

**TEACHERS' ATTITUDES AND CHALLENGES TOWARDS
INCLUSIVE EDUCATION IN COMMUNITY-BASED EARLY
CHILDHOOD EDUCATION CENTERS IN LEBANON**

By
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ABSTRACT

The protracted Syrian conflict has displaced over 1.5 million refugees into Lebanon, straining its education system. While initiatives like Reaching All Children with Education (RACE) expanded access, children with disabilities remain excluded with under 1% enrollment. This mixed-methods study explores the status of inclusive education (IE) in community-based early childhood education (CBECE) centers from teachers' perspectives. Using a survey questionnaire with 52 educators and a focus group discussion with 10 educators, it investigates a) attitudes on integrating children with special educational needs (SEN) into mainstream classrooms b) implementation challenges faced c) critical professional development needs for fostering inclusive practices. Although most teachers support IE philosophically, findings reveal discrepancies between beliefs and practical application competencies. Key challenges involve inadequate training, resources and skills for executing inclusion amid large classes, curriculum pressures and varying parental attitudes. Tailored assistance is lacking to address complex trauma and disabilities. Critical skill-building areas encompass assessment, communication, behavior management strategies, and Individualized Education Plans (IEP). For progress, consolidated efforts between policymakers, educators and communities are vital to translate positive intentions into quality inclusive environments, especially given refugees' heightened needs. Ultimately, supporting teacher capabilities through context-relevant professional development is key for actualizing inclusive rights among Lebanon's crisis-affected learners missing specialized assistance.

Key words: Early childhood education, inclusive education, inclusive beliefs, inclusive skills, teachers' attitudes, challenges, professional development, community-based centers, refugees

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LIST OF ABBREVIATIONS

| | |
|-------|---|
| SEN | Special Educational Needs |
| MEHE | Ministry of Education and Higher Education |
| CBECE | Community-Based Early Childhood Education |
| IE | Inclusive Education |
| IB | Inclusive Beliefs |
| IS | Inclusive Skills |
| ECE | Early Childhood Education |
| ECEC | Early Childhood Education and Care |
| RACE | Reach All Children with Education |
| CERD | Center for Educational Research and Development |
| NGO | Non-Governmental Organization |
| IEP | Individualized Education Plan |

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CHAPTER 1

INTRODUCTION

1.1 Statement of the Problem/Context

The protracted Syrian conflict has forcibly displaced over 1.5 million people into Lebanon since 2011, comprising nearly one-third of its population and straining resources across sectors (Al-Hroub et al., 2023). Approximately half of the refugees are children, amounting to over 750,000 minors requiring urgent educational services (Hamadeh, 2019). The influx overwhelmed Lebanon's public education system, compelling the Ministry of Education and Higher Education (MEHE) to launch the ambitious Reaching All Children with Education (RACE) strategy in 2013 focused on rapidly integrating displaced and vulnerable Lebanese and non-Lebanese children. RACE initiatives encompassed running double shifts in public schools, offering tuition grants, establishing non-formal refugee education centers focused on literacy, numeracy and psychosocial skills and implementing accredited community-based early childhood education (CBECE) centers with international assistance from different Non-Governmental Organizations (NGO) (Jalbout, 2015).

CBECE centers play a critical role as they target early childhood refugees aged 3-5 years for cognitive and social-emotional skill building to prepare them for primary school entry. As the most formative developmental stage, quality early learning opportunities can significantly impact life trajectories (Pradhan et al., 2013). Unfortunately, persistent barriers like discriminatory attitudes, policy limitations, underfunded budgets and a lack of teacher expertise continue preventing children with disabilities from accessing these existing education initiatives (Tilawi et al., 2023).

Approximately 27% of displaced Syrian families encompass members with disabilities, yet a mere 0.01% of refugee students with disabilities attend schools and educational centers (Humanity & Inclusion, 2023). Consequently, this mixed methods study aims to empirically

explore the status of inclusive education (IE) within CBECE centers from an under-examined perspective - teachers on the frontlines. It investigates a) self-reported attitudes on integrating children with diverse special educational needs (SEN) into mainstream classrooms, b) specific implementation challenges faced, and c) critical areas warranting trainings and professional support.

Teachers' attitude fundamentally shapes learning environments, indicating priorities for teacher education and assistance (Zabeli et al., 2020). Therefore, elucidating their knowledge, skills and perspectives is vital for developing responsive policies and effective practices to fulfill inclusive quality education for Lebanon's sizeable crisis-affected childhood population with unmet specialized needs. For instance, a study by Antoun (2022a) investigating Lebanese primary school teachers' perceptions of giftedness revealed misconceptions equating it solely with academic achievement. This limited understanding influenced how teachers identified gifted students and the instructional strategies used, acting as a barrier to providing appropriate educational support (Antoun, 2022a). Such findings highlight how teacher attitudes and knowledge can significantly impact inclusive practices not just for students with disabilities, but also those with diverse needs like giftedness.

This study is grounded in two key theories: Bandura's self-efficacy concept (2003) and Ajzen's theory of planned behavior (1991). This robust combined framework examines teachers' attitudes and their role in developing skills needed to effectively implement inclusive education. Bandura (2003) stresses the importance of self-efficacy, referring here to teachers' confidence in integrating SEN children into mainstream classrooms. This notion is vital for understanding how teachers perceive their capabilities and how these perceptions influence willingness to adopt inclusive practices. Self-efficacy matters because research shows teachers who believe they can meet special needs students' requirements hold more positive attitudes about inclusion (Avramidis et al., 2000; Lancaster & Bain, 2010).

Complementing Bandura's ideas, Ajzen's (1991) theory of planned behavior offers a broader perspective by incorporating self-efficacy within a framework analyzing links between attitudes, beliefs, intentions and behaviors. This theory clarifies that teachers' intentions to employ inclusive practices depend not only on self-efficacy but also on their attitudes about these practices and subjective norms in their schools. These institutional norms and culture, though often overlooked, significantly shape approaches to inclusion (Ajzen, 1991).

1.2 Research Aim and Research Questions

This study aims to explore the status of IE in CBECE centers in Lebanon. The study investigates: (a) teachers' attitude towards IE, (b) the challenges that teachers face when implementing IE in their classrooms, and (c) the trainings that teachers need for a successful implementation of IE.

The study is guided by the following questions:

1. What are the teachers' attitudes towards including children with SEN in CBECE regular classrooms.
2. What are the challenges that CBECE teachers face when implementing IE in their regular classrooms?
3. What are the trainings needed for CBECE educators to successfully include SEN children in their classrooms?

1.3 Rationale of the Study

While Lebanon's RACE plan significantly bolstered education access for refugees since 2013, enrolment statistics indicate persistent exclusions for the most marginalized - children with overlapping vulnerabilities stemming from displacement, poverty and disability (Human Rights Watch, 2021). Prevailing societal prejudices coupled with school-level barriers in

teacher abilities, physical accessibility and discriminatory policies continue preventing their participation (Tilawi et al., 2023). This amounts to systematic rights denials. Antoun's (2022a) study on Lebanese primary school teachers further illuminates how limited teacher knowledge and misconceptions about diverse student needs like giftedness can act as barriers to providing appropriate educational support.

Teachers directly facilitate, or obstruct, inclusion experiences, constructing daily educational realities for children with diverse support requirements (Zabeli & Gjelaj, 2020). Their knowledge, skills, and attitudes fundamentally shape learning access, experiences and outcomes. Yet substantial barriers around untargeted teacher training, inadequate learning supports, and unsupportive leadership decisions remain unchecked in Lebanon (Al-Hroub & Jouni, 2023). Antoun and Plunkett (2023) echo this, emphasizing the necessity of high-quality pre-service and in-service teacher training on inclusive practices, differentiation strategies, and specific disabilities to fulfill inclusive quality education goals.

This timely study addresses a conspicuous data gap by uncovering teacher perspectives within Lebanon's under-examined early childhood education context for refugees, especially those critically omitted from past quality or inclusion assessments. Its findings can inform structural education improvements through tailored teacher professional development and pre/in-service preparation models responsive to contextual needs and voices. Antoun's (2022b) research further highlights how developing contextually appropriate policies and teacher training programs that consider the specific socio-economic and cultural context is crucial for inclusive education efforts to be effective.

The study's insights illuminate pathways for progressing towards equitable inclusive quality assurance, and fulfillment of UN SDG4, for Lebanon's sizeable crisis-affected childhood population needing specialized support.

