2002; de Boer et al., 2011; Čagran & Schmidt, 2011). In general, teachers hold more-positive attitudes towards the inclusion of students with less severe disabilities and hold more concerns about teaching students diagnosed with severe disabilities. Additionally, Avramidis and Norwich (2002) and de Boer et al. (2011) found that teachers held negative attitudes towards students with cognitive disabilities, learning disabilities, and behavioural problems. However, they were more positive towards the inclusion of students with physical disabilities and sensory impairments. These findings are consistent with the findings of Čagran and Schmidt (2011), who found that teachers believed that inclusion was effective for students with physical disabilities and sensory impairments, yet not for students with cognitive disabilities, learning disabilities, and behavioural problems. They believed these students presented more demands on teachers and that it was more stressful to manage and teach them.
System-Related Factors

In international studies, factors related to the school system have also been found to potentially influence teachers’ attitudes towards inclusion. These include access to support and the broader demands and expectations of others.

Support from Others. The research suggests that administrative support at school may influence teachers’ attitudes toward the inclusion of students with special needs. Dev and Kumar (2015) found that teachers often have a more positive attitude towards including students with learning disabilities if administrators have provided them with materials and resources. More recently, Walker (2012) found that support from principals, including emotional, instrumental, and informational support, had a positive impact on American teachers’ attitudes towards the inclusion of students with special needs. Moreover, research indicates that teachers’ negative attitudes toward inclusion are associated with lack of administrative support; specifically, access to the type of training the teachers feel they need (Kosmerl, 2011; Odongo & Davidson, 2016; Sukbunpant et al., 2013), or the opportunity to consult with child-disability specialists (Kosmerl, 2011). For instance, having in-service training from professionals (Yeo et al., 2016) has been linked to more-positive attitudes towards inclusion.

Researchers have also found that the provision of training does not guarantee that teachers will have a favourable attitude. Galovic et al. (2014) and Stemberger and Kiswarday (2017) found that teachers’ previous experience and training in inclusive education did not influence their attitudes towards the inclusion of students with special needs in regular classes. MacFarlane and Woolfson (2013) found that Scottish teachers with training and experience in implementing inclusive practices still reported generally negative attitudes and intentions towards including students with social, emotional, and behavioural difficulties in their classes. As all these studies used structured surveys, it is difficult to discern whether
there were other factors that may have outweighed the effects of previous experience and training in inclusive education on whether teachers had positive attitudes. This points to a need for further research in this area to provide a more nuanced understanding of these factors.

Involvement of teachers in decision-making has also been linked to teachers’ attitudes toward inclusion. Odongo and Davidson (2016) reported that although Kenyan teachers were positive about the benefits of inclusion for students and the wider community, they demonstrated concerns when school principals did not involve them in the decision-making processes regarding the inclusion of students with special needs in their classrooms. The findings indicated that excluding teachers from decision-making processes created additional pressure on them. There is a need to expand our understanding on teachers’ role in school and classroom decision regarding inclusion.

**Demands and Expectations on Teachers.** Research findings (Galaterou & Antoniou, 2017; Sukbunpant et al., 2013; Wang et al., 2015) suggest that the expectations and demands that schools place on teachers may affect teachers’ attitudes and intentions towards including students with special needs. For example, Wang et al. (2015) reported that teachers in some countries perceive inclusion negatively because they find it difficult to take on new practices when they are already dealing with a large number of students. Other researchers (Galaterou & Antoniou, 2017; Sukbunpant et al., 2013) have reported that teachers hold negative attitudes towards inclusion because they believe that the inclusion of students with disabilities creates additional work in an already overburdened teaching role. Teachers have also expressed concern about providing the individualised instruction needed to support students with special needs.

Overall, the international research suggests the importance of examining system-related factors (e.g., Sukbunpant et al., 2013). Another factor that has received relatively little research is considering how existing system-related factors combine with teacher- or student-
related factors to influence teachers’ attitudes. More research from both quantitative and qualitative studies is needed to better understand how system-related factors shape the attitudes and beliefs of individual teachers and teachers as a collective about inclusion.

**Confidence and Self-Efficacy**

The theory of planned behaviour asserts that understanding people’s intentions and actions requires consideration not just of their personal beliefs and attitudes but also of their perceived control or self-efficacy beliefs to act. Thus, understanding teachers’ ability to include students with special needs in their classes entails considering their confidence and self-efficacy to do so. To date, a range of studies have examined teacher self-efficacy to implement inclusive practices or the relationship between teachers’ perceived self-efficacy and their attitudes and actions towards the inclusion of students with special needs in their classrooms.

Internationally, studies on teachers’ perceived self-efficacy to include students with special needs have demonstrated inconsistent findings. Some studies report generally high perceived self-efficacy perceptions by teachers (Hernandez et al., 2016; Malinen et al., 2012; Savolainen et al., 2012), and others report mixed (Savolainen et al., 2012; Woodcock & Jones, 2020). In a recent study, Woodcock and Jones (2020), using Tschannen-Moran and Woolfolk Hoy’s (2001) Teachers’ Sense of Efficacy Scale (TSES), measured British teachers’ beliefs and self-efficacy towards inclusion in three areas: classroom management, student engagement, and instructional strategies. The researchers found that teachers reported differing levels of confidence and self-efficacy toward different aspects of teaching students with special needs. Teachers reported higher self-efficacy towards managing classroom behaviours than towards implementing instructional strategies, and the lowest levels of self-efficacy towards engaging all students in class. In addition, self-efficacy was linked to
attitudes. Specifically, teachers who believed that inclusion was an effective way to teach all students showed higher self-efficacy than teachers who did not share this belief.

Malinen et al. (2012) surveyed 451 in-service teachers from Beijing to measure their self-efficacy towards teaching in inclusive classrooms in three areas: self-efficacy in using inclusive instructions, in collaboration, and in managing behaviour. Of the three, only self-efficacy in collaboration was related to attitudes towards inclusive education. Teachers with previous experience in teaching students with special needs indicated high self-efficacy in collaboration and positive attitudes towards inclusive education. Further research could explore other factors that may be related to teachers’ attitudes towards inclusion and may affect their efficacy in using inclusive instruction and managing behaviour in different contexts.

A recent study (Hernandez et al., 2016) comparing general education teachers’ and special education teachers’ self-efficacy to teach students with special needs found a relationship between teachers’ self-efficacy and their attitudes towards inclusion. Results indicated that special education teachers recorded higher self-efficacy to use instructional strategies and to teach students with special needs than did general education teachers. Special education teachers also had more-positive attitudes towards inclusive education. These findings are not surprising, as special education teachers have specialised training and experience in inclusive education.

Researchers have also compared the self-efficacy of teachers in different countries. Savolainen et al. (2012) compared self-efficacy towards inclusion of South African (n = 322) and Finnish (n = 342) teachers, finding that teachers from both countries reported relatively high self-efficacy to teach in inclusive classrooms. However, Finnish teachers recorded high self-efficacy and confidence in implementing inclusive instruction, but low self-efficacy and confidence in managing behaviour in class. South African teachers recorded high self-
efficacy and confidence in managing student behaviours in class, but lower self-efficacy and confidence regarding collaboration. The differences between teachers’ self-efficacy in South Africa and Finland may be influenced by contextual factors. Future research is needed to better understand the connection between teachers’ self-efficacy and their attitudes towards inclusive education as well as the contextual factors that might influence them.

**Factors Influencing Teachers’ Confidence and Self-Efficacy**

A number of studies have examined the influence of background factors on teachers’ self-efficacy beliefs towards inclusive practice (Collie et al., 2012; Forlin et al., 2014; Forlin & Sin, 2010; Hofman et al., 2014; Hosford & O’Sullivan, 2016; Malinen et al., 2013). Hofman et al. (2014) adapted items from different self-efficacy scales to measure the variables that influence the self-efficacy of Tanzanian teachers ($n = 100$) and the difficulties they faced in implementing inclusive education programs. Using multiple regression analysis, the researchers found low teacher self-efficacy related to teachers’ perception that they lacked the skills, training, or resources to support students in inclusive classrooms. They also found that low self-efficacy perceptions among teachers were related to negative attitudes towards inclusive education in general. However, other factors such as gender, class size, training in special education, and type of disability were not related to the teachers’ self-efficacy towards inclusive practice.

In other studies, Forlin et al. (2014) and Forlin and Sin (2010) measured the relationship between teachers’ professional learning and their self-efficacy towards inclusive practice. Forlin et al. (2014) found that taking a pre-post professional-learning program was a strong factor influencing teachers’ self-efficacy. Overall, the training program showed teachers’ high perceived teaching efficacy post-training, particularly in managing challenging behaviour in classrooms, but not efficacy in inclusive instruction and collaboration. Findings also indicated that these factors were particularly strong for female teachers compared to
male teachers. Forlin and Sin (2010) also found that teachers who undertook a professional-learning program showed greater self-efficacy towards inclusive practices. Further qualitative research would deepen understanding of the connection between teachers’ self-efficacy and professional-learning.

School support has also been examined as a factor in teacher self-efficacy. Collie et al., (2012) and Hosford and O’Sullivan (2016) both measured the relationship between teachers’ self-efficacy towards inclusive practice and school support, including collaboration with colleagues, availability of resources at school, and teachers’ involvement in decision-making. The findings indicated that teachers’ self-efficacy towards inclusive practices was strongly related to the availability of resources and collaboration with colleagues.

The international studies reviewed above regarding teachers’ self-efficacy and confidence levels to implement inclusive education unquestionably provide valuable contributions to the field. However, they each applied a quantitative survey tool to collect data, which arguably leaves a gap in the research literature in terms of understanding teachers’ interpretations of, and opinions about, their perceived self-efficacy towards inclusion. While quantitative survey-based studies can measure and report findings to show the different levels of teachers’ self-efficacy, investigating the relationship between teachers’ perceived self-efficacy and attitudes towards inclusive education using qualitative methodologies such as interviews would contribute to a more holistic understanding of these relationships.

**Expectations of Others**

The research suggests that teacher’s opinions about what others expect of them may influence teachers’ intentions towards inclusive education (Batsiou et al., 2008; MacFarlane & Woolfson, 2013; Yan & Sin, 2014). Yan and Sin (2014) measured the influence of the expectations of others (i.e., subjective norms) on Hong Kong teachers’ intentions towards the
inclusion of students with special needs in their classes. The researchers reported high levels of social pressure from important others (i.e., school principals and parents of students) to carry out inclusive education in class. Teachers were more likely to implement inclusive practices when their school principals implemented the principles of inclusion in their school. In contrast, researchers in Greece and Cyprus (Batsiou et al., 2008) and in Scotland (MacFarlane & Woolfson, 2013) reported that teachers’ perceptions of their school principals’ expectations to carry out inclusive practices did not influence their intentions towards inclusive education. The difference in the findings may be related to differences between cultures. This suggests a gap in our understanding of the influence of the expectations of others in different countries particularly how expectations from others can influence teachers’ intentions towards inclusive practices.

**Intentions and Actions**

Research examining teachers’ intentions towards teaching students with special needs as well as the influence of background factors on teachers’ intentions towards inclusive practice is limited (Ahmmed et al., 2014; San Martin et al., 2021; Sharma et al., 2018; Song et al., 2019). Current research suggests that teachers’ intentions may vary depending on their concerns about supporting students with different needs. For instance, Sharma et al. (2018) measured Australian and Italian teachers’ intentions and concerns to teach and support students with special needs. The researchers found the Italian teachers had higher intentions towards, and less concerns about, teaching students with special needs in regular classrooms and reported more intentions to adapt the curriculum, while Australian teachers indicated concerns related to the increase in the workload and declining academic standards.

Similar to Sharma et al. (2018), San Martin et al. (2021) found that Chilean teachers’ intentions were closely linked to their attitudes towards disability and inclusion. They found that teachers reported positive intentions towards adapting the curriculum to meet the needs
of students with mild disabilities, but held negative intentions towards making such adjustments for students with severe disabilities. Song et al. (2019) measured Korean pre-service teachers’ intentions to implement inclusive practices before and after taking a mandatory course in special education. The findings indicated that teachers’ intentions became more positive towards teaching students with special needs after taking the special education course. It was also found that teachers who had previous experience with individuals with special needs showed higher intentions to teach students with special needs in inclusive classrooms. It is unclear why some teachers hold negative intentions towards making curriculum adjustments to meet the needs of students with severe disabilities. Further research may shed light on teachers’ intentions towards all students with varying disabilities in mainstream classrooms.

Ahmmed et al. (2014) reported that younger teachers had more-positive intentions towards teaching students with special needs in their classrooms than older colleagues, as did teachers with more teaching experience or previous experience with teaching students with special needs and perceived school support. In contrast, MacFarlane and Woolfson (2013) found that teachers’ previous experience teaching students with special needs and professional developments did not influence their intentions towards inclusive practice. Further research on teachers’ work and life contexts and experiences is important in understanding the influences on teachers’ intentions to implement inclusive policy.

The research suggests that inclusive education involves teachers in using a variety of inclusive practices in inclusive general education classrooms to meet the needs of all students, including students with special needs (e.g., Lin & Lin, 2015). This includes taking the necessary actions to allow every student to learn (e.g., Florian 2014). A few studies have explored teachers’ use of actions or strategies to implement inclusive practices and the relationship between these and their attitudes or confidence. Angelides and Aravi (2007) and
Tarr et al. (2012) used observations and interviews to explore teachers’ use of inclusive practices and found that teachers used collaboration and co-teaching to facilitate the planning of individualised lessons. Teachers’ collaboration had an impact on their feelings of confidence to support diverse students in class.

In comparison, Russak (2016) used a questionnaire to examine teachers’ actions in implementing inclusive practices. The findings showed that teachers believed that they modified assessments and incorporated the use of peer and self-assessment strategy. However, although teachers were positive and believed in the benefit of using these practices, they indicated low self-efficacy in the ability to effectively teach all students in the class. Saloviiita (2018) found that teachers believed in modifying and explaining instructions and indicated that they used co-teaching and peer group work to support students in class. Teachers who stated they frequently used inclusive practices had more positive attitudes and higher self-efficacy towards inclusive education. Younger teachers were found to use more inclusive practices in their classroom than older teachers. However, it is unknown how teachers’ intentions impact their actions towards inclusive education. Further research using methods such as interviews, may shed further light on how teachers’ intentions and the factors influencing their actions towards teaching students with special needs in mainstream classrooms.

**Relationship between Attitudes, Self-Efficacy, and Expectations of Others**

As explained in the previous chapter, the theory of planned behaviour (TPB) (Ajzen, 1991) posits that a person’s intention towards enacting a behaviour is likely to be influenced by their attitudes, understanding of subjective norms (i.e., expectations of, or support from, others), and perceived behavioural control (i.e., confidence or self-efficacy) to act. A few researchers (Ahmmed et al., 2014; MacFarlane & Woolfson, 2013; Sharma & Jacobs, 2016; Yan & Sin, 2014) have used TPB to examine the relationships between all components of
planned behaviour, including attitudes, perceived self-efficacy, subjective norms (expectations of others), and intentions and actions. Ahmmed et al. (2014) surveyed 738 Bangladeshi teachers employed in mainstream primary schools to determine how their attitudes, self-efficacy, and perceptions of subjective norms related to their intentions. Subjective norms were linked to support and cooperation of school administration and school community as well as provision of access to resources and training. The researchers found that 40% of teachers’ variance in their intentions was related to having a positive attitude and a high level of perceived self-efficacy, and was affected by the subjective norms in perceiving the support and cooperation of the school administration and school community. Demographic factors explained the remaining 60% variance in teachers’ intentions towards inclusive practice.

MacFarlane and Woolfson (2013) measured the relationships between teachers’ beliefs, self-efficacy, subjective norms, and perceived behavioural control in predicting their intentions towards inclusive education. The researchers reported positive relationships between the components of planned behaviour. Teachers who indicated positive beliefs and high levels of perceived behavioural control showed high intentions towards inclusive practices. However, high subjective norms (e.g., expectations of school principals) predicted teachers’ actions (curricular, instructional, and social adaptations), but did not predict their intentions and willingness to teach students with special needs.

Yan and Sin (2014) sought to examine the relationship between all TBP variables in a study of 841 teachers in Hong Kong. In their study, subjective norms included feeling social pressure from important others who were identified as parents, other teachers, and the community, while perceived behavioural control related to their confidence in the training provided to staff. The researchers found that attitudes, subjective norms, and perceived behavioural control predicted teachers’ intentions to implement inclusive education. More
specifically, the participating teachers indicated negative attitudes towards inclusive education due to social pressure and perceived challenges related to inclusive practices, as well as the perceived adequacy of professional training.

Sharma and Jacobs (2016) utilised TPB to examine the relationship of Indian and Australian teachers’ attitudes and self-efficacy to their intentions to teach students with special needs, finding a positive relationship among the three. Self-efficacy was found to be a particularly significant predictor of teachers’ intentions towards including students with special needs in their classes. However, Sharma and Jacobs (2016) did not include the subjective norm component of the TPB in their study, the researchers argued that it would be largely influenced by the significant differences between the two context of the study that is India and Australia.

The summary above shows the extent to which international research has utilised TPB to examine the relationships between teachers’ attitudes towards inclusion, confidence to teach in inclusive settings, and perceptions of external expectations. However, since the majority of the studies were quantitative studies, used only measured items, there is a significant gap in the extent research regarding how the TBP variables influence each other, the influence of different factors, and the relationships of the TBP as it interconnects and influences teachers’ intentions towards inclusive practices.

**Summary of International Research**

While the international research adds to the current understanding of some of the drivers of teachers’ practices in inclusive classrooms, it arguably adds only limited insights into whether or how teachers enact their intentions to teach students with special needs in mainstream classrooms. Although the findings reported in international studies make valuable contributions to the field of inclusive education, there are undoubtedly different school- and country-related (i.e., context) factors, as well as likely differences related to
inclusive education policy, to potentially influence teachers’ inclusive education intentions and actions. In the following sections a review of the research on Saudi teachers’ attitudes, confidence, self-efficacy, and intentions and actions to implement inclusive education are presented.

**Research in Saudi Arabia**

As previously established, Saudi Arabia is a relatively unique setting in which to explore the provision of inclusive education, given that it is a monarchy state where Islamic values and principles underpin all aspects of education service delivery. Inclusive education provision is still at a relatively early stage of development in providing equal education opportunities for all students, including those with special needs. These factors may have unique implications and exert unique influences on Saudi teachers’ conceptualisations of inclusion, their ability to support students with different needs in inclusive classrooms, and their perceptions of other’s expectations. The following section provides a review of the research on Saudi teachers’ attitudes, confidence, self-efficacy, and intentions and actions to implement inclusive education. A recent exploration of the literature revealed 19 studies conducted in Saudi Arabia that were related to public school teachers’ attitudes, self-efficacy, and perceptions of their actions towards the inclusion of students with special needs (see Appendix A). Of these, 10 were published as dissertations, leaving only nine journal articles. To search for relevant literature published in English on Saudi teachers attitudes and intentions towards inclusive education, the following engines and electronic databases were used; UOW library search, Google Scholar, ERIC (ProQuest), Science Direct, and Scopus. For example, the study, “Inclusive education in Saudi Arabia and Finland: Pre-service teachers’ attitudes” (Alnahdi et al., 2019) was identified through ERIC (ProQuest) database.
Research Focus

Fourteen of the studies examined teachers’ attitudes towards inclusion. Two (Al-Assaf, 2017; Alnahdi, 2020) explored teachers’ self-efficacy and preparedness to teach students with special needs in inclusive classrooms. Two (Abed & Shackelford, 2021; Alzemaia, 2019) explored Saudi teachers’ perceptions of the obstacles to inclusive education, with one of those (Alzemaia, 2019) also including a focus on teachers’ perceptions of the training offered (see Appendix A). Six studies focused on Saudi teachers’ attitudes towards students with disabilities (Abed & Alrawajf, 2017; Abed & Shackelford, 2021; Al-Assaf, 2017; Alnahdi et al., 2019; Alnahdi, 2020; Alzemaia, 2019); 13 explored teachers’ beliefs and attitudes specifically towards inclusion of students with particular diagnoses, including autism spectrum disorder (ASD) (four studies) (Alhudaithi, 2015; Al-Faiz, 2006; Al Jaffal, 2019; Al-Saleh 2019), learning difficulties (LD) (two studies) (Alahmadi, 2009; Alanazi, 2012), attention-deficit/hyperactivity disorder (AD/HD) (two studies) (Abed & Shackelford, 2020; Alamri, 2014), hearing impairments (HI) (three studies) (Alasim & Paul, 2019; Alshahrani, 2014; Aseery, 2016), and intellectual disability (ID) (two studies) (Alkhattabi et al., 2020; Alquraini, 2012). No Saudi study has yet examined teacher’s intentions towards inclusive practices. One study (Abed & Alrawajf, 2017) explored teachers’ perceptions of their practices in class.

Research Design

Of the 19 studies, nine employed quantitative research methods; five employed qualitative research methods, and four employed a mixed-methods design (see Appendix A). Quantitative studies ($n = 8$) used surveys to examine differences in attitudes between teachers in different demographic groups (e.g., gender, age, teacher position, level of education, years of teaching, previous experience teaching students with special needs, family members with disabilities, and/or previous preparation in inclusive education). One study (Al-Assaf, 2017)
employed a quasi-experimental approach to examine the impact of the implementation of the New Model of Inclusion on teachers’ attitudes and beliefs.

All five qualitative studies conducted interviews with participants to explore Saudi teachers’ attitudes towards the inclusion of students with special needs in regular classes (Abed & Shackelford, 2020; Abed & Shackelford, 2021; Alanazi, 2012; Al-Saleh, 2019; Alzemaia, 2019). The four mixed-methods studies all used a combination of surveys and interviews. Surveys were followed up with interviews in three studies (Alahmadi, 2009; Alamri, 2014; Alshahrani, 2014), which sought to understand teachers’ attitudes towards the inclusion of students with special needs and to elaborate on the significant factors that influenced these attitudes. The remaining study administered survey and interviews in a parallel design (Alhudaithi, 2015). However, Alhudaithi’s (2015) study might have shown alternative or different insights of the findings if a sequential method was used. This method may have helped the researcher in identifying some gaps in the study through the analysis of the survey and then applying that information to construct the interview questions to follow up on those gaps. None of the current studies in the Saudi Arabia have adopted a mixed-method sequential design to examine the relationship between teachers’ attitudes, beliefs, intentions and self-efficacy regarding inclusive practices within general education classrooms. Current research within this context has tended to focus on only one of these areas. A more nuanced and detailed exploration of all factors is needed to fully understand teachers’ attitudes and intentions.

Participants

Six studies focused on general education teachers (Abed & Alrawajfh, 2017; Abed & Shackelford, 2020; Abed & Shackelford, 2021; Alamri, 2014; Al Jaffal, 2019; Al-Saleh 2019); 12 included both general and special education teachers (Alanazi, 2012; Alahmadi, 2009; Alshahrani, 2014; Alhudaithi, 2015; Al-Faiz, 2006; Alquraini, 2012; Aseery, 2016;
Alasim & Paul, 2019; Alkhattabi et al., 2020; Al-Assaf, 2017; Alnahdi, 2020; Alzemaia, 2019), and one study gathered data from pre-service teachers (Alnahdi et al., 2019). Twelve studies included both male and female teachers (Abed & Alrawajfh, 2017; Abed & Shackelford, 2021; Abed & Shackelford, 2020; Alahmadi, 2009; Alamri, 2014; Alasim & Paul, 2019; Al-Faiz, 2006; Al Jaffal, 2019; Alnahdi et al., 2019; Alnahdi, 2020; Alquraini, 2012; Aseery, 2016). Six studies included only female participants (Alanazi, 2012; Al-Assaf, 2017; Alhudaithi, 2015; Alkhattabi et al., 2020; Al-Saleh 2019; Alzemaia, 2019), and one study included only male participants (Alshahrani, 2014).

The vast majority of studies ($n = 12$) were conducted with primary teachers (Abed & Alrawajfh, 2017; Abed & Shackelford, 2021; Abed & Shackelford, 2020; Alanazi, 2012; Alamri, 2014; Alasim & Paul, 2019; Al-Assaf, 2017; Al-Faiz, 2006; Alhudaithi, 2015; Alquraini, 2012; Al-Saleh 2019; Alzemaia, 2019). Six others (Alahmadi, 2009; Alkhattabi et al., 2020; Alnahdi, 2020; Alnahdi et al., 2019; Alshahrani, 2014; Aseery, 2016) included teachers across all grade levels (i.e., primary, intermediate, secondary), and one study focused solely on secondary teachers (Al Jaffal, 2019). Few studies have looked at participants across all grade levels.

**Saudi Teachers’ Attitudes towards Inclusion**

A review of the research revealed variations in Saudi teachers’ attitudes towards including and teaching students with special needs in regular classes. Five studies found that teachers had positive attitudes (Alamri, 2014; Abed & Alrawajfh, 2017; Al Jaffal, 2019; Alnahdi et al., 2019; Al-Saleh 2019). Two studies found that teachers had mixed attitudes (Alanazi, 2012; Alasim & Paul, 2019), while five others found that teachers’ attitudes were generally negative (Alahmadi, 2009; Alhudaithi, 2015; Alkhattabi et al., 2020; Alquraini, 2012; Aseery, 2016).
Some researchers (Alahmadi, 2009; Alamri, 2014; Alanazi, 2012; Alasim & Paul, 2019; Alhudaithi, 2015; Al Jaffal, 2019; Al-Saleh 2019; Aseery, 2016) linked differing attitudes to varying beliefs about social, emotional, and educational benefits of inclusion for students with special needs. Participants in one study (Alhudaithi, 2015) expressed in open-ended questions their positive beliefs about the social, emotional, and educational benefits of inclusion on students with autism. In other studies, Saudi teachers reported beliefs about the placement of students with special needs, stating that special education schools and classrooms were more suitable for teaching students with particular special needs, such as learning disabilities (Alanazi, 2012), autism (Alhudaithi, 2015), hearing impairment (Alasim & Paul, 2019; Alshahrani, 2014; Aseery, 2016) or severe intellectual disability (Abed & Alrawajfh, 2017; Abed & Shackelford, 2021; Alkhattabi et al., 2020; Alquraini, 2012).

Aseery (2016) reported that in the open-ended questions, participants expressed their negative beliefs about the educational benefits for student who are deaf or hard of hearing in regular classes, and that they would receive the best educational options in special education classrooms. Teachers often explained this belief by pointing to the inadequacy of the regular school environment to support these students, citing insufficiencies in curriculum and teaching strategies, and lack of suitably qualified teachers and training programs (Abed & Shackelford, 2021; Alhudaithi, 2015; Alshahrani, 2014). These findings suggest that although teachers held positive attitudes towards the philosophy of inclusion, they expressed negative beliefs towards teaching students with specific types of disabilities. Further research is needed to explore how Saudi teachers are prepared to teach students with special needs in inclusive classrooms and how this preparation affects their attitudes and intentions towards teaching students with special needs in their own classes.

Alnahdi et al. (2019) conducted a comparative measurement of Saudi and Finnish pre-service teachers’ attitudes towards inclusive education. The researchers reported that Finnish
teachers held more-positive attitudes towards inclusion than Saudi teachers. Saudi teachers indicated their agreement with inclusion as a philosophy and right, but disagreed that general education teachers should be responsible for teaching students with special needs. The differences in Saudi and Finnish teachers’ attitudes were explained by the influence of the different demographic characteristics between teachers from the two countries.

Only one study (Alanazi, 2012) interviewed teachers to explore their attitudes towards the use of inclusive teaching practices in class for students with learning disabilities. The researcher reported that Saudi teachers indicated that inclusive teaching practices and classroom-management strategies were important to teaching and learning in inclusive classes. Teachers discussed their use of strategies such as simplifying the lessons, using repetition, and involving the students in group work and dialogues, and said that lack of support, resources, and training was problematic. Teachers also indicated that implementing these strategies proved challenging for them although the researcher did not explore which inclusive practices the teachers found difficult to implement. Further research is needed to explore and provide a more nuanced understanding of the kinds of inclusive practices teachers are implementing in Saudi classrooms.

Confidence and Self-Efficacy

Only a few of the studies have specifically examined teachers’ confidence, capacity, and self-efficacy to implement inclusive practice. Researchers (Özokçu, 2018) suggest that teachers’ self-efficacy beliefs are crucial predictors of their inclusive practice. To date, only four studies (Alamri, 2014; Al-Assaf, 2017; Alnahdi, 2020; Alzemaia, 2019) have sought to specifically examine Saudi teachers’ self-efficacy and confidence to teach students with special needs in inclusive classrooms. Two studies (Al-Assaf, 2017; Alnahdi, 2020) used surveys to measure teachers’ self-efficacy to teach in inclusive educational classrooms, and one study (Alamri, 2014) used a survey and interviews to explore the relationship between
teachers’ self-efficacy beliefs towards teaching students with AD/HD, their knowledge of AD/HD, and their attitudes towards inclusion. The final study (Alzemaia, 2019) used interviews to explore teachers’ self-efficacy beliefs in their ability implement inclusion and teach students with special needs.

Alnahdi (2020) used the Teacher’s Efficacy for Inclusive Practices scale developed by Sharma et al. (2012) to measure teachers’ self-efficacy for managing behaviour, implementing inclusive instructions, and collaborating to teach students with special needs in inclusive education classrooms. The findings revealed that Saudi teachers demonstrated high self-efficacy and confidence to help their students to follow classroom rules and to provide alternate explanations for students (i.e., instructional strategies). Conversely, participants reported low self-efficacy and confidence in designing learning tasks to accommodate the individual needs of students with disabilities, manage students’ behaviour, prevent disruptive behaviour in class, or manage physically aggressive students. These findings suggest that teachers had higher self-efficacy in their general teaching abilities, but not with regards to teaching students with special needs. Furthermore, the researcher did not examine the relationship between self-efficacy and teacher factors or attitudes towards inclusive education.

Al-Assaf (2017) used a quasi-experimental design to determine impact of exposure to the New Model of Inclusion, on primary-school teachers’ self-efficacy beliefs. The New Model of Inclusion provides teachers with training on inclusive educational practices. The researcher found that teachers in a pilot school that was implementing the New Model of Inclusion had higher self-efficacy beliefs towards inclusive practices than teachers in the control group. Findings indicated that teachers in the experimental group had higher self-efficacy and were more positive towards implementing inclusive practices.
In another study, Alamri (2014) explored the relationship between primary-school teachers’ self-efficacy beliefs towards teaching students with AD/HD, their knowledge of AD/HD, and their attitudes towards inclusion of students with AD/HD. The findings indicated a positive relationship between teachers’ knowledge about students with AD/HD and their self-efficacy to instruct and manage students with AD/HD. Moreover, teachers with higher self-efficacy held more-positive attitudes towards inclusion than teachers with low self-efficacy. Follow-up interviews revealed that teachers who had high self-efficacy reported having previous experience in teaching students with AD/HD. This study only explored primary-school teachers’ self-efficacy beliefs. It is possible that intermediate- and secondary-school teachers may have different efficacy beliefs. Further research is needed to explore the relationship between teachers’ self-efficacy beliefs and attitudes towards teaching students with varying special needs across a range of grade levels.

In another study, Alzemaia (2019) interviewed teachers about their confidence to teach students with special needs in mainstream classrooms. Teachers reported low confidence in their abilities to teach students with special needs, manage and deal with students with special needs in the classroom, and communicate information to students with special needs. Participants expressed negative attitudes towards the inclusion of students with special needs based on their lack of confidence. The researchers did not explore how teachers’ attitudes and self-efficacy beliefs influenced their intentions to implement inclusive practice.

The above review shows there has been much research on teachers but a recent exploration of the literature revealed 19 studies conducted to date on Saudi teachers’ confidence and perceived self-efficacy to implement inclusive education programs. Nonetheless, the findings reported in these studies generally align with international research findings. What Saudi studies have not done to date, however, is to examine how Saudi
teachers’ confidence and perceived self-efficacy relates to their intentions and actions regarding inclusive education.

**Intentions and Actions**

The review of the Saudi studies did not find any study examining teachers’ intentions towards inclusive practices. However, one study was found that examined teachers’ perceptions of their actions in inclusive classrooms. Abed and Alrawajfh (2017) used a survey to examine primary school teachers’ perceptions of the strategies they used to teach students with special needs in inclusive classrooms. Strategies noted included encouraging students to assist each other, monitoring students while doing classroom activities, and fostering interaction in the classroom. The strategies noted by the smallest number of participants included establishing educational goals for both students with special needs and other students and choosing teaching materials that are appropriate for all students. The researchers did not examine the relationship between teachers’ attitudes, self-efficacy, and intentions and which inclusive practices teachers were using and how they were using them in their classrooms.

**Factors Influencing Teacher’s Attitudes and Self-Efficacy**

**Teacher-Related Factors**

Teacher-related factors including gender, age, teaching qualification and experience, having a family member/relative with special needs, knowledge of inclusion, and religious beliefs are considered to have relationship with and impact on teachers’ attitudes.

