

Self-efficacy and Special Education Teachers' Attitudes Toward Teaching Students with Learning Disabilities

Ibraheem M. Alsawalem^{1,*}, Omar A. Alsamani^{1,*} and Mansour M. Aljohani²

¹Department of Special Education, College of Education, University of Ha'il, 12991, Riyadh, Saudi Arabia

*E-mail: i.alsawalem@uoh.edu.sa; *E-mail: o.alsamani@uoh.edu.sa

²Department of Curricula and Teaching Methods of Mathematics, College of Education, University of Ha'il, 12991, Riyadh, Saudi Arabia
E-mail: m.aljohani@uoh.edu.sa

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ABSTRACT This study examined primary school special education teachers' self-efficacy and attitudes toward teaching students with learning disabilities. Using inductive content analysis, the researchers examined interview contents from 12 special education teachers. Their interviews have been recorded and data obtained from the interview transcripts. The researchers applied inductive content analysis to process the data to obtain results. The results showed that these teachers faced challenges when teaching students with learning disabilities and believed that professional development could improve their knowledge and attitudes toward teaching this group of students. The findings emphasise the significance of professional development for successfully teaching students with learning disabilities and suggest avenues for additional analyses, strategies, and procedures in this area. Further, the results should be utilised to generate future research opportunities, practices, and policies.

INTRODUCTION

Special education teachers' self-efficacy plays a crucial role in managing classroom practices and ensuring the success of students with disabilities (Takir and Özder 2022). Special education teachers' self-efficacy comprises their belief in their ability to meet the needs of students with learning disabilities, which can positively affect their outcomes. However, when faced with challenges, self-efficacy can be compromised (Love et al. 2019). Previous research has focused on measuring special education teachers' self-efficacy using instruments related to classroom teaching (Carroll 2019). Priestley (2013) stated that learning disabilities, also known as learning disorders or learning difficulties, are typically characterised by difficulty learning in a typical manner.

Learning disabilities have various definitions and the concept remains controversial. The *Diag-*

nostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5), a comprehensive diagnostic guide published in 2013, defines learning disabilities as neurodevelopmental disorders with a biological basis and cognitive effects. The DSM-5 replaced the term "learning disability" with "specific learning disorder", which is divided into three categories of specific learning disorder with a reading disability, writing disability, or mathematics disability. The term "specific" indicates that the disability only affects a specific skill. This need for specificity reflects advances in learning disability research that have made targeted interventions practical. The DSM-5 no longer includes the gap between ability and achievement as a diagnostic criterion for learning disabilities (APA 2013).

Teaching students with learning disabilities can pose a unique challenge for special education teachers, even if their attitudes regarding their effectiveness are not diminished. These students may be highly emotional or easily irritated, and may have short-term memory issues or difficulty with computation (Barnard-Brak et al. 2015). Despite these challenges, special education teachers are required to meet students' needs (McCullough 2014). Therefore, educational leaders should seek

*Address for correspondence:

Ibraheem M. Alsawalem
Department of Special Education, College of Education,
University of Hail, 12991, Riyadh, Saudi Arabia
Telephone: +966503186858
E-mail: i.alsawalem@uoh.edu.sa

to understand how special education teachers recognise their potential to teach students with learning disabilities, and consider providing professional development training to increase teachers' self-efficacy in this area.

Participating in ongoing professional development can help special education teachers improve their self-efficacy (Rowan and Townend 2016), and special education teachers who do not receive adequate professional development may have low self-efficacy, which can hinder their ability to serve students with learning disabilities (Kim and Seo 2018). While much research has been conducted on teacher efficacy, there is limited research on the impact of teaching students with learning disabilities on teachers' self-efficacy. Some researchers are investigating self-efficacy in relation to teaching students with learning disabilities, but there is a need for additional research to more fully comprehend teachers' perceptions of these challenges (Carroll 2019; Pedota 2015).