CHAPTER 2

LITERATURE REVIEW

2.1 Defining Inclusive Education

Inclusive education refers to an educational system that caters to the diverse needs of all learners by creating a supportive and accepting environment for students with disabilities or special needs (Ainscow et al., 2006). The international community formalized its pledge to inclusive education through the Salamanca Statement and Framework for Action on Special Needs Education in 1994. This policy document, developed by UNESCO in collaboration with 92 governments, acknowledged the responsibility of education systems globally to increase educational access for all citizens (Attwood, 2017). This approach focuses on eliminating barriers to learning and ensuring equal opportunities for all students to participate and succeed academically (UNESCO, 1994). Instead of expecting marginalized students to fit into existing systems, inclusive education emphasizes reforming schools to meet the needs of every student (Ainscow et al., 2006). The goal is to prepare all students to live, learn, and work in a diverse society by promoting respect, understanding, and tolerance for individual differences (UNESCO, 1994).

Studies indicate that inclusive education is advantageous for students both with and without disabilities. For students with disabilities, being in an inclusive setting rather than a segregated environment leads to improved academic performance and better social skills development (Oh-Young & Filler, 2015). Furthermore, inclusion cultivates greater understanding and acceptance of individual differences among all students (Agran et al., 2020). Teachers report increased collaboration and innovative teaching practices in inclusive classrooms (Pancsofar & Petroff, 2013). However, successful implementation of inclusion requires adequate support and resources. In inclusive education, the responsibility for

promoting inclusion falls on all members of the educational community, including teachers, administrators, support staff, and parents (Ainscow et al., 2006). Teachers need training in differentiated instruction, collaborative teaching methods, and behavior management (Pancsofar & Petroff, 2013). Administrators should provide ongoing professional development, planning time, and curricular resources to enable inclusive practices (Agran et al., 2020). With proper support, inclusive education provides benefits for diverse learners.

2.2 Early Childhood Education: Definition & Importance

Early Childhood Education (ECE), as defined since 1980, is the education that begins from birth till 8 years old (Four et al., 2006). It encompasses the care and instruction of young children from birth through age 8 (NAEYC, 2020). ECE includes both formal programs like preschools and kindergartens as well as informal learning like nurseries and family childcare homes (Akar et al., 2017). In its SDG4, the United Nations (2015) emphasized the critical role of quality early childhood education in providing foundational cognitive and language skills for children, fostering their social competence and emotional development, and establishing a base for lifelong learning and well-being.

There is substantial evidence that high-quality ECE provides short- and long-term developmental benefits for children across domains. Research has shown that children who receive high-quality early childhood education and good teacher-child interaction have better linguistic, cognitive, and social development (Tilbe & Gai, 2022). In terms of cognitive and language development, language acquisition and emergent literacy skills develop rapidly in environments rich in verbal interactions, print materials, and opportunities for self-expression (Wasik, 2010). Studies have found attendance at high-quality pre-kindergarten predicts better reading and math achievement in elementary school (Phillips et al., 2017). In terms of social-emotional growth, Ahnert et al. (2006) stated that warm, responsive caregivers help children

develop secure attachments and self-regulation skills. Preschool classrooms that model cooperation and conflict resolution provide a foundation for positive peer interactions (Jennings & Greenberg, 2009).

Further, according to Pradhan et al. (2013) early years period is associated with a person's adult years. They mentioned that criminality, social interaction, employment, school attainment, and many other aspects may be affected because of poor early childhood protection and development. Moreover, long-term follow-up studies track the lasting impacts of early learning. Participants in high-quality intervention programs such as the Perry Preschool Project and Abecedarian Project showed higher educational attainment, employment rates, and income along with lower crime and teen pregnancy rates compared to control groups (Reynolds et al., 2011). Cost-benefit analyses indicate investments in ECE lead to sizable returns for society through increased productivity and reductions in remedial education and social services (García et al., 2016).

2.3 Special Educational Needs and Disabilities in Early Years

Special Educational Needs (SEN) encompass a broad spectrum of challenges that children may face in educational settings, requiring additional or different support compared to what is typically provided in mainstream educational settings (Lundqvist et al., 2019). These needs can range from mild to severe and include educational, physical, cognitive, and emotional aspects essential for a child's well-being and development (Lloyd, Irwin, & Hertzman, 2009). Students with SEN, as defined by the Department for Education (2015), are those who require additional support to access education due to disabilities or learning difficulties. SEN is particularly pertinent in the context of early school years, especially for children aged 5-7 years. During this period, children's needs and values are often expressed in

terms of their likes, dislikes, and what they consider to be good experiences (Lundqvist et al., 2019).

SEN cover a variety of difficulties, including behavioral, social, communication, and physical challenges (Wythe, 2022). Wythe (2022) added that these difficulties may trigger responses or behaviors that are perceived as challenging, such as changes to routine and behavioral expectations causing fear and anxiety in learners with SEN. According to Sharma & Salend (2016), there are two main types of SEN: cognitive/learning needs and social/emotional/mental health needs. Cognitive or learning needs encompass conditions like dyslexia, dyscalculia, dysgraphia, auditory processing disorder, and autism spectrum disorders, which can make it difficult for students to acquire academic skills. On the other hand, social, emotional, or mental health needs include conditions such as anxiety, attention deficit hyperactivity disorder, obsessive-compulsive disorder, and depression, which impact students' socio-emotional wellbeing and behavior (Sharma & Salend, 2016).

Increasingly, researchers and educators are recognizing giftedness as another form of special educational need (Plucker & Callahan, 2020). Gifted students, typically defined as those with exceptional abilities in one or more domains such as intellectual, creative, or artistic areas, require educational provisions that differ significantly from those provided to students of average ability (Subotnik et al., 2011). Like other SEN categories, giftedness is characterized by unique learning needs that, if not met, can lead to underachievement, boredom, and socio-emotional issues (Cross & Cross, 2015).

In early years education, identifying and supporting gifted children is crucial. Young gifted learners often display asynchronous development, where their cognitive abilities significantly outpace their physical or emotional maturity (Silverman, 2013). This disparity can lead to frustration, perfectionism, and difficulty relating to age-peers. Moreover, without

appropriately challenging material, these children may disengage from learning or develop poor work habits that persist into later schooling (Gagné, 2015).

Accommodations for gifted students parallel those for other SEN categories, focusing on adapting the educational environment to meet individual needs. These may include curriculum compacting, acceleration, enrichment activities, higher-order thinking tasks, and opportunities for independent study (VanTassel-Baska & Hubbard, 2019). Also, critical are socio-emotional supports to help gifted children navigate feelings of difference, manage expectations, and develop resilience (Cross & Cross, 2015).

These needs can significantly affect a student's academic performance and social development if not properly addressed through interventions and accommodations. Common accommodations for SEN students include providing extra time, using assistive technology, modifying the curriculum, preferential seating, and implementing behavior plans (Sharma & Salend, 2016). With the appropriate support, students with different needs can thrive academically and socially alongside their mainstream peers, underlining the importance of recognizing and catering to these diverse needs in educational settings (Sharma & Salend, 2016).

2.4 Inclusive Education in Early Years: Benefits & Barriers

While inclusive education widely refers to educating children with diverse abilities in mainstream classrooms (Ainscow et al., 2006), tailoring inclusion during early childhood entails distinct adaptations suited to young children's developmental needs and capacities (Oh-Young & Filler, 2015).

Extensive research demonstrates children with disabilities aged 3-5 years enrolled in inclusive preschool settings attain better academic and social outcomes compared to

segregated special education environments (Holahan & Costenbader, 2000). For example, analysis by Oh-Young and Filler (2015) across 44 studies showed preschoolers with disabilities performed considerably higher on cognitive and social measures when learning alongside typically developing peers. These positive effects spanned disability categories from mild to severe. Such exposure also nurtures compassion, appreciation of diversity and helpfulness in children without identified special needs (Downing & Peckham, 2007).

However, substantial multi-level barriers obstruct actualizing inclusive early childhood rights and evidence-based models in authentic educational settings. Ingrained societal prejudices viewing disabilities as inherent deficits rather than diversities persist, preventing welcoming environments for young children (Purdue, 2009). Practical barriers also loom regarding extensive classroom, materials and activities modification needs for differing abilities, relative to older children (Ranieri, 2022). Teacher skills remain inadequate, as Muccio et al. (2014) found over 95% of preschool educators conveyed concerns about managing child behaviors, lacking training and resources to implement quality inclusion. Structural barriers also exist concerning reliable school health services and family collaboration support compared to primary schools (Couchenour & Chrisman, 2016).