**Gender and Age.** As with the findings in the international studies, the literature regarding the relationship between gender and Saudi teachers’ attitudes is inconsistent. Alasim and Paul (2019), Alnahdi et al., (2019), and Abed and Alrawajfh (2017) all found that Saudi female teachers held more-positive attitudes towards inclusion than male teachers. In contrast, Alahmadi (2009), Al Jaffal (2019), and Alquraini (2012) found that Saudi male
teachers held more-positive attitudes than female teachers. Al-Faiz (2006) and Aseery (2016) reported no significant differences among female and male teachers in terms of their attitudes towards inclusion. The mixed findings between male and female teachers’ attitudes may be explained by the difference in school settings in Saudi Arabia, which are segregated by gender so that only males teach male students and females teach female students. Similarly, findings on the relationship between Saudi teachers’ attitudes and their age are inconsistent. Al-Assaf (2017) and Alhudaithi (2015) found that younger teachers were both more positive than older teachers and generally more confident to teach students with special needs in mainstream classrooms. Other research reported that age was not an influencing factor on teachers’ attitudes towards inclusion (Alahmadi, 2009; Alamri, 2014; Al-Faiz, 2006). These inconsistencies may suggest that teachers’ age is not a strong factor in their attitudes on its own, but may be related to other factors, such as exposure to teacher training.

**Teaching Qualification and Experience.** Researchers found that Saudi special education teachers held more-positive attitudes towards the inclusion of students with special needs than their general education teacher counterparts (Al-Ahmadi, 2009; Alhudaithi, 2015; Alkhattabi et al., 2020). Alkhattabi et al. (2020) suggested that these results were related to special education teachers having received special education training at university. Other researchers have also found that training in working with students with special needs had a positive influence on Saudi teachers’ attitudes (Al-Assaf, 2017; Al-Faiz, 2006; Aseery, 2016). In contrast, Abed and Alrawajfh (2017), Alamri (2014), and Alasim and Paul (2019) found that training did not influence teachers’ attitudes towards inclusion with special needs. Conversely, Alquraini (2012) found that general education teachers held more-positive attitudes than special education teachers. Alquraini suggested that the more negative attitudes of special education teachers may reflect their unsuccessful experience with inclusive education settings. However, Alasim and Paul (2019) found no relationship between teacher
position and teacher attitude towards inclusion, with both special education and general education teachers indicating generally negative attitudes towards the inclusion of students with special needs. Another factor to potentially influence teachers’ attitudes towards the inclusion of students with special needs in Saudi regular classes is having had previous experience with individuals with special needs. Alasim and Paul (2019) and Aseery (2016) found that having a family member or a friend with special needs did not positively influence teachers’ attitudes toward inclusion. In contrast, Al-Faiz (2006), Alquraini (2012), and Al-Assaf (2017) found that Saudi teachers with a family member with special needs reported significantly more-positive attitudes and greater self-efficacy (Al-Assaf, 2017) toward the inclusion of students. Further enquiry is needed to fully explore the influence of teachers’ experiences in the Saudi context. In addition, these researchers all used surveys to measure the relationship between teachers’ attitudes towards inclusion, having previous experience and/or training. Qualitative research may offer additional understanding.

**Knowledge of Inclusive Education.** Researchers suggest (Alamri, 2014; Alhudaithi, 2015) that the success of inclusive education requires a well-formulated knowledge of both inclusive teaching strategies and students with special needs. Alamri (2014) found that Saudi teachers’ knowledge about inclusive education and students with AD/HD was positively correlated with their attitudes and self-efficacy. Alhudaithi (2015) found that general education teachers who lack understanding of inclusion and of students with special needs held negative attitudes towards inclusive practice. Further research is needed to explore teachers’ attitudes regarding their knowledge on inclusive practice.

**Religious Beliefs.** Saudi Arabia is a society where religious beliefs strongly influence the daily behaviours and work practices of citizens. Thus, Saudi teachers’ religious beliefs may potentially exert a unique influence on their attitudes towards inclusion of students with special needs in regular classes. However, a review of the Saudi research literature revealed
that only Alzemaia (2019) explored the influence of religious beliefs on teachers’ attitudes toward inclusion. Although in interviews, teachers indicated a strong moral obligation towards helping people with disabilities, their religious beliefs were not found to necessarily override an unfavourable attitude towards inclusion. Alzemaia suggested that this was due to their insufficient knowledge of inclusion and its aims, as well as a lack of confidence in their ability to teach students with special needs in regular classes. However, the study did not note whether religious beliefs had an impact on teachers’ intentions or actions. This is one area that has not been fully explored within the Saudi context.

**Student-Related Factors**

The type and severity of disability has also been found to be a factor in Saudi teachers’ attitudes towards the inclusion of students with special needs. Similar to the international studies, Saudi researchers (Alasim & Paul, 2019; Al-Saleh, 2019) found that Saudi teachers generally hold positive attitudes towards the inclusion of students with special needs irrespective of the severity or type of student disability. Other researchers (Al-Saleh, 2019; Alshahrani, 2014) have found that Saudi teachers demonstrate more-positive attitudes towards students with less severe disabilities and more-negative attitudes towards students with more severe disabilities. For instance, Alasim and Paul (2019) and Alshahrani (2014) found that Saudi teachers held negative attitudes towards the inclusion of students who were profoundly deaf but were more positive about including students with milder hearing impairments. Teachers indicated that this was because they lacked adequate teaching skills to teach students with more-significant hearing-related needs (Alshahrani, 2014). Interestingly, in comparison to teachers in Finland, Alnahdi et al. (2019) found that Saudi pre-service teachers held more-positive attitudes to including students with emotional and behavioural
disorders in their classes. These previous studies have primarily explored teacher’s attitudes towards inclusion of students with a single diagnosis.

**System-Related Factors**

Evidence from the international literature has pointed to the importance of school structures and adequate support from the school administration for teachers’ successful implementation of inclusive education programs (e.g., Sukbunpant et al., 2013; Kosmerl, 2011). A review of Saudi research studies examining the contextual factors is presented below. These contextual factors including school procedures for implementing inclusion programs, inclusive education teaching conditions (e.g., class sizes), and the provision of in-service training to teachers, on implementing inclusion programs.

**School Structures and Procedures.** Saudi teachers’ perceptions about adequacy of school resources have been found to influence their attitudes regarding the inclusion of students with special needs. Teachers’ negative attitudes towards the inclusion of students classified as hard of hearing or deaf (Alshahrani, 2014; Aseery, 2016) was linked to their belief that their school lacked suitable infrastructure to support these students. Alshahrani (2014) found that teachers reported that they lacked teaching aids as well as human resources, including specialised teachers, and training to implement inclusive practice. In Aseery (2016) and Alzemaia (2019) studies teachers reported that the mainstream school buildings and classrooms are not prepared for students with special needs, preventing these students from communicating and interacting effectively with their peers and teachers.

**Demands on Teachers.** Perceptions of teaching conditions have also been found to influence Saudi teachers’ attitudes towards inclusion of students with special needs. Alquraini (2012) and Alzemaia (2019) found that Saudi teachers’ negative attitudes and low self-efficacy (Alamri, 2014) towards inclusion were influenced by large class sizes. Alqurauni (2012) found a relationship between the large number of students in classes and teachers’
negative attitudes toward the inclusion of students with severe intellectual disabilities. Teachers reported that the large number of students in general education classrooms made them unsupportive of inclusion, and that they lacked confidence in their abilities to manage students in class already without having to cater for students with special needs (Alamri, 2014; Alzemaia, 2019). Other research highlights the pressures on teachers with large numbers of students in general education classrooms and high curriculum workloads (Al-Ahmadi, 2009; Alshahrani, 2014).

It is perhaps not surprising, therefore, that when teachers were asked about their perceptions about the barriers and changes needed for a successful implementation of inclusion, they expressed the need for changes to school systems before the implementation of inclusive programs could be accomplished successfully (Alanazi, 2012). Teachers reported that changes need to be made in preparing school buildings and classrooms, modifying curricula, and ensuring provision of adequate resources and training prior to the inclusion of students with special needs in mainstream classrooms (Abed & Shackelford, 2021; Alahmadi, 2009; Alamri, 2014; Al-Saleh, 2019; Alshahrani, 2014).

**Training.** Training provision and/or access to professional-development opportunities emerged as arguably the leading system-related factor highlighted in the research on attitudes of Saudi teachers. Several Saudi studies (Abed & Shackelford, 2020; Abed & Shackelford, 2021; Alahmadi, 2009; Alhudaithi, 2015) found that teachers’ perceptions that they lacked training on effective inclusive teaching practices and managing behaviours of students with special needs were linked to negative teacher attitudes. This mirrors the findings in the international literature that without adequate support, training, and resources, teachers feel ill-prepared to effectively teach students with special needs in inclusive classes (e.g., Odongo & Davidson, 2016; Yan & Sin, 2014). Saudi teachers’ attitudes towards inclusion have also been found to be related to the amount of in-service training they received. Al-Saleh (2019)
found that Saudi teachers maintained negative perceptions towards inclusion despite attending a two-day training workshop prior to the implementation of the inclusion program in their school. The findings suggested that the short duration of the training (two days) appeared to be insufficient for Saudi teachers in implementing inclusive practices. Abed and Shackelford (2020) explored Saudi general education and special education teachers’ perceptions of the In-Service Education and Training (INSET) program, they found that Saudi teachers understood the importance of INSET programs in educating and supporting students with AD/HD, but were critical of the INSET programs for not facilitating or addressing effective teaching for these students, and for only being offered to special education teachers.

Alzemaia (2019) interviewed Saudi general education and special education primary-school teachers to explore their attitudes and practices related to the inclusion of students with disabilities before and after attending inclusive education training. The study explored teachers’ understanding of inclusion, attitudes towards inclusion in regular classrooms, inclusive practices, and the influence of training on teachers’ attitudes. The findings indicated that Saudi teachers held generally negative attitudes towards inclusion and felt unsupported in teaching students with special needs in regular classes. However, participants developed more-positive attitudes towards inclusion and were more willing to implement inclusive practices in their classes after receiving training on such practices. Participants also demonstrated more knowledge of inclusive education and its benefits. However, teachers highlighted several obstacles to the provision of inclusive education irrespective of teacher training, including insufficient curriculum, insufficient leadership and parental involvement, lack of training and resources, shortage of staff, lack of specialists, and misdiagnosis of the type of disability. The findings of the study revealed that training can potentially influence
some teachers’ attitudes towards inclusive practices, although not all, and that further research is needed that explores general education teacher’s beliefs about training needs.

**Summary of Saudi Literature**

The studies reviewed above provide compelling findings and additional insights into the potential influence of teacher-, student-, and system-related factors on Saudi teachers’ attitudes toward inclusion. Overall, the main factors cited by Saudi teachers to shape their attitudes included, but were not limited to, access to specific training in this field (e.g., Abed & Shackelford, 2020; Al-Saleh, 2019; Alzemaia, 2019); beliefs about the benefits (or lack thereof) of inclusion of students with particular special needs (e.g., Alquraini, 2012); their knowledge and skills to properly manage the behaviour of students with special needs in regular classrooms (e.g., Abed & Shackelford, 2021; Alahmadi, 2009; Alhudaithi, 2015); and concerns about the extra work that inclusion of students with special needs would create for teachers in the classroom (e.g., Al-Ahmadi, 2009; Alshahrani, 2014). However, none of the Saudi studies have explored teachers’ perceptions of others’ expectations or the influence this might have on their attitudes, self-efficacy, and intentions towards inclusive practice. The current study’s exploration of Saudi teachers’ perceptions of the factors that influence their attitudes, self-efficacy, and intentions towards inclusion is therefore warranted.

**Research Aim and Questions**

Based on the review of literature in both the international and Saudi contexts, the current study was conducted to explore how teachers’ attitudes and beliefs, confidence and self-efficacy, perceptions of the expectations of others, and other factors interconnect and influence their intentions and actions towards inclusive education. The study was guided by three research questions:
1. What are Saudi teachers' attitudes/beliefs, understandings of expectations, and perceived self-efficacy in relation to inclusion of students with special needs in their classrooms?

2. What are the main factors influencing Saudi teachers' attitudes/beliefs, understandings of expectations, and perceived self-efficacy in relation to inclusion of students with special needs in their classrooms?

3. How do Saudi teachers' attitudes/beliefs, understandings of expectations, and perceived self-efficacy inter-relate and influence their intentions and actions towards implementing inclusive education?

Chapter Summary

It is generally acknowledged in the literature on education service provision that the attitudes of teachers towards the education program they are implementing, their self-efficacy to implement the program, and their perceptions of the expectations of others are critical success factors for achieving the program’s goals and objectives (Moberg et al., 2020; Pit-ten Cate et al., 2018). This chapter reviewed both international and Saudi-specific research related to teachers’ attitudes towards inclusion, their confidence and perceived self-efficacy to teach students with special needs, and their perceptions of external expectations when practicing inclusion. The research highlighted that teachers’ attitudes/beliefs and confidence in relation to implementing inclusive education programs can be considered in relation to personal factors (e.g., conceptualisations of inclusion, personal beliefs, experiences with a person with a disability) and to external factors (e.g., training provision, policy, and system expectations). The research also provided some insightful findings on the teacher- and system-related factors that potentially influence teachers’ attitudes, self-efficacy perceptions, and experiences of inclusive education expectations.
This review also identified the lack of breadth and depth in the research literature on Saudi teachers’ attitudes towards inclusion, confidence, and perceived self-efficacy to teach students with special needs, and experiences of external expectations when practicing inclusion; specifically, how these aspects interrelate and connect to influence Saudi teachers’ inclusive education intentions and actions. This is a gap in the research that is important to address. The Saudi Arabian inclusive education context is unique, with teachers and schools having only recently started to implement inclusive education in practice in mainstream classrooms. Moreover, unlike in western countries, Islamic values and principles underpin all aspects of the delivery of inclusive education.

Current studies have largely relied on quantitative research methods (i.e., surveys) to ascertain insights about the relationships between teachers’ attitudes towards, self-efficacy perceptions of, and teaching experiences related to inclusive education. As a result, they do not widely explore teachers’ explanations and understanding of the factors influencing their attitudes towards inclusion and self-efficacy perceptions regarding the practice of inclusive education. In addition, the Saudi studies that do employ interview methods for understanding teachers’ attitudes have tended to focus only on one gender, single disability type, and/or grade level taught. The current study aims to address this gap in the Saudi research literature by adopting a mixed-methods approach to explore the attitudes and perceptions of Saudi general education male and female teachers across the year levels. The study will look specifically at Saudi teachers’ attitudes, confidence/self-efficacy beliefs, and experiences of expectations in relation to inclusive education in a general education context. The present study aims to contribute a more nuanced understanding of the teacher- and system-related factors to influence Saudi teachers’ attitudes towards inclusion and perceived self-efficacy in teaching students with special needs, how they interrelate, and how they appear to influence Saudi teachers’ intentions and actions regarding inclusive education.
Chapter 3: Methodology

This study will explore teachers’ attitudes/beliefs towards the inclusion of students with special needs in mainstream classrooms in Saudi Arabia. Specifically, the study aims to explore Saudi teachers’ attitudes and beliefs, self-efficacy and confidence, capacity, their views expectations of other, their intentions, and how they perceive their own actions and the interconnections between these beliefs. This chapter presents the research paradigm, design, and methods that were used in the study.

Research Paradigm

Philosophical worldviews are defined as “a basic set of beliefs that guide action” (Guba, 1990, p. 17). This study aligns with a pragmatic worldview, one which is not tied “to any one system of philosophy and reality” (p. 39), but rather focuses on what works in understanding the research questions and problem (Creswell & Creswell, 2017). Pragmatic research is not limited to what is necessarily “objectively” measured or demonstrated by experimental study or quantitative research, or by research that is purely qualitative in nature (Creswell & Creswell, 2017). The pragmatic lens focuses on the research phenomenon from the perspective of individuals in real-world situations (Smith et al., 2011), and on using “what works” to understand and solve the problem (Johnson & Christensen, 2019). In this instance the problem is discovering and understanding the real-world perspectives of Saudi teachers regarding the inclusion in their classrooms of students with special needs. The pragmatic view suits this study, as teachers’ perceptions and beliefs are influenced by their context (Heng & Song, 2020). The nuanced nature of teachers’ perceptions and beliefs is shaped by social and contextual experiences (Heng & Song, 2020). Thus, the pragmatic approach allows the researcher to be open to differing ideas and beliefs about inclusion and how they are formed within specific teaching contexts.
Research Design

The pragmatic approach was chosen in this study because it allowed the researcher the freedom to choose a variety of methods according to which was most appropriate in addressing the research problem (Creswell & Creswell, 2017); this contrasted with purely quantitative or qualitative studies, which may fail to capture essential aspects of attitudes, beliefs, and perceptions (Alamri, 2014). In this instance multiple methods of data collection (survey, open-ended questions, and interviews) and analysis (descriptive, statistical, and thematic) were used to answer the research questions, which focused on understanding the complexity of Saudi teachers’ attitudes, beliefs, and intentions towards inclusion.

This study used a mixed-methods design employing both a quantitative survey and qualitative semi-structured interviews. According to Creswell and Clark (2017), the central premise of mixed-methods research is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone (p. 5). This approach facilitates a more comprehensive exploration of teachers’ attitudes, thus providing significant insights into Saudi teachers’ perspectives (Creswell & Creswell, 2017). This design is most suited for this study, as it provides the basis for a holistic exploration of the research problem and comprehensive responses to the questions (Creswell, 2013).

This study adopted a sequential explanatory mixed-methods design (Creswell & Creswell, 2017) (see Figure 2) in which data was collected in two phases sequentially. In the first phase a survey that employed both qualitative and quantitative questions was used to gather perspectives from 360 mainstream teachers regarding their personal beliefs, attitudes, and perspectives on the inclusion of students with special needs. Additional survey items were added to measure teachers’ self-efficacy beliefs (Tschannen-Moran & Hoy, 2001), providing an important understanding of the relationships and connections between their
beliefs, their confidence and self-efficacy, what they believe others expect of them, and their intentions and actions. These were explored using Likert scales and open-ended questions. The Likert statements allowed for understanding teachers’ level of agreement or disagreement regarding their beliefs and intentions towards the inclusion of students with special needs in mainstream classrooms. The open-ended questions allowed the participants to expand on and clarify their responses to the Likert items. This was important as it provided an opportunity for the researcher to follow up on specific issues raised in the subsequent interviews (Phase 2).

In the second phase, interviews were conducted with a small group in order to gain a more nuanced understanding of teachers’ perceptions of their own beliefs and what influenced their intentions towards inclusion. The interviews generated a more comprehensive understanding of Saudi teachers’ attitudes and beliefs towards including students with special needs, and a deeper understanding of the context and the teachers’ perspectives regarding their intentions regarding inclusive practices in mainstream classrooms.

In the sequential design the final process involved combining the key findings from the three data sets: survey items, open-ended questions, and interviews. The combination of the three data sets was useful in enhancing the interpretation of the data and looking at the research problem from different sources (Creswell & Clark, 2017; Teddlie & Tashakkore, 2009). Since the current study looked at a complex construct-teachers’ attitudes and beliefs—the combination of data types provided a more comprehensive understanding of their perspectives and perceptions within the Saudi context.
Participants and Setting

Ethics approval for data collection was received from both the University of Wollongong (UOW) (approval number 2017/377; see Appendix B) and the Saudi Ministry of Education (MoE) in Saudi Arabia (approval number 39102186338; see Appendix C) to conduct the study. The participants in this study were mainstream general education teachers working in primary, intermediate, and secondary schools in Saudi Arabia. Participants were recruited from mainstream schools in three Saudi cities—Riyadh, Jeddah, and Dammam—as they represented the largest population centres in Saudi Arabia. After granting research approval, the Saudi Ministry of Education provided the researcher with a list of 22 school supervisors and contacts in the three cities. School supervisors are responsible for coordinating and managing approximately three schools in each region of Saudi Arabia. In Saudi Arabia, schools are segregated by gender, which includes both staff and students, so that only males teach male students and females teach female students. The researcher grouped the supervisors based on gender in each of the three cities. Thus, an equal number of male (n= 11) and female (n= 11) school supervisors were contacted to ensure both were represented.

The researcher contacted the school supervisors and provided them with the details of the study. The school supervisors were asked to provide contact details for their school...
principals so that the researcher could notify them of the aim of the study and ask to distribute the survey link and recruit teachers at their respective schools. Six school supervisors responded to the request: three males and three females from six different education departments in Riyadh, Jeddah, and Dammam. This provided the researcher with contact information for 18 school principals. The researcher contacted the school principals by phone and informed them of the aim of the study and obtained their consent via email. The researcher then emailed the school principals with a WhatsApp script (see Appendix D) and the participant information sheet (see Appendix E) and consent forms (see Appendix F), and asked them to distribute them to their teachers.

WhatsApp is a messaging application that is commonly used in Saudi Arabia to communicate between teachers, their school principals and school supervisors, and is increasingly has been used by researchers as a valid means of recruiting research participants in Saudi Arabia (e.g., Aseery, 2016). In the current study, it was used as a communication platform because each of the schools had its own WhatsApp group. The WhatsApp script for teachers contained a brief explanation of the aim of the study and a web link to access the survey via the Survey Monkey online platform. Each of the 18 school principals had an average of 56 teachers in their schools. Collectively, the school principals broadcast the WhatsApp invitation, along with the information and consent forms, to a targeted population of approximately 1,008 teachers. As it was an online survey, it included a paragraph including information about the study and a consent statement that the participants had to click to agree with if they were willing to participate and access the survey. The response rate was calculated by dividing the number of completed survey responses by the number of people targeted to take the survey, then multiplying the final score by 100 (Fincham, 2008). A total of 554 teachers accessed the link or viewed the survey and 360 completed the survey, for a 36% response rate.
Interview participants were recruited as a subgroup of survey participants. A statement was included at the end of the survey asking survey participants if they would be willing to participate in a follow-up interview. Those who were willing to be interviewed were asked to provide their contact information. Forty-two participants provided their contact information at the end of the survey. A stratified sampling procedure was then used to select participants to ensure all demographic groups were represented. Participants who agreed to participate in the interviews were divided into demographic groups by gender, years of experience, grade level taught, and city. The researchers then contacted the 42 participants via WhatsApp and provided them with the information (see Appendix G) and consent forms (see Appendix H) for participation in the interviews. Participants who were still willing to consent were asked to return the signed consent form to the researcher via WhatsApp or email. Twenty-five teachers consented, with 15 interviewed via phone. To obtain oral consent for recording the interviews, the researcher read an oral-consent script (see Appendix I) over the phone for recording the participants’ interviews. All participants consented to the recording of the interview. Morse (1995) argues that the interviews should continue until saturation is achieved; in the case of this study, 15 interviews were considered sufficient, as saturation was reached at this point. Guest et al. (2006) asserts that 12 interviews are enough for achieving saturation and sufficient for the development of meaningful interpretations (p. 78).

Data Collection

Survey Instrument

A survey instrument was constructed specifically for this study to collect information on Saudi teachers’ attitudes and beliefs towards inclusion of students with special needs. The survey comprised 63 questions across four sections: demographics, teachers’ sense of
efficacy, and teachers’ beliefs and perceptions regarding teaching students, and open-ended questions.

**Section 1 — Demographics.** The first section of the survey was comprised of 11 questions to gather demographic information regarding participants’ gender, age, region, school, grade level taught, degree, subjects taught, years of experience, training and professional learning, and type of students’ special needs.

**Section 2 — Teacher Sense of Efficacy Scale (TSES).** The Teacher Sense of Efficacy Scale (TSES) (Tschannen-Moran & Hoy, 2001) comprised the second section of the survey (see Table 3). The TSES has been constructed and validated by Tschannen-Moran and Hoy (2001) with factor analysis and has been considered consistent in measuring self-efficacy in student engagement, instructional practices, and classroom management. Tschannen-Moran and Hoy (2001) reported a reliability coefficient of $\alpha = 0.90$ for questions of the sum scale, indicating a high level of internal consistency, as well as for the subscales $\alpha = 0.81$ student engagement (questions 2, 4, 7, 11), $\alpha = 0.86$ instructional practices (questions 5, 9, 10, 12), and $\alpha = 0.86$ classroom management (questions 1, 3, 6, 8). The TSES consists of 12 questions and measures teacher’s self-efficacy in student engagement, instructional strategies, and classroom management. Participants were asked to rate items on a scale from 1 (“nothing at all”) to 9 (“a great deal”).

The TSES has been used in many studies and has good reliability as a measure of teacher self-efficacy (e.g., Khan, 2012; Klassen et al., 2009; Labone, 2004; Tsigilis et al., 2010). The TSES was translated into Arabic by Abu-Tineh and Al-Khalaileh, (2011) and the face and content validity of the Arabic version of the scale have been confirmed (Abu-Tineh & Al-Khalaileh, 2011). The TSES was selected for use as it had been used extensively in other studies (e.g., Chao et al., 2017; Frumos, 2018) to measure teachers’ self-efficacy about inclusive education; it was important for this study as it was used to determine whether there
was a quantifiable relationship between teachers’ confidence and capacity and to capture their perceptions of their confidence and capacity, as a confirmation of the data obtained from the interviews. Nine of the questions that were specified for students in general were adapted to include the phrase “students with special needs” (SN) to determine teachers’ self-efficacy to teach students with special needs.

**Table 3**

*Teacher Sense of Efficacy Scale*

<table>
<thead>
<tr>
<th>Question</th>
<th>Teacher Sense of Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Efficacy in Students Engagement</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>How much can you do to motivate students with special needs who show low interest in schoolwork?</td>
</tr>
<tr>
<td>4</td>
<td>How much can you do to help your students with special needs value learning?</td>
</tr>
<tr>
<td>7</td>
<td>How much can you do to calm a student with special needs who is disruptive or noisy?</td>
</tr>
<tr>
<td>11</td>
<td>How much can you assist families in helping their children with special needs do well in school?</td>
</tr>
<tr>
<td><strong>Efficacy in Instructional Strategies</strong></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>To what extent can you craft good questions for your students with special needs?</td>
</tr>
<tr>
<td>9</td>
<td>How much can you use a variety of assessment strategies?</td>
</tr>
<tr>
<td>10</td>
<td>To what extent can you provide an alternative explanation or example when students with special needs are confused?</td>
</tr>
<tr>
<td>12</td>
<td>How well can you implement alternative strategies in your classroom?</td>
</tr>
<tr>
<td><strong>Efficacy in Classroom Management</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>How much can you do to control disruptive behaviour of students with special needs in the classroom?</td>
</tr>
<tr>
<td>3</td>
<td>How much can you do to get students with special needs to believe they can do well in schoolwork?</td>
</tr>
<tr>
<td>6</td>
<td>How much can you do to get students with special needs to follow classroom rules?</td>
</tr>
<tr>
<td>8</td>
<td>How well can you establish a classroom management system with each group of students?</td>
</tr>
</tbody>
</table>

**Section 3—Teachers’ Beliefs and Perceptions of Inclusion.** The third section was comprised of 35 Likert-scale statements designed to assess teacher’s beliefs about and perceptions of inclusion in four categories of inclusion beliefs, based on the components of the theory of planned behaviour (Ajzen, 1991): attitudes, subjective norms, perceived
behavioural control, and intentions and actions (Appendix L). Thirty-five questions were taken from two previous questionnaires: the *Preservice teacher attitudes and intentions toward an inclusive educational environment: An application of the theory of planned behaviour* (Jones, 2009), and the *Opinions Relative to Mainstreaming (ORM) scale* (Alhudaithi, 2015). All items in this section were rated using a five-point Likert-type scale from 1 (“strongly disagree”) to 5 (“strongly agree”). The first category, personal beliefs, included statements related to the attitude component of the TPB survey. Statements 1, 2, 3, 4, 5, 6, 8, 22, and 27 reflected personal beliefs about inclusion and students with special needs (e.g., “Inclusion of students with special needs means extensive retraining of mainstream classroom teachers”). The second category, confidence and capacity, was related to the perceived behavioural control as captured by the TPB survey. Statements 14, 15, 16, 17, and 18 in this category were related teachers’ confidence in their ability to teach students with special needs and the capacity within the context of their classrooms (e.g., “I am capable of teaching and managing students with special needs in my classroom”). The third category, others’ expectations, was related to the subjective norms component of the TPB survey. It included statements 10, 24, 25, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, and 37 that related to perceptions about others’ expectations regarding inclusion of students with special needs (e.g., “Doing what other teachers do is important to me”).

The final category in this section was related to participants’ intentions and actions towards inclusion and teaching practices. This included statements 7, 11, 12, 13, 19, 20, and 21 (e.g., “I welcome students with special needs into the mainstream classroom and work with them there rather than in a special institute’s classroom”). In order to have a variety of statements related to attitudes and beliefs, items 4, 5, 6, 8, and 26 were added from Alhudaithi’s (2015) survey to reflect teachers’ perceptions of inclusion. Item 18, which related to perceived behavioural control, was added to reflect teachers’ need for special skills
when accommodating inclusion. Items 20 and 21, which related to teachers’ intentions and actions, were added to reflect teachers’ intentions and actions towards inclusive practice.

The total number of items was 35. These were then reviewed by the researcher and researcher’s supervisors and adapted to fit the Saudi context. Items adopted from Jones (2009) were adapted to fit the context of the study replacing the words “preservice teachers” with “teachers”, “future students” with “students”, and “professors” with “principals and school supervisors”. Other questions in Jones’s (2009) survey were not included if they were specifically pertinent to pre-service teachers as the current study focused on practising teachers. Table 4 provides details on item statements, item source, adaptations made, and categories of inclusion beliefs.

**Table 4**

*Category of Inclusion Beliefs for Each Survey Item*

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Survey Item</th>
<th>Source</th>
<th>Original Item</th>
<th>Adaptation Made</th>
<th>Inclusion Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>The extra attention that students with special needs require is to the detriment of other students.</td>
<td>Alhudaithi</td>
<td>The extra attention that students with autism require is to the detriment of other students.</td>
<td>“Autism” replaced with “special needs”</td>
<td>Personal Beliefs (PB)</td>
</tr>
<tr>
<td>22</td>
<td>Students with special needs are better in a special institute classroom rather than mainstream classroom.</td>
<td>Alhudaithi</td>
<td>Students with autism are better in special institutions than mainstream schools.</td>
<td>“Autism” replaced with “special needs” and “schools” replaced with “classrooms”</td>
<td>Personal Beliefs (PB)</td>
</tr>
<tr>
<td>1</td>
<td>It causes a lot of worry and concern for the student with special needs if they are placed in an inclusion classroom.</td>
<td>Jones</td>
<td>It causes a lot of worry and concern for the student with academic learning disabilities if they are placed in an inclusive educational environment</td>
<td>“Academic learning disabilities” replaced with “special needs” and “inclusive education environment” replaced with “inclusion classroom”</td>
<td>Personal Beliefs (PB)</td>
</tr>
<tr>
<td>6</td>
<td>The extra attention that students with special needs require is to the</td>
<td>Alhudaithi</td>
<td>The extra attention that students with autism require will</td>
<td>“Autism” replaced with “special needs”</td>
<td>Personal Beliefs (PB)</td>
</tr>
<tr>
<td></td>
<td>Statement</td>
<td>Author</td>
<td>Modified Statement</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------</td>
<td>------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Students in my class would like to learn in an inclusion environment.</td>
<td>Jones</td>
<td>My future students would like to learn in an inclusive educational environment.</td>
<td>Personal Beliefs</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Inclusion offers mixed-group interaction that fosters understanding and acceptance of differences among students.</td>
<td>Alhudaithi</td>
<td>Inclusion offers mixed-group interaction that will foster understanding and acceptance of differences among students.</td>
<td>Personal Beliefs</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Inclusion educational environments are beneficial for students with special needs.</td>
<td>Jones</td>
<td>Inclusive educational environments are beneficial for students with academic learning disabilities.</td>
<td>Personal Beliefs</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Inclusion educational environments require extra work on the part of the teacher.</td>
<td>Jones</td>
<td>Inclusive educational environments require extra work on the part of the teacher.</td>
<td>Personal Beliefs</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Inclusion of students with special needs means extensive retraining of the mainstream classroom teacher.</td>
<td>Alhudaithi</td>
<td>Inclusion of students with autism will mean extensive retraining of the mainstream classroom teacher.</td>
<td>Personal Beliefs</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Doing what my school director thinks I should do is important to me.</td>
<td>Jones</td>
<td>Doing what my professors think I should do is important to me.</td>
<td>Expectations of Others' (EO)</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Doing what my subject supervisor thinks I should do is important to me.</td>
<td>Jones</td>
<td>Doing what my professors think I should do is important to me.</td>
<td>Expectations of Others' (EO)</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>My subject supervisor believes in the use of inclusion as an option for students with special needs.</td>
<td>Jones</td>
<td>My professors believe in the use of inclusion as an option for students with academic learning disabilities.</td>
<td>Expectations of Others' (EO)</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>My school director believes in the use of inclusion as an option for students with special needs.</td>
<td>Jones</td>
<td>My professors believe in the use of inclusion as an option for students with academic learning disabilities.</td>
<td>Expectations of Others' (EO)</td>
<td></td>
</tr>
<tr>
<td>Sentence</td>
<td>Jones</td>
<td>Notes</td>
<td>Expectations of Others’ (EO)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is expected of me that I approve of heterogeneous classroom groupings (e.g., disabled, and non-disabled).</td>
<td>It is expected of me that I approve of heterogeneous classroom groupings (e.g., disabled and non-disabled).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The approval of my peers is important to me.</td>
<td>The approval of my peers is important to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doing what other teachers do is important to me.</td>
<td>Doing what other teachers do is important to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers in my school think that students with special needs should have the choice of learning in inclusion schools or special institutes.</td>
<td>Teachers in the field think schools should use inclusive educational settings as an option for students with academic learning disabilities.</td>
<td>Reworked the whole statement to fit the context</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers like me approve of the use of inclusion as an option for students with special needs.</td>
<td>Preservice teachers like me approve of the use of inclusion as an option for students with academic learning disabilities.</td>
<td>Omitted the word “preservice”, and “academic learning disabilities” replaced with “special needs”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel social pressure to favour an inclusive educational environment.</td>
<td>I feel social pressure to favour an inclusive educational environment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People who are important to me believe inclusive educational environments promote acceptance of differences among students.</td>
<td>People who are important to me believe inclusive educational environments promote acceptance of differences among students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People who are important to me think inclusive educational environments are beneficial for students with special needs.</td>
<td>People who are important to me think inclusive educational environments are beneficial for students with academic learning disabilities.</td>
<td>“Academic learning disabilities” replaced with “special needs”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The approval of my students is important to me.</td>
<td>The approval of my future students is important to me.</td>
<td>Omitted the word “future”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel pressure when I am working with students who have an IEP (Individualised Education Plan)</td>
<td>I feel pressure when I am working with students who have an IEP (Individualised Education Plan)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Statement</td>
<td>Author</td>
<td>Revised Statement</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>I can control how much or how often I collaborate with other professionals to make decisions about students.</td>
<td>Jones</td>
<td>“Have control” replaced with “can control”</td>
<td>Expectations of Others’ (EO)</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>I am capable of teaching and managing students with special needs in my classroom.</td>
<td>Alhudaithi</td>
<td>“Autism” replaced with “special needs”</td>
<td>Confidence/Capacity (CC)</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>I feel capable of planning learning for an individual student with special needs in my class.</td>
<td>Jones</td>
<td>“Implementing” replaced with “planning”</td>
<td>Confidence/Capacity (CC)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I have the equipment and resources needed to teach students with different needs in my classroom.</td>
<td>Jones</td>
<td>Reworked the whole statement to fit the context</td>
<td>Confidence/Capacity (CC)</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>In my school, programs or professional development are available so I can learn about teaching students with special needs.</td>
<td>Jones</td>
<td>Reworked the whole statement to fit the context</td>
<td>Confidence/Capacity (CC)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>As a teacher, I do extra work for the benefit of students.</td>
<td>Jones</td>
<td>Omitted the word “will”</td>
<td>Intent/Actions (IA)</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I collaborate with other professionals on the education of my students.</td>
<td>Jones</td>
<td>Omitted the word “likely”</td>
<td>Intent/Actions (IA)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>I use research-based practices in my classroom.</td>
<td>Jones</td>
<td>Omitted the word “likely”</td>
<td>Intent/Actions (IA)</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>I use appropriate teaching techniques to support students with special needs.</td>
<td>Alhudaithi</td>
<td>Reworked the whole statement to fit the context</td>
<td>Intent/Actions (IA)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I implement Individualised Education Plan (IEP) provisions in my classroom.</td>
<td>Jones</td>
<td>Omitted the word “likely”</td>
<td>Intent/Actions (IA)</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>I welcome students with special needs into the mainstream.</td>
<td>Alhudaithi</td>
<td>Omitted the word “would” and replaced “autism”</td>
<td>Intent/Actions (IA)</td>
<td></td>
</tr>
</tbody>
</table>
It was important to ensure that each item in the survey was grouped accurately into relevant areas of inclusion beliefs. To achieve this outcome, the researcher conducted content validity. According to Creswell (2013), the aim of content validity is to ensure that the items of the instrument are relevant to and reflect the research construct. The following steps were carried out to ensure content validity. First, the areas related to inclusion beliefs were clearly defined and the objective of the survey instrument was clearly established. Second, the researcher identified suitable people to assist with assessing the survey content who had experience in conducting survey-based research and expertise in the field of teaching students with special education needs. The researcher’s supervisors met these criteria and agreed to assess the content validity of the third section of the survey. Third, the researcher’s supervisors were provided with a copy of the instrument to perform their assessment and to check whether the items were appropriately matched to the four categories of inclusion beliefs. Fourth, feedback from the researcher’s supervisors was gathered, and modifications were made to the survey (see Table 5). Once changes were made, the survey was revised again, and an agreement was reached that the items reflected the categories of inclusion beliefs.