Focusing on students' strengths allows them to succeed in areas where they excel (Woodcock and Faith 2021). Emphasis on strength-based strategies has been shown to enhance academic achievement, increase self-efficacy, and assist students in overcoming social and emotional difficulties (Frederickson and Jacobs 2001). Moreover, special education teachers who display good teaching practices, understanding and care can positively influence the academic engagement of students with learning disabilities (Yakut 2021). However, few studies have examined how these challenges affect teachers' self-efficacy in meeting students' needs in inclusive or classroom settings. This study sought to understand and describe how teachers' experience the difficulties related to teaching students with learning disabilities, and how these challenges influence their ability to accommodate these learners' special needs.

Special education teachers with low self-efficacy are more prone to burnout (Frederickson and Jacobs 2001). Conversely, special education teachers with strong self-efficacy tend to have higher personal accomplishment, job satisfaction, and job commitment (McCullough 2014). Special education teachers' habitual instructional strategies may be influenced by their attitudes toward education. Sharing and reflecting on successful lessons can improve instructional practices and increase students' academic success (Yakut 2021). Teachers'

self-efficacy and students' academic performance are connected, and special education teachers' sense of self-efficacy influences their confidence and ability to assist in students' success (Woodcock and Faith 2021).

Current research emphasises special education teacher retention, self-efficacy, and ways to increase self-efficacy to meet the challenges of teaching students with learning disabilities (Pedota 2015). However, few studies have investigated special education teachers' self-efficacy and their groundwork in challenging contexts. This study aimed to address this gap. The topic is important because improving special education teachers' self-efficacy and preparing them for the challenges of teaching special education students can increase Saudi Arabian students' academic development and produce more qualified special education teachers.

Literature Review

Klassen (2002) conducted one of the few studies to examine self-efficacy attitudes in people with learning disabilities. Woodcock and Faith (2021) noted that existing classroom settings and previous experiences might influence special education teachers' self-efficacy regarding teaching students with learning disabilities, which involves more than simply addressing their academic needs. In addition, special education teachers who have no previous experience teaching students with learning disabilities may have lower self-efficacy. Furthermore, previous studies have shown that teachers with greater self-efficacy tend to be more sympathetic toward students who put forth less effort (Love et al. 2019).

Woodcock and Faith's (2021) recent Australian study examined the relationship between teachers' self-efficacy and their causal ideas regarding students with or without particular learning disabilities, and showed that teachers with greater levels of self-efficacy experienced less irritation, gave additional encouraging responses, and had fewer expectations of future failure for all students, despite student ability levels, effort, or particular learning disability. These results suggest that special education teachers with higher levels of self-efficacy are more likely to attribute student underachievement to internal intrapersonal factors, whereas those with lower levels of self-efficacy

are more likely to attribute it to external and interpersonal factors.

Yakut (2021) used a scale and observation to examine special education teachers' self-efficacy attitudes toward teaching students with learning disabilities in a sample of 200 general education teachers working in public elementary schools in Turkey. The authors found that teachers with experience teaching students with learning disabilities felt more confident in their ability to do so. These students had fewer issues with motor skills but more difficulties with maths, attention, memory, and writing skills, as reported by the teacher. The authors interpreted these findings within a Turkish context.

A qualitative study conducted in the United States (Prather-Jones 2011) included 13 special education teachers from a metropolitan area in a midwestern state, and found that directorial and collegial support, particularly that offered early in their careers, played a significant role in their decision to stay in the profession. These teachers described managerial support as admiration and appreciation from principals and assistant principals, and benefited from developing positive relationships with other educators. The authors also reported that teacher turnover had negative effects on student achievement. This study highlights the importance of providing support for special education teachers to retain them in the field.

Bandura (1995) asserted that self-efficacious attitudes influence motivation in numerous ways, such as determining the goals that special education teachers set for themselves, how much effort they put in, how long they persevere in the face of challenges, and their resilience in the face of failure. Setting specific ambitious goals increases perseverance and contributes to success because it helps special education teachers focus on overcoming difficulties (Pedota 2015). Self-efficacy also influences affective processes, which comprise a person's ability to cope with challenging situations through actions, thoughts, and emotions (Oliver and Reschly 2010). Special education teachers with a stronger sense of self-efficacy are more likely to approach difficult situations with more confidence and less fear, while those with a poorer sense of self-efficacy may become overwhelmed and experience impaired functioning (Carroll 2019).