Notably, parents of children with special needs demonstrate lower school involvement rates that require sensitivity and skills to successfully cultivate partnerships (Bennett et al., 1998). Cultural factors may also contribute to this discrepancy in certain communities. Systemic awareness-raising and empathy-building regarding children's holistic participation rights represent urgent priorities alongside educational training and materials improvements for achieving inclusive early childhood education (Zabeli & Gjelaj, 2020; Sharma et al., 2022).

2.5 Teachers' Attitude Towards Inclusive Education

Teachers are pivotal stakeholders central to enacting IE policies and making them work effectively in schools, thus their perceptions and attitudes greatly impact inclusion success (Forlin & Florian, 2010). Multiple studies have explored variables influencing teachers' openness and capability to adopt inclusive practices. A 2017 qualitative study by Bialka analyzed three general education teachers' attitudes towards integrating students with special needs, finding educators with more positive prior exposure to those with disabilities held a more favorable inclusive stance. Muccio et al. (2014) identified professional development, training, administrative backing, and collaboration as key factors shaping teacher perspectives. They emphasized teachers want practical instruction not just theory, plus adequate staffing assistance and resources. Research also shows teacher confidence in differentiating instruction, or self-efficacy, promotes more positive attitudes towards inclusion per Forlin's 2006 work.

Perspectives among early childhood educators towards inclusive education and teaching students with disabilities in mainstream classrooms vary. Some express concerns about having inadequate training, skills or resources to address all children's needs in an inclusive setting (Banerjee et al., 2017; Kraska & Boyle, 2014). However, other preschool teachers report more positive attitudes about inclusion, emphasizing social development and peer interaction benefits applying to all students (Chandler-Olcott & Kluth, 2009). Certain research also indicates teacher comfort levels differ based on disability types. For instance, Vaz et al. (2015) found more favorable attitudes toward inclusion of children with physical rather than emotional, behavioral or cognitive disabilities. Similarly, Coplan et al. (2015) revealed teachers respond more positively to introverted versus externalizing behaviors.

Providing targeted professional development can help improve early childhood educators' self-efficacy and practices related to inclusion. For example, Kraska and Boyle (2014) found a 3-day intensive in-service training led to reduced teacher concerns and increased confidence in supporting preschoolers with disabilities alongside peers. Ongoing coaching and collaboration with special education staff are also critical for ensuring early childhood teachers feel supported in implementing quality inclusive education (Banerjee et al., 2017; Chandler-Olcott & Kluth, 2009). More recent research underscores the importance of pre-service and in-service training focused on evidence-based inclusive practices to shape positive teacher attitudes and preparedness (Sokal & Sharma, 2022; Stites et al., 2018). Sokal and Sharma (2022) recommended sustained coaching and communities of practice in addition to one-time workshops. Overall, addressing early childhood teacher concerns through comprehensive professional development and learning communities is key for successful inclusion (Stites et al., 2018).

2.6 Teachers' Challenges in Implementing Inclusive Education

Teachers face numerous challenges in implementing effective inclusive education, which aims to provide quality education to all students regardless of individual differences (Fernandez et al., 2023). A major challenge is that teachers often lack sufficient training in differentiated instruction, experience, and resources to adapt their instruction for the range of student needs (Boyle et al., 2020; Carballo et al., 2021). Surveys of early childhood teachers indicate that large percentages feel they lack the skills and training needed for inclusion, especially regarding significant disabilities or behavioral issues (Park et al., 2018; Sukbunpant et al., 2013). Danner and Fowler's (2015) research on preschool teachers showed comparable results, with teachers feeling unprepared for inclusion, especially those in private preschools and daycares. Another major barrier is negative attitudes and low self-efficacy

beliefs among both preservice and in-service teachers regarding teaching students with disabilities or diverse learning needs in mainstream classrooms (Avramidis et al., 2019; Sharma et al., 2018). At a systemic level, the full implementation of inclusion can be impeded by cultural prejudices, funding constraints, inadequate policy support or leadership, and insufficient collaboration across school staff and with families (Bines & Lei, 2011; Woodcock & Woolfson, 2019).

In early childhood settings, teachers report similar challenges relating to lack of preparation, behaviors management, and collaboration (Lee et al., 2015; Barton & Smith, 2015). Some early childhood teachers express concerns about lacking sufficient training, skills, and resources to meet the needs of all students in an inclusive setting (Banerjee et al., 2017; Kraska & Boyle, 2014). Teachers require administrative support, targeted professional development, and access to evidence-based strategies and resources to feel equipped to teach inclusively (Brown, 2019). Moreover, teachers also reported that access to therapies and support services for young children with disabilities may also be limited (Couchenour & Chrisman, 2016). However, research also highlights measures to facilitate more inclusive practices, including targeted professional development, fostering of positive teacher attitudes through contact and experience with people with disabilities, development of school-wide inclusion plans, and increased family and community partnerships (Ainscow et al., 2013; Lautenbach & Heyder, 2019; Sharma et al., 2019).

2.7 Policies for Inclusive Education in Lebanon

IE policies in Lebanon have gradually developed over the past few decades, with some progress alongside ongoing challenges. One notable advancement was 2000's "Law 220," acknowledging rights to schooling for individuals with special needs and requiring inclusive opportunities across schools (Al-Hroub et al., 2023). However, analysis by Al-

Hroub (2022) indicates this legislation does not explicitly mandate including students with disabilities in mainstream schools or provide robust enforcement mechanisms, hence its limited real-world effect (Al-Hroub & Jouni, 2023). In 2012, Lebanon's Ministry of Education's Center for Educational Research and Development (CERD) launched the "National Educational Plan for Persons with Disabilities," stressing tailored learning needs and accessibility (Al-Hroub et al., 2023). Yet as Al-Hroub and Jouni (2023) discussed, insufficient financing and implementation clarity restricted its impact. More recently in 2018, the Ministry of Education partnered with UNICEF on an IE pilot across 30 Lebanese public schools (MEHE & UNICEF, 2021), expanding to 110 by 2023, indicating growing governmental IE commitment. Furthermore, the Ministry's 2021 "5-Year General Education Plan" promotes equitable, quality education for at-risk children including students with special needs, championing inclusion for developing active, innovative citizens (MEHE, 2021). One of his 5-year plan's targets was to begin inclusion from ECE and to provide inclusive early childhood education for all children in formal and non-formal education (MEHE, 2021). For instance, The RACE framework, guiding refugee education response, emphasizes identifying and assisting individuals with disabilities via its non-formal interventions such as the CBECE centers (MEHE, 2016).

A significant shift came in June 2023 with the MEHE's launch of the "National Policy for Inclusive Education", developed in extensive consultation with international actors like the European Union and UNICEF (MEHE & CERD, 2023). This policy aims to provide a national framework for implementing inclusion across Lebanon's education system, building on lessons from pilot projects and global best practices. It establishes standards for inclusive, supportive learning environments in both formal (public and private schools) and non-formal education centers from kindergarten through secondary level (Al-Hroub et al., 2023). Specifically, the policy mandates schools and educational institutions to make

curricular adaptations, utilize differentiated instruction, remove physical barriers, and synchronize educational and social inclusion efforts to engage all learners. It also outlines the roles and responsibilities of various actors like policy bodies, schools, families, and communities in executing the policy (Al-Hroub et al., 2023). For instance, schools must form collaborative student support teams, while governing agencies should issue implementation mechanisms with incentives and accountability measures (MEHE & CERD, 2023). To develop this Policy, MEHE conducted extensive stakeholder consultations over 15 months with local and international experts, NGOs and civil society groups, teacher representatives and families of children with special needs (MEHE & CERD, 2023). Feedback was incorporated into the document to align with groups' visions and ensure contextual relevance. The participatory process allowed diverse voices to shape a policy addressing accessibility, quality, and inclusion in the education system (MEHE & CERD, 2023).