**Table 5**

*Modifications of Item Categories*

<table>
<thead>
<tr>
<th>Q</th>
<th>Survey Item</th>
<th>Category before Modifications</th>
<th>Category after Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>I will try to teach and manage students with special needs in my classroom.</td>
<td>Jones</td>
<td>I want to teach students with different levels of ability.</td>
</tr>
</tbody>
</table>
To assure the internal consistency of items in different areas, a Cronbach’s alpha (α) coefficient was conducted (Cronbach, 1951). When developing a scale in research, values for Cronbach’s alpha of 0.70 or higher are indications of the scale being internally consistent and sufficient for reliability (Kline, 2010). The internal consistency of the items of the sum scale was α = 0.977, indicating a high level of internal consistency. Cronbach’s alpha was also conducted on the items clustered by the four categories of inclusion beliefs, which were found to demonstrate internal consistency, with values for Cronbach’s alpha ranging from 0.872 to 0.975 (see Table 6).

Table 6

Reliability Coefficients for the Categories of Inclusion Beliefs

<table>
<thead>
<tr>
<th>Categories of Inclusion Beliefs</th>
<th>Personal Beliefs (PB)</th>
<th>Confidence/Capacity (CC)</th>
<th>Expectations of Others’ (EO)</th>
<th>Intent/Actions (IA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s alpha (α)</td>
<td>0.872</td>
<td>0.929</td>
<td>0.975</td>
<td>0.938</td>
</tr>
</tbody>
</table>

Section 4 — Open-Ended Questions. In order to collect more information about participants’ perceptions of and beliefs about their experiences with inclusion and teaching students with special needs, along with factors they felt may have contributed to these perceptions and beliefs, five open-ended questions were included in Section 4 (see Table 7). These questions were constructed based on the research questions and the Theory of Planned Behaviour.
Table 7

Open-Ended Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Short Open-Ended Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Please comment on what you feel is the impact of inclusion for students and staff.</td>
</tr>
<tr>
<td>2</td>
<td>Do you feel that you have helped students with special needs, and if so in what way?</td>
</tr>
<tr>
<td>3</td>
<td>Please describe your level of confidence in teaching students with special needs.</td>
</tr>
<tr>
<td>4</td>
<td>What has helped you to teach students with special needs?</td>
</tr>
<tr>
<td>5</td>
<td>What difficulties, if any, have you faced in teaching students with special needs?</td>
</tr>
</tbody>
</table>

Survey Translation. The survey instrument was initially developed in English and subsequently translated into Arabic. A specific process was used to ensure that the translation maintained the trustworthiness of the survey (van Nes et al., 2010). First, the researcher, who is fluent in both English and Arabic, translated the survey from English into Arabic. Second, the researcher used a method of back translation advocated by Beaton (2000) to translate the Arabic version back into English. This step was to ensure that the survey items did not lose the original meaning during the translation process. Third, the researcher approached five Saudi colleagues living in Saudi Arabia who were fluent in both languages and held degrees in education to compare the Arabic and English translations. This step was to check the accuracy of both translations and that they both led to the same meaning. These colleagues’ experts returned the Arabic survey with feedback related only to making minor grammatical changes to the Arabic version. The researcher took into consideration this feedback and made those grammatical changes.

The initial open-ended questions were written in English. The researcher then translated the questions from English into Arabic. To verify that the Arabic version elicited the same type of information as the English version, the five Saudi colleagues who had been asked to review the survey translation were asked again to check the Arabic translation of the open-ended questions. This was to confirm that the translation did not change the meaning of
the questions. All colleagues agreed that the translation was accurate and matched the same wordings and meaning in English.

**Survey Piloting.** Piloting survey instruments aims to detect any problems and deficiencies in the instrument prior to distribution (Hassan et al., 2006). Once the Arabic version of the survey was deemed to be a reliable translation, the survey was piloted with a small group of Saudi teachers who currently resided in Australia. Initially, an email was sent to the researcher’s Saudi liaison at the Saudi Cultural Mission in Australia, asking the liaison to help identify teachers to participate in the pilot (see Appendix J). The email included an information sheet for participants outlining the aim of the pilot study and including the researcher’s email address for those willing to participate to reply to the researcher (see Appendix K).

Participants who replied to the researcher were sent a survey link that contained a consent statement that enabled them to start the survey. The survey contained a comment box asking Saudi special and general teachers in Australia to pilot the survey and to provide comments on its comprehensibility and feasibility. Twenty-six individuals responded, including seven who were special education teachers and 19 who were general education teachers in Saudi Arabia. All were currently studying in Australia and thus were not invited to participate in the main part of the research. These individuals provided feedback and suggestions pertaining to grammar, such as altering the tense of verbs. Comments made by the special education teachers included changing the Arabic term “disability” to the term “special needs”, and changing the term “inclusive” to the term “inclusion” to fit with the Saudi context. Prior to distributing the survey, these suggestions were incorporated with the modifications that had already been made.

**Survey Distribution.** Digital copies of the survey were constructed and distributed using the Survey Monkey platform. As discussed previously, participants were sent a link to
the survey in the information and consent form. The survey link was active for six weeks. Initially, 554 individuals who received the WhatsApp invitation chose to select the link to the survey. Of these, 161 (29%) responses were excluded, as the majority only accessed the link and did not consent, which meant they did not proceed to answer any questions, and a 33 (6%) only completed half of the questions in the demographic section but no other questions in the survey. Responses to the first scale (TSES) of the survey had to be complete in order to be included in the analysis. This left 360 (65%) participants whose responses were included for analysis.

**Interviews**

In the second phase of the study, the researchers conducted semi-structured interviews to gain more insight into participants’ perceptions (Minichiello et al., 2008) regarding their attitudes and beliefs, confidence, and self-efficacy, and their intentions towards inclusive practice, and to understand their perceptions of the influence of others’ expectations and other factors on their own beliefs and intentions. The researcher developed a list of interview questions based on the results of the survey to provoke information with regard to teachers’ perceptions and beliefs towards inclusion and their intentions towards inclusive practice. This approach enabled the researcher to be flexible and responsive to participants during the interviews (McGrath et al., 2019). It also allowed the researcher to delve into the participants’ different perceptions of their own attitudes and beliefs and their intentions towards inclusive practice.

The interview questions were designed to expand on the issues raised from the survey items and open-ended responses. For example, in the survey findings, the majority of participants indicated not having any kind of training in special education. Thus, question 5 was developed to follow up on this factor to gain an understanding of why they did not receive training and what type of training they needed to support them.
The interviews consisted of nine key questions with five follow-up sub-questions (see Table 8). These nine questions pertained to their perceptions and beliefs regarding inclusion and their experience working with students with special needs. The questions, which were informed by the TPB responses, collected information on participants’ perceptions of influences from others, their self-efficacy beliefs, their perceptions of factors influencing their beliefs, and their intentions towards inclusive practice. Questions 1, 2, and 3 pertained to participants’ attitudes, beliefs, and intentions regarding including students with special needs. Participants were asked these questions when they responded that there were no inclusion programs in their schools. For example, in question 1, when participants responded with not having students with special needs in their class, they were given the alternative question, What if you had students with special needs in your class – what would you do? Similarly, participants who responded to question 2 that there was no inclusion program in their school were asked an alternative question, What if you were asked to implement inclusion program in your classroom—what would you do? For question 3, the alternative question was, So, what type of inclusion programs would you see as helpful in your school?

**Table 8**

*Interview Questions*

<table>
<thead>
<tr>
<th>Question</th>
<th>Questions/Sub-questions</th>
<th>Alternative Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Can you describe your experience working with students with special needs?</td>
<td>What if you had students with special needs in your class what would you do?</td>
</tr>
<tr>
<td>2</td>
<td>What does inclusion look like in your classroom?</td>
<td>What if you were asked to implement inclusion program in your classroom what would you do?</td>
</tr>
<tr>
<td>3</td>
<td>Tell me a little bit about the type of the inclusion programs you have in your school.</td>
<td>So, what type of inclusion programs would you see as helpful in your school?</td>
</tr>
<tr>
<td>4</td>
<td>• Thinking about your colleagues and other staff members in your school, what do you believe are their general attitudes towards inclusion?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Can you give me an example of someone in the staff who really goes to support students with special needs? (Follow up with tell me a bit more why you think this is the case).</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Have you had any training to support students with special needs?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Can you describe how this training was</td>
<td></td>
</tr>
</tbody>
</table>
### Translation of the Interview Questions

The interview questions were initially generated in English. The researcher then translated the questions from English to Arabic. To ensure that the Arabic version elicited the same type of information as the English version, two Saudi colleagues who had provided feedback on the survey translation were asked to review the Arabic translation of the interview questions and make sure that the translation did not change the wording and meaning of the questions. Both colleagues felt that the translation was accurate and matched the same wordings and meanings that were in the English version.

#### Interview Procedure

All interviews were conducted over the phone within Saudi Arabia, because the researcher only had limited time to conduct the interviews and the teachers were from different cities, making in-person travel difficult. Each interview was recorded and took approximately 40 minutes to complete the nine questions and follow-up sub-questions. The researcher transcribed the interview recordings verbatim. Participants were sent a copy of their interview recording and transcript to verify the accuracy of the transcript and to confirm whether they wanted to change or add anything, as suggested by numerous researchers (Goldblatt et al., 2011; Thomas, 2017; McGrath et al., 2019). The participants all confirmed the accuracy of the transcripts and did not provide any amendments or additional information. The researcher, who was fluent in Arabic and English, translated the transcripts into English, as this was important for conducting the data analyses in English.

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What kind of support has been helpful to your practice?</td>
<td></td>
</tr>
<tr>
<td>2. What training would you like to have and why?</td>
<td></td>
</tr>
<tr>
<td>3. If you were in a position to make the decision about resourcing, what</td>
<td>Would you think would be important to you and other teachers to support students with special needs?</td>
</tr>
<tr>
<td>4. What or who has influenced you and your attitudes towards inclusion?</td>
<td></td>
</tr>
<tr>
<td>5. Can you think of a time when another person’s opinion has affected</td>
<td>Your decision in dealing with a student with special needs in your class?</td>
</tr>
<tr>
<td>6. Is there anything else you would like to share?</td>
<td></td>
</tr>
</tbody>
</table>
The accuracy of the translation was verified by one Saudi colleague studying at the University of Wollongong who was also fluent in Arabic and English.

**Data Analysis**

**Surveys**

Responses to quantitative (Likert-scale) survey questions were analysed using the Statistical Package for Social Sciences SPSS v23. Relevant percentages for the demographic information (such as gender, age group, training, place of residence, etc.) were calculated from the raw data. Descriptive statistics, including mean and standard deviation, were calculated for all survey items. In addition, percentage of agreement on Likert questions was calculated from the total of “agreed” or “strongly agreed” responses. Percentage of disagreement was calculated from the total for each item of responses of “disagreed” or “strongly disagreed”. Descriptive statistics, including mean, standard deviation, and response rate, were also calculated for each item in the TSES (Section 2). Details are provided in the results chapter (Chapter 4).

Before analysing the open-ended data, the researcher, who is fluent in Arabic and English, translated all responses into English. A deductive content analysis process (Creswell, 2017; Bernard et al., 2016) was used to analyse the open-ended questions. In the deductive approach the researcher made inferences by moving from broad ideas to specific conclusions, based on the open-ended questions and the TPB results. The first step in this process involved reading the participants’ responses several times to become familiar with the data. In the second step, similar responses were grouped together. In the third step, important text, such as phrases or sentences (e.g., “inclusion requires extra effort from the teacher”), was highlighted to identify meaningful coding units. In the fourth step, the initial codes were generated. Next, categories were developed that grouped initial codes containing similar concepts, based on the content of the open-ended questions and the frequency with which the
codes occurred. In the final step the researcher and supervisors reviewed the categories for reliability and confirmed them. Interview questions were then generated to follow up on the survey and the open-ended responses.

**Interview Data**

A deductive and inductive content analysis was performed to analyse participants’ interview responses (Elo & Kyngas, 2008). The questions shaped the deductive analysis, with coding derived from looking at specific information. The researcher used an inductive approach, which implies a “bottom-up” method of analysis that is directly informed by the data itself (i.e., the emerging codes and themes) rather than by external concepts and constructs applied to the data set by the researcher (Braun & Clarke, 2014). This approach permitted the researcher to identify themes that emerged directly from the data. The interviews were transcribed for analysis, after which the researcher followed Braun and Clarke’s (2006) six-step process of thematic analysis (see Figure 3).

**Figure 3**

*Six-Step Thematic Analysis (Braun & Clarke, 2006)*

<table>
<thead>
<tr>
<th>Step 1</th>
<th>• Familiarizing Yourself with Your Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>• Generating Initial Codes</td>
</tr>
<tr>
<td>Step 3</td>
<td>• Searching for Categories</td>
</tr>
<tr>
<td>Step 4</td>
<td>• Reviewing Categories</td>
</tr>
<tr>
<td>Step 5</td>
<td>• Defining and Naming Themes</td>
</tr>
<tr>
<td>Step 6</td>
<td>• Producing the Report</td>
</tr>
</tbody>
</table>

This process was not performed as a fixed process; rather, the researcher moved back and forth among the steps as needed (Braun & Clarke, 2006). This was important to examine the relevance of the emerging themes to the research questions and to discover the nature of their connections with each other.
Step 1: Familiarisation with the Data. To be more familiar with the data, the researcher first read the interview transcripts several times. This activity involved writing down summaries of key ideas, as suggested by Braun and Clarke (2006). The researcher then reviewed each interview and began to form general ideas of the data (i.e., meanings of data), which assisted in generating initial codes in the next step.

Step 2: Initial Coding. In this second step, the researcher generated a codebook with predetermined codes based on the TPB results (deductive approach) and codes that had been derived from the data itself (inductive approach). The codebook included codes and definitions of the codes throughout the process. The initial coding used this codebook to identify and code key features of the data in a systematic method throughout the whole data set, grouping relevant data under each code. The researcher used NVivo software to assist in organising and analysing the data more extensively, line by line. The researcher began highlighting and extracting the text (e.g., “We are so under pressure, we complain to the administration that we can’t handle this situation but we’re being forced to accept it”) that represented the same idea and then assigning it an initial code (e.g., “Forced to teach students with special needs”).

Step 3: Categorising. After generating the initial coding, the researcher developed aggregate categories in the third step. Categories were added to the codebook with their definitions. For example, data coded as “large class size” and “forced to teach students with special needs” were initially grouped under the categories of “system demands” and “system pressure”. It was at this phase in the data analysis that the researcher commenced the process of making connections between and considering relationships among different codes to determine greater themes emerging from the data.

Step 4: Reviewing Categories. This step involved reviewing the categories to ensure that the coded extracts fit with the definitions developed in the codebook. This involved a
two-phase process, as suggested by Braun and Clarke (2006, p. 87), where the researcher moved back and forth through the extracts to verify the codes and double-check their relevance under each possible category.

**Step 5: Defining and Naming Themes.** The categories generated in the previous step were used to identify common themes that emerged across the data. Specifically the categories were classified into themes, and the data pertaining to each theme was grouped. The defining and naming of themes takes the inductive analysis process to a deeper level. Following Braun and Clarke's (2006) recommendation, the researcher also generated names and definitions for each theme through an “ongoing analysis to refine the overall story the analysis tells” (p. 87). During this step the themes were reviewed and refined, and connections were carefully drawn to other themes. Finally, conclusions were drawn from the themes. These were related to the research questions, which enabled the researcher to identify the overarching themes that emerged from the data. These themes were kept and defined in the codebook.

**Step 6: Producing the report.** The final step of Braun and Clarke’s (2006) six-step analysis process is producing the findings in a report. The researcher, together with the researcher’s supervisors, who were experienced in content analysis, compared the results to resolve any differences and agreed on the coding and themes. In this step the researcher provided clear, compelling extracted examples from the data, conducted the final analysis of the extracted examples to illustrate each theme, related the examples to the research questions, and produced the report of the analysis. Examples of the thematic analysis process are presented in Table 9.
**Table 9**

*Examples of Thematic Analysis*

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Themes</th>
<th>Categories</th>
<th>Initial Coding</th>
<th>Text Extract from the Transcripts</th>
</tr>
</thead>
<tbody>
<tr>
<td># 9</td>
<td>Inclusion imposed upon us</td>
<td>System pressure</td>
<td>Forced to teach students with special needs</td>
<td>e.g. “We are so under pressure, we complain to the administration that we can’t handle this situation but we’re being forced to accept.”</td>
</tr>
<tr>
<td># 10</td>
<td>Inclusion imposed upon us</td>
<td>System pressure</td>
<td>Forced to teach students with special needs</td>
<td>e.g. “We are forced to do it because of the administration.”</td>
</tr>
<tr>
<td># 8</td>
<td>Teachers felt Overwhelmed</td>
<td>System demands</td>
<td>Large class size</td>
<td>e.g. “The inclusion is very beneficial, but it is hard for me to control 60 or 65 students all at once.”</td>
</tr>
<tr>
<td># 9</td>
<td>Teachers felt Overwhelmed</td>
<td>System demands</td>
<td>Large class size</td>
<td>e.g. “How can I teach them? I have 45 students in my class.”</td>
</tr>
<tr>
<td># 13</td>
<td>Moving forward</td>
<td>Personal effort</td>
<td>Searching social media</td>
<td>e.g. “By watching YouTube videos, and asking other people about their experience.”</td>
</tr>
<tr>
<td># 3</td>
<td>Moving forward</td>
<td>Personal effort</td>
<td>Searching social media</td>
<td>e.g. “I look for information by searching the internet.”</td>
</tr>
</tbody>
</table>

**Trustworthiness.** In the present study, the trustworthiness of the qualitative findings was established using peer debriefing and an audit trail. Through peer debriefing specifically, the researcher and research supervisors alternately reviewed the coding scheme used for the analysis of the qualitative data to verify and agree on the final themes to be reported in the study. Any differences in the codes identified by the researcher and research supervisors were subject to discussion and justification, and changes were applied to the final coding where appropriate.

Another step in establishing trustworthiness in this study was creating an audit trial. The recording of data, which was kept in a codebook throughout the entire process of the qualitative analysis, helped to document an audit trial. The codebook process included themes, categories, and codes with their definitions. It also included quotations from the transcripts. The decisions documented in the codebook were through constant meetings between the researcher and researcher’s supervisors, which ensured the coherence of the process.
Analysis Across Data Sets

In keeping with mixed-methods design, the intention of the researcher in this study was to analyse the three data sets (structured survey questions, open-ended survey questions, and interview responses) separately and then conduct a further analysis of the three in combination to identify the overarching findings. An important strength of the mixed-methods approach is that it provides triangulation of the data sets, which increases the validity of the findings in answering the research questions and provides a better and deeper understanding of the research phenomenon (Creswell & Clark, 2017; Teddlie & Tashakkore, 2009). Following the analyses of the three data sets separately, the researcher created a table to look at key findings and results from each type of data. The researcher analysed the data deductively by drawing links between these key findings based on similarities in the three data sets that related to TPB. The TPB results helped to identify six key findings related to teachers’ intentions to perform a behaviour, which are formed by their attitudes/beliefs, subjective norms, perceived behavioural control, and other mitigating factors.

Triangulation was used in this study to ensure the trustworthiness of the overall findings. Robson (2011) asserts that triangulation helps to ensure the trustworthiness of the research by using multiple sources of data; similarly, Turner and Turner (2010) write that triangulation enhances trustworthiness by providing an alternative perspective that can be used “to validate, challenge or add to extend existing findings” (p. 1). In this study, the researcher triangulated three sources of data—closed-ended survey responses, open-ended survey replies, and individual interview responses—to corroborate the findings emerging in each about teachers’ attitudes, beliefs, and intentions towards inclusive practice. This was integral to establishing the trustworthiness of the study, given, as Teddlie and Tashakkori (2009) point out, that people’s attitudes and perceptions are complex constructs that are difficult to explore in research that uses a single approach.
Chapter Summary

This chapter described and justified the choice to adopt a sequential, explanatory mixed-methods design underpinned by a pragmatic research approach as the methodology for this study. It was established that multiple and diverse methods were employed for the collection of both quantitative and qualitative data to support a comprehensive investigation of Saudi teachers’ attitudes towards inclusive education. Trustworthiness was established through data triangulation (the combining of the three data sets). This chapter also clarified the methods undertaken to recruit participants, develop reliable and valid study instruments and data-analysis processes, and ensure that appropriate ethics considerations were applied throughout all stages of the research process; these procedures and considerations contributed to the overall trustworthiness of the study. The following chapter presents the results of the quantitative data analysis, including descriptive statistics of the outcomes for each of the survey items and the main themes to emerge from the open-ended questions in the survey.
Chapter 4: Survey Results

This chapter reports on findings from the survey, which comprised four different sections and included both statistical and qualitative data sets. The results include descriptive statistics; analysis of differences among groups; relationships between different categories of inclusion beliefs (i.e., personal beliefs, confidence and self-efficacy, expectations of others, and respondents’ intentions and actions); and an analysis of responses to five short open-ended questions.

Demographic Information

A total of 360 respondents completed the survey. Table 10 presents demographic information on respondents, including gender, age, years of teaching, level of education, years of experience, grade level, and subjects taught.

Table 10
Demographic Information

<table>
<thead>
<tr>
<th>Demographic Information</th>
<th>N of Respondents</th>
<th>Percentage of Total (360) Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>100</td>
<td>27.8%</td>
</tr>
<tr>
<td>Female</td>
<td>260</td>
<td>72.2%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24-30</td>
<td>22</td>
<td>6.1%</td>
</tr>
<tr>
<td>31-37</td>
<td>102</td>
<td>28.3%</td>
</tr>
<tr>
<td>38-44</td>
<td>139</td>
<td>38.6%</td>
</tr>
<tr>
<td>45-51</td>
<td>78</td>
<td>21.7%</td>
</tr>
<tr>
<td>52+</td>
<td>19</td>
<td>5.3%</td>
</tr>
<tr>
<td>Level of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>269</td>
<td>74.7%</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>47</td>
<td>13.1%</td>
</tr>
<tr>
<td>Years of Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fewer than 5</td>
<td>32</td>
<td>8.9%</td>
</tr>
<tr>
<td>5-10</td>
<td>101</td>
<td>28.1%</td>
</tr>
<tr>
<td>11-20</td>
<td>122</td>
<td>33.9%</td>
</tr>
<tr>
<td>More than 20</td>
<td>105</td>
<td>29.2%</td>
</tr>
<tr>
<td>Grade Level</td>
<td>360</td>
<td></td>
</tr>
<tr>
<td>Grade Level</td>
<td>Respondents</td>
<td>Percentage</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>Primary lower (1st to 3rd grade)</td>
<td>122</td>
<td>33.9%</td>
</tr>
<tr>
<td>Primary upper (4th to 6th grade)</td>
<td>113</td>
<td>31.4%</td>
</tr>
<tr>
<td>Intermediate (7th to 9th grade)</td>
<td>97</td>
<td>26.9%</td>
</tr>
<tr>
<td>Secondary (10th to 12th grade)</td>
<td>94</td>
<td>26.1%</td>
</tr>
<tr>
<td>Subject</td>
<td>360</td>
<td></td>
</tr>
<tr>
<td>Sciences</td>
<td>65</td>
<td>18.1%</td>
</tr>
<tr>
<td>Social sciences</td>
<td>34</td>
<td>9.4%</td>
</tr>
<tr>
<td>Arabic language</td>
<td>84</td>
<td>23.3%</td>
</tr>
<tr>
<td>English language</td>
<td>39</td>
<td>10.8%</td>
</tr>
<tr>
<td>Religion</td>
<td>79</td>
<td>21.9%</td>
</tr>
<tr>
<td>Art</td>
<td>28</td>
<td>7.8%</td>
</tr>
<tr>
<td>General primary</td>
<td>44</td>
<td>12.2%</td>
</tr>
<tr>
<td>Special education class or groups</td>
<td>31</td>
<td>8.6%</td>
</tr>
</tbody>
</table>

The majority of respondents were female (72.2%), between the ages of 38 and 44 years (38.6%), with a bachelor’s degree (74%). Respondents had a range of teaching experience, with 28% indicating five to 10 years of teaching, 33.9% 11 to 20 years, and 29.2% over 20 years of teaching experience.

Respondents included teachers in all school grade levels in primary, intermediate, and secondary schools. Respondents also taught a range of subjects, with some of them teaching more than one subject across the different grade levels. Arabic language (23%) was the most common subject taught, followed by religion (22%) and science (18%). A slight majority of respondents (54%) indicated that they currently taught students with special needs in their classrooms, while 46% indicated they had never taught students with special needs.
Respondents were asked to indicate whether they had undertaken any specific training or professional learning relevant to inclusion or teaching students with special needs (see Figure 4). Overall, 69% indicated that they had had no previous training, and a small number indicated they had either attended a relevant workshop (13.50%), received relevant in-service training (11%), or attended a support group (1.5%) for parents and teachers of students with special needs. Only 6.70% reported that they had received relevant training at university.

Respondents were asked what types of special needs their students exhibited. Fifty-four percent of respondents answered this question, which reflected the number who said they currently taught students with special needs. Of the respondents (54%) who answered the question, 26% indicated they taught students with intellectual disabilities, including 4% who stated that they taught students with Down syndrome. Thirteen percent taught students with hearing impairment; 12% taught students with autism; 12% taught students with physical disability; 9% taught students with a speech disorder; 7% taught students with ADHD; 6% taught students with learning disability; and 4% taught students with vision impairment.
Teachers’ Sense of Efficacy

In section 2 of the survey, respondents were asked to answer 12 questions rating on a scale of 1 to 9 each item related to their feelings of self-efficacy in teaching students with special needs. An average response rate of 353, or 98% of respondents, was calculated across the 12 questions, with a range of 350 to 355 responses. Mean, standard deviation, and response rate were calculated individually for each question as well as across all 12 questions on the Teacher Sense of Efficacy Scale (TSES) (see Table 11). A mean of 5.46 (SD= 2.7) was calculated across all questions, indicating that self-efficacy was mixed across respondents.

Respondents indicated the highest self-efficacy ratings on questions 9 and 12, which were not specifically related to teaching students with special needs, with 58% indicating high feelings of self-efficacy for *using a variety of assessment strategies* (M= 5.99, SD= 2.67) and 51% indicating *implementing alternative strategies* (M= 5.74, SD= 2.56). Respondents also indicated a high self-efficacy rating on question 2, which was related to engagement of students with special needs, with 50% indicating high feelings of self-efficacy for *motivating students with special needs who show low interest in schoolwork* (M= 5.56, SD= 2.84). They indicated the lowest self-efficacy ratings on questions 1 and 7, which were related to classroom management, with 40% indicating low feelings of self-efficacy for *managing disruptive behaviours exhibited by students with special needs* (M= 4.88, SD= 2.74), and 37% for *helping students with special needs to calm when disruptive or noisy* (M= 5.01, SD= 2.66). Responses on questions related to student engagement (questions 3, 4, and 5), instructional strategies (questions 5 and 10), and classroom management (questions 6 and 8) were variable across the population sample, with mean and standard deviation scores ranging from (M= 5.25; SD= 2.71) to (M= 5.65; SD= 2.70).
### Table 11

*Teacher Sense of Efficacy Scale*

<table>
<thead>
<tr>
<th>Q</th>
<th>Question Text</th>
<th>N of Respondents</th>
<th>$M$</th>
<th>$SD$</th>
<th>Low SE</th>
<th>Moderate SE</th>
<th>High SE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$N$</td>
<td>$%$</td>
<td>$N$</td>
</tr>
<tr>
<td>9</td>
<td>How much can you use a variety of assessment strategies?</td>
<td>354</td>
<td>5.99</td>
<td>2.67</td>
<td>86</td>
<td>24</td>
<td>62</td>
</tr>
<tr>
<td>12</td>
<td>How well can you implement alternative strategies in your classroom?</td>
<td>351</td>
<td>5.74</td>
<td>2.56</td>
<td>87</td>
<td>26</td>
<td>85</td>
</tr>
<tr>
<td>4</td>
<td>How much can you do to help your students with special needs value learning?</td>
<td>350</td>
<td>5.65</td>
<td>2.70</td>
<td>100</td>
<td>29</td>
<td>89</td>
</tr>
<tr>
<td>3</td>
<td>How much can you do to get students with special needs to believe they can do well in schoolwork?</td>
<td>352</td>
<td>5.57</td>
<td>2.70</td>
<td>93</td>
<td>27</td>
<td>105</td>
</tr>
<tr>
<td>2</td>
<td>How much can you do to motivate students with special needs who show low interest in schoolwork?</td>
<td>354</td>
<td>5.56</td>
<td>2.84</td>
<td>106</td>
<td>30</td>
<td>69</td>
</tr>
<tr>
<td>11</td>
<td>How much can you assist families in helping their children with special needs do well in school?</td>
<td>355</td>
<td>5.55</td>
<td>2.70</td>
<td>109</td>
<td>31</td>
<td>81</td>
</tr>
<tr>
<td>8</td>
<td>How well can you establish a classroom management system with each group of students?</td>
<td>354</td>
<td>5.49</td>
<td>2.64</td>
<td>104</td>
<td>29</td>
<td>95</td>
</tr>
<tr>
<td>6</td>
<td>How much can you do</td>
<td>353</td>
<td>5.41</td>
<td>2.67</td>
<td>107</td>
<td>31</td>
<td>97</td>
</tr>
</tbody>
</table>
Teachers’ Beliefs and Perceptions Regarding inclusion

In section three of the survey, respondents were asked to respond to 35 items related to their beliefs about inclusion in four different categories. Items are divided into groups by categories of inclusion beliefs (e.g., personal beliefs, confidence and capacity, expectations of others, and intent and actions). An average response rate of 279, or 77.5% of respondents, was calculated across 35 items, with a range of 324 to 251 responses. Descriptive statistics, including mean and standard deviation, were calculated across all respondents for each individual item. Percentage of agreement scores were calculated from the aggregate number of respondents who indicated they either agreed or strongly agreed. Percentage of
disagreement scores were calculated from the aggregate number of respondents who indicated they either disagreed or strongly disagreed with each item.