Tschannen-Moran and Hoy (2001) noted that special education teachers' efficacy may be negatively

related to the control ideology of students with learning disabilities. Special education teachers with a strong sense of efficacy are less likely to have custodial attitudes toward these students. Additionally, special education teacher efficacy is also significantly negatively related to work alienation and a lack of intrinsic pride or meaning in one's work. Developing a high sense of self-efficacy is important to special education teachers' preparation and retention, because they must understand and have positive attitudes toward students with disabilities. Approximately 13 percent of students receive special education services and approximately 34 percent of these students qualify for the services because they have specific learning disabilities. However, it can be difficult for teachers working with low-achieving students to develop a strong sense of self-efficacy, because it requires a complex combination of strengths and weaknesses (McFarland et al. 2018; Wang et al. 2017).

Professional development should focus on special education teachers because other issues rapidly emerge that leave these teachers feeling that they are not capable of teaching students with learning disabilities. Self-efficacy and effectiveness have a powerful relationship (Skaalvik and Skaalvik 2010). Therefore, professional development should focus on raising the self-efficacy of special education teachers in teaching students with learning difficulties (McFarland et al. 2018). Special education teachers must continuously seek professional development opportunities in order to continue teaching within this domain (Yakut 2021). Further, in order to develop self-efficacy, attention must be given to all special education teachers at the primary stage (Carroll 2019).

The Ministry of Education (Kamala and Ramganesh 2013) issued a report indicating that professional development for all teachers plays an important role because it allows them to comprehend whether their students are experiencing learning disabilities. Kamala and Ramganesh (2013) asserted that primary school teachers have limited knowledge regarding learning disabilities and that degree of knowledge was related to a teacher's gender. Gandhimathi and Eljo (2010) found no statistically significant associations between teacher age, the nature of the school, teaching experience, and learning disabilities awareness. Dharmaraj (2000) reported that teachers with higher educa-

tion levels had a higher awareness of learning disabilities.

Research Questions

The researchers sought to answer the following question:

RQ1: What are the perceived challenges in special education teachers' attitudes toward teaching students with learning disabilities?

RQ2: How do special education teachers perceive self-efficacy in teaching students with learning disabilities?

The researchers investigated these questions through interviews with teachers and applied a combination of inductive and deductive content analysis methods.

MATERIAL AND METHODS

Participants and Setting

The researchers collected qualitative data to obtain detailed information from interview participants regarding their attitudes toward the challenges of teaching students with learning disabilities and how these challenges influenced their self-efficacy. Participants included 12 special education teachers (four men and eight women) from five primary schools in the Ha'il Region. Participant age ranged from 26 to 39 years, with an average age of 30 years, average teaching experience length was eight years, ranging from five to seventeen years, participants were coded as female teachers (FT) or male teachers (MT), where, for example, MT2 represents the second male teacher interviewed. Interviews were between 25 and 46 minutes long, with an average of 35 minutes.

Procedure: Semi-structured Interviews

The University of Ha'il, with which the authors are affiliated, and the Ministry of Education, provided ethical approval for the research (approval number: H-222-421). The researchers randomly chose five primary schools in Ha'il and sent their principals an email invitation to participate in the study. All schools were willing to participate. The study purpose was explained to special education teachers during a meeting, and their principal presented a letter describing the study, and those teach-

ers willing to participate provided written informed consent to participate.

The researchers formulated semi-structured interview protocols for special education teachers and conducted a literature review to develop 14 open-ended questions (Kim and Seo 2018; McFarland et al. 2018; Pedota 2015), which included demographic questions (interview protocols will be provided on request). Consistent with participant preferences, the first author personally conducted the interviews. Participants provided consent for the researchers to audio-record the interviews, which were then transcribed verbatim. All transcripts were de-identified and participants were assigned pseudonyms.

Data Analysis

All audio-recorded interviews were reviewed by the first author to ensure accuracy and ascertain that inconsistencies were rectified. The researchers used inductive content analysis to evaluate the interview content (Elo and Kyngäs 2008). The coding units in the data analysis included words, sentences, or paragraphs that included elements that were linked through context and content (Graneheim and Lundman 2004). Each teacher interview was coded separately by the second and third authors. The researchers compared the coding results and resolved any discrepancies through discussion. After reaching an agreement, open coding of the remaining teachers' interviews was conducted by the first author by thoroughly reviewing each interview and determining the initial codes. In vivo codes (actual words used by participants to explain the code) were observed (Corbin and Strauss 2015; Cumming et al. 2020) through this process. The second author reviewed the open coding stage findings to ensure coding accuracy, and the interviews were transcribed. The researchers held several meetings to validate the coding phase findings and resolved any discrepancies through discussions.