The National Policy signifies Lebanon's re-focused commitment to inclusive education under the global SDGs (MEHE & CERD, 2023). By outlining a supportive framework spanning institutional, pedagogical, and social domains, it has strong potential to progress inclusive practices if executed effectively (Al-Hroub & Jouni, 2023). However, translating policy to on-ground change requires consolidated efforts across all responsible entities, adequate budget allocations and ongoing progress monitoring. Maintaining participatory decision-making with students, parents and experts is equally important for successful implementation (Al-Hroub & Jouni, 2023). While these policies and plans represent progress, substantial work remains to achieve effective inclusion and transform education for marginalized children in Lebanon. Issues like lack of teacher training, accessibility barriers in schools, and societal stigma continue to impede inclusion. Ongoing efforts between policymakers, schools, educators, and communities are vital to translate policies into practice (Al-Hroub & Jouni, 2023).

2.8 Refugee Children Education and Inclusive Education in Lebanon

Lebanon currently hosts over 1.5 million displaced Syrians, constituting nearly one-third of the country's population (Al-Hroub et al., 2023). Approximately 50% are children, many of whom endured significant trauma and require urgent educational services (Alhajji, 2020). The massive influx has strained Lebanon's education system, with public schools absorbing nearly 200,000 additional non-Lebanese learners (Jalbout, 2015). Lebanon's Ministry of Education established the RACE initiative in 2013 to integrate displaced children through morning/afternoon school shifts, education grants and accelerated learning programs (Jalbout, 2015). Additionally, UN organizations and NGOs instituted informal education centers focused on non-cognitive skills, with models spanning trauma-informed psychosocial support, preparatory academics, language classes, recreational activities and skills development using experiential pedagogies tailored to refugees' complex needs (Shuayb et al., 2014).

However, only 50% of school-aged Syrian refugees in Lebanon attend any form of education (Human Rights Watch, 2021). Barriers include school-related costs, residency/documentation issues, security fears, discrimination, and lack of transport (Human Rights Watch, 2021). The protracted displacement has increased child labor, early marriage and forced recruitment risks (Al-Hroub et al., 2021). Refugee enrollment further declined during COVID-19 closures, with attendance dropping up to 59% among non-Lebanese children despite remote learning efforts by UN agencies and NGOs (Maadad & Matthews, 2020).

Compounding these exclusions, children with disabilities constitute around 27% of displaced Syrian families but only 0.01% of refugee students in Lebanon, indicating gross under-representation (Humanity & Inclusion, 2023). Schools commonly remain physically

inaccessible and lack inclusive policies, trained personnel, or assistive devices (Humanity & Inclusion, 2023). Ableist societal attitudes coupled with financial constraints frequently deprive families of educational choices besides segregated institutions (Tilawi et al., 2023).

The influx of refugee children into Lebanon's education system provides an imperative for adopting inclusive frameworks that are responsive to diverse learners. As Tilawi, Al-Hroub, and Jouni (2023) emphasize, refugee children with disabilities and special educational needs warrant particular focus. These children encounter intersecting barriers that heighten their vulnerability and frequently deprive them of quality education opportunities. Discriminatory attitudes, financial constraints, inadequate teacher preparation and inaccessible infrastructure commonly preclude their participation in mainstream schooling (Tilawi et al., 2023). Consequently, developing inclusive systems that proactively identify and support marginalized refugee children is vital. Strategies exist such as early screening and intervention programs, capacity building for educators on trauma-informed instruction, multi-tiered academic/behavioral support models, assistive technologies, and accessible facilities (Tilawi et al., 2023). Ultimately however, ensuring education access for refugee children in Lebanon requires coordinated efforts between humanitarian actors, communities, and government bodies to align policies, teaching practices and resource allocation toward inclusion.

To expand inclusive quality education for refugee children, including those with SEN and disabilities, initiatives like RACE must be strengthened with international support and private sector involvement (Jalbout, 2015). Teacher capacities for trauma-informed instruction, disability-related competencies and psychosocial intervention require significant development (Yarak, 2014). Updated national policies emphasizing human rights, gender-responsiveness and out-of-school children are equally vital alongside decentralized

administration enabling context-specific solutions (Jalbout, 2015). However, ensuring education access for refugee children with disabilities in Lebanon requires coordinated efforts between humanitarian actors, communities, and government bodies to align policies, teaching practices and resource allocation toward inclusion.

2.9 Conceptual Framework

This study is grounded in two complementary theoretical perspectives that provide a comprehensive lens for understanding the factors influencing teachers' attitudes and readiness to implement inclusive education practices effectively.

Bandura's Self-Efficacy Theory (1997) emphasizes the critical role of self-efficacy beliefs, which refer to an individual's confidence in their ability to successfully execute a specific behavior or task. In the context of inclusive education, teachers' self-efficacy beliefs, or inclusive beliefs, reflect their perceived capabilities to integrate children with diverse needs and disabilities into mainstream classrooms successfully. According to Bandura, individuals with strong self-efficacy beliefs are more likely to initiate and persist in challenging tasks, exert greater effort, and exhibit resilience in the face of obstacles. Conversely, those with low self-efficacy beliefs are more prone to avoidance behaviors and early withdrawal from demanding situations.

Importantly, Bandura posits that self-efficacy beliefs are a key determinant of an individual's attitudes, motivation, and actions. Teachers with robust inclusive beliefs, stemming from mastery experiences, vicarious learning, social persuasion, and positive emotional states, are more likely to develop positive attitudes towards inclusive education and demonstrate a greater willingness to implement inclusive practices in their classrooms (Avramidis et al., 2000; Lancaster & Bain, 2010). In other words, Bandura's theory suggests

that teachers' positive inclusive beliefs act as a precursor to their positive attitudes towards inclusive education, laying the foundation for their intentions and actions in this domain.

Complementing Bandura's self-efficacy perspective, Ajzen's Theory of Planned Behavior (1991) offers a broader framework for understanding the interplay between attitudes, beliefs, perceived behavioral control, subjective norms, intentions, and actual behavior. This theory posits that an individual's intention to perform a specific behavior is shaped by three key factors: their attitude towards the behavior, subjective norms (perceived social pressure), and perceived behavioral control (self-efficacy beliefs).

In the context of inclusive education, teachers' attitudes towards inclusive practices are influenced by their inclusive beliefs (perceived behavioral control), as well as their perceptions of the subjective norms surrounding inclusive education within their school and broader community. According to Ajzen's theory, teachers' inclusive skills, which reflect their perceived ability to implement inclusive strategies effectively, play a crucial role in determining their perceived behavioral control over inclusive teaching practices.

Teachers with strong inclusive skills are more likely to perceive greater control over their ability to meet the diverse needs of students in inclusive classrooms, thereby positively influencing their attitudes and intentions to engage in inclusive teaching practices. Conversely, teachers with limited inclusive skills may experience lower perceived behavioral control, which could negatively impact their attitudes and intentions towards inclusive education implementation.

By integrating Bandura's self-efficacy theory and Ajzen's theory of planned behavior, this conceptual framework provides a comprehensive understanding of how teachers' inclusive beliefs (self-efficacy), inclusive skills (perceived behavioral control), and subjective norms collectively shape their attitudes towards inclusive education, which, in turn, influence their intentions and ultimate behaviors in inclusive teaching contexts.

In summary, this framework suggests that teachers' positive inclusive beliefs, facilitated by mastery experiences, vicarious learning, and supportive environments, promote positive attitudes towards inclusive education, as proposed by Bandura. Additionally, as highlighted by Ajzen's theory, teachers' inclusive skills contribute to their perceived behavioral control, which, along with subjective norms, further reinforces their attitudes and intentions to implement inclusive practices effectively in their classrooms.

CHAPTER 3

METHODOLOGY

The methodology for conducting this research will be elaborated in the following section. Details will be provided on the approach followed, the study context and participants, the instruments utilized for data collection, procedures for analyzing the data, and ethical considerations made.

3.1 Approach

For this study, a sequential explanatory mixed methods approach was used. It involves first collecting and analyzing quantitative data, followed by the collection and analysis of qualitative data to help explain or elaborate on the quantitative results (Creswell & Creswell, 2018). This mixed methods approach is especially useful to explore quantitative results in more depth or explain relationships found in the quantitative data. The two phases build on each other, with the qualitative results helping to explain the initial quantitative results. Creswell and Creswell (2018) noted that this approach is popular in fields like health sciences and social sciences where researchers want to use qualitative data to explain significant (or nonsignificant) quantitative results.

3.2 Research Context

The research was conducted in Community-Based Early Childhood Education (CBECE) centers in Lebanon. CBECE centers in Lebanon are local initiatives that provide preschool education primarily to refugee and vulnerable children. These centers operate with the support of NGOs and are crucial in helping these children integrate into the Lebanese

national educational system. They create a safe and inclusive learning environment and facilitate the issuance of educational certificates by the Lebanese Ministry of Education and Higher Education, enabling children to progress to formal schooling. These centers are critical as they provide certificates issued to refugee students by MEHE. This certification allows refugee students to proceed to grade 1 in public schools, thus continuing their education (Jesuit Refugee Service, 2022).