Descriptive statistics for each of the 35 survey items pertaining to teacher’s beliefs about inclusion are presented in Table 12.

Table 12

*Teachers’ Perceptions and Beliefs Regarding Inclusion*

<table>
<thead>
<tr>
<th>Q</th>
<th>Survey Item</th>
<th>N of Respondents</th>
<th>M</th>
<th>SD</th>
<th>Agree %</th>
<th>Disagree %</th>
<th>Neither Agree nor Disagree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Inclusive education environments require extra work on the part of the teacher.</td>
<td>322</td>
<td>4.35</td>
<td>0.99</td>
<td>87</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Inclusion of students with special needs means extensive retraining of mainstream classroom teacher.</td>
<td>324</td>
<td>4.21</td>
<td>1.14</td>
<td>84</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>As a teacher, I do extra work for the benefit of students.</td>
<td>324</td>
<td>3.98</td>
<td>1.02</td>
<td>79</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>14</td>
<td>I can control how much or how often I collaborate with other professionals to make decisions about students.</td>
<td>281</td>
<td>3.88</td>
<td>0.88</td>
<td>76</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>13</td>
<td>I collaborate with other professionals on the education of my students.</td>
<td>281</td>
<td>3.85</td>
<td>0.91</td>
<td>74</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>12</td>
<td>I use research-based practices in my classroom.</td>
<td>280</td>
<td>3.6</td>
<td>0.98</td>
<td>64</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>10</td>
<td>I feel pressure when I am working with students who have IEP (Individualised Education Plan) accommodations or</td>
<td>281</td>
<td>3.54</td>
<td>1.22</td>
<td>59</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Statement</td>
<td>Std</td>
<td>Mean</td>
<td>SD</td>
<td>M</td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------</td>
<td>-----</td>
<td>------</td>
<td>-----</td>
<td>----</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The extra attention that students with special needs require is to the detriment of other students.</td>
<td>324</td>
<td>3.49</td>
<td>1.28</td>
<td>58</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I implement IEP (Individualised Education Plan) provisions in my classroom.</td>
<td>280</td>
<td>3.46</td>
<td>1.04</td>
<td>51</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>The approval of my students is important to me.</td>
<td>253</td>
<td>3.42</td>
<td>1.17</td>
<td>54</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Inclusion offers mixed-group interaction that fosters understanding and acceptance of differences among students.</td>
<td>324</td>
<td>3.41</td>
<td>1.25</td>
<td>58</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>People who are important to me believe inclusive educational environments promote acceptance of differences among students.</td>
<td>251</td>
<td>3.38</td>
<td>1.07</td>
<td>51</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Students with special needs are better in a special institutes classroom rather than mainstream classroom.</td>
<td>278</td>
<td>3.37</td>
<td>1.33</td>
<td>50</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>I use appropriate teaching techniques to support students with special needs.</td>
<td>279</td>
<td>3.36</td>
<td>1.21</td>
<td>54</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>The approval of my peers is important to me.</td>
<td>254</td>
<td>3.35</td>
<td>1.13</td>
<td>50</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>People who are important to me think inclusive educational environments are beneficial for students with special needs.</td>
<td>253</td>
<td>3.31</td>
<td>1.18</td>
<td>50</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Inclusive educational environments are beneficial for students with special needs.</td>
<td>323</td>
<td>3.2</td>
<td>1.27</td>
<td>48</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Doing what my subject</td>
<td>254</td>
<td>3.16</td>
<td>1.06</td>
<td>40</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Doing what my school director thinks I should do is important to me.</td>
<td>254</td>
<td>3.13</td>
<td>1.09</td>
<td>40</td>
<td>24</td>
<td>36</td>
</tr>
<tr>
<td>1</td>
<td>It causes a lot of worry and concern for the student with special needs if they are placed in an inclusion classroom.</td>
<td>322</td>
<td>3.12</td>
<td>1.29</td>
<td>46</td>
<td>34</td>
<td>20</td>
</tr>
<tr>
<td>24</td>
<td>Teachers in my school think that students with special needs should have the choice of learning in inclusion schools or special institutes.</td>
<td>257</td>
<td>3.12</td>
<td>1.24</td>
<td>40</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>36</td>
<td>It is expected of me that I approve of heterogeneous classroom groupings (e.g., disabled and nondisabled).</td>
<td>254</td>
<td>3.09</td>
<td>1.15</td>
<td>40</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>26</td>
<td>My subject supervisor believes in the use of inclusion as an option for students with special needs.</td>
<td>255</td>
<td>3.09</td>
<td>1.11</td>
<td>36</td>
<td>25</td>
<td>39</td>
</tr>
<tr>
<td>29</td>
<td>Doing what other teachers do is important to me.</td>
<td>253</td>
<td>3.06</td>
<td>1.12</td>
<td>40</td>
<td>27</td>
<td>33</td>
</tr>
<tr>
<td>21</td>
<td>I welcome students with special needs into the mainstream classroom and work with them rather than in a special institutes classroom.</td>
<td>278</td>
<td>3.05</td>
<td>1.38</td>
<td>46</td>
<td>35</td>
<td>19</td>
</tr>
<tr>
<td>19</td>
<td>I will try to teach and manage students with special needs in my classroom.</td>
<td>277</td>
<td>3.05</td>
<td>1.31</td>
<td>45</td>
<td>32</td>
<td>23</td>
</tr>
<tr>
<td>17</td>
<td>I feel capable of implementing IEP provisions in my classroom.</td>
<td>279</td>
<td>3.05</td>
<td>1.24</td>
<td>41</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>37</td>
<td>I feel social pressure to</td>
<td>254</td>
<td>3.02</td>
<td>1.14</td>
<td>35</td>
<td>31</td>
<td>34</td>
</tr>
</tbody>
</table>
favour an inclusive educational environment.

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>25%</th>
<th>49%</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>I am capable of teaching and managing students with special needs in my classroom.</td>
<td>3.01</td>
<td>1.33</td>
<td>42</td>
<td>35</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>My school director believes in the use of inclusion as an option for students with special needs.</td>
<td>3</td>
<td>1.14</td>
<td>34</td>
<td>32</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Teachers like me approve of the use of inclusion as an option for students with special needs.</td>
<td>2.96</td>
<td>1.26</td>
<td>39</td>
<td>36</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Students in my class would like to learn in an inclusive environment.</td>
<td>2.87</td>
<td>1.11</td>
<td>26</td>
<td>34</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The extra attention that students with special needs require is to the benefit of other students.</td>
<td>2.63</td>
<td>1.18</td>
<td>27</td>
<td>51</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I have the equipment and resources needed to use to teach students with different needs in my classroom.</td>
<td>2.5</td>
<td>1.23</td>
<td>25</td>
<td>56</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>In my school, programs or professional development is available so I can learn about teaching students with special needs.</td>
<td>2.19</td>
<td>1.15</td>
<td>16</td>
<td>64</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mean Across Questions</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>25%</th>
<th>49%</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3.26</td>
<td>1.16</td>
<td>49%</td>
<td>26%</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>
Seventy-nine percent of respondents agreed on item 7, *As a teacher, I do extra work for the benefit of students* \((M=3.98, SD=1.02)\), and 76\% on item 14, *I can control how much or how often I collaborate with other professionals to make decisions about students* \((M=3.88, SD=0.88)\). The highest level of disagreement was found for items 16, 15, and 6, with 64\% of respondents disagreeing that *In my school, programs or professional development is available so I can learn about teaching students with special needs* \((M=2.19, SD=1.15)\), 56\% disagreeing that *I have the equipment and resources needed to use to teach students with different needs in my classroom* \((M=2.5, SD=1.23)\), and 51\% disagreeing that *The extra attention that students with special needs require is to the benefit of other students* \((M=2.63, SD=1.18)\). A number of respondents (40\%) indicated that they neither agreed nor disagreed that *Students in my class would like to learn in an inclusive environment* \((M=2.87, SD=1.11)\), and that 39\% felt that *Doing what my subject supervisor thinks I should do is important to me* \((M=3.16, SD=1.06)\) and that *My subject supervisor believes in the use of inclusion as an option for students with special needs* \((M=3.09, SD=1.11)\).

**Categories of Inclusion Beliefs**

Mean, standard deviation, and percentage of agreement were calculated across all items grouped according to category of inclusion belief (e.g., personal beliefs (PB), others’ expectations (EO), confidence/capability (CC), and intent/actions (IA) (see Table 13). The highest mean score \((M=3.49, SD = 1.18)\) and highest mean percentage of agreement (59\%) were found for items related to respondents’ intent and actions to teach students with special needs. This was followed closely by items related to personal beliefs (54\% of respondents agreed) \((M=3.42, SD=1.32)\). The lowest mean was found across items related to respondents’ confidence and capability to teach students with special needs \((M=2.93, SD = 1.31)\), with an
even distribution of responses of agreement (40%) and disagreement (38%) across respondents and items.

**Table 13**

*Categories of Inclusion Beliefs*

<table>
<thead>
<tr>
<th>Category</th>
<th>M</th>
<th>SD</th>
<th>Agreement</th>
<th>Disagreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Beliefs</td>
<td>3.42</td>
<td>1.32</td>
<td>54</td>
<td>27</td>
</tr>
<tr>
<td>Confidence/Capability</td>
<td>2.93</td>
<td>1.31</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td>Expectations of Others</td>
<td>3.19</td>
<td>1.16</td>
<td>43</td>
<td>26</td>
</tr>
<tr>
<td>Intent/Actions</td>
<td>3.49</td>
<td>1.18</td>
<td>59</td>
<td>19</td>
</tr>
</tbody>
</table>

**Personal Beliefs.** Responses for items related to their personal beliefs about the inclusion of children with special needs are presented in Table 14. The highest percentages of agreement were found on items 3, and 4, with 87% of respondents agreeing that *Inclusive education environments require extra work on the part of the teacher* (*M* = 4.35), and 84% agreeing that *Inclusion of students with special needs means extensive retraining of mainstream classroom teacher* (*M* =4.21). High percentages of agreement were also found on items 5, 8, and 22, with 58% agreeing that *The extra attention that students with special needs require is to the detriment of other students* (*M* =3.49), 58% agreeing that *Inclusion offers mixed group interaction that fosters understanding and acceptance of differences among students* (*M* = 3.41), and 50% agreeing that *Students with special needs are better in a special institutes classroom rather than a mainstream classroom* (*M* = 3.37). The highest level of disagreement was found on item 6, with 51% of respondents indicating they disagreed (*M* = 2.63) that *The extra attention that students with special needs require is to the benefit of other students.*

Responses on items 2, 1, and 27 were variable across the population sample. On item 2 respondents indicated that *Inclusive educational environments are beneficial for students with special needs* (*M* = 3.2), with 48% agreeing, 30% disagreeing, and 22% undecided. On
item 1. *It causes a lot of worry and concern for the student with special needs if they are placed in an inclusion classroom* (M = 3.12), 46% agreed, 34% disagreed, and 20% were undecided. On item 27, *Students in my class would like to learn in an inclusive environment* (M = 2.87), 26% agreed, 34% disagreed, and 40% were undecided.

Table 14

*Personal Beliefs*

<table>
<thead>
<tr>
<th>Q</th>
<th>Survey Item</th>
<th>N of Respondents</th>
<th>M</th>
<th>SD</th>
<th>Agree</th>
<th>Disagree</th>
<th>Neither Agree/Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Personal Beliefs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Inclusive education environments require extra work on the part of the teacher.</td>
<td>322</td>
<td>4.35</td>
<td>0.99</td>
<td>87</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Inclusion of students with special needs means extensive retraining of the mainstream classroom teacher.</td>
<td>324</td>
<td>4.21</td>
<td>1.14</td>
<td>84</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>The extra attention that students with special needs require is to the detriment of other students.</td>
<td>324</td>
<td>3.49</td>
<td>1.28</td>
<td>58</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>Inclusion offers mixed-group interaction that fosters understanding and acceptance of differences among students.</td>
<td>324</td>
<td>3.41</td>
<td>1.25</td>
<td>58</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>22</td>
<td>Students with special needs are better in a special institute</td>
<td>278</td>
<td>3.37</td>
<td>1.33</td>
<td>50</td>
<td>26</td>
<td>24</td>
</tr>
</tbody>
</table>
classroom rather than mainstream classroom.

2 Inclusive educational environments are beneficial for students with special needs.

1 It causes a lot of worry and concern for the student with special needs if they are placed in an inclusion classroom.

27 Students in my class would like to learn in an inclusive environment.

6 The extra attention that students with special needs require is to the benefit of other students.

Confidence and Capacity to Teach Students with Special Needs. Responses for items related to confidence and capacity showed that most respondents were confident about collaborating with others (see Table 15). The highest percentage of agreement was found on item 14, *I can control how much or how often I collaborate with other professionals to make decisions about students* (*M* = 3.88; 76%). In contrast, responses related to items 17 and 18 were variable across the population. For item 17, *I feel capable of implementing IEP provisions in my classroom* (*M* = 3.05), 41% agreed, 30% disagreed, and 29% were undecided. For item 18, *I am capable of teaching and managing students with special needs in my classroom* (*M* = 3.01), 42% agreed, 35% disagreed, and 23% were undecided. Respondents did have low levels of agreement in regard to having the resources or training needed for *I*
have the equipment and resources needed to use to teach students with different needs in my classroom \((M= 2.5; 25\%)\) and In my school, programs or professional development is available so I can learn about teaching students with special needs \((M= 2.19; 16\%)\) (items 15 and 16, respectively).

**Table 15**

Confidence/Capacity

<table>
<thead>
<tr>
<th>Q</th>
<th>Survey Item</th>
<th>N of Respondents</th>
<th>M</th>
<th>SD</th>
<th>Agree</th>
<th>Disagree</th>
<th>Neither Agree/Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Confidence/Capacity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>I can control how much or how often I collaborate with other professionals to make decisions about students.</td>
<td>281</td>
<td>3.88</td>
<td>0.88</td>
<td>76</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>18</td>
<td>I am capable of teaching and managing students with special needs in my classroom.</td>
<td>278</td>
<td>3.01</td>
<td>1.33</td>
<td>42</td>
<td>35</td>
<td>23</td>
</tr>
<tr>
<td>17</td>
<td>I feel capable of implementing IEP provisions in my classroom.</td>
<td>279</td>
<td>3.05</td>
<td>1.24</td>
<td>41</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>15</td>
<td>I have the equipment and resources needed to use to teach students with different needs in my classroom.</td>
<td>278</td>
<td>2.5</td>
<td>1.23</td>
<td>25</td>
<td>56</td>
<td>19</td>
</tr>
<tr>
<td>16</td>
<td>In my school, programs or professional development is available so I can learn about teaching students with special needs.</td>
<td>279</td>
<td>2.19</td>
<td>1.15</td>
<td>16</td>
<td>64</td>
<td>20</td>
</tr>
</tbody>
</table>

**Expectations of Others.** In relation to respondents’ perceptions about expectations of others regarding inclusion of students with special needs, 59% agreed that *I feel pressure when I am working with students who have IEP accommodations or modification* (item 10)
(M= 3.54; 59%), and 54% agreed that The approval of my students is important to me (item 32) (M= 3.42; 54%). The lowest levels of agreement ranged from 40% to 34% on items related to respondents’ perceptions about the expectations of their supervisor, school director, or colleagues (see Table 16). The lowest levels of agreement were for item 26, My subject supervisor believes in the use of inclusion as an option for students with special needs (M=3.09; 36%), item 37, I feel social pressure to favour an inclusive educational environment (M= 3.02; 35%), item 25, My school director believes in the use of inclusion as an option for students with special needs (M=3; 34%), and item 28, Teachers like me approve of the use of inclusion as an option for students with special needs (M= 2.96; 39%). Levels of agreements were also low on items 29, Doing what other teachers do is important to me (M=3.06; 40%), item 31, Doing what my subject supervisor thinks I should do is important to me (M= 3.16; 40%), and item 30, Doing what my school director thinks I should do is important to me (M= 3.13; 40%). Other items with low levels of agreement were items 24, Teachers in my school think that students with special needs should have the choice of learning in inclusion schools or special institutes (M= 3.12; 40%) and 36, It is expected of me that I approve of heterogeneous classroom groupings (e.g., disabled and nondisabled) (M= 3.09; 40%), respectively.

Table 16

Expectations of Others

<table>
<thead>
<tr>
<th>Q</th>
<th>Survey Item</th>
<th>N of Respondents</th>
<th>M</th>
<th>SD</th>
<th>Agree</th>
<th>Disagree</th>
<th>Neither Agree/Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>I feel pressure when I am working with students who have IEP (Individualised Education Plan) accommodations or modification.</td>
<td>281</td>
<td>3.54</td>
<td>1.22</td>
<td>59</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Statement</td>
<td>Rating</td>
<td>Mean</td>
<td>SD</td>
<td>Median</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------</td>
<td>--------</td>
<td>------</td>
<td>-----</td>
<td>--------</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>The approval of my students is important to me.</td>
<td>253</td>
<td>3.42</td>
<td>1.17</td>
<td>54</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>People who are important to me believe inclusive educational environments promote acceptance of differences among students.</td>
<td>251</td>
<td>3.38</td>
<td>1.07</td>
<td>51</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>The approval of my peers is important to me.</td>
<td>254</td>
<td>3.35</td>
<td>1.13</td>
<td>50</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>People who are important to me think inclusive educational environments are beneficial for students with special needs.</td>
<td>253</td>
<td>3.31</td>
<td>1.18</td>
<td>50</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Doing what my subject supervisor thinks I should do is important to me.</td>
<td>254</td>
<td>3.16</td>
<td>1.06</td>
<td>40</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Doing what my school director thinks I should do is important to me.</td>
<td>254</td>
<td>3.13</td>
<td>1.09</td>
<td>40</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Teachers in my school think that students with special needs should have the choice of learning in inclusion schools or special institutes.</td>
<td>257</td>
<td>3.12</td>
<td>1.24</td>
<td>40</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>It is expected of me that I approve of heterogeneous classroom groupings (e.g., disabled and non-disabled).</td>
<td>254</td>
<td>3.09</td>
<td>1.15</td>
<td>40</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Doing what other teachers do is important to me.</td>
<td>253</td>
<td>3.06</td>
<td>1.12</td>
<td>40</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Teachers like me approve of the use of inclusion as an option for students with special needs.</td>
<td>256</td>
<td>2.96</td>
<td>1.26</td>
<td>39</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>My subject supervisor believes in the use of inclusion as an option for</td>
<td>255</td>
<td>3.09</td>
<td>1.11</td>
<td>36</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>
students with special needs.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>I feel social pressure to favour an inclusive educational environment.</td>
<td>254</td>
<td>3.02</td>
<td>1.14</td>
<td>35</td>
</tr>
<tr>
<td>25</td>
<td>My school director believes in the use of inclusion as an option for students with special needs.</td>
<td>256</td>
<td>3</td>
<td>1.14</td>
<td>34</td>
</tr>
</tbody>
</table>

**Intent and Actions.** Respondents indicated a high level of agreement on items relating to their intentions to use general quality teaching practices, with 79% agreeing with item 7, *As a teacher, I do extra work for the benefit of students (M= 3.98)*, 74% with item 13, *I collaborate with other professionals on the education of my students (M= 3.85)*, and 64% with item 12, *I use research-based practices in my classroom (M= 3.6)*. High levels of agreement were also found for items relating to their intentions to support students with special needs: 54% agreed with item 20, *I use appropriate teaching techniques to support students with special needs (M= 3.36)*, and 51% agreed with item 11, *I implement IEP (Individualised Education Plan) provisions in my classroom (M= 3.46)*. Responses of agreement were variable across the population sample for items 21, *I welcome students with special needs into mainstream classroom and work with them rather than in a special institutes’ classroom (M= 3.05; 46%)*, and 19, *I will try to teach and manage students with special needs in my classroom (M=3.05; 45%)*, which related to specific practices for students with special needs. These results are presented in Table 17.
### Table 17

*Intent/Actions*

<table>
<thead>
<tr>
<th>Q</th>
<th>Survey Item</th>
<th>N of Respondents</th>
<th>M</th>
<th>SD</th>
<th>Agree</th>
<th>Disagree</th>
<th>Neither Agree/Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Intent/Actions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>As a teacher, I do extra work for the benefit of students.</td>
<td>324</td>
<td>3.98</td>
<td>1.02</td>
<td>79</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>13</td>
<td>I collaborate with other professionals on the education of my students.</td>
<td>281</td>
<td>3.85</td>
<td>0.91</td>
<td>74</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>12</td>
<td>I use research-based practices in my classroom.</td>
<td>280</td>
<td>3.6</td>
<td>0.98</td>
<td>64</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>20</td>
<td>I use appropriate teaching techniques to support students with special needs.</td>
<td>279</td>
<td>3.36</td>
<td>1.21</td>
<td>54</td>
<td>22</td>
<td>24</td>
</tr>
<tr>
<td>11</td>
<td>I implement IEP (Individualised Education Plan) provisions in my classroom.</td>
<td>280</td>
<td>3.46</td>
<td>1.04</td>
<td>51</td>
<td>16</td>
<td>33</td>
</tr>
<tr>
<td>21</td>
<td>I welcome students with special needs into the mainstream classroom and work with them rather than in a special institutes classroom.</td>
<td>278</td>
<td>3.05</td>
<td>1.38</td>
<td>46</td>
<td>35</td>
<td>19</td>
</tr>
<tr>
<td>19</td>
<td>I will try to teach and manage students with special needs in my classroom.</td>
<td>277</td>
<td>3.05</td>
<td>1.31</td>
<td>45</td>
<td>32</td>
<td>23</td>
</tr>
</tbody>
</table>

**Comparisons between Respondent Groups**

In the next level of analysis, comparative statistics were used to determine whether results differed between different demographic groups.
**Gender Comparisons**

A parametric independent-sample t-test at the 0.95 confidence level (alpha = 0.05) was used to compare responses of male and female teachers on items grouped by category of inclusion beliefs (i.e. personal beliefs, confidence and capability, and intent and actions) (see Table 18). A small difference at the significant level (p < 0.05) was found for gender in all three categories of inclusion beliefs—personal beliefs ($p=0.021$), confidence and capability ($p=0.003$), and intent and actions ($p=0.007$)—with males demonstrating higher mean scores in all three categories. A non-parametric independent sample median test was used to calculate difference between gender groups across items related to the fourth category (e.g., expectations of others). Differences between males and females were not statistically significant ($p = 0.133$) for items related to expectations of others.

**Table 18**

*Gender and Category of Inclusion Beliefs*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Category of Inclusion Beliefs</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Personal Beliefs</td>
<td>70</td>
<td>48.76</td>
<td>12.87</td>
<td>160.623</td>
<td>2.33</td>
<td>0.021</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>174</td>
<td>44.15</td>
<td>16.34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>Confidence/Capability</td>
<td>78</td>
<td>15.79</td>
<td>3.75</td>
<td>162.328</td>
<td>3.02</td>
<td>0.003</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>199</td>
<td>14.21</td>
<td>4.36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>Intent/Action</td>
<td>70</td>
<td>31.74</td>
<td>7.15</td>
<td>157.809</td>
<td>2.72</td>
<td>0.007</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>175</td>
<td>28.78</td>
<td>8.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>Expectations of Others</td>
<td>65</td>
<td>47.85</td>
<td>9.48</td>
<td>135.644</td>
<td>1.22</td>
<td>0.222</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>168</td>
<td>46.06</td>
<td>11.13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An independent sample t-test at the significance level (p < 0.05) was performed to determine differences between gender groups for items on the TSES (see Table 19). The difference between males and females on the TSES was found to be statistically significant ($t(221)= 2.130, p= 0.034$), with males having higher mean scores for self-efficacy ($M=69.1, SD= 21.3$) than females ($M=63.31, SD= 26.8$).
Table 19

*Gender and Self-Efficacy*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>99</td>
<td>69.1</td>
<td>21.3</td>
<td>221</td>
<td>2.130</td>
<td>0.034</td>
</tr>
<tr>
<td>Female</td>
<td>257</td>
<td>63.31</td>
<td>26.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Types of Training*

Respondents were placed into three groups according to the type of training they had undertaken. Due to the small sample size in the university and support groups, these were collapsed into the third group (workshops). A non-parametric independent sample Kruskal-Wallis test ($p<0.0005$) was used to determine whether differences between groups who had undertaken different types of training were significant (see Table 20).

Table 20

*Type of Training*

<table>
<thead>
<tr>
<th>Categories of Inclusion Beliefs</th>
<th>Type of Training</th>
<th>N</th>
<th>Median</th>
<th>df</th>
<th>Chi-Square value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB Personal Beliefs</td>
<td>None</td>
<td>141</td>
<td>46.0</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In-Service</td>
<td>66</td>
<td>51.0</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workshops/University/Support Groups</td>
<td>37</td>
<td>59.5</td>
<td>2</td>
<td>27.832</td>
<td>0.001</td>
</tr>
<tr>
<td>CC Confidence/Capacity</td>
<td>None</td>
<td>165</td>
<td>14.0</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In-Service</td>
<td>71</td>
<td>16.0</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workshops/University/Support Groups</td>
<td>41</td>
<td>17.0</td>
<td>2</td>
<td>27.469</td>
<td>0.001</td>
</tr>
<tr>
<td>EO Expectations of Others</td>
<td>None</td>
<td>135</td>
<td>47.0</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In-Service</td>
<td>61</td>
<td>48.0</td>
<td>2</td>
<td>5.027</td>
<td>0.081</td>
</tr>
<tr>
<td></td>
<td>Workshops/University/Support Groups</td>
<td>37</td>
<td>50.0</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA Intent/Action</td>
<td>None</td>
<td>143</td>
<td>28.0</td>
<td>2</td>
<td>21.278</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>In-Service</td>
<td>65</td>
<td>32.0</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workshops/University/Support Groups</td>
<td>37</td>
<td>36.0</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A statistically significant difference was found between training groups for items related to personal beliefs ($\chi^2(2, N = 244) = 27.832, p = 0.001$), confidence and capability ($\chi^2(2, N = 277) = 27.469, p = 0.001$), and intent and action ($\chi^2(2, N = 245) = 21.278, p = 0.001$) (see Figures 5-7). Respondents who had engaged in workshops/university training/support group had the highest mean score, while those who had had no training had the lowest median score. No statistically significant difference was found between training groups across items related to expectations of others ($\chi^2(2, N = 233) = 5.027, P = 0.081$) (see Figure 8).
An independent sample distribution Kruskal-Wallis test was conducted to compare differences in self-efficacy for the three training groups (see Figure 9). A statistically significant difference was found for the training groups ($p < 0.05$) $\chi^2(2, N = 356) = 46.904, p = 0.001$ (see Figure 9), with those in the workshop group having the highest median score ($Mdn = 69.00$).

Correlation—Self-Efficacy and Categories of Inclusion Belief

It was important to determine the relationships between responses across items related to the categories of inclusion beliefs (personal beliefs, expectations of others, confidence and capacity, intent and actions, and levels of self-efficacy). A Pearson correlation coefficient was used to examine the relationships between responses for each of the category of inclusion beliefs (see Table 21). As indicated in Figures 10-14, a strong positive correlation was found between responses for intent and actions and personal beliefs, $r(240) = .80, p < .001$ (see Figure 10), expectations of others and intent and actions $r(228) = .61, p < .001$ (see Figure 11), and confidence and capability and intent and actions $r(244) = .59, p < .001$ (see Figure 12).
Table 21

Correlation between Categories of Inclusion Beliefs

<table>
<thead>
<tr>
<th></th>
<th>Self-Efficacy</th>
<th>Personal Beliefs</th>
<th>Expectations of Others</th>
<th>Confidence/Capability</th>
<th>Intent/Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Efficacy</td>
<td>Coefficient r</td>
<td>1</td>
<td>0.97**</td>
<td>0.42**</td>
<td>0.87**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>356</td>
<td>244</td>
<td>233</td>
<td>275</td>
</tr>
<tr>
<td>Personal Beliefs</td>
<td>Coefficient r</td>
<td>0.97**</td>
<td>1</td>
<td>0.44**</td>
<td>0.80**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.01</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>244</td>
<td>244</td>
<td>226</td>
<td>243</td>
</tr>
<tr>
<td>Expectations of</td>
<td>Coefficient r</td>
<td>0.47**</td>
<td>0.45**</td>
<td>1</td>
<td>0.61**</td>
</tr>
<tr>
<td>Others</td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.01</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>233</td>
<td>226</td>
<td>233</td>
<td>231</td>
</tr>
<tr>
<td>Confidence/Capac</td>
<td>Coefficient r</td>
<td>0.42**</td>
<td>0.44**</td>
<td>0.45**</td>
<td>1</td>
</tr>
<tr>
<td>ity</td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.01</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>275</td>
<td>243</td>
<td>231</td>
<td>277</td>
</tr>
<tr>
<td>Intent/Actions</td>
<td>Coefficient r</td>
<td>0.87**</td>
<td>0.80**</td>
<td>0.61**</td>
<td>0.59**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>245</td>
<td>240</td>
<td>228</td>
<td>244</td>
</tr>
</tbody>
</table>

Note. **Correlation is significant at the 0.01 level (two-tailed).

Figure 10

Correlation between Personal Beliefs and Intent and Actions
Figure 11

Correlation between Expectations of Others and Intent and Actions

Figure 12

Correlation between Confidence and Capacity and Intent and Actions
A strong positive correlation was also found between respondents’ self-efficacy and their personal beliefs, $r(244) = .97, p < .001$ (see Figure 13), and intentions and actions, $r(245) = .87, p < .0001$ (see Figure 14).

**Figure 13**

*Correlation between Self-Efficacy Beliefs and Personal Beliefs*

**Figure 14**

*Correlation between Self-Efficacy Beliefs and Intentions and Actions*
A moderate positive correlation was found between respondents’ perceptions of confidence and capability and expectations of others, $r(231) = .45$, $p < .001$; confidence and capability and personal beliefs, $r(243) = .44$, $p < .001$; and personal beliefs and expectations of others, $r(226) = .45$, $p < .001$. A moderate positive correlation was also found between self-efficacy and confidence and capability, $r(275) = .42$, $p < .001$, and self-efficacy and expectations of others (EO), $r(233) = .47$, $p < .0001$.

**Open-Ended Questions**

In the final section of the survey, five open-ended questions were included to elicit more-detailed information from respondents about their beliefs and experiences with inclusion and teaching students with special needs and factors they felt may have contributed to these beliefs and experiences (see Table 22).

**Table 22**

*Short Open-Ended Questions*

<table>
<thead>
<tr>
<th>Q</th>
<th>Open-Ended Questions</th>
<th>N of Respondents</th>
<th>Percentage of total survey participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Please comment on what you feel is the impact of inclusion on students and staff.</td>
<td>190</td>
<td>52.7%</td>
</tr>
<tr>
<td>2</td>
<td>Do you feel that you have helped students with special needs, and if so in what way?</td>
<td>130</td>
<td>36%</td>
</tr>
<tr>
<td>3</td>
<td>Please describe your level of confidence in teaching students with special needs.</td>
<td>225</td>
<td>62.5%</td>
</tr>
<tr>
<td>4</td>
<td>What has helped you to teach students with special needs?</td>
<td>122</td>
<td>33.8%</td>
</tr>
<tr>
<td>5</td>
<td>What difficulties if any, have you faced in teaching students with special needs?</td>
<td>99</td>
<td>27.5%</td>
</tr>
</tbody>
</table>

**Impact of Inclusion**

The first open-ended question (see Table 22) asked respondents to discuss their feelings about the impact of inclusion on students and staff. One hundred and ninety people responded and indicated four types of impact: student impact (47%), teacher impact (27%), community impact (12%), and system impact (14%) (see Figure 15).
Impact on Students—Positive. The largest group of responses to the first question was related to the impact of inclusion on students (47%) (see Figure 15). Of these responses, 40% of respondents noted that inclusion had a positive impact on students (see Figure 16), and indicated that inclusion increased students’ confidence. For example, one respondent wrote, “[Inclusion] is important for those with special needs. It increases their confidence and they [feel like] their other peers. By praising them they attain confidence and participate with their peers.”

Figure 15
Types of Impact

Figure 16
Impact on Students
Another positive impact reported was that inclusion enabled students to develop their social and communication skills. One respondent wrote that inclusion “strengthens the psychological aspect, increases confidence, and increases their communication skills”. Some responses indicated a belief that inclusion fostered social interactions between students. One respondent wrote that inclusion “is very useful for students with special needs; it encourages all students to work and help each other. It helps students to interact with their peers with special needs without letting them feel inferior”. Other responses included “achieving many goals does not mean what they learn in the classroom but what they learn from other peers and teachers” and “inclusion is beneficial for all students, [because] it gets mainstream students to accept the existence of others who differ from them and know how to adapt and deal with them”.

**Impact on Students—Negative.** Not all respondents felt that inclusion was beneficial for students, with 60% (see Figure 16) of responses describing negative impacts for students including: peer bullying, reduction of confidence of students with special needs, and decreased learning for other students. One respondent wrote that the inclusion of students with special needs into regular classes causes peer bullying:

Students with special needs are often bullied by mainstream students, which makes it difficult for them as they struggle from the harassment and ridicule of their peers; [this results in] a bad psychological situation and frustration for students with special needs.