Considering the 'emergent nature of qualitative research approaches,' the researchers modified and clustered the emerging codes and classified them into themes (Hodgetts 2013). Triangulation of 'codes, memos, interview quotes, and frequency of occurrences' affirmed the evidence for an established theme (Hodgetts 2013). The researchers investigated the research questions by

conducting deductive content analysis, because this approach is suitable for evaluating the subject of interest. The first author then used the themes to select the practices cited by the teachers. The second and third authors then evaluated the themes and resolved any differences through discussions. The results presented a complete overview of special education teachers' responses regarding teaching students with learning disabilities. Triangulation and peer checking were ensured by including all authors in each step of data analysis (Brantlinger et al. 2005; Rodger et al. 2012).

RESULTS

The researchers sought to discover whether special education teachers' perceptions aligned with those of teachers of students with learning disabilities. The researchers identified the following themes of challenges of teaching students with learning disabilities, and training and professional development.

Theme (1): Challenges of Teaching Students with Learning Disabilities

Participants reported that it was challenging to teach students with learning disabilities and that it was frequently essential to find material, in addition to their normal lessons, to challenge these students. Participants also reported that meeting the social and emotional needs of students with learning disabilities was more challenging than meeting their academic needs, because it was difficult to develop confident relationships with these students.

All participants reported a need to close the gap between the needs of special education teachers and those of students with learning disabilities, and indicated that they lacked practical tools to cope with these challenges. In addition, participants indicated that it was difficult to challenge these students at the appropriate academic and interpersonal levels:

The challenges in working with students with learning disabilities...is important to know low achievements. (FT4)

There are many challenges faced in teaching students with learning disabilities. (FT3)

Participants also emphasised the importance of preparing to avoid challenges in teaching students with learning disabilities:

Special education teachers' challenges while coping with classes of teaching students with learning disabilities are due to the lack of knowledge that prepares these special education teachers according to students with learning disabilities' needs. (MT5)

We have a lack in the practice of special education teachers to constantly challenge them academically. (MT6)

Participants highlighted the attitude of teaching students with learning disabilities, which is a challenge. For instance, special education teachers must learn about the characteristics and challenges, and how to cope with their roles (MT1, MT4, and MT6). MT7 noted, "This complexity increases the difficulty for special education teachers confronting the dual challenges of students with learning disabilities". Furthermore, FT2 believed that the situation intensifies the special education teachers' challenges and that special education teachers do not receive appropriate preparation to deal with the cognitive and emotional characteristics of students with learning disabilities.

In interviews conducted at the end of the seminar, participants said that they would like to have a learning procedure that changed their resentment and distance to a position of kindness and consideration of the challenges faced by students with learning disabilities. Participants believed that they could contribute to their classroom environment, which would enable them to develop skills while simultaneously providing solutions to students' difficulties and improving their self-efficacy.

Theme (2): Training and Professional Development to Perceive Self-efficacy

Participants indicated that they did not receive ongoing professional development training that would help them to positively manage the challenges of teaching students with learning disabilities, increase their confidence in their ability to do so, and improve their self-efficacy. For instance, MT2 and MT8 noted, "During our teaching the students, there are many individual differences between the students, but we do not know how to

teach them because we do not receive professional development to teach students with learning disabilities for a new method.” Several participants expressed concern about the lack of professional development in general:

There is a weakness in the professional development offered by the Ministry of Education for this category of students, and most of these courses are outside the Ha'il region and it is difficult for us to travel. (MT3)

Because we don't get professional development, we don't have the self-efficacy to teach students with learning disabilities by updating strategies...because each learning disabilities student is so different from others. (FT3)

Participants believed that special education teachers should undergo professional development to learn new methods for teaching students with learning disabilities, and most participants believed that benefits could be reaped regardless of whether they occurred during in-service training:

We must obtain professional development to teach students with learning disabilities to raise our self-efficacy and not to encounter challenges in teaching them. (FT2)

During my experience of teaching, I suffered from a lack of professional development that contributes to teaching students with learning disabilities in the correct way and...no professional development education for teaching students with learning disabilities. (MT1)

Professional development, which could increase their level of knowledge about the teaching of students with learning disabilities, would be helpful in supporting them. (MT8)

Participants recognised the importance of properly supporting students with learning disabilities.