3.3 Participants

This research study targeted teachers of children aged between 5 and 6 years old from underprivileged and marginalized communities, such as refugee camps and low-income areas, where access to quality early childhood education may be limited. The teacher component in this study included participants from different CBECE centers all over Lebanon. The teacher sample comprised of teachers, directors, and coordinators (N = 52). After signing a consent form, all participants were asked to fill a survey. A group of 10 experienced teachers from different centers, who also participated in the survey, were interviewed using semi-structured in-depth interview questions in a group discussion. Teachers that were interviewed had more than two years of experience in teaching refugee students and a minimum of one year of teaching SEN children. All teachers who participated in this study have at least a high school degree.

3.4 Data Collection

Data for the study was gathered through a survey questionnaire and a focus group discussion with a group of ten teachers. The survey was used to collect information relevant to the research aim. Before administering the survey and holding the focus group discussion, an NGO HR-manager, project director, and a community-based center principal reviewed the

survey questions to ensure they were applicable to the local context. Participants were reached through sharing a google form link with them on different social media platforms and through reaching out to different NGO's HR-managers. All participants were informed about the study and their voluntary participation prior to taking part. Teachers participated in the study out of their own free will, without obligation. The following instruments were used in the study.

3.4.1 Survey

For the quantitative data collection tool, the STARS survey was used. It is known as "Support and Technical Assistance through relationships and skills building" survey. STARS survey was created by Bruns and Mogharreban in 2005 as a needs assessment to gather information on the inclusive beliefs and skills level of early childhood professionals, along with their desired training topics, in order to improve teacher preparation programs and professional development opportunities related to including young children with disabilities in inclusive settings.

The choice of the STARS survey for this study was guided by its specific design to assess the inclusive beliefs, skill levels, and desired training topics of early childhood professionals. Given the study's focus on understanding teachers' attitude and challenges towards including SEN children in their classrooms and improving teacher preparation programs and professional development opportunities for including young children with disabilities in inclusive settings, the STARS survey aligns perfectly with the research objectives. By employing an instrument tailored to the study's aims, the researcher can gather relevant and insightful data, enhancing the study's validity and reliability.

The validity of the STARS survey can be attributed to its tailored development process, which specifically targets the assessment of inclusivity in ECE settings. By

concentrating on the real-world needs and desired training topics of early childhood educators, the survey ensures that the data collected is relevant and practical for understanding teachers' attitude and challenges and developing effective teacher training and professional development programs. This focus enhances the survey's content validity, as it gathers appropriate and significant information directly related to its intended study area.

As for the reliability of the STARS survey, it is bolstered by its structured approach to collecting consistent and repeatable data across different groups of early childhood professionals. Since it was crafted to address specific assessment needs and has been utilized in various contexts since 2005, the survey likely offers a high degree of consistency in results when administered under similar conditions. This consistency is crucial for longitudinal studies and comparisons across different demographic groups or over time, supporting the survey's reliability in measuring what it purports to assess.

3.4.2 Focus Group Discussion

After finishing the survey, a group of 10 teachers were asked to take part in a focus group discussion. The group discussion had different questions designed to get the teachers' perspectives related to the survey topics. There were questions about the teachers' views and beliefs on IE, questions to show their skills in IE implementation, and questions on the challenges they face with IE in CBECE centers in Lebanon.

The use of a focus group discussion as a second tool for data collection after the survey was a valuable approach in this study. It provided a rich source of qualitative data, allowing researcher to gain deeper insights into the perspectives, experiences, attitudes, and challenges of participants (Krueger, 2014). By conducting a focus group discussion with a subset of teachers who completed the survey, the researcher explored and clarified the

quantitative findings, uncovered underlying reasons behind the survey responses, and gathered additional context-specific information.

Focus groups were particularly useful for exploring complex and sensitive topics, such as the beliefs and practices related to inclusive education (IE) in this study. The interactive nature of focus groups encouraged participants to share their views, experiences, and challenges more freely, as they were able to build upon and react to the comments of others (Liamputtong, 2011). This dynamic yielded rich data that may not be captured through individual interviews or surveys alone.

Moreover, the focus group discussion allowed the researcher to probe further into the teachers' beliefs, skills, and challenges regarding IE implementation, which were initially explored through the survey. The open-ended nature of focus group questions elicited more nuanced and detailed responses, providing a deeper understanding of the teachers' perspectives and the contextual factors that influence their beliefs and practices (Krueger, 2014).

By combining the survey data with the focus group discussion, the researcher triangulated the findings, enhancing the validity and reliability of the study (Liamputtong, 2011). The quantitative data from the survey was further explored and contextualized through the qualitative insights gained from the focus group, leading to a more comprehensive understanding of the research topic.

3.5 Data Analysis

The data analysis for the survey utilized the SPSS software, version 25. SPSS (Statistical Package for the Social Sciences) is a widely used software program for statistical analysis in social science research. It provides a comprehensive set of tools for data entry,

data management, data analysis, and data visualization (Arkkelin, 2014). SPSS allows researchers to perform a wide range of statistical analyses, including descriptive statistics, inferential statistics, regression analysis, factor analysis, and many others (Wagner III, 2019). Descriptive analysis in this study was implemented with qualitative nominal data represented visually through tables, charts, pie graphs, and bar graphs displaying frequencies and percentages. For quantitative scale data, mean, standard deviation, median, minimum, and maximum values were calculated. This quantitative data was also depicted graphically using histograms. The key outcome scores for "Inclusive Beliefs" and "Inclusive Skills" were summarized using mean, standard deviation, median, minimum, and maximum values.

Bivariate analysis was further conducted to evaluate potential associations linking two main scores, "Inclusive Beliefs" and "Inclusive Skills", to teachers' demographic and experience variables. Specifically, the independent t-test, ANOVA tests, and Pearson correlation tests were run. The t-tests and ANOVA tests assessed variation across different subgroups. Pearson correlations assessed the relationship and strength of relationship between "Inclusive Beliefs" and "Inclusive Skills" scores specifically. Correlations with p-values under 0.05 (alpha error threshold of 5%) were considered statistically significant for these analyses.

The focus group discussion was analyzed using thematic analysis, following the six-phase process outlined by Braun and Clarke (2006): familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Thematic analysis is a method for identifying, analyzing, and reporting themes or patterns of meaning within qualitative data like interview transcripts (Clarke & Braun, 2017). To ensure trustworthiness and credibility, member checking was conducted by sharing the initial themes with focus group participants for feedback (Shenton, 2004). Participants' confidentiality and anonymity were maintained by removing any identifying

information from the transcripts (Kaiser, 2009). By carefully reading through the group discussion transcript, initial codes were generated to capture relevant concepts. These codes were then categorized into overarching themes that described teachers' key perspectives relating to the research questions. The prevalence of specific codes and themes was quantified to understand dominant views. Comparing teacher responses on particular themes also revealed areas of consensus or contradictory opinions within the group. Reporting salient themes along with verbatim quotes from the discussion illustrated the findings in teachers' own words. This rigorous qualitative analytic process aided in interpreting teachers' beliefs, skills and challenges concerning inclusive education in CBECE.

3.6 Trustworthiness

The trustworthiness of this study was rigorously established through several key research methodologies, ensuring that the findings are robust and reliable. Credibility was reinforced by the use of data triangulation, where multiple data collection methods, such as surveys and focus group discussions, provided a more comprehensive understanding of the phenomena being studied (Creswell & Creswell, 2018). Dependability was ensured by creating an extensive audit trail, which documents every step of the research process from data collection to analysis, thereby facilitating an external check by reviewers (Shenton, 2004). Confirmability was addressed through the practice of reflexivity, where the researcher continually examined his own assumptions and biases to avoid undue influence on the study outcomes (Lincoln & Guba, 1985). Transferability was enhanced by providing detailed descriptions of the research context and participant profiles, allowing other researchers to evaluate the applicability of the results to other settings (Merriam, 1998). This comprehensive approach ensured that the study adhered to established qualitative research standards, making the findings valuable and actionable for stakeholders.