Another wrote, “Inclusion causes tension between mainstream students and students with special needs, especially in the early stages of primary school. Others believed that inclusion reduced the confidence of students with special needs. For example, one wrote, “Students with special needs are bullied and they lose confidence in themselves and are rejected from other learning groups.”
A number of respondents believed that inclusion reduces the learning for students without disabilities. One wrote, “Regular students lose their time and lower their level of progress, and do not live up to the higher mental levels because of the extra attention paid to those with special needs.” Similarly, another wrote, “Regular students will have less performance as they get used to the level of students with special needs, which will reduce their level of education.”

**Impact on Teachers—Positive.** Around 12% of responses described positive impacts for teachers (see Figure 17). For a number of respondents, having students with special needs in their class was a source of pride. One wrote, “They are joy to us, so they love us, and we love them. I feel proud when I work for them, I am proud to be a teacher of that group and proud of being able to help them.” Another related their perception of having students with special needs in their class as a source of pride in their own abilities as a teacher: “The presence of this category brings blessing in everything. I enjoy the blessing of being able to teach them.”

**Impact on Teachers—Negative.** Twenty-seven percent of responses related to the impact of inclusion on teachers (see Figure 16). Of these, 88% described negative impacts (see Figure 4), including pressure caused by the demands, extra effort, and lack of class time.

**Figure 17**

*Impact on Teachers*
Respondents related that inclusion had a negative impact on them due to pressure from the demands of doing extra work. One wrote, “It causes a burden on us because of being charged with extra tasks, activities, and strategies that are beyond our capacity.” Another wrote, “It is just too much for me. I can’t develop individual education plans and monitor the students’ progress and keep up with my regular curriculum.”

Others noted that inclusion requires “more effort, with not enough time, mainly if the student has an individual learning plan, which makes it very difficult to teach in regular classes.” This extra time and effort also created feelings of stress, as indicated by one response:

Teachers feel stressed and nervous as a result of their desire to control the time of the lesson, the loss of time in the repetition of information for one student, and in some cases the inability to deal with the student in the right way.

**Impact on the Community.** Twelve percent of responses related to the positive impact of inclusion on the community (see Figure 15). A number of respondents commented that inclusion can facilitate acceptance and integration in the community:

[Inclusion] establishes a healthy school environment where regular classroom students learn to engage and integrate with students with special needs in their class, which leads to their integration in the different aspects of life and acceptance in the community, which they will not reach without the support of each other.

Some respondents felt that inclusion fosters acceptance among the community. For example, one noted, “Inclusion allows people to accept each other despite their differences, leading to a positive impact on all categories. People will have responsibility and co-existence within the community and gain more confidence in this life.”
Impact on the System. Fourteen percent of responses described negative impacts due to the lack of support from the system (see Figure 15). A number of respondents commented on the issues with large classes. For example, one wrote:

I don’t see inclusion to be successful because the classrooms are crowded with more than 35 students and need more effort from teachers. I do not expect the result of inclusion to be satisfying because the teacher cannot focus on each student with the large numbers within a limited time given for each period, especially given that students with special needs require more attention and teaching methods somewhat different from the rest of the students.

A number of respondents commented on the need for training or reported that they lacked relevant knowledge. For example, one wrote, “Inclusion cannot be successful because each student has a different special need, special thinking, which requires proper training and knowledge for teachers.” Another wrote, “At this time, I don’t see it to be successful because it is randomly planned without preparing schools to accommodate students with disabilities and not preparing teachers to deal with them, but I believe if applied after a good, planned preparation it will be successful.”

Helping Students with Special Needs

The second open-ended question asked respondents to comment on whether they felt they had helped students with special needs, and if so, in what way. There were 130 (36%) responses to this question (see Table 22).
Fifty-two percent of the responses were short, indicating simply whether respondents felt they had or had not helped students with special needs. These responses included 24% indicating that they had helped, 19% had not helped, and 9% had not taught students with special needs before (see Figure 18). Other respondents provided more-detailed commentary, indicating that they believed they had helped students by providing support (14%); raising awareness among students (18%); providing support for parents of students with special needs (4%); and increasing students’ self-confidence (12%).

**Providing Support for Students with Special Needs.** Fourteen percent of responses indicated that respondents provided support for students with special needs in areas such as providing simple learning skills and modifying the curricula; for example, “[I] provided the skills of learning in a detailed and simple way.” A number of respondents also discussed making changes to the curriculum to address students’ needs. One wrote, “I usually modify the curriculum as much as I can to address all student needs in class.” Other respondents indicated trying to address students’ needs by providing different types of support. For example, one wrote, “Provide them [students with special needs] with psychological support,
encouragement, and simple tests…taking into account their individual differences, I try to deliver the information in a very simple easy and understandable way.” Others provided visuals to support students with special needs in class; for example, “I try to look at the individual needs of my students and think about how to simplify the lesson by using flash cards with pictures as possible.”

**Raising Awareness among Students.** Twenty-two percent of the responses related to ways in which respondents raised awareness among other students. One wrote, “[I usually] raise awareness among students in regular education [specifically] in dealing with their peers with special needs.” Similarly, another wrote, “I always try to give my students group activities to make them interact and help each other...and make them understand that each student has their own unique differences...this helps in creating a cooperative environment between them.”

**Providing Support for Parents.** Respondents described providing support for parents of students with special needs to support their children’s learning. One wrote, “Helping parents to overcome all difficulties and provide guidance to them.” Others created chat groups for parents to support them and help them as possible to overcome any difficulties they faced at home. For example, one respondent wrote:

I created a WhatsApp group for all the parents, especially those who have kids with special needs. I try to provide them with information they need about their child’s education. I also try my best to look for any information they ask for even if it was not related to their child’s education.

**Increasing Self-Confidence.** Twelve percent of the responses described increasing students’ self-confidence. For example, one respondent wrote, “to develop their self-confidence and insist on challenging them to overcome any obstacles and to continue their studies at the university and insist on overcoming all difficulties to achieve their wishes”.

Similarly, another wrote, “I try to raise their self-confidence by giving them some communication skills with their peers in class.”

**Level of Confidence in Teaching Students with Special Needs**

The third open-ended question asked respondents to describe their level of confidence in teaching students with special needs. Two hundred and twenty-five (62.5%) people responded to this question (see Table 22). Some responses simply indicated whether they either did (37%) or did not (9%) feel confident. Other respondents (24%) provided some commentary on factors that influenced their confidence, including resources available, knowledge and professional learning, having a family member with special needs, and class size.

A number of respondents felt that the availability of resources had a significant influence on their confidence and capability. For example, one respondent wrote, “I’m confident to teach students with special needs as we now have lots of teaching methods and modern strategies that we can use in class.” Another explained that attending training and having professional learning had increased their confidence: “I was nominated by my school to attend an extensive course about inclusive education…I’m confident that I can deliver all that leads them to progress and excellence.”

In contrast, for some respondents, feeling confident in their abilities as teachers did not necessarily mean that they always felt confident to support students with special needs. For example, one noted, “As a teacher my confidence is very high, but sometimes I feel frustrated and less confident towards teaching students with special needs in my class because I don’t have proper support and training to teach students with special needs.” Another wrote, “I feel confident as a teacher, but to be confident to teach students with special needs I need the proper training and knowledge.” Respondents felt confident in using
general quality teaching practices but felt that their capacity towards teaching students with special needs would be under the condition of having the proper training and knowledge.

Some respondents specified that having a family member with special needs increased their confidence and capability to teach students with special needs. For example, one wrote, “I look forward to teaching them, and I’m very confident due to teaching my own daughter, who has special needs.” Similarly, another wrote, “I believe that I’m confident to teach them because my brother has an intellectual disability. I think I have good knowledge on how to deal with people with special needs.”

**Lack of Confidence and Capability.** Thirty percent of respondents described reasons that they lacked the confidence and capability to support students with special needs. Chief among these factors was a lack of knowledge or resources. One wrote, “I’m not confident in teaching them because their teaching needs knowledge and training that I do not have.” Others wrote, “[I] don't have the confidence, I can't teach them because I lack the knowledge, skills and teaching methods” and “Their education requires intensive courses in how to deal with them and accommodate them”.

Other respondents indicated that having a large class size affected their confidence and capability to cater for students with special needs. For example, one wrote, “I'm unconfident and incapable because I have no resources, no training, not the right environment with crowded classes of 35 students in a class.” Another wrote, “I definitely can’t teach them [students with special needs]. How do you expect me to be able to teach them and look after them with already having a class of 40 students?”

**Things that Helped in Teaching Students**

The fourth open-ended question asked respondents what had helped them to teach students with special needs. One hundred and twenty-two (33.8%) people responded to this question (see Table 22). Forty-one percent had mix of beliefs, respondents simply stated that
nothing had helped them. Other responses were more positive, with respondents indicating they had been helped through experience, courses, and consultations (18%); educational environment and resources (14%); personal efforts (12%); and religious beliefs (15%) (see Figure 19).

**Figure 19**

*Things that Helped in Teaching Students with Special Needs*

Eighteen percent of the respondents stated that experience, courses and consultations with colleagues had helped them. This included approaching colleagues and learning from previous experience with students with special needs. For instance, one respondent wrote, “I try to learn from the experience of my friend, who has taught them [students with special needs] before, and always ask her for advice on how to deal with things in class.” Attending courses and consulting others about inclusion and students with special needs also helped a number of respondents. One wrote, “Sharing experiences between colleagues who have taught students with special needs helped me a lot in teaching students with special needs. I also attended private special education courses outside the school” Some respondents wrote that having previous experience with a family member or a friend with special needs helped
them. One related, “Having a child with special needs made me able to know how to address the needs of those students,” while another wrote, “Relatives with special needs, this made a big difference and helped me in accepting them and teaching them.”

A small number of respondents (14%) commented that it was useful to have resources available for them to teach students with special needs. Some wrote that “…the right environment…teaching aids” and “the suitability of the place” had helped them cater for students with special needs in their class. One wrote, “The availability of appropriate teaching aids and the cooperation of colleagues and home helped a lot,” while another said that “educational aids, individual plans, the use of technology and modern strategies in education” helped her in teaching students with special needs.

Another group of respondents (12%) commented that it was only their personal efforts that helped them teach students with special needs. For example, one wrote, “I did my own research and reading in this area and asking questions to specialists about how to teach students with special needs.” Searching social media also helped teachers. One related, “I look for information in all social media, including phones, internet, tutorials, and others, to help me teach them.” Some also related that they did their own research and searched the internet for different types of information on how to teach students with special needs in their class.

**Religious Beliefs.** A number of respondents (15%) reported that their religious beliefs had played an important role in helping them accept inclusion and support students with special needs. For example, one wrote, “My religious belief and love for them gives me the ability to deal with them without training.” Another wrote, “Confidence, responsibility and honesty as part of my religion, [which] helped me teach students with special needs.” Others commented that having religious morals helped them teach students with special needs; for example, one wrote, “patience as the Quran has mentioned and taught us to be patient with all
people”. Respondents felt that their religious instruction taught them how to be responsible, honest, and patient in dealing with all people, including people with diverse needs.

**Difficulties in Teaching Students with Special Needs**

The final open-ended question asked respondents what difficulties they had faced in teaching students with special needs (see Table 22). Ninety-nine (28%) people responded to this question. Difficulties described included lack of resources and skills (30%), lack of knowledge (32%), classroom management (9%), large class size (18%), and system demands (11%) (see Figure 20).

**Figure 20**

*Difficulties in Teaching Students with Special Needs*

![Graph showing difficulties in teaching students with special needs]

**Lack of Resources and Skills.** Thirty percent of the responses related to lack of resources, training, and skills. Respondents commented that it was difficult for them to cater for and support students with special needs when they lacked resources. Training was an issue for almost all respondents. For example, one wrote, “It is very difficult for me to teach them [students with special needs] in my class. I don’t have the right qualification; the school doesn’t help us—they don’t provide us with any training courses or teaching aids.” As
indicated in this comment, respondents felt they not only lacked training but also lacked support from their schools.

**Lack of Knowledge.** Thirty-two percent of the responses related to lack of knowledge about inclusive practice or students with special needs. For example, one respondent wrote, “I can’t give them their right to education because I don’t have any knowledge or skills on how to teach in inclusion classrooms. Another wrote, “I don't have any knowledge on how to deliver information [to cater for] individual differences.”

A lack of knowledge about students’ disabilities was another difficulty cited by respondents. One wrote, “We don't know what's wrong with the student and mostly we don't know why she is not keeping up. [The student] not being diagnosed increases the burden on us.” Similarly, another wrote, “We don’t know anything about the students’ needs; no-one tells us if the students have special needs. We often don’t know what’s wrong with the student and can’t provide the right support that they need.”

**Classroom Management.** Nine percent of the responses related to difficulties with classroom management. For example, one respondent wrote, “Controlling them due to the large number and differences between them and other students is difficult.” Others found it difficult to deliver information and control the students at the same time. One respondent wrote, “They [students with special needs] don't follow the classroom instructions. I can't control the class.” Another wrote, “it is difficult to make them sit in their place and focus on the lesson.” Respondents expressed their stress and frustration in having to control a large number of students in class and at the same time having to cater for individual needs.

Another difficulty facing teachers in class was managing disruptive behaviour exhibited by students with special needs. For example, one respondent wrote, “I don't know how to deal with them and their unexpected behaviour sometimes; the student starts
screaming and moving around in class. I become anxious and uncertain of what to do!!! The whole classroom becomes noisy.”

**Large Class Size.** A number of respondents (18%) reported that teaching both mainstream students and those with special needs in a large class was a difficulty. One wrote, “It is already difficult for me to teach 38 students and monitor their progress, and having students with special needs in my class makes it more difficult.” Another wrote, “It is very exhausting to teach students with special needs in a regular classroom. I can’t teach them and I wish they didn’t force us to teach them. I have 38 students in my class—I just don’t have the time for individual students.” These comments indicate that having students with special needs in mainstream classes contributed to a burden that teachers were already experiencing with managing large class sizes.

**Managing System Demands.** Eleven percent of the responses related to managing system demands, including lack of time and magnitude of workload. For example, one respondent wrote, “I teach 24 lessons a week, and having students with special needs is frustrating. No-one asks about our opinion; they just force us to implement the circulars.” Similarly, another respondent related, “How does the administration expect us to teach them? They did not even ask us about our opinion. I feel pressured that I don’t have knowledge or any training; I also don’t have enough time to meet the needs of this category.” These comments indicate that respondents felt that the demands of the system to teach students with special needs created additional pressure on top of the challenges they had been experiencing before implementing inclusion.

The open-ended responses revealed a number of key findings including:

- Participants believed that inclusive educational environments are beneficial for students with special needs included better understanding of students’ needs, greater
acceptance of students’ differences by other students and teachers, and an increase in
the confidence levels of students with special needs in general education classes.

- Participants believed that having previous experience, resources, personal efforts, and
  religious beliefs helped them to teach students with special.
- Participants expressed concerns about the pressure manifest from expectations on
  them to meet extra demands beyond their capacity within challenging time
  constraints.
- Participants associated “successful” inclusive education provision with “proper
  training” for teachers, and indicated how lack of access to training and professional
  development opportunities led them lack confidence and to feel either under-prepared
  or ill-equipped to implement inclusive education in the classroom.

Chapter Summary

This chapter has presented the results from the survey, including the open-ended
questions. Descriptive statistics of the mean, standard deviation, and percentage were
calculated for the quantitative sections of the survey. For the open-ended data, a content
analysis was implemented. Data was obtained using a four-section survey from 360 Saudi
teachers in mainstream schools. The first section presented the respondents’ demographic
information. The second section gathered data about how respondents felt about their self-
efficacy; they reported high self-efficacy about using general quality teaching practices, and
indicated the lowest self-efficacy ratings on questions related to classroom management. The
third section gathered descriptive statistics on respondents’ beliefs about inclusion in four
different categories: personal beliefs, confidence and capacity, expectations of others, and
intentions and actions.

An analysis of their personal beliefs revealed a high level of agreement related to the
benefits of inclusive education environments for students with special needs. At the same
time, they showed high levels of agreement related to their belief that inclusion causes extra work and retraining of teachers and that students with special needs are better placed in special classrooms. Findings regarding respondents’ confidence and capacity revealed that high levels of agreement were related to generally feeling confident in collaborating with others for the benefit of their students in general, while their lowest levels of agreement were related to their lack of preparation, including professional development, resources, knowledge, and equipment, to support and teach students with special needs. The findings regarding respondents’ thoughts about expectations of others, the findings revealed high levels of agreement in feeling pressured working with students with special needs and working on IEPs.

The results also showed high levels of agreement related to the importance of their students’ approval about inclusion. Respondents showed the lowest levels of agreement related to what they thought their colleagues, school principal, and subject supervisor expected them to feel about giving students with special needs a choice about their placement. Their lowest levels of agreement related to their feelings of social pressure to favour inclusive education. Respondents’ intentions and actions to support students with special needs showed high agreement related to employing quality teaching practices that were not specifically aimed at students with special needs, and related to their intentions to support students with special needs. Respondents’ levels of agreement were variable across the population sample related to specific practices for students with special needs.

Comparative statistics between demographic groups revealed that there were differences in the mean scores of genders, type of training, personal beliefs, confidence and capability, intent and actions, and self-efficacy beliefs, but not for expectations of others. Furthermore, the relationships between the categories of inclusion beliefs showed a strong
and moderate positive correlation between the categories of inclusion beliefs and self-efficacy beliefs.

The open-ended findings revealed respondents’ positive beliefs in the social and educational benefits of inclusion for students with special needs, but also their negative beliefs and lack of confidence related to pressure caused by the demands, extra effort, lack of class time, large class sizes, lack of preparation (including resources, knowledge, and equipment) to support students with special needs, and managing and controlling disruptive behaviour exhibited in class by students with special needs. The following chapter will present the qualitative results from the semi-structured interviews and the triangulation of the three data sets.
Chapter 5: Interview Results

The aim of this study was to explore teachers’ attitudes and perceptions regarding the inclusion of students with special needs in mainstream classes in Saudi Arabia. This chapter reports on findings from interviews conducted with 15 participants, recruited from the survey respondents. The interviews were conducted to gain a more comprehensive understanding of Saudi teachers’ attitudes and beliefs towards inclusion in mainstream classrooms; in essence, to determine the factors that were affecting their intentions and actions towards implementing inclusive practices. This chapter gives a brief outline and presentation of the participants’ demographic information, then presents the results from the participant interviews. Findings have been organised into two main themes: *Inclusion was imposed upon us* and *Moving forward and making the best of the situation*, which emerged from the analysis of the interview data. To support each theme and its sub-themes, participant comments are included throughout. This chapter concludes with a summary of the main findings, which comprises a triangulation of findings from the three data sets (survey items, short-answer responses, and interviews).

**Participant Demographics**

The interview participants’ demographic information (see Table 23) shows that nine participants were female and six were male, and that their teaching experience ranged from three to 22 years. Four participants were teaching at the primary school level, one was teaching at the intermediate level (grades 7-9), five were teaching at the secondary school level (grades 10-12), two were teaching at both the primary and intermediate levels, and three were teaching all grade levels. Eight participants indicated they had no previous training related to inclusive education or teaching students with special needs, and seven indicated they had attended at least one type of training program on inclusive education. Importantly,
only six out of the 15 participants indicated that they had previous experience teaching students with special needs, with nine reporting that they had no previous experience.

Table 23

Interviewees’ Demographic Information

<table>
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<tr>
<th>Interviewees’ pseudonyms</th>
<th>Gender</th>
<th>Years of experience</th>
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<th>Grade level taught</th>
<th>Type of training</th>
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</table>

Salient Themes

Analysis of the participants’ interview responses revealed two overarching themes.

The first theme, *Inclusion was imposed upon us*, included two sub-themes: *Teachers felt ill-equipped* and *Teachers felt overwhelmed*. The second theme, *Moving forward and making the best of the situation*, included three sub-themes: *Religious beliefs; previous experience with individuals with special needs*; and *Different teaching methods*. Themes and sub-themes are presented in Figure 21.
Inclusion Has Been Imposed Upon Us

The first theme, *Inclusion has been imposed upon us*, reflected the participants’ frustrations about the way students with special needs were included in their classrooms without their (the teachers’) consultation. As a result, the participants felt they were “forced” by the school system to teach students with special needs. For example, Tahani stated:

*We complain that this is not the right place for her [student with a disability]. We are not prepared to teach her, but at the end no-one cares about what we say or how we feel, and we are forced to take care of her.*

In this statement, Tahani not only commented on her lack of choice but also that she felt forced to teach a student with special needs, for which she was not prepared.

Samar also explained how the inclusion of students with disabilities had been imposed on her. Samar said that she just did what she was told; her perception was that she did not have a choice in who she taught in her class: “I don’t know anything about what happens in the administration. I just do what I am asked to do, they told me that there is lack of teachers, and you have to teach them, and I did”.

Saud commented on a similar experience of teachers being pressured by the administration to accept students with special needs in classes. Saud went on to suggest that
being forced did not mean that a teacher would actually put effort into teaching students with special needs:

Some teachers are not willing to help students with special needs because they don't know how to teach them. But because they're pressured from the administration, they're forced to accept students without putting in any effort to actually teach them. As Saud’s comment reveals, the potential consequences of Saudi teachers feeling they have no choice in inclusive education, that it is being imposed upon them, may mean that some teachers are resistant to include students with special needs in their classes or that their stated intention to accommodate students with special needs in their classroom is not genuine.

Moreover, it emerged that some participants felt that school administrators had failed to consult with them regarding inclusion. They felt that their opinions and concerns were not sought regarding including individual students with special needs into their classroom. For example, Mazen related his experience and frustrations: “They implemented the inclusion program without preparing teachers or taking their opinions. They don’t know what we are already going through. We have to accept what comes from the Ministry and just do it”. Mazen believed he did not have a voice in the process of implementing inclusive education at his school and in his classroom. He also felt that the administration had little understanding of existing pressures in the school.

Overall, as participants discussed their feelings about having inclusion in their classrooms, two important key sub-themes emerged. The first was that many of the participants felt ill-equipped to implement inclusive education programs. The second was that the teachers often felt overwhelmed by the additional workload they believed inclusion created.

**Teachers Felt Ill-Equipped.** Participants’ comments about feeling ill-equipped to implement inclusive education with students with special needs in their classes typically
related to three factors: a lack of knowledge of appropriate inclusive teaching practices; inadequate preparation to implement inclusion due to lack of training; and a lack of access to suitable resources and equipment to teach students with disabilities in their classrooms.

**Lack of Knowledge.** Participants related that they lacked two types of knowledge in relation to implementing inclusive education: knowledge of students’ disabilities in general, and knowledge of how to teach students with special needs. This latter sentiment is concisely reflected in Areej’s comment: “We don’t know how to teach them. We don’t have any knowledge on how to teach them. We are not trained for this”. Participants largely considered that preparing general education teachers with such knowledge was the responsibility of those running the education system (i.e., the Ministry of Education and school administrators).

The participants’ views that they sometimes lacked specific knowledge about a student’s disability was associated with a lack of information provided to them by school administration. For instance, Afnan discussed how a particular student with special needs was assigned to her class with little information to guide the teacher: “We struggle a lot with them. Some cases they [school administrators] just categorised them as special education students without a specific diagnosis”. Afnan’s statement indicated that her lack of information about the students’ disability made it more difficult for her to support the student in the class.

Saud also expressed frustration at having been given little information about students’ disabilities or how to cater for the special needs of the students in the classroom:

Sometimes it is clear that the student has learning disabilities. I notice that after a year or two. I don't know anything about them, and I don't know how to teach them. [I] don’t know if the student [in my class] has special needs. I don’t have any experience in teaching [them].
Saud felt that his lack of knowledge of and experience with students with disabilities was affecting his confidence and his capacity to teach students with special needs in his classroom.

Participants identified a lack of knowledge about students’ disabilities and the implications of this not only for learning but also for classroom management as an issue. Wijdan, for example, expressed her confusion about one student’s behaviour, and felt ill-equipped to deal with this challenging autistic student:

I had a student with special needs. She used to scream and put her hands on her ears while I explained. So, I was confused and didn’t know why she would act like this. Later on, I found out that she gets annoyed by some noises, so I read about it, and I found out that she is a student with special needs [autism].

For Wijdan, her lack of knowledge about autism and how best to support this student’s learning and to manage her behaviour in class meant that for her, the solution was not to include this student in her class (“I thought it might be better for her mother to move her to another school”). Notably, the comments from Areej, Afnam, Saud, and Wijdan reveal important insights into training for and knowledge of inclusion for Saudi general education teachers. Overall, the teachers in general classes seemed to lack knowledge of and expertise in inclusive practices. They also believed that they had not been properly informed about the disabilities of students entering their classrooms. This contributed to some teachers’ belief that the needs of students with a disability are better met in a special education classroom setting.

**Lack of Preparation (Access to Training).** Analysis of the participants’ interview responses revealed that the teachers often felt ill-equipped to teach students with special needs in their classrooms. Many of the teachers discussed a lack of access to training and professional development opportunities as factors in their feeling unprepared for inclusion.
Sumaya said: “We were not prepared for the inclusion system that was [introduced] in our school. It came suddenly. Both the administration and the MoE didn’t take care of the inclusion system at all”. Samaya felt that the system had failed her. This sentiment was echoed by Sara who stated: “I have no experience at all, and I don’t know how to deal with them. They suddenly asked me to teach them math which made me upset”.

Similarly, Wijdan believed that the system was also failing the students with special needs:

The administration does not take care about this. We don’t receive any curricula or any workshops, although we need [this] because we have lots of students with special needs....We keep asking continuously for training to help us teach students with special needs, but the administration never offered us any training regarding teaching students with special needs.

The lack of training and professional development opportunities as perceived by the participants was at times a source of frustration to them, with the potential to manifest as a negative attitude towards inclusion. As evident in the comments above, participants wanted the Ministry of Education to “take care” of the preparedness of general education teachers so they were better equipped to teach students with special needs in their classrooms. For some this involved access to relevant training.

For some participants, feeling better prepared to implement the inclusive education program was a function of having both access to training in inclusive education teaching and a reduction in the number of students in the class (average class size is around 40 students). Majed believed smaller class numbers would help him to better support students’ individuals with special needs: “I would accept integration if there was training, and students were limited in class because there will be less work”.

Areej suggested that access to specific training in how to identify students with specific special needs and how to implement learning activities to meet their learning needs would help her to be a more effective inclusive education teacher:

I would like to attend courses on how to know that a student has special needs. For example, we have schools that integrate hearing and visual impairment together, and they give those teachers who teach them some related courses to help them teach those students. It would be helpful if we had the same courses.

Saud also commented that general education teachers would benefit from access to training that helped them to identify students’ disabilities: “We need a course given through the semester for the teachers on how to recognise the student's different types of special needs, and how to deal with them”.

Furthermore, Tahani, a participant who expressed an overall positive intention towards teaching students with special needs, also noted that access to training would benefit the teacher in implementing inclusive education: “If they gave us a course to attend regarding the integration system, we would be able to teach them”.

Lastly, a notable implication of general education teachers feeling unprepared to implement the inclusive education program at their school (due to lack of access to relevant training) was that they often developed low levels self-efficacy or confidence. For example, Amal commented:

We are not offered any training about inclusive practices. The only training that they provide us with is regarding general education practices. How do they want us to be confident and teach students with special needs, as they need specific types of methods that we do not have?

Overall, participants’ feelings of being ill-equipped, overwhelmed at times, and imposed upon led some participants to have negative attitudes and limited intentions towards
including students with special needs in their classrooms. As a result, a few individuals, who were no longer coping with what they perceived as an overwhelming workload, expressed intentions to leave the profession, although others had a more positive outlook and described their intentions and efforts to support their students who had special needs.

**Lack of Access to Resources.** The interview analysis results also revealed that, in addition to access to training, several participants drew a connection between feeling ill-equipped or unprepared to implement inclusive education and spoke of a lack of access to quality teaching and learning resources. Indeed, although some participants were willing to try new or modified teaching strategies to ensure the inclusion of students with special needs in their classrooms, they believed that the resources they needed to better implement inclusive practices were not available to them. The types of resources mentioned included adaptive equipment, specialised inclusive education learning programs, and special education experts.

The participants’ comments highlight how system-related factors such as having adequately equipped schools to support inclusion of students with special needs potentially influenced their attitudes and intentions towards implementing inclusion. Samar pointed to the lack of adaptive equipment (e.g., lifts, communication devices, positioning devices, machines to help with toileting) to facilitate the inclusion of students with special needs at her school and in the classroom:

Students with special needs require specific machines and special teaching aids. One thing that should be done is that the students should be put in a well-prepared school. They need machines, games, special things for them. They [the schools] need to provide more resources that helps us teachers in educating those kids, especially those who have hearing and vision impairment.
Sara also commented that her school was not accessible for students with disabilities: “Our school is not equipped for students with disabilities. For example, there is a student who walks with a crutch and her class is on the third floor, so they have to carry her and help her every time”.

Participants’ perceptions of suitable support resources also included access to specialised learning programs and to teacher aides. As evident from their comments during the interviews, participants often reported positive attitudes and/or intentions to implement inclusion of students with special needs, but felt hindered in their efforts because they were not receiving adequate training and resource support. For instance, Hayfa reiterated that teachers would be willing to support inclusion if they had access to such resources: “We all share the same opinion that we are okay with inclusion, but we are in need for special courses and teaching aids to be able to teach them”. Similarly, Wijdan said: “We are required to do a lot of exhausting things. We are very happy to help them, and they are more than welcome, but we need the administration to provide us help”. The type of help to which participants were referring included access to teaching and learning resources to support them to meet the academic and social needs of students within regular classes. Participants also talked about the lack of targeted services; for example, Jamal commented on the loss of a specialist teacher: “We don’t have a specialist. We had him for one semester, and then they moved him”. Similarly, Samar said: “Most importantly, we need a specialist to help us teach those students. Every school should have a special education teacher to help general education teachers”.

Hayfa described how the lack of suitable resources led to her frustration when trying to implement inclusive education; in this case, trying to teach a student with hearing impairment, using a resource—a sign-language chart—she did not understand how best to use in a classroom setting: “First, we struggled a lot. They gave us a chart that had sign
language, but the chart makes you [feel more] lost”. This comment illustrates Hayfa’s feelings of frustration and her own disappointment in not being able to support her student in communicating the learning.

**Teachers Felt Overwhelmed.** The second sub-theme to emerge from the participants’ interview responses was that for some participants the demand of supporting students with special needs in their classrooms left them feeling overwhelmed. Four interrelated “demands” were associated with being overwhelmed: teaching large class sizes; managing challenging student behaviours; a lack of time to implement the learning curriculum; and the extra workload associated with supporting students with special needs in their classrooms.

**Large Class Sizes.** Overall, the participants were generally in favour of including students with special needs. However, for several participants who were already struggling with large class numbers, the addition of a special needs student seemed overwhelming. Saleh explained:

General education teachers have no problem with the integration system. What they have a problem with is the number of students per class. Sometimes the number of students reaches 40 per class. How can a public-education teacher give each student their right in learning with this number of students, including special education students?

For teachers like Saleh, it was not that they did not want an integrated system; rather, it was that they believed it was not possible to manage the needs of all their students (including students with special needs) in the current public education system.

**Classroom-Management Challenges.** For some participants, frustrations around having to manage a large class size that included students with special needs were compounded when having to manage the classroom behaviour of students with special needs.
As evident in the following comments, some participants felt that having more students in the classroom contributed to more behaviour problems, and that having to manage challenging behaviours impeded their ability to implement the learning program.

Jamal commented:

[I] have a class of both special and public education students. Honestly, the integration system was a [tough] responsibility. I had 60 students per class, and it is hard for me sometimes to handle things or have things under control. Sometimes students make it very difficult for me when they don’t pay attention and they don’t follow directions.

Hayfa also talked about the way disruptive behaviours by a student with disability took time away from the rest of the class. She remarked, “We lost time because she [student with a disability] laughs so hard, so everyone starts laughing and it takes time to control [the class]”.

Having experiences that led to feelings of being overwhelmed when implementing inclusive education tended to have a negative impact on the teachers’ confidence. For instance, Hayfa commented that she felt ill-equipped to deal with the sudden outbursts of a student with disability during a lesson, which led to her losing confidence in her ability to manage difficult behaviours:

When I used to explain something, she [student with special needs] did some weird movements, such as laughing loudly and crying suddenly. I lose time because everyone starts laughing and I feel that I begin to lose my confidence in not knowing how to control them.

Notably, feeling overwhelmed by the demands of implementing inclusive education and subsequent feelings of being ill-equipped to effectively manage challenging student behaviours left some teachers’ questioning their decision to stay in the profession; for example, Hayfa found her situation so challenging that she had applied for early retirement.
**Time Constraints.** Not having enough time in class to deliver the curriculum and to adequately meet the learning needs of all students, including those with special needs, contributed to participants’ feeling overwhelmed. This emerged as a relatively common concern among the participants, with Tahani explaining:

> [It is] hard for me to balance between them [general and special education students] and give each one of them their rights in learning. They have very different learning needs. They need their own time; I only have 45 minutes to finish my class. At the same time I have to deliver the curriculum on time.

Tahani’s comment alludes to the challenges some Saudi general education teachers perceive are associated with differentiate teaching and learning activities for students with disability. This perception was expressed by Wijdan: “I teach science and maths. I struggle to teach this student maths. She needs effort and time. She needs her own time and place. I don’t have the time to teach them and test them alone”.

For other participants, time constraints were in relation to the implementation of inclusive education programs, which some believed added pressure to already-complex situations such as teaching large classes. Saud commented: “[We] don’t have the time to follow up with them, because of the pressure [we] face at school in having to teach too many classes and students”.