There is a lack of official acknowledgment of this, and characteristics which are challenging the special education teachers' support for students with learning disabilities. (MT2)

The Ministry of Education is supposed to provide all teachers of students with learning disabilities with professional development in order to raise the self-efficacy of all teachers in teaching students with learning disabilities (FT1).

It needs to be introduced into professional development courses and workshops, and post-graduate studies. It is essential for the government. (MT5)

Should be adjusted to the requirements of the educational system... The students with learning disabilities can feel more confident and improve their self-efficacy. (MT1)

Participants provided several suggestions for how professional development should be delivered to help teachers of students with learning disabilities. Four teachers (FT1, MT3, MT8 and MT2) indicated that careful planning is crucial for realising effective initiatives for students with learning disabilities. Other teachers (MT6 and FT2) emphasised the need for professional development to identify students with learning disabilities in schools. In addition, three participants (FT4, MT4 and MT5) recommended compulsory learning for disability student training, especially for special education teachers at all levels, to help teachers perceive their self-efficacy. All participants expressed their hope that the Ministry would provide them with professional development, indicating that some special education teachers need to be trained overseas, while others should undergo training within the country and conduct research in the field.

In conclusion, participants indicated that they face many challenges in teaching students with learning disabilities because they lack professional development training for teaching these students, and therefore, it would be helpful for them to receive professional development. Additionally, participants want to improve their level of self-efficacy in teaching students with learning disabilities through inquiries with prospective teachers in Saudi Arabia schools. These special education teachers showed that the combination of relevant knowledge and attitudes that met the challenges of students with learning disabilities made a difference to their attitudes and stigma toward students with learning disabilities and empowered their teaching skills and self-efficacy.

DISCUSSION

The study aimed to analyse the attitudes of special education teachers to determine the self-efficacy of teaching children with learning disabilities. The results showed that, although it is difficult for most special education teachers to teach students with learning disabilities, they face more difficulties fulfilling students' social and emotional needs than their academic needs. These results

are consistent with those of the existing literature (Love et al. 2019; Woodcock and Faith 2021) regarding the issues experienced by special education teachers when teaching students with learning disabilities. Other studies obtained similar results, which suggests that there is a greater likelihood of special education teachers concentrating on the challenges they experience (Pedota 2015). In addition, the results showed that the key challenge faced by special education teachers at the academic level was a lack of practice (Oliver and Reschly 2010). The challenges faced by special education teachers when teaching students with learning disabilities were identified by these teachers, who recognised that teaching such students involves a complicated mix of distinct strengths, as shown by the vast body of research (Tschanen-Moran and Hoy 2001; Wang et al. 2017). Special education teachers assert that official recognition of such students is lacking, as is a definition of their characteristics, which hinders their ability to provide support to students with learning disabilities, and to teach them at different educational levels (Prather-Jones 2011). These results concur with other recent studies reporting that special education teachers need to understand the factors that influence their attitudes regarding their ability to fulfil the challenge of teaching students with learning disabilities, and to identify ways in which they can enhance their self-efficacy (Dawson and Scott 2013; Pedota 2015; Rushton 2000).

The researchers found that special education teachers consider self-efficacy as an indicator of faith in their ability to help students achieve success (Woodcock and Faith 2021). They believe that self-efficacy gives rise to productive learning environments for teaching students with learning disabilities. Participants identified the factors that could affect teachers' self-efficacy when teaching such students. However, they frequently felt that their earlier experiences were not helpful because each student with a learning disability was very different from others, and this was supported by previous literature (Skaalvik and Skaalvik 2010).

Special education teachers believe that professional development can enhance their knowledge about teaching students with learning disabilities and would help them offer support to such students in the classroom, confirming the finding that professional development plays a vital role in teaching such students. Pedota (2015) found that

it was significantly more likely for teachers who had received professional development to teach students with learning disabilities. These results are expected because professional development is requested by teachers when they feel incapable of teaching such students (Carroll 2019; Skaalvik and Skaalvik 2010).