3.7 Ethical Considerations

In this study, ethical considerations were essential to ensure the integrity of the research process and protect the rights and welfare of participants. Key ethical principles included obtaining informed consent, ensuring confidentiality, and maintaining anonymity. Participants were informed about the purpose of the study, procedures, and benefits, and their participation was voluntary, emphasizing their right to withdraw at any time without penalty (Fisher, 2021). Confidentiality was strictly observed by de-identifying data and using secure data storage methods. Additionally, ethical approval was sought from relevant organizations involved, ensuring compliance with both local and international ethical standards (Resnik, 2015).

To further enhance ethical compliance, all data collected in this study was anonymized to prevent any identification of participants. Special care was taken to ensure that all digital data were encrypted and only accessible to the researcher. This measure protected the privacy of participants and the confidentiality of their information. The research also adhered to ethical guidelines stipulated by the NGOs involved, requiring approval of research instruments and processes to align with their policies and ethical standards. This alignment not only secured organizational support but also assured that the research methods are culturally and contextually appropriate for the participants involved (Israel & Hay, 2006).

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Demographics

Table 1 provides an overview of key demographic traits among the 52 teachers participating in this study. It captures details on gender, age, marital status, education level attained, years of experience in early childhood education, and years of experience specifically working with special needs children.

Looking at gender breakdown, the large majority of teachers (94.2%) were female, with just 5.8% being male. In terms of age, the most common range was 20-29 years old (44.2%), followed by 30-39 years old (34.6%). Smaller proportions fell into the 40-49 year range (15.4%) and over 50 years category (5.8%). Over half the teachers were married (61.5%), about a third were single (34.6%) and a smaller portion were divorced (3.8%). Most held at least a bachelor's degree (57.7%), while 25% had completed a master's program and 15.4% held a vocational degree. Just one teacher had only a high school diploma.

There was diversity in terms of early childhood education experience – the most common category was 3-5 years (34.6%), but there was representation across 0-2 years (23.1%), 6-10 years (25%) and over 10 years (17.3%). Experience specifically working with special needs children varied as well, though almost a third had less than 1 year of experience in this area (34.6%) and nearly 20% had no experience. The remaining teachers were distributed between 1-3 years of experience (28.8%), more than 3 years (17.3%) and no experience (19.2%). This diversity in experience levels with special needs children is relevant to the study's focus on this particular aspect of education.

Table 1: Demographic characteristics of teachers (N = 52)

| | | Frequency | Percent |
|--|-------------------|-----------|---------|
| Gender | Male | 3 | 5.8 |
| | Female | 49 | 94.2 |
| Age | 20-29 years | 23 | 44.2 |
| | 30-39 years | 18 | 34.6 |
| | 40-49 years | 8 | 15.4 |
| | 50 years older | 3 | 5.8 |
| Relationship status | Single | 18 | 34.6 |
| | Married | 32 | 61.5 |
| | Divorced | 2 | 3.8 |
| Education level | High school | 1 | 1.9 |
| | Vocational degree | 8 | 15.4 |
| | Bachelor | 30 | 57.7 |
| | Masters | 13 | 25.0 |
| Years of experience in early childhood education | 0-2 years | 12 | 23.1 |
| | 3-5 years | 18 | 34.6 |
| | 6-10 years | 13 | 25.0 |
| | Over 10 years | 9 | 17.3 |
| Years of experience with children with special educational needs | No experience | 10 | 19.2 |
| | Less than 1 year | 18 | 34.6 |
| | 1-3 years | 15 | 28.8 |
| | More than 3 years | 9 | 17.3 |

4.2 Types of Students' Needs

Figure 1 provides an overview of the types of needs that the students had according to teachers. The most prevalent type of need among the students was speech and language disorder, accounting for 69.2% of the cases. Physical impairments represented 13.5% of the students' needs. A smaller percentage, 9.6%, of students' need was sensory impairments. Autism was reported as a special need for 28.8% of the students. Developmental delay was identified as a need for 23.1% of the students. The most prevalent need among the students was social-emotional delay, representing 48.1% of cases.

Overall, the data in this figure highlights the diverse and complex needs of refugee and vulnerable children in Lebanon, emphasizing the importance of tailored educational strategies and support systems to address these various needs effectively. As already pointed

in the literature, these needs affect students' performance and should be addressed through providing extra time, using assistive technology, modifying the curriculum, preferential seating, and implementing behavior plans (Sharma & Salend, 2016). Through targeting these needs, children with special needs can thrive academically and socially alongside their mainstream peers (Sharma & Salend, 2016).

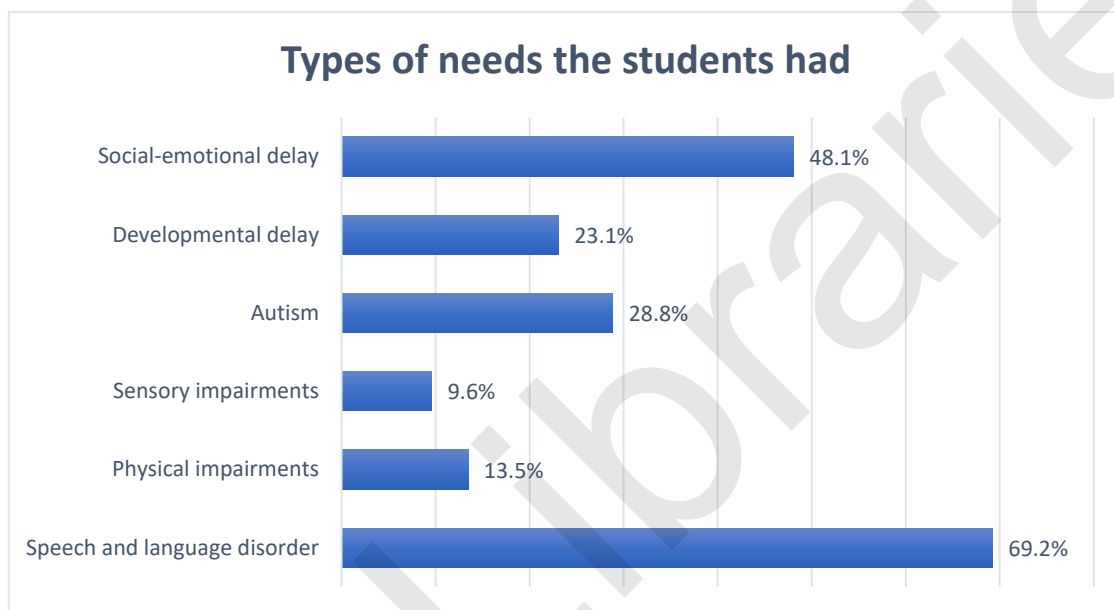


Figure 1: Types of needs that the students had according to teachers

4.3 Inclusive Beliefs (IB)

In the survey used, there was a section related to inclusive beliefs. The section consisted of 5 statements where teachers were asked to express their degree of agreement for each statement. Table 2 presents data related to the inclusive beliefs of teachers, including the frequencies, percentages, means (with standard deviations), and the range of responses for each statement.

Statement 1: “Children with disabilities should receive services in early childhood settings alongside their same-age peers”:

The data indicated that the majority of teachers (58.5%) either agreed or strongly agreed with the notion that children with disabilities should receive services in early childhood settings alongside their same-age peers. This reflects a strong belief in IE, where students with special needs should be integrated into regular classrooms. The mean belief score for this statement is 3.75, suggesting a relatively high level of support for IE.

Statement 2: “The strategies and adaptations necessary to assist a child with a disability are easy to prepare and implement”:

In contrast to the first statement, the data showed that most teachers find it challenging to prepare and implement strategies and adaptations to assist children with disabilities. A substantial portion (58.5%) either strongly disagreed or disagreed with this statement. The mean belief score is 2.37, which is on the lower end of the scale, indicating that teachers perceive these strategies as relatively difficult to prepare and put into practice. Based on these findings, it is recommended that ECE teachers in Lebanon receive more practical, hands-on training opportunities to enhance their skills in implementing inclusive practices. By developing a stronger skillset in this area, teachers' IB in their preparedness and ability to effectively carry out IE are more likely to increase.

Statement 3: “Children without disabilities are positively affected by playing and learning alongside their peers with disabilities”:

Teachers' beliefs regarding the impact of inclusive education on typically developing children are somewhat mixed. While a considerable number (44.2%) agree or strongly agree that children without disabilities benefit from interacting with peers with disabilities, a significant portion (27.0%) either strongly disagree or disagree. This ambivalence is reflected in the mean belief score of 3.35, suggesting some uncertainty about the extent of this positive influence.