**Extra Workload.** Several participants also expressed the view that teaching students with special needs required them to take on extra work on top of an already-busy teaching workload. This view was generally expressed in the context of participants feeling unsupported by a system that already asked a lot of them. Hayfa commented:

> We were forced to teach them…. One class with the special education students equals two or three classes of just general education students. We are already pressured by our workload, and unfortunately, there is no consideration by the administration of
our pressure. Due to the pressure we were put under, my friends and I applied for early retirement.

Hayfa, believed that the system had let her down and had not considered existing pressures on teachers before introducing integration of students with special needs into classes.

Tahani shared a similar belief:

It is just too much additional work for us to teach them in the same class. We complain that this is not the right place for her, she shouldn’t be here, but at the end we are forced to take care of her and give her different questions than her friend’s questions. We are already pressured with our workload.

Notably, several of the participants’ comments reveal how time constraints and other challenges such as, a lack of knowledge and preparation, increased their workload and affected their intention and or ability to practice inclusion in their classrooms.

Moving Forward and Doing Our Best

In the second theme, Moving forward and doing our best, it emerged that some participants were trying to implement inclusive practice and support the students with special needs who had been placed in their classes. For example, Saud reflected on how he worked to support one of his students: “What I did are personal efforts, nothing more, for the student’s interest. I sit with the student himself or the parent during my free time and plan for what we can do to help him”. Saud recognised that need to support his student with special needs, outlining his intention to plan for that individual.

Wijdan also indicated a willingness to support her students with special needs in the class, showing her love of teaching and her desire for all her students to feel connected:

I love education, I love teaching, and I love my students. I like to give. So, I try my best to keep all students coming along with each other. I can't change anything about
inclusion, but I will ask and read on how to teach and to get them [to move] along with the rest of the students.

For Wijdan, this involved seeking out information on how to best to teach students with special needs within a mainstream class.

Participants’ responses revealed several factors that had a positive influence regarding their intentions to implement inclusive education: religious beliefs, previous experience with a person with disability, and experience with applying differentiated teaching methods in their classrooms.

**Religious Beliefs.** Some participants’ expressed a strong obligation to accept students with special needs in their classrooms based on their religious beliefs. It was particularly evident in comments related to the teachers’ understanding of Islam, which asserts the individual’s responsibilities towards others. This is encapsulated in Saud’s acknowledgement that: “acceptance of the idea of inclusion differs from one person to another but at the end I think we all accept it as Allah (God) who ordered us to accept all kinds of people”. Similarly, Hayfa commented: “We do this to help those students as Allah (God) asked us to do, so we never thought of money and financial things”.

Amal also expressed the view that her intentions and actions around implementing inclusive education were driven above all, by her religious beliefs and personal values as a teacher:

Even the salary is low, but [I continue to teach] because I don’t work for money, I work for the sake of Allah. That is why I accepted to teach them [students with special needs]. What I did for those kids, I found it’s positivity in my own kids.

For these participants, religious convictions played an important part in their intentions towards inclusion in their classrooms.
Previous Experience with Individuals with Special Needs. For some participants, their beliefs about inclusion of students with special needs was influenced by their previous experience with children with special needs. For example, Tahani said:

My old friend had a daughter in the school that I used to teach in. Some of the students used to treat her badly and the teachers didn’t take that much care of her. The teachers didn’t know that she had special needs. No-one told them that the student had special needs.

Tahani’s previous experiences helped her to become more understanding of, and caring towards, the learning and social needs of students with a disability in her classroom. Exposure to her friend’s daughter enabled her to understand the likely negatively impact on students with special needs when they are excluded or ignored by teachers and peers. Tahani also provided insights into her inclusive education intentions and possible actions: “I will keep on looking for information and courses to be able to help them. I would like to have them with the rest of the students, living a normal life as the rest of the society”.

In another example, Areej discussed how having a family member with special needs had affected her attitude towards inclusion and the importance of a teacher being able to recognising the needs of all students and do something about it:

I was affected by my niece when I saw her parents struggling because no school accepted her; even private schools, because some teachers are not aware of how to recognise the student’s needs. This made me recognise what others were going through and that I had to do something about it.

Areej’s experience with a person with disability lead her to revaluate the role of a teacher in supporting students with special needs. Moreover, in a further comment she revealed her actions in supporting one of her students with special needs:
There was a student with a syndrome, I forgot the name, where the student, whenever she memorised something, she forgot it. I remembered my niece's situation and how no-one took care of her. So, I told the teachers that the student is not able to memorise. They refused to listen to me and got upset, complaining that the student is smart, and she always chats with her friends. So, I began to sit with the student and try to help her and simplify things using pictures and asking her about what she saw.

Experiences like Areej’s can help to build a teacher’s confidence in being able to support students with special needs in a mainstream classroom.

**Trying Different Teaching Methods.** Participants’ responses further revealed that for many Saudi general education teachers, moving forward and doing their best at inclusive education meant trying out different teaching methods to support students with different needs. Amal explained:

I always tell teachers to try out what I tried in class. For example, I start an activity for three minutes. Then I repeat it once after three minutes, so everyone catches up with me. Some teachers say that they only teach once with no repetition; they do not care if the student understood or not. I try to explain the lesson in different ways, so everyone receives the same information…I often use the projector and flashcards to simplify the lesson.

Amal went on to describe some of the advice she offers other teachers in how to be inclusive and what strategies work:

Some teachers say that class time is not enough, I say the exact opposite. From my experience, if the teacher knew how to divide her time, she will get things done in one class. The teacher should make her students happy from the beginning of the class, by smiling or by telling them some motivating phrases. Then she should start her lesson.
Amal’s statement makes clear that for some general education teachers in Saudi Arabia, a key aspect of moving forward and doing their best at implementing inclusive education was making good decisions about how best to support the needs of students with special needs. For Amal, this involved experimentation with different teaching methods to facilitate both student engagement and student learning. In turn, she found that this approach was rewarding to her as a teacher and had a positive impact on her attitude towards inclusion of students with special needs in her class.

Importantly, Amal also related what has shaped her positive attitudes towards teaching students with special needs: “I love those kids and consider them as my own kids. Everything I do for them I see it in myself, what I did for the kids, I find its positivity in my own kids”. Amal’s connection with her students and caring made her try to get to know them, which drove her to find different ways to support their learning.

For some participants, moving on and doing the best they could to implement inclusive education involved getting to know their students with special needs, reflecting on their needs, and then expanding their teaching repertoire to accommodate their needs as appropriate. As related by Samar in her two comments below, this included implementing more differentiated learning and peer-support activities and adopting a more student-centred approach to accommodate students with special needs in the classroom:

I taught students with special needs for a whole year…. I gave the students the same skill a couple of times, then I figured out that they experienced learning difficulties. We now give [one student] different paragraphs than her friends. We include her in activities that help her improve the skills that she has learning difficulties in.

She added:

When you get to know them, you will know how to deal with them…. After I give the whole class the directions on the activity, I approach each student with special needs
and explain the directions for them individually. I also gather the rest of the students
and give them some instructions on how to assist their peers with special needs, and it
actually went very well.

For Samar, implementing differentiated teaching and peer-support activities provided a more
individualised learning support for students with special needs; this, in turn, increased her
satisfaction, improved student outcomes, and built her confidence.

**Key Findings across Data Sets**

To triangulate the findings, each of the data sets was analysed individually, and then
connected with the others to identify and draw out the key findings. The theory of planned
behaviour was applied in this process, as it was useful in connecting the teachers’ intentions
and actions regarding the implementation of inclusive education practices in general
education classrooms. The theory of planned behaviour was applied to the three data sets—
survey responses, open-ended survey replies, and individual interview responses—to identify
key findings emerging in each about teachers’ attitude/beliefs, self-efficacy, and expectations
of other’s and how they shape their intentions and actions towards inclusive education. The
process involved identifying similarities and differences in each of the data sets, focusing on
the participants’ attitudes/beliefs, understandings of subjective norms, and perceived
behavioural control related to implementing inclusion. The purpose was to connect the data
sets and apply the TPB to gain insights into the way participants’ overall attitudes/beliefs and
any mitigating factors potentially influenced their intentions and actions in the classroom (see
Figure 22).
Figure 22

Findings across Three Data Sets

Personal Beliefs
Teachers believed inclusion may be a good thing, but it was forced upon them and they were pressured to do it.

Mitigating Factors
Teachers’ beliefs were shaped by religious beliefs and previous experience with individuals with special needs.

Perceived Behavioural Control
Teachers had confidence teaching general education but lacked perceived self-efficacy in their capacity to teach students with special needs.

Subjective norms (perception of expectation of others)
Teachers felt burdened by a number of system demands and unsupported in taking on new demands.

Intentions
Some teachers were trying to make inclusion work, whereas others refused to try.

Actions
Teachers tried different strategies and teaching methods.


Personal Beliefs about Inclusion

A key finding to emerge from triangulation of the data results was that although some participants believed they should help students with special needs and that inclusion is beneficial to these students, they also believed that inclusion was forced on them. The participants felt that inclusion increased the pressured on the teacher in their classroom and increased teachers’ workloads. The participants believed in the benefits of inclusion. The
survey data, however, did reveal some contradictory results. Overall, more participants agreed rather than disagreed that inclusive educational environments are of value for students with special needs. The open-ended responses confirmed this belief and included some details on the benefits of inclusion, including better understanding of students’ needs, greater acceptance of students’ differences by other students and teachers, and an increase in the confidence levels of students with special needs in general education classes. Conversely, more participants agreed than disagreed that students with special needs would be better placed in special institutes rather than mainstream classrooms.

Being forced to implement inclusion caused participants to feel pressured to support students with special needs in their classrooms despite not knowing how to do so. As revealed in the survey results, most participants agreed rather than disagreed that they felt social pressure to favour an inclusive environment, professional pressure to modify student learning activities to accommodate students with special needs, and systemic pressure to do extra work as a teacher. Some participants (28%) then expressed concerns in their responses to the fifth open-ended question about the pressure manifest from expectations on them to meet extra demands beyond their capacity within challenging time constraints. This was explained in the interviews, where participants spoke about the pressure they felt from the school system to implement inclusion and support students with special needs. The pressure they felt was linked to a lack of initial consultation with them to address their concerns, a lack of specific knowledge about inclusion and understanding on how to identify and teach students’ special needs, and constraints regarding the amount of time available and large class sizes.

**Perceived Behaviour Control**

A key element in the TPB considers a person’s intentions and actions towards enacting a particular behaviour; this refers to the person’s perceptions of the ease or difficulty
associated with carrying out the behaviour. The application of the concept of perceived behavioural control in this study aligns with the constructs of confidence, capability, and perceived self-efficacy. The findings indicated a statistical strong relationship between participants’ self-efficacy, beliefs, and intentions and actions. The findings of the Likert scale and open-ended questions revealed that participants generally felt confident in their abilities as general education teachers but lacked confidence and capacity to teach and effectively manage students with special needs in their classes. Specifically, participants rated or described themselves on the self-efficacy scale, Likert scale, and open-ended questions as having confidence as teachers with high self-efficacy in general teaching practices. However, in all data sets participants also emphasised their lack of confidence to teach students with special needs.

Data revealed that participants their perceived lack of capacity and confidence (i.e., perceived behavioural control) was due, at least in part, to feeling overwhelmed by the pressures of teaching and classroom management. For instance, in all data sets, managing students with disruptive behaviours was an area that participants reported they found particularly challenging. It emerged that they felt they did not have the capacity to manage challenging behaviours from students with special needs while simultaneously teaching and managing all students in the classroom.

Another reason cited by participants to explain their perceived low behavioural control to implement inclusion was their belief that they could not feasibly implement inclusion without access to training and teaching and learning resources. The survey results revealed that most participants had not received formal training in inclusive education provision, and very few had attended relevant in-service training. This view was also highlighted in the interviews. The majority of participants (84%) on the Likert scale indicated their belief that extensive training and retraining of mainstream classroom teachers is needed
to support the provision of inclusive education at their school. The results from the open-ended questions in the survey and the interview responses further revealed implications for teacher confidence and self-efficacy (perceived capacities) in implementing inclusive education. Specifically, participants wrote about how they associated “successful” inclusive education provision with “proper training” for teachers, and/or they talked about how lack of access to training and professional development opportunities led them to feel either under-prepared or ill-equipped to implement inclusive education in the classroom. This is reflected in the significant difference found in the confidence and capacity scores of participants who had received training compared to those who had not.

Lastly, participants’ open-ended question and interview responses shed further light on their survey responses, which indicated that their school lacked the necessary adaptive equipment to facilitate full inclusion and that teachers lacked access to suitable teaching resources and equipment. When given the opportunity to make personal comments about inclusive education provision at their school, some participants (30%) related the lack of access to suitable resources with their low levels of confidence and self-efficacy regarding teaching students with special needs (e.g., I'm unconfident and incapable because I have no resources, no training, not the right environment with crowded classes of 35 students in a class). Other participants indicated they had some resources available to them, but emphasised that they did not have the capacity to use these resources.

**Perceptions of Subjective Norms**

Subjective norms refer to beliefs about the acceptance or non-acceptance of a behaviour, particularly the beliefs of people of importance to the person thinking of engaging in the behaviour. In this study, the expectations of “important” others included the Ministry of Education, school administrators, and the school (e.g., I don’t know anything about what happens in the administration. I just do what I am asked to do, they told me that there is lack
of teachers, and you have to teach them, and I did). Participants’ perceptions of these expectations were analysed for their impact on teachers’ inclusive education intentions and actions. Key findings in all data sets revealed that participants felt burdened by the expectations and system demands regarding the provision of inclusive education at their school, and unsupported in taking on the requirements of inclusion.

Results of the quantitative, open-ended questions, and qualitative data analysis showed that most participants believed there was an expectation from policy-makers, school administrators, and subject supervisors that they not only favour an inclusive educational environment but also meet all the demands associated with program implementation. When provided the opportunity to comment further on these demands, participants revealed that they associated system demands with others’ expectations that they should increase their workload to support inclusive education provision, teach large size classes, and manage challenging student behaviour effectively in their classroom. For instance, in the open-ended survey and interview responses, participants commented on how their current struggles and burdens with system demands and expectations (such as accepting an increase in workload and teaching large class sizes) affected their attitude towards supporting students with additional needs. Participants expressed that they already felt burdened by a number of system demands, and that having to include students with special needs in their classrooms without support would only increase this burden.

**Mitigating Factors**

Many participants indicated in open-ended question and interview responses that implementing inclusive education was forced upon them, which diminished their capacity and confidence to implement inclusion effectively (e.g., *We are not prepared to teach her, but at the end no-one cares about what we say or how we feel, and we are forced to take care of her*). Notwithstanding these perceptions and experiences, a key finding to emerge was that
participants’ religious beliefs and previous experience with individuals with disability helped to shape positive attitudes and beliefs about inclusion. Participants expressed that their willingness to support students with special needs in their classrooms was ingrained in them through their religious morals and their understanding of what Islam asserts about their responsibilities to others.

For instance, although they were not asked directly about their religious beliefs and the impact of these on their teaching practices, some participants mentioned in the open-ended question responses that their religious beliefs were a key source of personal support to help them to teach students with special needs. Results from the interview data analysis further established religious beliefs as a potential factor mitigating the impact of system demands, providing additional insights into how participants drew on their religious beliefs and the teachings of Allah around acceptance to provide them with the drive to move forward and try their best at implementing inclusive education.

Participants’ positive attitudes and confidence towards implementing inclusive education in the face of burdensome expectations and system demands were diffused by having previous experience with individuals with special needs. This sentiment was affirmed in comments from participants in the open-ended question and interview responses particularly. For instance, participants commented on how previous experience with individuals with special needs deepened their understanding of the negative impacts of exclusion and provided motivation to be supportive and acquire knowledge of how to address the needs of students with a disability in the classroom.

**Intentions and Actions Towards Implementing Inclusive Education**

The three data sets examined collectively revealed that Saudi general education teachers’ attitudes, perceptions of expectations (subjective norms), and self-efficacy beliefs (perceived behavioural control) in relation to inclusion did not necessarily lead to their
intentions and actions towards implementing inclusive education. Survey results showed that the items on which participants differed the most were in relation to their intentions to welcome students with special needs into mainstream classrooms and work with them, rather than feeling that such students should be in a special institute classroom (Q21; 46% agreed compared to 36% who disagreed), and in their intention to try to teach and manage students with special needs in their classroom (Q19; 45% agreed compared to 32% who disagreed).

These differences in intentions were further clarified in the participants’ open-ended and interview responses. Some participants expressed explicitly the intention to make inclusion work and to support students with special needs in their classrooms. When faced with inclusion, they relied on personal initiative and made efforts to look for information. In contrast, other participants either could not or would not try to include or teach students with special needs, with some even expressing their intention to leave the profession. Participants’ negative intentions towards implementing inclusive education in these instances were affected by their negative perceptions and their experiences of pressure to implement inclusion.

As shown in Figure 22 above, the final stage in the TPB framework, the assumed outcome of a person’s behavioural intentions, is action (Ajzen, 1991). Likert scale responses, open-ended questions, and interview responses showed that most participants believed that implementing inclusive education techniques to support students with special needs required extra work. These participants generally expressed positive perceptions of their actions to implement inclusive education. That is, participants commented positively on how they tried different strategies and methods to support students with special needs to achieve the desired learning and social outcomes. They implemented differentiated teaching and peer-support activities to provide more student-centred and individualised learning support to students with special needs in the classroom.
Chapter Summary

This chapter reported the results of the qualitative (interview) data analysis. It concludes with a triangulation of all three data sets. The TPB was applied and expanded upon to interpret the results of the study. The triangulation of the data sets revealed TPB areas attitudes/beliefs, subjective norms, and perceived behavioural and expanded to include a new area —Mitigating Factors — related to influencing teachers’ intentions towards implementing inclusion. Although teachers’ believed inclusion maybe beneficial for students with special needs, they believed that inclusion was being imposed upon them. This also impacted their self-efficacy and capacity to teach students with special needs in mainstream classrooms. Moreover, teachers often felt overwhelmed by the demands of teaching students with special needs in their classroom with already-large class sizes, and requirements to managing challenging behaviour. Inclusion was viewed in many cases as an extra workload within severe time constraints. These beliefs of being forced and feelings of burden with the demands also impacted their self-efficacy and capacity to teach students with special needs in mainstream classrooms.

This study did find that some participants were attempting inclusion and moving forward in implementing inclusive practices in their classroom. Teachers intentions on making the best of the situation was influenced by their religious beliefs, previous experience with individuals with special needs, and experience with success in applying different teaching methods. The following chapter provides a discussion of the main findings of this study and their relevance to the three research questions.
Chapter 6: Discussion

Saudi Arabia has signalled its commitment to the inclusion of students with special needs by signing the Salamanca Statement (Battal, 2016). Integral to the provision of inclusive education in Saudi Arabia is the role of general education teachers. However, general mainstream teachers have struggled to implement inclusive education in their classrooms (e.g., Alahmadi, 2009; Alhudaithi, 2015; Alnahdi et al., 2019; Aseery, 2016). The current study explored Saudi teachers’ attitudes and intentions toward the inclusion of students with special needs in mainstream classrooms. The study used a mixed-methods approach and was informed by the theory of planned behaviour (TBP) (Ajzen, 1991). Guiding the analysis were three research questions:

1. What are Saudi teachers’ attitudes/beliefs, understandings of expectations, and perceived self-efficacy in relation to inclusion of students with special needs in their classrooms?
2. What are the main factors influencing Saudi teachers’ attitudes/beliefs, understandings of expectations, and perceived self-efficacy in relation to inclusion of students with special needs in their classrooms?
3. How do Saudi teachers’ attitudes/beliefs, understandings of expectations, and perceived self-efficacy interrelate and influence their intentions and actions towards implementing inclusive education?

Data obtained in surveys facilitated an overview of the participating teachers’ perceptions of their attitudes towards inclusion, confidence to implement inclusion, and intentions and attitudes towards implementing inclusive education. Both Likert and open-ended questions were included to explore Saudi teachers’ attitudes/beliefs, their confidence/self-efficacy, the expectations of others, and their intentions and actions towards inclusion and inclusive practice. This was followed by interviews to gain a more nuanced
understanding of the how teachers’ attitudes/beliefs, confidence/self-efficacy, expectations of others, and other related factors interrelate and influence their intentions and actions towards implementing inclusive education. Lastly, data was analysed across all three data sets to identify how key findings aligned to the Theory of Planned Behaviour. The following sections provide a detailed discussion of the key findings and their significance in response to the research questions.

**Research Question 1**

The first research question explored Saudi teachers' attitudes/beliefs, understandings of expectations, and perceived self-efficacy in relation to inclusion of students with special needs in their classrooms.

**Beliefs and Attitudes**

It was important for the current study to gain a more nuanced understanding of the different attitudes and beliefs Saudi teachers hold about inclusion of students with special needs, and how these influenced their intentions and actions to teach these students in their classrooms. Participants indicated they believed that inclusion may be beneficial for students with special needs, but felt that it was forced upon them and that they were pressured to do it. Participants generally believed that inclusion in mainstream classrooms had potential benefits for their students with special needs. The benefits included increased acceptance of disabilities by others and enhanced confidence as learners of students with special needs. Both Saudi and international researchers have found that successful implementation of inclusive education in mainstream classrooms is heavily dependent upon the attitudes of mainstream teachers towards inclusion and their beliefs about its benefits for students with special needs in particular (e.g., Alasim & Paul, 2019; Al Jaffal, 2019; Alkhattabi et al., 2020; Hwang & Evans, 2011; Mishra et al., 2018).
Previous studies in both the international context (Hwang & Evans, 2011; Mag et al., 2017) and in Saudi Arabia (Alamri, 2014; Alasim & Paul, 2019; Al-Saleh, 2019) have similarly reported that teachers generally have positive attitudes towards inclusion. For example, Hwang and Evans (2011) found that Korean primary school teachers reported positive beliefs about the social benefits of inclusion, indicating that inclusion provided students with special needs with positive role models for learning and interaction. In another study (Mag et al., 2017), teachers cited benefits such as access to a wider range of learning resources, participation in shared learning opportunities, increased opportunities for friendships, and better readiness for inclusion beyond the school environment.

The present study provided fresh insights into the seeming lack of alignment between Saudi general education teachers’ beliefs about the benefits of inclusion and their attitudes towards inclusive education provision at their schools. Findings indicated that most teachers felt that they were not consulted regarding their opinions about how to go about the process and practicalities of including students with special needs in their classrooms. They believed research in previous studies had reported similar findings, revealing that Saudi general education teachers believe that inclusion offers educational, communication, and social benefits to students with special needs (e.g., Alamri, 2014; Alasim & Paul, 2019; Al-Saleh, 2019). Despite these benefits, teachers in other studies reported negative attitudes and difficulty implementing inclusive practice, as they believed that they lacked support to access the type of training needed to develop specific knowledge to implement inclusive practice (e.g., Alamri, 2014; Alquraini, 2012; Alzemaia, 2019; Kosmerl, 2011; Odongo & Davidson, 2016).

The findings of the current study offer new insight into Saudi general education teachers’ attitudes towards inclusion, suggesting that negative attitudes held by mainstream teachers may be associated with their belief that they have limited decision-making input and
control over the process. Although previous Saudi studies have not examined this aspect of teacher’s attitudes towards inclusion of students with special needs, a study of Kenyan teachers (Soodmand et al., 2018) found that they wanted to be involved in the decision-making process in their classrooms, including deciding how to deliver the curriculum in inclusive classrooms and what limits to the number of students in class there should be.

**Beliefs about Expectations of Others**

The key finding regarding participants’ beliefs about the expectations of others (i.e., the Ministry of Education and school administrators) was that they believed the school system was placing pressure on them to implement inclusion of students with special needs without taking into consideration the teachers’ opinions. This is a finding of some interest, given that it involved teachers in decision-making processes, to promote their commitment and willingness to engage in the implementation of established or new learning programs (Somech, 2010). However, not only did Saudi teachers report feeling pressured by the system, they also related that they had not had a voice in decisions made about how students would be included in their school or classes. As a result, the teachers felt burdened by the demands put on them and held more negative attitudes about inclusion of students with special needs.

The belief expressed by Saudi general education teachers that they were being forced to accept inclusion, and the subsequent negative attitude towards inclusion more broadly that this generated, appeared to align with their attitude that inclusion of students with special needs in mainstream classes was not feasible. “Feasible” in this context refers to the teachers’ perception that performing certain teaching practices in the classroom (e.g., implementing inclusive education) could be more achievable with other demands on their time and knowledge. Considering teachers’ perceptions of the feasibility of inclusive education provision is important. Although most teachers in this study believed students with special
needs had a right to be included and supported in mainstream classrooms, some believed it was currently not feasible in their classrooms because felt they lacked the requisite knowledge and skills to teach students with special needs. This left them feeling ill-equipped to implement inclusion effectively, particularly because they also believed they were not provided with adequate teaching and learning resources to teach students with special needs in their classroom.

This study found that participants believed that large class sizes were perceived as significant barriers to implementing inclusive education in their schools. Such demands and expectations contributed to the perceptions of Saudi general education teachers in the current study that inclusive education was unfeasible in their schools. There is compelling research evidence as it shows that having large class sizes can increase difficulties for teachers to cater to the learning needs of all students in general, and to the learning needs of students with special needs more particularly (Galaterou & Antoniou, 2017). Indeed, studies by Alamri (2014), and Alzemaia (2019) in Saudi Arabia, and Wang et al. (2015) in China, each found that teachers reported that the expectation to teach large numbers of students in inclusive classrooms made it more challenging for them to implement the learning program and to manage the classroom effectively.

**Confidence and Self-Efficacy**

In the attempt to provide fresh insights into Saudi general education teachers’ attitudes and intentions towards the inclusion of students with special needs in regular classes, focus was given in the current study to their confidence/perceived self-efficacy to implement inclusive education effectively. The rationale for including this area of focus is twofold. First, perceived self-efficacy provides critical insights into a person’s beliefs in her or his capabilities to easily organise and execute actions required to produce desired outcomes (Bandura, 1997). Second, teachers’ confidence/perceived self-efficacy is used as a
proxy in applying the perceived behavioural control component of the TPB to understanding teachers’ inclusive education intentions and actions.

The current study found that Saudi general education teachers were confident in their general teaching skills and practices, but demonstrated less confidence or perceived self-efficacy to use these skills effectively to meet the learning needs of students with special needs in their classrooms. Previous studies have reported a similar lack of confidence among Saudi teachers towards implementing inclusion effectively in their classrooms. For example, Alshahrani (2014) reported Saudi teachers’ lack of confidence in their abilities to teach students who are hard of hearing in inclusive classroom, while Al-Assaf (2017) reported higher levels of perceived self-efficacy to achieve inclusive education outcomes regarding student learning and engagement among special education teachers compared to general education teachers.

Participants perceived that their attitudes and self-efficacy was directly influenced by their knowledge of disabilities and inclusive teaching practices as well as the resources available to them. Many of the participants in the current study felt that they lacked capacity to effectively engage and motivate students with special needs, assist families to improve the learning outcomes of their child with special needs, implement differentiated learning tasks to cater to students with special needs, and manage challenging behaviours in the inclusive classroom.

Previous researchers have similarly reported an association between teachers’ knowledge of different types and severities of disabilities and their self-efficacy towards implementing inclusive classes for students with disabilities. Casebolt and Hodge (2010) found that the self-efficacy of physical education teachers in devising appropriate learning activities and engaging students with special needs was contingent on their knowledge of student disability types and severity and suitable teaching strategies. Previous researchers
(Alshehri, 2018) have also reported that general education teachers in Saudi Arabia lack specific knowledge of different student disabilities. Thus, it is not surprising that the teachers in the current study related poor confidence/self-efficacy in implementing inclusive practice with lack of knowledge about disability and inclusive teaching strategies.

As Bay (2020) points out, teachers’ awareness of the sufficiency of their capabilities for use in the teaching and learning processes is central to their self-efficacy belief. Such capabilities include those regarding classroom management, such as organising the classroom environment to engage students in learning tasks, promote participative learning, and responding appropriately to students’ diverse behaviours (Bay, 2020). In the current study, participants perceived that their low confidence and self-efficacy were related to feeling overwhelmed at having to manage challenging behaviours of students with special needs while simultaneously teaching and managing all students in the classroom. This finding aligns with those reported by Alnahdi (2020). Although he found that Saudi primary school teachers reported they were generally confident in their ability to teach in inclusive classrooms, he also found that teachers reported lowest self-efficacy/confidence levels in dealing with students with special needs who had behaviour problems or who were physically aggressive. Similarly, Sharma et al (2012) found that teachers who do demonstrate higher levels of self-efficacy to implement inclusive practice are typically more confident in their capabilities to identify and manage disruptive student behaviours within inclusive settings.

**Research Question 2**

The second research question explored factors influencing Saudi teachers’ attitudes/beliefs, understandings of expectations, and perceived self-efficacy in relation to inclusion of students with special needs in their classrooms? Findings revealed both factors that influenced teacher’s beliefs, self-efficacy, intentions, and actions as well as those that appeared to mitigate the impact of other factors.
Influencing Factors

The current study found that the prevailing factor influencing Saudi teachers’ attitudes/beliefs, confidence, and self-efficacy was their exposure to training. This finding aligns with those of previous Saudi studies. Al-Ahmadi (2009) conducted a mixed-methods study of 251 Saudi general education and special education teachers and found that both teacher cohorts reported receiving either no training or inadequate training on teaching students with a disability in an inclusive classroom. Moreover, participants associated lack of training with a lack of confidence and a negative attitude towards inclusion.

The success of inclusive education is dependent on effective teaching (Rakap et al., 2016), and structured training can help build teachers’ knowledge and confidence to implement inclusive education practices (Nolan & Molla, 2017). In the international domain, Yeo et al. (2016) found study of 202 Singaporean teachers that being afforded opportunities for new learning and training in identifying special needs, was one of the main factors associated with a more positive attitude towards inclusion. Similarly, Forlin et al. (2014) found training appeared to be a significant influence on teachers’ self-efficacy.

Similar to the relationship between access to training (pre-service and in-service) and teacher attitudes, this study found a correlation between teachers’ lack of access to suitable resources in schools and their indicating a generally negative attitude towards inclusion. This finding is not that surprising, given the importance teachers in general typically place on having access to suitable teaching and learning resources to facilitate effective teaching (Hofman et al., 2014). Another key resource could be giving teachers access to an appropriately qualified and experienced special education teacher as a source of assistance and advice for teaching and managing students with special needs.

The current study has contributed to the existing body of knowledge on the support of students with special needs within Saudi Arabian mainstream classrooms. By specifically
focusing on the Saudi Arabian context, a more nuanced understanding of Saudi teachers’ beliefs regarding training needs became evident. The study found that Saudi teachers were quite negative towards inclusion, driven by a lack of experience or training in special education. The implementation of inclusion policy in Saudi Arabian mainstream classrooms was not generally connected to any formal professional learning opportunities, nor was there any assessment at a school level, of prior training or experience with inclusion of students with special needs in general education. This not only resulted in the teachers having negative beliefs but a lowering of the teachers’ confidence. This became evident in the interviews when the teachers talked about inclusion and inclusive practice in their classrooms. This study arguably adds weight to the body of evidence in Saudi Arabian suggesting the crucial role that training could play in inclusive education policy and practice, particularly in shaping teachers' attitudes, beliefs, intentions, and confidence towards inclusion in their classrooms.

**Mitigating Factors**

Religion and previous experience emerged as the two factors that strongly mitigated the negativity in teachers’ attitudes/beliefs and self-efficacy to implement inclusive practices. Specifically, this study found that for some teachers religious beliefs and their previous experience with a family member or individual with special needs led to them report more-positive attitudes and intentions towards inclusive practice.

As previously discussed, most teachers in the current study indicated generally negative attitudes/beliefs towards the inclusion of students with special needs. Nonetheless, it emerged that for some of these teachers, their religious values and understandings of religious teachings appeared to mitigate, to some extent, the impact of their negative beliefs about the demands of the system. Some teachers related their belief that accepting and catering for students with special needs in their classrooms was part of their moral religious beliefs, which as practicing Muslims required them to help others.
This finding reflects Alquraini’s (2012) suggestion that Saudi teachers’ religious beliefs might play an important role in influencing their attitudes towards inclusive education. Alzemaia (2019) found that despite reporting strong moral and religious beliefs, Saudi general and special education teachers reported generally negative attitudes towards inclusion. The difference in these findings may be explained by the suggestion that even when they share the same religious belief, it is not unusual for different people to interpret religious texts and their teachings according to their own subjectivity and in a way that has most meaning to them (Gaad, 2011). The findings of the current study add to the evidence base to suggest that how Saudi teachers internalise religious values and beliefs, which means assimilating these values and beliefs into the self, can shape not only their perceptions of student disabilities but also their intentions and sense of obligation or duty as a teacher to practice inclusion in the classroom. These are important initial insights that could be built upon to further promote inclusive practices in schools, particularly in Saudi Arabia, where Islamic values and teachings are an important part of everyday life, including government systems in the country.

It emerged in the current study that Saudi general education teachers who reported having previous experience with a person with a disability (e.g., family members or friend) considered this experience to have a potentially positive influence on their attitudes/beliefs, understanding of expectations, and confidence/perceived self-efficacy related to implementing inclusive education. A person’s attitudes and confidence levels are formed in part from their past and present experiences (Jin, 2014). Based on this, a teachers’ experiences with a person with disability can have a significant influence on both their understanding of inclusion as a concept, and on their behaviour regarding social inclusion (Hall, 2014; Zheng et al., 2016).
Much of the research in both the international and Saudi Arabian contexts has tended to focus on the relationship between teachers’ attitudes towards inclusion and their previous experience teaching students with special needs. However, some researchers have explored the relationship between teachers’ attitudes and their experience of a family member or friend with disability. Alquraini (2012) and Dias and Cadime (2016) each found that teachers’ previous experience with a person with a disability had a positive influence on their attitudes and confidence towards inclusive practice. However, Alasim and Paul (2019) and Aseery (2016) found that having a family member with special needs had no influence on teachers’ attitudes and confidence towards the inclusion of students with special needs in regular classes.