With respect to enhancing teachers' self-efficacy in Saudi Arabian schools, previous research showed that special education teachers who teach students with learning disabilities do not receive professional development. Therefore, increased support could be provided by teachers of students with learning disabilities when they receive specialised training in this regard. Carroll (2019) asserted that teachers who have received specialised training exhibit differences in the type of support they offer to students with learning disabilities compared to teachers who have not received training. Similarly, the researchers found that when special education teachers have not received professional development, they may be ill equipped to serve as counsellors in educating children with learning disabilities. For instance, because special education teachers do not have the knowledge to enhance their skills, they may only be capable of offering challenging activities to students with learning difficulties.

CONCLUSION

This study conducted in-depth interviews to examine self-efficacy and special education teachers' attitudes toward teaching students with learning disabilities to prevent challenging events. The researchers obtained insights through these qualitative methods that other methods, such as surveys could not reveal. The findings regarding teachers' self-efficacy and the challenging issues they experience, which surpass their ability to teach students with learning disabilities, are consistent with the need to improve the formal individual education domain.

RECOMMENDATIONS

The key outcome of this study is that little attention has been given to teachers' attitudes toward teaching students with learning disabilities in Saudi Arabia, primarily because of shortcomings in the professional development available to

special education teachers who have low self-efficacy. In addition, Saudi Arabia does not recognise learning disabilities, which is why they need to be incorporated into professional development workshops and courses as well as in postgraduate programs. It is important for the government (particularly the Ministry of Education), special education teachers, education and training providers, teachers, and administrators to comprehend the concept of students with learning disabilities, and to develop policies that will allow teachers to handle these students' requirements. Teachers should undergo professional development to improve their ability to efficiently respond to the requirements of all learners, and to improve teachers' positive perceptions to increase their self-efficacy in teaching students with learning disabilities. In addition, special education teachers' learning capabilities and self-efficacy compelled them to review their attitudes and approaches toward countering the challenges related to teaching students with learning disabilities.

LIMITATIONS

This study had limitations. First, the researchers had a small sample, with only 12 special education teachers from schools in Ha'il, and therefore, it is not possible to generalise the findings to other scenarios. Similar results have been obtained in different settings, however, subsequent studies should include participants from different schools and distinct geographic locations. Second, the researchers conducted interviews only with special education teachers. Future studies should include other teachers by employing accessible research approaches such as questionnaires. In addition, a more extensive understanding was obtained when teachers from all over Saudi Arabia were examined, particularly in light of recent requests to enhance their attitudes about teaching students with learning disabilities.

CONSIDERATIONS FOR FUTURE RESEARCH

This study concentrated on special education teachers' attitudes. School officials' and parents' attitudes toward students with learning disabilities also have an impact on these students' education experiences. Therefore, it is also important to

consider officials' and parents' attitudes. The approach with special education teachers can be expanded to provide vital information on parents' awareness regarding students with learning disabilities, which could help develop policies and practices for such students in primary schools, high schools, and universities in Saudi Arabia. A mixed-methods approach should be used in such studies to determine general attitudes toward teaching students with learning disabilities, and to develop a base of evidence that can help special education teachers improve their self-efficacy in supporting these students.

AUTHOR CONTRIBUTIONS

Methodology, M.M.A.; Data Curation, I.M.A.; Validation, O.A.A.; Formal analysis, O.A.A.; Investigation, O.A.A.; Resources, O.A.A.; Software, O.A.A.; Original Draft Preparation, I.M.A.; Project Administration, I.M.A.; Funding Acquisition, I.M.A.; Supervision, I.M.A.; Review and Editing, M.M.A.; Visualisation, M.M.A.

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INSTITUTIONAL REVIEW BOARD STATEMENT

The University of Ha'il and the Ministry of Education provided ethical approval for the research (H-222-421).

INFORMED CONSENT STATEMENT

Written informed consent was obtained from all participants involved in the study.

DATA AVAILABILITY STATEMENT

Data is unavailable due to privacy and ethical restrictions.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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