Statement 4: “All children can learn”:

The data strongly supports the belief that all children are capable of learning. An overwhelming majority of teachers (82.7%) either agree or strongly agree with this statement. The mean belief score of 4.31 indicates a high level of confidence in the learning potential of all children, aligning with the principles of IE.

Statement 5: “Children are more alike than different”:

The data demonstrated that most teachers (63.5%) hold the belief that children, regardless of their backgrounds, share more similarities than differences. This belief in the commonality of children's experiences was reflected in the mean belief score of 3.77. It suggests that teachers generally recognize the shared characteristics among children, fostering a sense of inclusivity.

In summary, these findings highlight teachers' attitudes and beliefs regarding IE. While there is strong support for the inclusion of children with disabilities in regular classrooms and a

belief in the learning potential of all children, there are also challenges perceived in preparing and implementing necessary strategies. Additionally, the impact of inclusive education on typically developing children remains a topic with varying beliefs among teachers.

Table 2: Item related to Inclusive Beliefs among teachers (N = 52)

| | | Frequency | Percent | Mean (SD) | Min - Max |
|--|-------------------|-----------|---------|-------------|-----------|
| Children with disabilities should receive services in early childhood settings alongside their same-age peers. | Strongly Disagree | 0 | 0.0 | 3.75 (1.12) | 2 - 5 |
| | Disagree | 9 | 17.3 | | |
| | Neutral | 13 | 25.0 | | |
| | Agree | 12 | 23.1 | | |
| | Strongly Agree | 18 | 34.6 | | |
| The strategies and adaptations necessary to assist a child with a disability are easy to prepare and implement. | Strongly Disagree | 13 | 25.0 | 2.37 (1.10) | 1 - 5 |
| | Disagree | 17 | 32.7 | | |
| | Neutral | 14 | 26.9 | | |
| | Agree | 6 | 11.5 | | |
| | Strongly Agree | 2 | 3.8 | | |
| Children without disabilities are positively affected by playing and learning alongside their peers with disabilities. | Strongly Disagree | 3 | 5.8 | 3.35 (1.22) | 1 - 5 |
| | Disagree | 11 | 21.2 | | |
| | Neutral | 15 | 28.8 | | |
| | Agree | 11 | 21.2 | | |
| | Strongly Agree | 12 | 23.1 | | |
| All children can learn. | Strongly Disagree | 0 | 0.0 | 4.31 (0.85) | 2 - 5 |
| | Disagree | 1 | 1.9 | | |
| | Neutral | 10 | 19.2 | | |
| | Agree | 13 | 25.0 | | |
| | Strongly Agree | 28 | 53.8 | | |
| Children are more alike than different. | Strongly Disagree | 2 | 3.8 | 3.77 (1.11) | 1 - 5 |
| | Disagree | 5 | 9.6 | | |
| | Neutral | 12 | 23.1 | | |
| | Agree | 17 | 32.7 | | |
| | Strongly Agree | 16 | 30.8 | | |

The score “Inclusive Beliefs” was computed by adding the sum of its related 5 items which follow a Likert scale from 1 “Strongly Disagree” to 5 “Strongly Agree” (table 3 and figure 2).

Table 3 provides a summary of the teachers' overall inclusive beliefs. The average score “Inclusive Beliefs” was 17.54 ± 3.86 over 25, which suggests a relatively moderate to high level of IB among teachers. The minimum score of 10.00 and the maximum score of 25.00 illustrate the range of beliefs within the group of teachers, with some holding lower beliefs and others holding very high beliefs in the principles of IE. Overall, these statistics provide insights into the teachers' collective disposition towards inclusive practices in CBECE. The findings illustrate teachers' favorable attitudes toward IE. This aligns with Bandura's (2003) social cognitive theory, which suggests that teachers with higher self-efficacy beliefs and confidence in their ability to include children with special needs in their classrooms are more likely to willingly implement inclusive practices and hold positive attitudes about IE. However, the mean score of the statement related to the implementation of the inclusive practices, which is on the lower end of the scale, puts a red flag on teachers' inclusive skills.

Table 3: Representation of the score “Inclusive Beliefs” among teachers (N = 52)

| | Inclusive Beliefs |
|----------------|-------------------|
| N | 52 |
| Mean | 17.54 |
| Median | 18 |
| Std. Deviation | 3.86 |
| Minimum | 10 |
| Maximum | 25 |

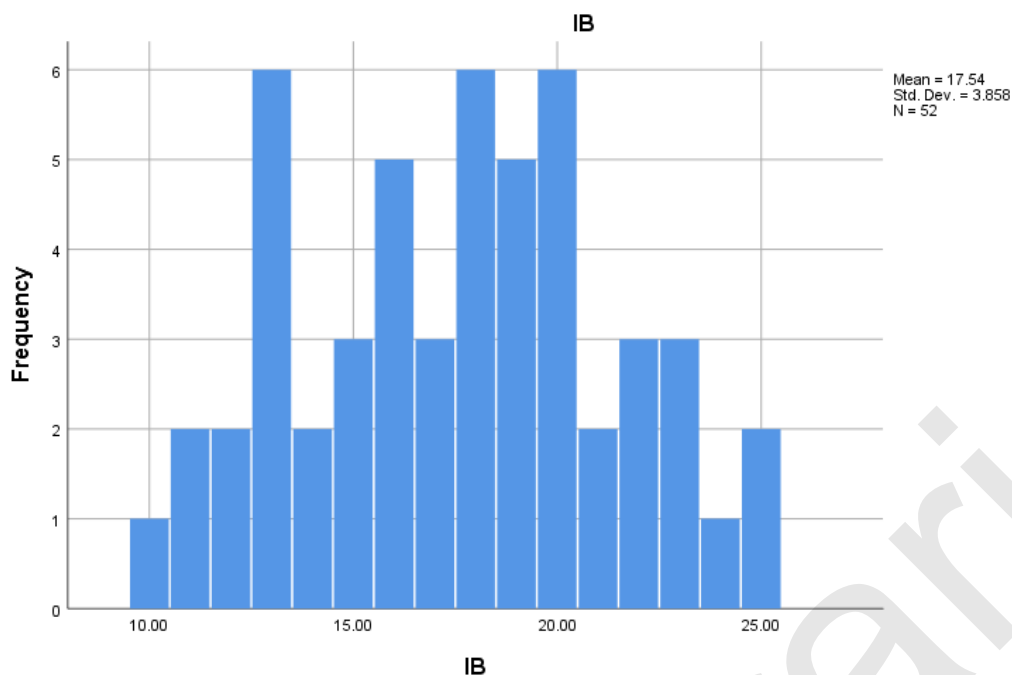


Figure 2: Representation of the score “Inclusive Beliefs” among teachers

4.4 Inclusive Skills (IS)

Table 4 provides insights into teachers' inclusive skills based on their responses to various statements. This section on the survey consisted of 16 statements where teachers were asked to also choose their degree of agreement for each statement.

1. Awareness of Assessing Children with Disabilities: About 44.3% combined of teachers strongly agreed or agreed that they are aware of ways to assess the skills of children with special needs effectively. However, 30.8% were neutral, and 25% disagreed or strongly disagreed indicating room for improvement in this area and the need for real-life practical trainings in assessing children with special needs.

2. Effective Observation of Developmental Skills: A significant proportion (30.8%) of teachers strongly agree that they can effectively observe children to learn about their developmental skills and needs. Another 34.6% agreed. This suggests that many teachers feel confident in this skill which is learning from observation.

3. Environment Arrangement: A significant number of teachers (42.3%) agreed and 19.2% strongly agreed that they can arrange the environment to meet the needs of all children, including those with disabilities, while 28.8% were neutral and only 9.6% disagreed/strongly disagreed. This indicates that there might be some uncertainty or room for improvement in environmental arrangement skills.

4. Knowledge of Adapted Toys and Materials: While 32.7% agreed and 19.2% strongly agreed regarding knowing where to locate and how to use adapted toys and materials, a considerable number of teachers (36.5%) were neutral adding to them 11.5% who expressed no knowledge in this area. This suggests the need for more trainings, resources, and materials in this area.

5. Positive Relationships with Families: A substantial proportion consisted of 36.5% who strongly agreed and 30.8% who agreed, showed that teachers can initiate, develop, and maintain positive relationships with families. This indicated strong communication skills with families of students with special needs among ECE teachers in Lebanon.