In the current study, teachers’ previous experience with individuals with special needs deepened their understanding of the negative impacts of exclusion and showed positive attitudes towards supporting students with special needs and positive intentions to acquire knowledge of how to address the needs of students with a disability in the classroom. Accessing new insights into the way teachers’ previous experiences with a family member or friend with a disability can mitigate their attitudes and intentions. This is important for a successful inclusive implementation. In particular, research is needed to examine how facilitating teachers’ engagement with a person with disability outside the classroom prior to implementing inclusion may support better inclusive education teaching and learning outcomes for teachers and students respectively.

**Research Question 3**

A key contribution of the current study is its attempt to explain how Saudi teachers’ attitudes/beliefs, understandings of expectations, and perceived self-efficacy related to inclusion interrelate and influence their intentions and actions towards enacting inclusive education (RQ3). Within the TPB, intention is defined as an individual’s self-prediction
regarding the likelihood of performing a certain action (Ajzen & Fishbein, 1980). Intention is considered a precursor to action, based on the key assumption that people have deliberate control over their behaviours (Ajzen, 1991). The transition from a behavioural intention to enacting a behaviour is ultimately shaped by their attitudes towards the behaviour, perceived behavioural control, and understanding of subjective norms associated with the behaviour (Ajzen, 1991). In the context of inclusive education, this reflects Sharma et al.’s (2018) assertion that teachers’ intentions toward implementing inclusion are typically driven by their attitudes toward inclusion and their perceived self-efficacy to enact inclusive practices effectively in the classroom.

Overall, the participants expressed primary intentions towards implementing inclusive education in their classrooms. Some teachers expressed a determination to move forward to meet their responsibilities to implement inclusion. Others expressed a desire or refusal to try to support students with special needs. The emergence of these intentions can arguably be traced back to the main factors found to influence their attitudes towards inclusion and perceived confidence and capabilities to implement inclusive education effectively.

Findings in the current study revealed that some teachers enacted positive inclusive practices, with the intent to at least try their best, to support and teach students with special needs in the classroom. Although teachers made relatively brief comments about their inclusive teaching practices, some who expressed positive intentions towards implementing inclusive education discussed implementing inclusion practices in their classrooms. Specifically, they described how they sought to include students with special needs by experimenting with different teaching methods, modifying the curricula to support their learning needs, and making the personal effort to search the internet for information on inclusive education for students with special needs. This is consistent with findings from previous research (e.g., San Martin et al., 2021; Sharma et al., 2018) showing teachers’
enacted actions to adapt the curriculum, assist struggling students, and work with other professionals and parents to address the needs of the students with special needs in their classes. This is an important addition to the research field, as it offers fresh insights into how some Saudi teachers are actually enacting inclusion of students with special needs in their classrooms.

The literature on human behaviour suggests that previous experience of a particular behaviour or action can have a paradoxical effect on behavioural intention. As Sheeran et al. (2017) explain, on the one hand, previous experience may weaken behavioural intention due to the impact of dissatisfying outcomes or results. On the other hand, previous experience may strengthen behavioural intention due to an anticipated positive or satisfying outcome. In some teachers in the current study, previous experience with a person with a disability was also associated with expressed positive intentions to include students with special needs in their classrooms. The teachers explained during interviews that having previous experience with relatives or friends with special needs made them realise how difficult the circumstances must be at times for students with disabilities and their families and how much importance they placed on inclusion. This previous experience had a positive impact on teachers’ intentions to implement inclusive practice in their classrooms. It may be that Saudi general education teachers’ previous contact and experiences with a person with disability afforded them a degree of practical experience in how to communicate, interact, and/or engage with a person with a disability. As a result, they developed more-positive attitudes towards engaging in such interactions and more confidence to attempt to enact inclusion in the classroom.

In the current study, some teachers’ unfavourable intentions towards enacting inclusive education appeared to be linked most strongly to a perceived lack of behavioural control. That is, the negative intentions of some teachers were typically associated with the expressed view that the pressures put on them by the system-based demands regarding
implementing inclusion (i.e., large class sizes, increased workload, and challenges in managing students in the classroom) diminished their perceptions of their capabilities to implement inclusion easily and effectively. Similarly, Dev and Kumar’s (2015) study found that the intentions (willingness) of teachers in Abu Dhabi and Dubai to include students with learning disabilities in their classrooms was significantly related to their beliefs about the supports provided by the school to manage student behaviours. Previous research by Yan and Sin (2014) also reported the influence of social pressure from important others (i.e., school principals) on teachers’ intentions to implement inclusive education.

It is also interesting to note that this study reported a correlation that points to the potential interrelation between an individual’s perceived behavioural control and their attitudes/beliefs, as suggested in the TPB. Teachers’ lack of access to formal and structured training in how to implement inclusive education practices, both at the pre-service and in-service levels, was found in this study to be a factor influencing Saudi general education teachers diminished perceived behavioural control to implement inclusion effectively in their classrooms. This was particularly related to low self-efficacy and perceived capabilities regarding catering adequately to the learning needs of students with special needs and managing challenging students’ behaviours. The subsequent correlation between teachers’ lower perceived self-efficacy and more-negative attitudes towards inclusion arguably implies that a teacher’s perceived self-efficacy to implement inclusive education practices to achieve specific teacher- and student-related performance goals can predict both their attitudes and their behaviours towards practicing inclusive education. Al-Assaf (2017) and Alzemaia (2019) also reported that teachers’ higher perceived self-efficacy was associated with more-positive attitudes towards inclusion more generally. These findings are also explained to some extent by Bandura’s self-efficacy theory. Bandura (1997) identified the affective or emotional state of the individual as an important influence on their perceived self-efficacy.
The implication of this for Saudi general education teachers implementing inclusive education is that their attitude and perceived self-efficacy will influence on each other during classroom situations where inclusive education capabilities are being demonstrated.

The TPB posits that behavioural intention (as influenced by attitude towards the behaviour, understanding of subjective norms, and perceived behavioural controls) can predict enactment (or not) of the behaviour (Ajzen, 1991). Generally speaking, a favourable attitude, positive perceptions of subjective norms, and an acceptable level of perceived behaviour control will likely combine to manifest as the intention to perform the behaviour (Ajzen, 1991). This predictive relation between intention and action, as explained in the TPB, is reflected in the current study, specifically related to teachers’ inclusive education practices. For some teachers, their religious beliefs contributed to more-favourable behavioural intention to “try their best” towards implementing inclusion, and subsequently to enact inclusive behaviours, such as to welcome students with special needs into their classrooms, and to implement differentiated learning tasks and make adaptations to the curriculum.

Part of the strength of this study can be linked to the mixed-methods approach that was used. While the collection and analysis of survey data provided the opportunity to “quantify” (i.e., determine their level of agreement with) aspects of teachers’ attitudes towards inclusion and their intentions to implement inclusive education, the collection and analysis of qualitative data provided the opportunity to “explain” the underlying reasons for their attitudes and intentions. In particular, it demonstrated how religious beliefs and previous experience of interacting with a person with a disability influenced their attitudes/beliefs about inclusion and perceived self-efficacy towards implementing inclusion, ultimately leading to the development of more-positive intentions towards implementing inclusion in the classroom to the best of their ability.
Contribution to Theory

The TPB considers how individuals’ attitudes, perceptions of subjective norms (the expectations of others), and perceived behavioural control (confidence/self-efficacy and capability to enact a behaviour easily and effectively) influence their intentions to engage in a behaviour (Ajzen, 1991). Although the TPB has been applied as a theoretical framework in several studies in the field of inclusive education provision (e.g., Ahmmed et al., 2014; Batsiou et al., 2008; Kuyini & Desai, 2007), these studies have primarily been quantitative (survey-based) in design. Thus, they did not provide an understanding of how attitudes, perceptions of subjective norms (the expectations of others), and perceived behavioural control (confidence/self-efficacy and capability to enact a behaviour easily and effectively) interrelate and influence teachers’ intentions and actions towards implementing inclusive education. The current study is one of the few studies to use a mixed-method design to explore the use of the TPB in examining teachers’ use of inclusive practice, and the only one to do so in the context of Saudi Arabia. It combines objective measures of Saudi teachers’ attitudes, perceived self-efficacy, and perceptions of others’ expectations with teachers’ subjective interpretations and explanations of these three components. As a result, it provides new insights into the prevailing drivers of teachers’ attitudes and intentions towards implementing inclusive education across all three levels of school education in Saudi Arabia.

In addition, the current study sheds new light on the importance of subjective norms in shaping attitudes, perceptions of behavioural control, and intentions towards inclusive practice. The influence of teachers’ perceptions of subjective norms on their intentions and actions has been canvassed in previous studies. For example, Ahmmed et al. (2014) found that teachers’ perceptions of these subjective norms positively affected their attitudes, efficacy beliefs, and intentions towards inclusive education. Conversely, Kuyini and Desai
(2007) found that teachers’ perceptions of the subjective norms expressed by school principals did not influence their attitudes and behaviours toward implementing inclusion.

These and other studies that have applied the TPB reflect the common conceptualisation of subjective norms as the expectations of important others, including people of influence or authority. In the current study, participants related a systems perspective of subjective norms, indicating how system-related (rather than explicitly person-related) subjective norms and expectations associated with the enactment of a behaviour may help to shape an individual’s attitude and perceived behavioural control towards a behaviour. This novice and new application of the TPB to explore the influence of systemic-related subjective norms on an individual’s attitude and confidence towards enacting a behaviour provides a new way to consider how behavioural intentions are formed.

Furthermore, the TPB posits explicitly that a person’s beliefs influence their actions (Doll & Ajzen, 1992), but it does not consider what shapes a person’s beliefs. Therefore, a unique contribution of this study is insight into factors that may shape teacher’s attitudes and beliefs or that may sit with the individual themselves, such as religion or previous experience. In this way, the current study arguably contributes to the understanding and application of the TPB in research in two important ways. First, it suggests the likely research limitations of focusing on components of the theory in isolation (e.g., a person’s attitudes or perceived behavioural control or perceptions of subjective norms) to explain their intentions and actions. To achieve a deeper understanding of a person’s behavioural intentions, it is necessary to examine the interrelationships among all three components for their influence on each other. Second, although the TPB states the connections and bi-directional influences among its three components (attitudes, confidence and capability, expectations of others) and behavioural intentions and actions (Ajzen, 1991; Doll & Ajzen, 1992), the findings of this study suggest that consideration should be given to individuals’ previous experiences and
internal dispositions for their role in influencing personal attitudes, behavioural control perceptions, and understanding of subjective norms.

**Implications for Practice**

The findings reported in the current study have some important implications for teacher practice and Saudi implementation of inclusive education. The findings suggest that access to structured training in how to teach students with special needs in an inclusive classroom setting is vital to the development of positive teacher attitudes and self-efficacy to implement inclusive practice. This highlights the need for teacher training institutions in Saudi Arabia to design and implement programs within their teacher education courses that integrate subjects in inclusive education provision, as most participants in this study indicated that they had not had access to such training. Integrating subjects in inclusive education provision into teacher training courses (pre-service courses) in higher-education institutions will help to provide Saudi teachers with a foundation of knowledge and skills to better meet the different learning requirements of all students in their classes.

Specifically, teachers articulated the need for relevant knowledge and training regarding how to identify students with special needs in their classrooms. They also requested training on how to identify and teach students with special needs using different methods. This suggests that having an updated and fuller understanding of the type of in-service training and professional development opportunities Saudi general education teachers receive in relation to what they actually need can improve their attitudes towards and beliefs about inclusion and its benefits to students with special needs.

In addition, the Saudi Ministry of Education could work in collaboration with school administrators and staff to institute professional-development initiatives and programs that support currently practicing teachers to acquire and/or further develop the knowledge and skills they feel they need to implement inclusive education policy. These in-service training
and professional-development initiatives should not just be one-off programs, but rather be ongoing, located within the schools, and be easy for teachers to attend. Having reachable ongoing programs available for teachers will empower and support them as well as develop their skills. It may be worth considering that the in-service training programs help teachers to identify the learning needs of students with disability—and the teaching strategies that best cater to their needs, but are still feasible within demanding classrooms.

The finding in this study of a positive effect of previous experience with a person with a disability on intentions towards implementing inclusion reflects the position posited in behavioural theory that increased opportunities to experience a behaviour may be associated with a stronger intention to enact that behaviour (Sheeran et al., 2017). Thus, providing Saudi general education teachers more opportunities to form connections with students with special needs before implementing inclusive education in their classrooms might help them to develop more-positive intentions towards enacting inclusive practices. This suggests the potential benefits of initiatives that include increasing teachers’ exposure to students with special needs in general education classrooms. Studies by Dymond and Bentz (2006) and Hourigan (2007) have respectively reported the benefits to teacher preparation of watching videos and observing the implementation of strategies for teaching students with disabilities in general education settings. These could be incorporated in regular education settings to strengthen teachers’ attitudes and confidence.

The school education system in Saudi Arabia is highly centralised, with the top-down approach to education provision meaning the Ministry of Education has the final say in all decisions related to education service delivery (Alsaleh, 2019). Based on this, it is vital that any proposed changes to teacher training programs (pre-service) and professional-development initiatives (in-service) in schools be designed with the involvement of teachers
and the consideration of their opinions. This involvement may possibly influence teachers’
attitudes, perceived self-efficacy, and intentions towards inclusion.

This study arguably offers a new perspective on the potential benefits to inclusive
education provision in Saudi Arabia from accessing teachers’ beliefs and opinions on
inclusion and involving them in decision-making on implementing inclusion programs.
Adopting a participatory approach will potentially support teachers in identifying and
discussing the challenges regarding implementing inclusion that they may face in their
classrooms (Sindelar et al., 2006). In addition, accessing and acknowledging teachers' opinions will potentially result in their developing more-positive attitudes towards inclusive of students with special needs in their classroom (Agbenyega, 2007).

Furthermore, the findings of this study indicate the benefits of developing, and ensuring that teachers have access to, a range of suitable teaching and learning resources to support their capacity to successfully implement inclusive education. The contents of these resources could be developed with teachers’ input and made accessible with the explicit intention to bolster teachers’ understanding of inclusion and their confidence to implement inclusive teaching practices. Such resources could identify and outline recognised strategies for modifying and adapting current learning programs to best meet the learning requirements of students with special needs and for managing challenging students’ behaviours in inclusive classrooms (Aldabas, 2019). In addition, resources combined with in-service training could detail evidence-based best practices that teachers can use for managing challenging students’ behaviours in inclusive classrooms (Aldabas, 2019).

Lastly, as some Saudi teachers indicated that their religious beliefs had a strong impact on their attitudes, confidence, and intentions, it is recommended that inclusive education policy-makers and school administrators in Saudi Arabia seek to integrate Islamic values and teachings explicitly into the rationales for policy recommendations and the
contents of in-service professional development programs. This may help to activate Saudi general education teachers’ moral commitment towards the inclusion of students with special needs in their classes and build confidence in their capabilities to implement inclusive education practices.

**Implications for Further Research**

There are several implications for future research based on the current findings of this study. Previous international research has been undertaken to explain the interrelationships among teachers’ attitudes towards inclusion, confidence to teach in inclusive settings, and perceptions of external expectations (e.g., Ahmmed et al., 2014; MacFarlane & Woolfson, 2013; Yan & Sin, 2014). However, these previous studies measured the components of the TPB and did not provide an understanding of how these components influence each other, the influence of different factors, and the relationships of the TPB components as they interconnect and influence teachers’ intentions towards inclusive practices. The current study is one of the first to use the theory of planned behaviour to examine the interrelationships among general education teachers’ attitudes/beliefs about inclusion, systemic expectations, self-efficacy and their intentions and actions towards students with disability in their classrooms. Although there have been previous studies that have used the theory of planned behaviour, these studies (e.g., Ahmmed et al., 2014; MacFarlane & Woolfson, 2013; Sharma & Jacobs, 2016; Yan & Sin, 2014) solely explored teacher’s beliefs through surveys. In contrast, the mixed methods approach used in the current study facilitated the exploration of and provided greater insights into the factors that influenced Saudi teachers’ attitudes and subsequent actions related to supporting students with disability in their classroom. However, further research is needed to examine whether Saudi teachers’ intentions and reported actions are actually demonstrated in their daily practice.
Findings in this study also revealed the challenges participants experienced in trying to implement inclusion effectively (and feasibly) in their classrooms. Further research is needed to investigate the types of resources general education teachers require, particularly to support students with different needs. These findings could potentially inform inclusive education policy development as well as inclusive education provision in Saudi school. This study also demonstrated an expanded application of the TPB in research on inclusive education provision to reveal that teachers’ belief systems (i.e., religion) and previous experiences with a person with disability can demonstrate an important influence on their attitudes, confidence, and understanding of others’ expectations related to inclusive education. Future research applying the TPB is needed to understand how these and other factors work together to shape teachers’ implementation of inclusive education policy.

The current study pointed to the limited number of mixed-methods approach studies in Saudi Arabia particularly those that explore the relationship between general education teachers’ attitudes and intentions towards implementing inclusive education. Future research is needed that combines qualitative and quantitative research paradigms to further investigate these relationships so as to contribute to a rich and comprehensive picture of Saudi teachers’ attitudes towards inclusion and confidence in, implementing inclusive teaching practices in the classroom.

Limitations of the Study

Notwithstanding the insights provided in the current study, some limitations should be noted. The findings in this study relied on self-reported data collected from participants in surveys and interviews. This may be a limitation because people are influenced either consciously or unconsciously by their own experiences, which may cause bias (McDonald, 2008). However, given the lack of research on Saudi teacher’s perceptions towards inclusion, the aim of the study was to offer initial insights into factors that influenced their intentions.
and actions to implement inclusive policy, gathering personal perceptions through self-reported data was necessary to gaining these insights. Future researchers may expand on these findings by conducting observations on teachers in the classroom, which may provide more-detailed knowledge of how teachers implement inclusive strategies in their classrooms.

The current study included general education teachers from three large cities in Saudi Arabia and did not involve teachers from other cities and rural areas in Saudi Arabia. This may limit the generalisability of the findings. However, since the researcher was able to collect data from teachers in three major cities different regional attitudes were captured in the data collection. Future research may include large cities and rural areas in Saudi Arabia to compare the results.

Another noted limitation is that the study only included general education teachers. Special education teachers may have related, but different, perspectives on inclusive education. Although they may share different perspectives, focusing specifically on general education teachers facilitated a deeper exploration of their perceptions and intentions in the mainstream class. In the future, researchers can explore whether there is any connection between special education teachers’ beliefs and practices and the practices implemented by mainstream teachers in general education classrooms. Moreover, data was not gathered on the type of support provided to teachers in mainstream schools or the number of teachers available to facilitate inclusive education provision. However, the comprehensive nature of the data collection enabled a more focused investigation of general education teachers’ perceptions of inclusive education and what influences their attitudes and intentions towards implementing inclusive teaching practices. Another limitation may derive from the need to translate interview data from Arabic to English as some potential nuances expressed in Arabic may not be easily transferred to English. To minimise this effect, the researcher who is fluent in both English and Arabic translated the data herself and was able to expand on and
ask the participants in the interviews about topics that would help in the translation to English. Another limitation was the translation of the survey instrument and the interview questions from English to Arabic. To minimise any effect, the researcher translated the survey instrument and the interview questions herself and followed a back translation advocated by Beaton et al. (2000) to ensure that the survey items did not lose the original meaning during the translation process. To overcome any conflicts with the translation it was verified by bilingual experts. However, these concerns of the conflicts arising from the translation would not be different from the survey and interview questions that are also subject to misunderstanding and raise the possibility of people interpreting them in varied way (Ryan et al., 2012; van Nes et al., 2010).

**Conclusion**

Inclusive education refers to education provision whereby all students with or without disability can fully participate in learning with the support of suitable program adjustment and teaching strategies designed to meet individual learning needs. However, how inclusive education is implemented in schools can vary significantly across cultures and educational systems. Saudi Arabia is a staunch advocate of the rights of all students with disabilities to access the same learning opportunities and experiences as their peers. Indeed, the primary goal of its inclusive education policy is the inclusion of students with disabilities in the regular classrooms aided by the development and implementation of special education programmes. Despite this, concerns remain around the extent to which general education teachers feel prepared to implement inclusive practice and support students with special needs in their classrooms.

The current study explored Saudi general education teachers’ attitudes/beliefs about inclusion, confidence/ self-efficacy to implement inclusion effectively, and perceptions of the expectations around inclusive education provision in their schools, along with the factors that
influence these three outcomes. The TPB was applied as a framework for interpreting and describing the nature of these inter-relationships. The inter-relationships among Saudi general education teachers’ attitude/beliefs, perceived self-efficacy, and perceptions of other’s expectations and how they shape their intentions and actions towards inclusive education is a relatively novel and underexplored research area in Saudi Arabia. Although some previous studies have explored one or more of these components, research on the inter-relationships among Saudi teachers’ attitudes, perceived self-efficacy, and perceptions of other’s expectations in the context of inclusive education provision is limited. The current study provided a more nuanced understanding of their attitudes and intentions towards inclusion.

This study found that teachers generally (but not exclusively) held positive beliefs about the potential benefits of inclusion of students with special needs in general mainstream classrooms. However, they felt that, as general education teachers they had little say inclusive education policy directives from the MOE and the subsequent expectations of schools’ administrators. This feeling was associated with generally negative attitudes towards inclusive education provision among the teachers.

Regarding the teachers’ confidence/perceived self-efficacy (RQ1), this study found they generally felt confident in their abilities as general education teachers but lacked self-efficacy or belief in their capacity to teach and effectively manage students with special needs in their classes. Lastly, this study found teachers perceived the expectations of others (RQ1) such as the MOE and school administrators as pressure on them to implement inclusion of students with special needs and as burdensome in terms of the additional demands (larger class sizes, extra workload) it placed on them as teachers.

It emerged in this study that the main factors to influence Saudi general education teachers’ attitude/beliefs, perceived self-efficacy, and perceptions of other’s expectations in
relation to implementing inclusive education (RQ2) were system-related and/or personal. A lack of training in inclusive teaching practices and access to professional development opportunities, along with limited access to teaching and learning resources and support were found to strongly influence teachers’ negative attitudes towards inclusion. It also contributed to a lowering of confidence in their capabilities to implement inclusion in the classroom. Having had access to some training in inclusive teaching and having relative confidence in their capabilities to implement inclusion on the classroom were found to influence these teachers towards more favourable attitudes towards inclusion. In addition, teachers’ religious beliefs and previous experiences with a person with disability were found in some cases to have a strong influence on teachers’ attitudes, confidence, and/or perceptions of other’s expectations in relation to implementing inclusive education.

Saudi general education teachers' attitudes/beliefs, perceived behavioural control, and perceptions of subjective norms inter-related to influence their intentions and actions towards implementing inclusive education (RQ3). It revealed that for some teachers, personal belief systems (i.e., religious beliefs and understandings of religious teachings) strongly influenced perceptions of their responsibilities towards others (understandings of subjective norms) and subsequently generated a more favourable attitude towards implementing inclusion. In terms of their positive intentions and actions, these teachers subsequently drew on their religious beliefs and attitude to move forward with the intent to try their best to implement inclusive teaching strategies. Teachers’ previous experience with a person with a disability was found to be a mitigating factor that shaped their positive attitude towards inclusion providing them with increased confidence (perceived behavioural control) towards implementing inclusive education in the face of burdensome expectations and system demands.

Conversely, teachers’ negative intentions and actions towards implementing inclusive education in their classrooms emerged primarily from the system-based expectations and
demands (large class sizes, extra workload). These subsequently shaped both their low perceived self-efficacy (compounded by perceptions they lacked proper training and support), and their negative attitudes towards inclusive education (compounded by the beliefs it is forced upon).

Saudi teachers who had favourable intentions in some cases relied on personal initiative to understand the learning needs of their students with special needs and to implement different teaching strategies, to make inclusion work and to support these students in their classrooms. In contrast, some teachers with unfavourably intentions could not or were not willing to try to include or teach students with special needs, with some even expressing their intention to leave teaching.

The findings in this study compel further thought and consideration of how Saudi general education teachers perceived their preparedness to implement inclusion in their classroom and how this impacts their attitudes and intentions towards inclusive education. General education teachers in Saudi Arabia require adequate preparation and support to practice inclusion effectively and to meet the unique learning needs of students with disability. Furthermore, these teachers require professional development opportunities to update and improve their knowledge of best-practice inclusive education provision and their skills to implement these practices effectively. It has previously pointed out that teachers should not be considered as practitioner whose only responsibility is the implementation of pre-develop syllabus. Rather they should be considered as professionals who are facilitated in all attempts to improve professionally as well as the learning outcomes of students. The findings of the present study suggest there are valuable benefits to teachers, students with special needs, and schools from teachers having access to appropriate training and professional development opportunities, support, and resources around best-practice inclusive education provision. Indeed, successful inclusive education provision is reliant on the
availability of appropriate resources and supports to teachers. Hence, the way and extent to which teacher preparation programs in Saudi Arabia address inclusion principles and practices with general education teachers, and the way and extent to which schools provide ongoing training and support, must be recognised as central to shaping teachers’ positive intentions and actions towards implementing inclusion in the classroom.

Training institutions and school leaders in Saudi Arabia could therefore take steps to recognise the challenges to implementing inclusion experienced by general education teachers. They could then identify appropriate pathways towards providing teachers with the training, resources, and support they require to overcome these challenges and foster more positive attitudes and self-efficacy perceptions towards inclusive education. Professional development opportunities for teachers and access to quality teaching resources are integral to a motivating, improvement-focused, and supportive school environment. Given the concerns some teachers in the current study had about not having been consulted for their views around inclusion of students with special needs in their classroom, these steps could naturally include a participatory role for teachers to help inform the decision-making around what actions to take.

Moreover, the findings in the current student point to the importance of school administrators acknowledging the system-based pressures and demands to potentially overwhelm Saudi general education teachers in their efforts to implement inclusion in their classroom. The workload of teachers in inclusion classroom is generally acknowledged to be demanding. As this study reported, challenging teaching conditions were found to negatively influence some teachers’ attitudes towards inclusion and confidence in their capabilities to implement inclusion effectively, and subsequently diminished their intentions and actions towards inclusion in the classroom. This underlines the importance of school administrators identifying potential corrective actions to ensure teachers view the conditions around
implementing inclusion as helping to make the achievement of inclusive education provision more feasible.

Conceptualisations of how inclusive education teachers may strengthen their sense of self-efficacy to implement inclusion in the classroom effectively also include the potential impact that a teacher’s previous experience of a person or student with a disability can have on perceptions of their preparedness to teach students with special needs. This includes teachers’ views of their preparedness to manage challenging student behaviours and the extra workload demands of inclusive education; two issues identified by teachers in the current study which were found to negatively influence their attitudes and intentions towards inclusion. Research findings which add to the research evidence present new opportunities for teacher preparation programs in Saudi Arabia. Ensuring the designs of these programs include formalised and structured opportunities for general education teachers to ‘experience’ students with disability in learning and social context through observation, interaction, and reflection prior to implementing inclusive education programs.

In closing, the relationship between teachers’ attitudes, perceived self-efficacy, and perceptions of other’s expectations and their inclusive education intentions and actions is an important point of focus in the field of inclusive education provision. In schools in Saudi Arabia, general education teachers’ attitudes and intentions towards inclusive education have implications for the extent to which inclusion is practiced in classrooms and the learning outcomes of students with special needs are met.
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Appendices
### Appendix A: Summary of the Saudi Studies

*Studies Conducted in Saudi Arabia Relevant to Teachers’ Perceptions of Inclusion of Students with Disabilities in Regular Classes*

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<tr>
<th>Author/Year</th>
<th>Aim</th>
<th>Teacher’s role</th>
<th>Level taught</th>
<th>Disability type</th>
<th>Methodology</th>
<th>Variables identified</th>
<th>Relationships</th>
<th>Other findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abed &amp; Alrawajfh, 2017</td>
<td>Explored teachers’ opinions about inclusion and relationships between student- and teacher-related factors</td>
<td>General Ed.</td>
<td>P</td>
<td>General</td>
<td>Surveys/ descriptive</td>
<td>Teachers’ attitudes / practices</td>
<td>Influential factors</td>
<td>Interviews/ observation</td>
</tr>
<tr>
<td>Alnahdi et al., 2019</td>
<td>Examined attitudes towards inclusive education to understand the impact of cultural differences and the influence of</td>
<td>Preservice</td>
<td>P/I/S</td>
<td>General</td>
<td>Surveys/ correlational</td>
<td>Attitudes</td>
<td>Gender/Saudi Female, SEN background /Saudi, Type of disability/ Saudi</td>
<td>Yes</td>
</tr>
</tbody>
</table>
| Alanazi, 2012** | Examined attitudes and practices towards inclusion and influence of cultural / religious factors | √ | √ | P | LD (dyslexia) | Interviews (semi-structured) of educators and parents, Observations (students) | • Attitudes not necessarily translated to practice  
• Understanding of inclusion informed by Islamic values  
• Attitudes generally positive but less for students with cognitive disabilities.  
• Key issues included clarifying understanding and collaboration between parties. |

| Alahmadi, 2009** | Examined differences in teachers’ attitudes toward inclusion and teacher- and student-related factors | √ | √ | P/I/S | LD | Surveys (correlational) followed up with interviews (semi-structured) | • Attitudes | Gender, Age, Years of experience, Education level, Major, SEN training, Family member with disability, Experience teaching SN | Yes | • Teachers believed their training was insufficient to manage the behaviours of students with disabilities.  
• General education teachers unable to meet needs of students with LD.  
• Special education teachers had more realistic view of Kingdom resources |
<table>
<thead>
<tr>
<th>Author, Year</th>
<th>Methodology</th>
<th>Data Collection</th>
<th>Variables</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alamri, 2014**</td>
<td>Examined teachers' attitudes towards inclusion and relationships of teacher- and student-related factors</td>
<td>√</td>
<td>P</td>
<td>AD/HD</td>
</tr>
<tr>
<td>Alshahran, 2014**</td>
<td>Explored educators’ attitudes and beliefs toward inclusion and relationships between student- and teacher-related factors</td>
<td>√</td>
<td>√</td>
<td>P/I/S</td>
</tr>
<tr>
<td>Alhudaithi, 2015**</td>
<td>Explored teachers’ attitude towards practicing inclusion and relationships between teacher-related factors</td>
<td>√</td>
<td>√</td>
<td>P</td>
</tr>
</tbody>
</table>
with people with autism and in the quality of the resources and support staff available to them, lack of preparedness and training about inclusion, large class size, Severity of Autism, difficulty managing disruptive behaviour.
- teachers’ religious views overcame negative cultural influences

<table>
<thead>
<tr>
<th>Study</th>
<th>Research Question/Method</th>
<th>Participants</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Faiz, 2006**</td>
<td>Examined teachers’ attitudes towards inclusion and relationships between teacher- and student-related factors</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P</td>
<td>Autism Surveys (correlational)</td>
</tr>
<tr>
<td>Study</td>
<td>Research Question</td>
<td>Methodology</td>
<td>Severe ID</td>
</tr>
<tr>
<td>-------</td>
<td>------------------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Alquraini, 2012</td>
<td>Examined teachers’ perspectives towards inclusion and relationship to teacher-related factors</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Aseery, 2016**</td>
<td>Examined teachers’ attitudes toward inclusion of deaf, hard of hearing and D/hh students and the influence of teacher-related factors</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Authors</td>
<td>Study Description</td>
<td>Gender</td>
<td>Years of teaching</td>
</tr>
<tr>
<td>---------</td>
<td>------------------</td>
<td>--------</td>
<td>------------------</td>
</tr>
<tr>
<td>Alsim &amp; Paul, 2019</td>
<td>Examined teachers’ attitudes towards inclusion of students who are hard of hearing and the influence of teacher-related factors</td>
<td>√</td>
<td>P</td>
</tr>
<tr>
<td>Al Jaffal, 2019**</td>
<td>Examined teachers’ attitudes toward inclusion of students with ASD and differences in teacher-related factors</td>
<td>√</td>
<td>S</td>
</tr>
<tr>
<td>Alkhattabi et al., 2020</td>
<td>Examined teachers’ preparedness</td>
<td>√</td>
<td>P/I/S</td>
</tr>
</tbody>
</table>
Al-Saleh, 2019

<table>
<thead>
<tr>
<th>Study Title</th>
<th>Methodology</th>
<th>Sample Description</th>
<th>Findings/Implications</th>
</tr>
</thead>
</table>
| Examined teachers’ perceptions and beliefs towards inclusive education and the advantage / disadvantage of inclusion of students with ASD | Interviews (semi-structured)             | Teachers reported: • lack of sufficient knowledge about mainstreaming or integration and inclusive education  
• the need for training  
• positive attitudes towards inclusive education and students with ASD  
Teachers believed: • inclusion has a positive impact on students with ASD  
• inclusion has a negative impact on the academic achievement of general education students |                                                                                                                                                        |

Self-Efficacy and Preparedness to Teach Students with Special Needs in Inclusive Classrooms

Al-Assaf, 2017**

<table>
<thead>
<tr>
<th>Study Title</th>
<th>Methodology</th>
<th>Sample Description</th>
<th>Findings/Implications</th>
</tr>
</thead>
</table>
| Examined teachers’ perceptions,                                          | Survey (quasi-experimental:  
• Attitudes and expectations) | Use of UDL, Implementing new inclusion  
Yes                                                                            |                                                                                                                                                        |
| Alnahdi, 2020 | Explored teachers’ self-efficacy to teach in inclusive educational classrooms and differences in efficacy in managing behaviour, inclusive instructions, and collaboration | √ | √ | P/I/S | General | Survey (correlational) | • Self-efficacy and confidence | Efficacy in managing behaviour, inclusive instructions, and collaboration | Yes |

**Obstacles to Inclusive Education**

- Attitudes, and efficacy beliefs towards inclusion and the impact of the Inclusion Model associated factors on teachers’ attitudes and expectations of students learning use of Universal Design for Learning (UDL)
- Teaching practices
- Understanding of importance of inclusion
- Model (school type), Years of teaching, Knowledge of inclusion
<table>
<thead>
<tr>
<th>Study</th>
<th>Methodology</th>
<th>Data Collection</th>
<th>Findings</th>
</tr>
</thead>
</table>
| Alzemaia, 2019**                         | Explored the obstacles to and enablers of the implementation of inclusive education and teacher’s related factors | Interviews (semi-structured), Observations before and after training | • Negative attitudes and practices  
• Religious beliefs shaped moral commitment to SEN  
• Age, experience, qualification did not influence attitudes.  
• Negative attitudes specifically attributed to lack of specialist knowledge and lack of confidence  
• Teachers who participated in training are more supportive of inclusive education and exhibited more inclusive practices post-training  
• Barriers to inclusion: curriculum, lack of training, staff cooperation, leadership, parental involvement, resources, large class sizes shortage of staff and misdiagnosis |
| Abed & Shackelford, 2021                 | Explored Saudi teachers’ perspectives of inclusive education and obstacles to successful inclusion | Interviews (semi-structured)  | • Most participants reported positive attitudes toward inclusion and felt important  
• Participants reported obstacles: lack preparedness, lack of training, and lack of effective partnerships between teachers and parents  
• Some participants believed that students with severe disabilities should not be included |
| Abed & Shackelford, 2020                 | Examined teachers’ beliefs, and opinions of in-service education and training | Interviews (semi-structured)  | Participants:  
• recognised the importance of INSET programs for best practices for managing and educating students with ADHD |
programs for teaching students with ADHD

- expressed a strong desire to participate in additional training addressing ADHD
- criticised the Saudi MoE for providing INSET opportunities for almost only special education teachers.
- expressed a significant lack of and need for INSET specifically for teaching students with ADHD.

**Note.** **denotes thesis rather than published study.**
P = denotes primary, I = denotes intermediate, and S = denotes secondary.

ASD= Autism spectrum disorder, LD= learning difficulties, AD/HD= attention-deficit/hyperactivity disorder, HI= hearing impairments, and ID= intellectual disability.
Appendix B: Ethics Approval from the University of Wollongong

8 November 2017

Dear Dr Webster,

I am pleased to advise that the application detailed below has been approved.

Ethics Number: 2017/377
Approval Date: 07/11/2017
Expiry Date: 06/11/2018
Project Title: Teachers’ Attitudes towards the Inclusion of Students with Special Needs in Mainstream Classes in Saudi Arabia
Researcher/s: Almutairi Wafa; Sheridan Lynn; Webster Amanda

Documents Approved:
- Ethics Application
- Response to review 30/10/2017, 18/10/2017
- Oral Consent for Audio Recording Teachers Interviews v3 - 30/10/2017
- Teachers Consent form for Interviews v3 - 30/10/2017
- Teachers Information Sheet for Interviews v2 - 10/10/2017
- Teachers Consent form for Survey v2 - 18/10/2017
- Principals Information Sheet v1 - 10/10/2017
- Teachers Information Sheet for Survey v2 - 10/10/2017
- Participants Information Sheet for the Pilot Study v1 - 10/10/2017
- Oral Information Script for Principals v2 - 10/10/2017
- Interview Schedule Sheet v1 - 10/10/2017
- Email Script for the Saudi Academic Supervisor v1 - 10/10/2017
Email and WhatsApp Script for Principals to distribute v2 - 10/10/2017

Survey Instrument v1 - 31/08/2017

Sites:

<table>
<thead>
<tr>
<th>Site</th>
<th>Principal Investigator for Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia mainstream schools with Inclusion programs</td>
<td>Mr Wafa Almutairi</td>
</tr>
</tbody>
</table>

The HREC has reviewed the research proposal for compliance with the National Statement on Ethical Conduct in Human Research and approval of this project is conditional upon your continuing compliance with this document. Compliance is monitored through progress reports; the HREC may also undertake physical monitoring of research.

Approval is granted for a twelve month period; extension of this approval will be considered on receipt of a progress report prior to the expiry date. Extension of approval requires:

- The submission of an annual progress report and a final report on completion of your project.
- Approval by the HREC of any proposed changes to the protocol or investigators.
- Immediate report of serious or unexpected adverse effects on participants.
- Immediate report of unforeseen events that might affect the continued acceptability of the project.

If you have any queries regarding the HREC review process or your ongoing approval please contact the Ethics Unit on 4221 3386 or email rso-ethics@uow.edu.au.

Yours sincerely,

Emma Barkus

Dr Emma Barkus, Acting Chair, UOW & ISLHD Social Sciences Human Research Ethics Committee

The University of Wollongong and Illawarra and Shoalhaven Local Health District Social Sciences HREC is constituted and functions in accordance with the NHMRC National Statement on Ethical Conduct in Human Research.
Appendix C: Approval from the Saudi Ministry of Education

المملكة العربية السعودية
وزارة التعليم

الموضوع: بشأن الباحثة / وفاء بنت نايف الطبري

سماحة الملحق الإقليمي السعودي في أستراليا (عكاظ)

السلام عليكم ورحمة الله وبركاته، وبعد:

إشارة إلى خطاب سماحةكم رقم (بدون) بتاريخ ٢٠١٦/٨/٢٩ وفاية بنت نايف الطبري لجمع المعلومات حول طالبة الدكتوراه بجامعة (ولو نجوج) وفاية بنت نايف الطبري لجمع معلومات حول بحثها بعنوان "مواضيع ومعتقدات المعلمين والمعلمين نحو دمج الطلاب ذوي الاعترافات الخاصة في الفصول العامة في المملكة العربية السعودية.

نندي سماحةكم بأنه لما أنحن لدينا من حيث المبدأ من تشمل مهمتها على أن تقوم الباحثة بزود المركز بآدوات الدراسة في صيغتها النهائية قبل بدء التطبيق

والتكبّل/

مدير عام

المركز الوطني لبحوث سياسات التعليم

د. عبد الله بن محمد الحمید
APPENDIX D: Email and WhatsApp Script for Teachers

EMAIL AND WHATSAPP SCRIPT FOR PRINCIPALS TO DISTRIBUTE TO TEACHERS

Dear teachers,

I would like to invite you to participate in my research. My name is Wafa Almutairi. I am a PhD student and currently doing my degree at the University of Wollongong in Australia in the school of education, faculty of Social Science. My research is on ‘Teachers’ Attitudes towards the Inclusion of Students with Special Needs in Mainstream Classes in Saudi Arabia’. I write to invite you to participate voluntarily in the study.

Participation in this research includes taking an online survey (phase one of the study) about your attitudes towards teaching students with special needs in mainstream classes, which will take approximately 20 minutes. At the end of the survey you will be asked if you wish to participate voluntarily in phase two of the study. Not all teachers will be contacted for phase two of the study, only those who agree to participate in a follow-up interview. You will be contacted via phone which will take approximately 40 minutes. Prior to the phone interviews you will be sent an information sheet and consent form.

Participants in the study will have an opportunity to go into a draw to win a ticket worth $300 to one of the most popular cities in Saudi Arabia.

If you would like to participate voluntarily in the research, please read the attached information sheet and sign the consent form following an online link prior to the survey for phase one of the study.

If you have any questions, I can be reached at (AU) wnam98@uowmail.edu or (SA)

EMAIL AND WHATSAPP SCRIPT FOR PRINCIPALS TO DISTRIBUTE TO TEACHERS Version 2 10/10/17
Appendix E: Participants Survey Information Sheet

TEACHERS INFORMATION SHEET FOR SURVEY

TITLE: Teachers' Attitudes towards the Inclusion of Students with Special Needs in Mainstream Classes in Saudi Arabia

PURPOSE OF THE RESEARCH

This is an invitation to participate in a study conducted by the researcher who is a student at the University of Wollongong in Australia. The purpose of the research is to explore teachers' attitudes towards the inclusion of students with special needs in mainstream classes in Saudi Arabia and to explore the impact of these attitudes on teacher practice.

RESEARCHERS

DR Amanda Webster  
(Main Supervisor)  
Faculty of Social Science  
00+61 2 4298 1254  
awebster@uow.edu.au

Dr Lynn Sheridan  
(Co-supervisor)  
Faculty of Social Science  
00+61 2 4221 5739  
lynn@uow.edu.au

Wafa Almutairi  
Researcher (Student)  
Faculty of Social Science

METHOD AND DEMANDS ON PARTICIPANTS

All teachers are welcome to participate in this study. If you choose to be included in this study, you will be asked to participate in completing an online survey for phase one of the study following a link to survey monkey. The survey will consist of two sections and will take up to 20 minutes for you to complete. At the end of the survey you will be asked to tick a box and provide your contact number if you wish to be followed up with interviews via phone in phase two. Not all teachers will be contacted for phase two (interviews) only the ones who ticked the box will be contacted and sent information sheets and consent forms for the interview. The interviews will take up to 40 minutes with each participant. Participants in the study will have an opportunity to go into a draw to win a ticket worth $300 to one of the most popular cities in Saudi Arabia.

POSSIBLE RISKS, INCONVENIENCES AND DISCOMFORTS

Apart from the 20 minutes of your time to complete the survey in phase one and the 40-minute interview if you wish to follow up in phase two, we can foresee no risks for you. Your involvement in the study is voluntary and you may withdraw your participation from the study at any time and withdraw any data that you have provided to that point. Refusal to participate in the study will not affect you in any way.

The data will be handled in a confidential manner at all times. The data will be held for five years in the main supervisor’s (Amanda Webster) locked cabinet in her locked office. It will also be kept on the researcher’s (Wafa Almutairi) password locked personal computer. Data will also be de-identified for analyses and storage. The data will be handled in a confidential

TEACHERS INFORMATION SHEET FOR SURVEY Version 2 10/10/2017
manner and pseudonyms will be used for each participant. Data collected during the study will be published in journals and thesis publications. It will all be de-identified before it is published.

FUNDING AND BENEFITS OF THE RESEARCH

This study is funded by SACM (Saudi Arabian Cultural Mission) Scholarship Funding under the Ministry of Education in Saudi Arabia. It is anticipated that this research could help in providing an advancing understanding of inclusion among Saudi teachers, and expanding the knowledge and understanding of the Theory of Planned Behaviour and the relationship between teachers’ attitudes and practice. Furthermore, it is expected that the findings of this study will be useful in establishing guidelines for inclusive practices for Saudi mainstream teachers. In addition, it is anticipated that the findings could be used to guide the Ministry of Education in the implementation of best practice and evidence-based methods and training for teachers in Saudi Arabian school.

ETHICS REVIEW AND COMPLAINTS

This study has been reviewed by the Human Research Committee (Social Science, Humanities and Behavioural Science) of the University of Wollongong. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the UOW Ethics Officer on (00612) 4221 3386 or email rso-ethics@uow.edu.au.

Thank you for your interest in this study.
Appendix F: Participant Survey Consent Form

TEACHERS CONSENT FORM FOR SURVEY

TITLE: Teachers’ Attitudes towards the Inclusion of Students with Special Needs in Mainstream Classes in Saudi Arabia

RESEARCHERS: Wafa Almutairi (Primary researcher, PhD student, School of Education, University of Wollongong), Dr Amanda Webster, (Chief supervisor, School of Education, University of Wollongong), and Dr Lynn Sheridan, (Co-supervisor, School of Education, University of Wollongong).

- I have been given information about the research project.
- I have discussed this research project with Mrs. Almutairi the primary researcher of this project who is a student at the University of Wollongong.
- I understand the requirements for participation in this project.
- I have been advised of the potential risks and burdens associated with this research, which include the time to participate in the survey, and have had the opportunity to ask Mrs. Almutairi any questions I may have about the research and my participation.
- I understand that my participation in this research is voluntary.
- I have been invited to participate and I am free to withdraw from the research at any time.
- I understand that I may contact Mrs. Almutairi at any time if I wish to withdraw my consent, and may request that information I have provided is destroyed.
- Non-participation or withdrawal of consent will not affect me in any way.
- If I have any enquiries about the research, I can contact Mrs. Almutairi (AU+61) or (SA) email wnam998@uowmail.edu.au.
- If I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer, Human Research Committee, Office of Research, University of Wollongong on (00612) 4221 3386 or email rso-ethics@uow.edu.au.
- I understand that the data collected from my participation will be de-identified before journal and thesis publications.
- I understand that it is anticipated that the data will provide an advanced understanding of inclusion among Saudi teachers. It is also anticipated that this research will guide the Ministry of Education in the implementation of best practice and evidence-based methods and training for teachers in Saudi Arabian schools.

By signing below, I indicate my consent to participate in the survey of phase one of the study.

Signed

Date

Name (Please print)

TEACHERS CONSENT FORM FOR SURVEY Version 2 10/10/2017
Appendix G: Participants Interviews Information Sheet

TEACHERS INFORMATION SHEET FOR INTERVIEWS

TITLE: Teachers’ Attitudes towards the Inclusion of Students with Special Needs in Mainstream Classes in Saudi Arabia

PURPOSE OF THE RESEARCH

This is an invitation to participate in the interviews of phase two of the study conducted by the researcher who is a student at the University of Wollongong in Australia. The purpose of the research is to explore teachers’ attitudes towards the inclusion of students with special needs in mainstream classes in Saudi Arabia and to explore the impact of these attitudes on teacher practice.

RESEARCHERS

DR Amanda Webster
(Main Supervisor)
Faculty of Social Science
00+61 2 4298 1254
awebster@uow.edu.au

Dr Lynn Sheridan
(Co-supervisor)
Faculty of Social Science
00+61 2 4221 5739
lynns@uow.edu.au

Wafa Almutairi
Researcher (Student)
Faculty of Social Science

METHOD AND DEMANDS ON PARTICIPANTS

All teachers are welcome to participate in this study. If you choose to be included in phase two of the study, you will be asked to participate in a phone interview. The phone interview will take up to 40 minutes. At the beginning of the interview you will be read an oral consent for your interviews to be recorded and transcribed for later analysis. Participants in the study will have an opportunity to go into a draw to win a ticket worth $300 to one of the most popular cities in Saudi Arabia.

POSSIBLE RISKS, INCONVENIENCES AND DISCOMFORTS

Apart from the 20 minutes of your time to complete the survey in phase one and the 40-minute interview if you wish to follow up in phase two, we can foresee no risks for you. The recording of your interview will be destroyed once the data has been transcribed using anonymous names. Your involvement in the study is voluntary and you may withdraw your participation from the study at any time and withdraw any data that you have provided to that point. Refusal to participate in the study will not affect you in any way.

The data will be handled in a confidential manner at all times. The data will be held for five years in the main supervisor’s (Amanda Webster) locked cabinet in her locked office. It will also be kept on the researcher’s (Wafa Almutairi) password locked personal computer. Data will also be de-identified for analyses and storage. The data will be handled in a confidential manner and pseudonyms will be used for each participant. Data collected during the study

TEACHERS INFORMATION SHEET FOR INTERVIEWS Version 2 10/10/2017
will be published in journals and thesis publications. It will all be de-identified before it is published.

FUNDING AND BENEFITS OF THE RESEARCH

This study is funded by SACM (Saudi Arabian Cultural Mission) Scholarship Funding under the Ministry of Education in Saudi Arabia. It is anticipated that this research could help in providing an advancing understanding of inclusion among Saudi teachers, and expanding the knowledge and understanding of the Theory of Planned Behaviour and the relationship between teachers’ attitudes and practice. Furthermore, it is expected that the findings of this study will be useful in establishing guidelines for inclusive practices for Saudi mainstream teachers. In addition, it is anticipated that the findings could be used to guide the Ministry of Education in the implementation of best practice and evidence-based methods and training for teachers in Saudi Arabian school.

ETHICS REVIEW AND COMPLAINTS

This study has been reviewed by the Human Research Committee (Social Science, Humanities and Behavioural Science) of the University of Wollongong. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the UOW Ethics Officer on (00612) 4221 3386 or email rso-ethics@uow.edu.au.

Thank you for your interest in this study.
Appendix H: Participants Interviews Consent Form

TEACHERS CONSENT FORM FOR INTERVIEWS

TITLE: Teachers’ Attitudes towards the Inclusion of Students with Special Needs in Mainstream Classes in Saudi Arabia

RESEARCHERS: Wafa Almutairi (Primary researcher, PhD student, School of Education, University of Wollongong), Dr Amanda Webster, (Chief supervisor, School of Education, University of Wollongong), and Dr Lynn Sheridan, (Co-supervisor, School of Education, University of Wollongong).

- I have been given information about the research project.
- I have discussed this research project with Mrs. Almutairi the primary researcher of this project who is a student at the University of Wollongong.
- I understand the requirements for participation in this project.
- I have been advised of the potential risks and burdens associated with this research, which include the time to participate in the interview which will take approximately 40 minutes.
- I have had the opportunity to ask Mrs. Almutairi any questions I may have about the research and my participation.
- I understand that my participation in this research is voluntary and that I can ask questions any time before or throughout the interview.
- I have been invited to participate and I am free to withdraw from the research at any time.
- I understand that I may contact Mrs. Almutairi at any time if I wish to withdraw my consent, and may request that information I have provided is destroyed.
- Non-participation or withdrawal of consent will not affect me in anyway.
- If I have any enquiries about the research, I can contact Mrs. Almutairi (AU+61) or (SA) email wnam998@uowmail.edu.au.
- If I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer, Human Research Committee, Office of Research, University of Wollongong on (00612) 4221 3386 or email rso:ethics@uow.edu.au.
- I understand that the data collected from my participation will be de-identified before journal and thesis publications.
- I understand that the data will be safely stored on a password protected computer in the main supervisor’s locked cabinet in her locked office at the University of Wollongong. I understand that the research data will be kept for a minimum of five years.
- I understand that the interviews will be audio recorded for analysis purposes unless I choose not to.
- I understand that it is anticipated that the data will provide an advanced understanding of inclusion among Saudi teachers. It is also anticipated that this research will guide the

TEACHERS CONSENT FORM FOR INTERVIEWS Version 3 30/10/2017
Ministry of Education in the implementation of best practice and evidence-based methods and training for teachers in Saudi Arabian schools.

By signing below, I indicate my consent to participate in the interview of phase two of the study and have my interviews audio recorded to be transcribed for later analysis.

Signed

Date

........................................... ...........................................

Name (Please print) .................................................................
Appendix I: Oral Consent for Audio Recording

ORAL CONSENT FOR AUDIO RECORDING TEACHERS INTERVIEWS

Hello again, my name is Wafa Almutairi I’m a PhD student and currently doing my degree at the University of Wollongong in Australia in school of education, faculty of Social Science. To recap, the broad aim of my research is ‘Teachers’ Attitudes towards the Inclusion of Students with Special Needs in Mainstream Classes in Saudi Arabia’. As you have already consented to be interviewed, with your permission, I would like to make an audio recording of our discussion to make sure I’m getting an accurate record of your thoughts. Alternatively, I can take notes in my notebook. Which would you prefer? I may want to re-contact you to clarify information you gave me in your interview. In that case, I will ask you if you have time to answer some more questions.

Are you still interested in taking part in the project? [Await confirmation].

If you have any concerns or questions about the research you can contact me at any time. To reiterate: my mobile is (AU 0014), or (SA ), you can also reach me at wnam998@uowmail.edu.au. I have also given you the project’s ethics reference number and relevant contact details. To reiterate: their contact details are (00612) 4221 3386 for UOW Ethics Officer or email rsio-ethics@uow.edu.au.

- Are you still willing to take part? Do you give your permission for me to re-contact you to clarify information? [Await confirmation]

So if you’re happy with all of that, and have no more questions, let’s start.
Appendix J: Email Script for Saudi Liaison

EMAIL SCRIPT FOR THE SAUDI ACADEMIC SUPERVISOR TO PARTICIPATE IN THE PILOT PROGRAM

Dear Supervisor

I would like to invite you to participate in a pilot study. My name is Wafa Almutairi I’m a PhD student and currently doing my degree at the University of Wollongong in Australia in the school of education, faculty of Social Science. My research is on ‘Teachers’ Attitudes towards the Inclusion of Students with Special Needs in Mainstream Classes in Saudi Arabia’. The purpose of the research is to explore teachers’ attitudes towards the inclusion of students with special needs in mainstream classes in Saudi Arabia and to explore the impact of these attitudes on teacher practice. The purpose of the pilot study is to modify and contextualise the survey questions for the use in the Saudi Arabian context and ensure validity of the survey in measuring the research questions. I write to invite you to participate in this pilot study.

Participation in this pilot study means
- Passing on an invitation to all Saudi mainstream teachers in Australia to participate voluntarily in this study.
- You will be provided with a participant’s information sheet for the pilot study with the researcher’s contact details to attach to the emails.
- Ten teachers who reply to the invitation and choose to participate by contacting the researcher will be sent a link to an online survey to complete.
- At the end of the survey they will be asked to provide their contact numbers to discuss and clarify any further comments if needed.
- All participants will receive a $10 iTunes voucher for their participation in the pilot study.

If you have any questions, I can be reached at (******** ) or email wnam998@uowmail.edu

EMAIL SCRIPT FOR THE SAUDI ACADEMIC SUPERVISOR TO PARTICIPATE IN THE PILOT PROGRAM Version 1 10/10/2017
Appendix K: Participants Pilot Program Information Sheet

PARTICIPANTS INFORMATION SHEET FOR PILOT PROGRAM

TITLE: Teachers’ Attitudes towards the Inclusion of Students with Special Needs in Mainstream Classes in Saudi Arabia

PURPOSE OF THE RESEARCH

This is an invitation to participate in a pilot study conducted by the researcher who is a student at the University of Wollongong in Australia. The purpose of the research is to explore teachers’ attitudes towards the inclusion of students with special needs in mainstream classes in Saudi Arabia and to explore the impact of these attitudes on teacher practice. The purpose of the pilot study is to modify and contextualise the survey questions for the use in the Saudi Arabian context and insure validity of the survey in measuring the research questions.

RESEARCHERS

DR Amanda Webster (Main Supervisor) Dr Lynn Sheridan (Co-supervisor) Wafa Almutairi (Researcher (Student))
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METHOD AND DEMANDS ON PARTICIPANTS

All Saudi mainstream teachers are welcome to participate in this pilot program.

- If you choose voluntarily to be included in this pilot program, you will be asked to participate in completing an online survey in both English and Arabic.
- Both surveys will consist of three sections and will take up to 40 minutes for you to complete.
- At the end of the survey you will be asked to provide your contact number to discuss and clarify any further comments if needed.
- All participants will receive a $10 iTunes voucher for their participation in the pilot study.

POSSIBLE RISKS, INCONVENIENCES AND DISCOMFORTS

Apart from the 40 minutes of your time to complete the survey and any time spent to clarify any comments via phone if needed, we can foresee no risks for you. Your involvement in the pilot study is voluntary and you may withdraw your participation from the study at any time and withdraw any data that you have provided to that point. Refusal to participate in the study will not affect you in any way.

PARTICIPANTS INFORMATION SHEET FOR PILOT PROGRAM Version 1
10/10/2017
The data will be handled in a confidential manner at all times. The data will be held for five years in the main supervisor’s (Amanda Webster) locked cabinet in her locked office. It will also be kept on the researcher’s (Wafa Almutairi) password locked personal computer. Data will also be de-identified for analyses and storage. The data will be handled in a confidential manner and pseudonyms will be used for each participant. Data collected during the study will be published in journals and thesis publications. It will all be de-identified before it is published.

FUNDING AND BENEFITS OF THE RESEARCH

This study is funded by SACM (Saudi Arabian Cultural Mission) Scholarship Funding under the Ministry of Education in Saudi Arabia. It is anticipated that this research could help in providing an advancing understanding of inclusion among Saudi teachers, and expanding the knowledge and understanding of the Theory of Planned Behaviour and the relationship between teachers’ attitudes and practice. Furthermore, it is expected that the findings of this study will be useful in establishing guidelines for inclusive practices for Saudi mainstream teachers. In addition, it is anticipated that the findings could be used to guide the Ministry of Education in the implementation of best practice and evidence-based methods and training for teachers in Saudi Arabian school.

ETHICS REVIEW AND COMPLAINTS

This study has been reviewed by the Human Research Committee (Social Science, Humanities and Behavioural Science) of the University of Wollongong. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the UOW Ethics Officer on (00612) 4221 3386 or email rso-ethics@uow.edu.au.

Thank you for your interest in this study.

PARTICIPANTS INFORMATION SHEET FOR PILOT PROGRAM Version 1
10/10/2017
Appendix L: Survey Instrument (English)

Teachers’ Attitudes towards the Inclusion of Students with Special Needs in Mainstream Classes in Saudi Arabia

Introduction:
Welcome to my survey. The purpose of the research is to explore teachers’ attitudes towards the inclusion of students with special needs in mainstream classes in Saudi Arabia and to explore the impact of these attitudes on teacher practice. This survey will take up to 20 minutes for you to complete. At the end of the survey, you will be asked to tick a box and provide your contact number if you wish to be followed up with interviews via phone in phase two (all personal information and data will be handled in a confidential manner at all times). Not all teachers will be contacted for phase two (interviews) only the ones who ticked the box will be contacted and sent information sheets and consent forms for the interview. The interviews will take up to 40 minutes with each participant. Participants in the study who provide their personal information will have an opportunity to go into a draw to win a ticket to Makkah one of the most popular cities in Saudi Arabia.

* 1. If you wish to proceed with the survey please tick the box below.
☐ I have read and understood the participant information and agree to take part in this study.

Section 1: Teachers Demographic Information:
Please tick (✓) the box that best describes you and corresponds to your background data.

2. What is your gender?
   - Male
   - Female

3. What is your age?
   - 24-30
   - 31-37
   - 38-44
   - 45-51
   - 52+
4. In which of the following regions is your school?

- Central region (e.g., Riyadh)
- Western region (e.g., Jeddah)
- Eastern region (e.g., Dammam)
- Other (please specify)

5. What is the type of school you work in?

- A regular school with inclusion programs
- A regular school without inclusion programs

6. What school level do you teach? (Answer all that applies)

- Primary lower grades (e.g., 1st grade to 3rd grade)
- Primary upper grades (e.g., 4th grade to 6th grade)
- Intermediate (e.g., 7th grade to 9th grade)
- Secondary (e.g., 10th grade to 12th grade)
- Other (please specify)

7. What is the highest level of education you have completed?

- Bachelor's degree
- Master degree
- Other (please specify)
8. Which of the following classes do you teach? (Answer all that applies)

- [ ] Sciences
- [ ] Math
- [ ] Social sciences
- [ ] Arabic language
- [ ] English language
- [ ] Religion
- [ ] Art
- [ ] General primary
- [ ] Special education class or groups
- [ ] Other (please specify)

9. For how many years have you been teaching?

- [ ] Less than 5 years
- [ ] 5–10 years
- [ ] 11–20 years
- [ ] More than 20 years

10. Have you had any specific training or professional learning in teaching students with disabilities? (Answer all that applies)

- [ ] In-service training
- [ ] Workshop
- [ ] University training
- [ ] Support groups (e.g., for teachers or parents)
- [ ] I have no training
- [ ] Other (please specify)
11. Over your teaching career, how many students with special needs have you had in your classes?

- None
- 1-3
- 4-6
- 7+
- Other (please specify)

12. If you have had any students with special needs, please discuss what types of special needs these students have been identified as having.

Teachers’ Attitudes towards the Inclusion of Students with Special Needs in Mainstream Classes in Saudi Arabia

Section 2: Teachers’ Sense of Efficacy Scale:
Each question in this section refers to teachers’ beliefs (Efficacy Scale) towards the inclusion of students with special needs in a mainstream classroom.

13. For each of the questions below, circle the response that best characterizes how you feel about the statement.

<table>
<thead>
<tr>
<th></th>
<th>Nothing</th>
<th>Very Little</th>
<th>Some Influence</th>
<th>Quite A Bit</th>
<th>A Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>Nothing</td>
<td>Very Little</td>
<td>Some Influence</td>
<td>Quite A Bit</td>
<td>A Great Deal</td>
</tr>
<tr>
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<tr>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. To what extent can you craft good questions for your students with special needs?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>6. How much can you do to get students with special needs to follow classroom rules?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>7. How much can you do to calm a student with special need who is disruptive or noisy?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>8. How well can you establish a classroom management system with each group of students?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>9. How much can you use a variety of assessment strategies?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>10. To what extent can you provide an alternative explanation or example when students with special needs are confused?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>11. How much can you assist families in helping their children with special needs do well in school?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>12. How well can you implement alternative strategies in your classroom?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Section 3.1. Teachers’ attitudes towards inclusion:
Each question in this section refers to the inclusion of students with special needs in a mainstream classroom measuring:
1. Attitudes.
2. Perceived behavioural control (the person’s perception of the ease or difficulty of performing the behaviour of interest).
3. Subjective norms (the influence of others opinions on an individual’s decision).

15. For each of the questions below, circle the response that best characterizes how you feel about the statement below.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It causes a lot of worry and concern for the student with special needs if they are placed in an inclusion classroom.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>2. Inclusion educational environments are beneficial for students with special needs.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>3. Inclusion educational environments require extra work on the part of the teacher.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>4. Inclusion of students with special needs means extensive retraining of mainstream classroom teacher.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>5. The extra attention that students with special needs require is to the detriment of other students.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>6. The extra attention that students with special needs require is to the benefit of other students.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>7. As a teacher, I do extra work for the benefit of students.</td>
<td>○</td>
<td>○</td>
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</tr>
</tbody>
</table>
8. Inclusion offers mixed group interaction that fosters understanding and acceptance of differences among students.

**Section 3.2. Supporting students with special needs in my classroom (Perceived behavioural control):**

16. For each of the questions below, circle the response that best characterizes how you feel about the statement below.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. I feel pressure when I am working with students who have IEP (Individualized Education Plan) accommodations or modifications.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I implement IEP (Individualized Education Plan) provisions in my classroom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I use research-based practices in my classroom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree Nor Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
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</tr>
<tr>
<td>13. I collaborate with other professionals on the education of my students.</td>
<td></td>
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<td></td>
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<tr>
<td>14. I can control how much or how often I collaborate with other professionals to make decisions about students.</td>
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</tr>
<tr>
<td>15. I have the equipment and resources needed to use to teach students with different needs in my classroom.</td>
<td></td>
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<tr>
<td>16. In my school programs or professional development is available so I can learn about teaching students with special needs.</td>
<td></td>
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</tr>
<tr>
<td>17. I feel capable of planning learning for an individual student with special needs in my class.</td>
<td></td>
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<tr>
<td>18. I am capable of teaching and managing students with special needs in my classroom.</td>
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</tr>
<tr>
<td>19. I will try to teach and manage students with special needs in my classroom.</td>
<td></td>
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<tr>
<td>20. I use appropriate teaching techniques to support students with special needs.</td>
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<tr>
<td>21. I welcome students with special needs into mainstream classroom and work with them rather than in a special institutes' classroom.</td>
<td></td>
<td></td>
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<tr>
<td>22. Students with special needs are better in a special institutes' classroom rather than mainstream classroom.</td>
<td></td>
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</tr>
</tbody>
</table>
### Section 3.3. Influences on teachers' attitudes and behaviour (Subjective norms):

Influences on teachers' attitudes and behaviour when supporting students with special needs in mainstream classes

17. For each of the questions below, circle the response that best characterizes how you feel about the statement below.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
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</tbody>
</table>

24. Teachers in my school think that students with special needs should have the choice of learning in inclusion schools or special institutes.

25. My school director believes in the use of inclusion as an option for students with special needs.

26. My subject supervisor believes in the use of inclusion as an option for students with special needs.

27. Students in my class would like to learn in an inclusion environment.
<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>28. Teachers like me approve of the use of inclusion as an option for students with special needs.</td>
<td></td>
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</tr>
<tr>
<td>29. In terms of teaching students with special needs, doing what other teachers do is important to me.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>30. In terms of teaching students with special needs, doing what my school director thinks I should do is important to me.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>31. In terms of teaching students with special needs, doing what my subject supervisor thinks I should do is important to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. In terms of teaching students with special needs, the approval of my students is important to me.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>33. In terms of teaching students with special needs, the approval of my peers is important to me.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>34. People who are important to me think inclusive educational environments are beneficial for students with special needs.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>35. People who are important to me believe inclusion educational environments promote acceptance of differences among students.</td>
<td></td>
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</tr>
<tr>
<td>36. It is expected of me that I approve of heterogeneous classroom groupings (e.g., disabled and nondisabled).</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Section 4. Open-ended questions:

18. Please describe your level of confidence in teaching students with special needs?

19. Please comment on what you feel is the impact of inclusion for students and staff?

20. Do you feel that you have helped students with special needs, if so in what way?

21. What has helped you teach students with special needs?

22. What difficulties if any, have you faced in teaching students with special needs?

23. Please provide your personal information so we can contact you if you agree to be followed up with an interview, and to have an opportunity to go into a draw to win a ticket to Makkah one of the most popular cities in Saudi Arabia.

Name
Email

Contact number

Preferred time to call