6. Collaboration with Parents: The data suggests a generally positive perception among the respondents regarding ECE teachers' ability to engage in collaboration and problem-solving with parents and family members. While a significant portion (32.7%) remained neutral, the majority (61.6%) expressed agreement or strong agreement with the statement. However, it is worth noting that a small percentage (5.8%) disagreed with the statement suggesting room for improvement in this area.

7. Awareness of Related Professionals: The results show a somewhat positive perception among teachers regarding their awareness of the services provided by related professionals. While a significant portion (28.8%) remained neutral, slightly more respondents expressed agreement (32.7%) or strong agreement (17.3%) than disagreement (17.3%) or strong

disagreement (3.8%). It is worth noting that a considerable percentage (21.1%) disagreed with the statement, indicating a lack of awareness of related professionals' services among a notable minority of the respondents. This shows the need for NGOs and educational organizations to introduce their teachers to the services and professionals provided.

8. Working with Professionals from Other Disciplines: the data suggests a generally positive perception among ECE teachers regarding their ability to effectively work with professionals from other disciplines. While a significant portion (34.6%) remained neutral, the majority (50.0%) expressed agreement or strong agreement with the statement. However, it is worth noting that a notable minority (15.4%) disagreed or strongly disagreed with the statement. The distribution of responses indicates that a larger percentage of respondents agreed with the statement compared to those who strongly agreed, suggesting that while many teachers felt capable of working with other professionals, they may not have been entirely confident in their abilities.

9. Familiarity with IEP Development: A somewhat divided perception among teachers regarding their familiarity with developing Individualized Education Plans (IEPs). While a significant portion (40.4%) expressed agreement or strong agreement with the statement, a similar percentage (36.5%) disagreed or strongly disagreed, indicating a lack of familiarity with IEP development among a notable portion of the respondents. Additionally, 23.1% of the respondents remained neutral on this statement. The distribution of responses indicates a relatively even split among those who agreed, disagreed, and remained neutral, suggesting that familiarity with IEP development may vary considerably among teachers. It is important to note that a substantial minority (36.5%) expressed disagreement or strong disagreement, highlighting a potential area for further training or professional development.

10. Implementation of IEP Goals: The largest percentage of respondents, 32.7%, agreed that they understand how to implement IEP goals and objectives into an existing curriculum. This

shows that they feel somewhat confident about this task. However, combining the percentages of those who disagreed (strongly disagreed and disagreed), which totals 28.8%, indicates a notable portion of teachers who lack confidence in this skill. Meanwhile, the neutral response was fairly high at 26.9%, suggesting some uncertainty among educators about their capabilities in this area. This mixed response highlights a need for potentially increasing training or support for educators in effectively implementing IEPs within existing curriculums.

11. Positive Guidance Approaches: While the majority agreed about the ability to use effective strategies to facilitate positive behavior with all children, a significant number (44.1%) were either neutral, disagreed, or strongly disagreed to have this ability. This indicated room for improvement in positive guidance and classroom management skills.

12. Strategies for Positive Behavior: The data indicates a relatively positive outlook among teachers, with a majority (51.9%) agreed or strongly agreed that they use effective strategies. However, a significant portion (17.3%) disagreed with this assertion, and a considerable number (30.8%) remained neutral, suggesting some uncertainty or variability in the application or awareness of such strategies. The substantial neutral response could point to an opportunity for further training or support to ensure consistency in using effective behavior management techniques across all ECE educators in Lebanon.

13. Communication with Students with Special Needs: Results shows a diverse range of experiences or opinions among educators. A combined total of 48% of participants agreed or strongly agreed that they incorporate effective communication strategies, reflecting a positive endorsement from nearly half of the respondents. However, a substantial portion (38.5%) remained neutral, which might suggest uncertainty or variability in the application of these strategies. This notable neutral response could indicate a need for further training or clarification on how to effectively encourage communication skills with children with

disabilities. A smaller segment (13.4%) disagreed or strongly disagreed, indicating some dissatisfaction or challenges with these methods.

14. Alternative Communication Forms Familiarity: A significant portion of teachers (42.7%) expressed some level of disagreement regarding their familiarity with alternative communication forms like sign language, picture systems, or specialized augmentative devices. This reflects a potential gap in knowledge or training. Meanwhile, 42.3% of respondents expressed confidence in their familiarity, showing a polarized view on this topic. The neutral response, at 25%, indicates a sizable group of participants were uncertain about their level of familiarity, highlighting an area for potential educational enhancement or professional development to increase awareness and usage of these communication tools.

15. Knowledge of Motor Impairments: The data indicated a noticeable gap in knowledge or confidence among early childhood educators. A total of 25% expressed disagreement (sum of Strongly Disagree and Disagree), suggesting a lack of familiarity or understanding of motor impairments. A significant proportion, 32.7%, remained neutral, indicating uncertainty or partial knowledge. Meanwhile, 42.3% of respondents (combining Agree and Strongly Agree) showed confidence in their understanding of such impairments, showing a division in preparedness or training. The high percentage of neutral responses might suggest the need for more focused training or education in this area.

16. Positioning Children with Motor Impairments: The results reflect a notable concern: a majority (38.4%) of the respondents either disagreed or strongly disagreed about their knowledge on properly positioning children with motor impairments. The neutral responses, at 28.8%, indicate a significant level of uncertainty or lack of confidence. Meanwhile, only 32.7% agreed or strongly agreed that they are knowledgeable in this area, suggesting a need for enhanced training or professional development to improve competence in proper lifting techniques and positioning of children with motor impairments.

These results provide a comprehensive overview of teachers' self-perceived inclusive skills, highlighting strengths and areas where further training and professional development may be beneficial to enhance their capabilities in supporting children with disabilities effectively.

Table 4: Item related to Inclusive Skills among teachers (N = 52)

| | | Frequency | Percent | Mean (SD) | Min - Max |
|--|-------------------|-----------|---------|-------------|-----------|
| 1. "I am aware of ways to effectively assess the skills of children with disabilities (e.g., complete data sheets, prepare progress reports highlighting strengths and needs)." | Strongly Disagree | 2 | 3.8 | 3.38 (1.17) | 1 - 5 |
| | Disagree | 11 | 21.2 | | |
| | Neutral | 16 | 30.8 | | |
| | Agree | 11 | 21.2 | | |
| | Strongly Agree | 12 | 23.1 | | |
| 2. "I can effectively observe children to learn about their developmental skills and needs (e.g., observe at various times and during different activities, be objective and specific)." | Strongly Disagree | 0 | 0.0 | 3.81 (1.05) | 2 - 5 |
| | Disagree | 8 | 15.4 | | |
| | Neutral | 10 | 19.2 | | |
| | Agree | 18 | 34.6 | | |
| | Strongly Agree | 16 | 30.8 | | |
| 3. "I can arrange the environment to meet the needs of all children, including children with disabilities (e.g., shelves at appropriate heights, dividers between learning centers)." | Strongly Disagree | 1 | 1.9 | 3.69 (0.94) | 1 - 5 |
| | Disagree | 4 | 7.7 | | |
| | Neutral | 15 | 28.8 | | |
| | Agree | 22 | 42.3 | | |
| | Strongly Agree | 10 | 19.2 | | |
| 4. "I know where to locate and how to use adapted toys and materials (e.g., high contrast items, switch-activated toys, specialized writing implements)." | Strongly Disagree | 0 | 0.0 | 3.60 (0.93) | 2 - 5 |
| | Disagree | 6 | 11.5 | | |
| | Neutral | 19 | 36.5 | | |
| | Agree | 17 | 32.7 | | |
| | Strongly Agree | 10 | 19.2 | | |
| 5. "I know how to initiate, develop, and maintain positive relationships with families (e.g., reciprocal communication, honoring preferences)." | Strongly Disagree | 0 | 0.0 | 4.00 (0.91) | 2 - 5 |
| | Disagree | 2 | 3.8 | | |
| | Neutral | 15 | 28.8 | | |
| | Agree | 16 | 30.8 | | |
| | Strongly Agree | 19 | 36.5 | | |
| 6. "I know how to engage in collaboration and problem solving with parents and/or family members (e.g., | Strongly Disagree | 0 | 0.0 | 3.87 (0.93) | 2 - 5 |
| | Disagree | 3 | 5.8 | | |
| | Neutral | 17 | 32.7 | | |

| | | Frequency | Percent | Mean (SD) | Min - Max |
|--|-------------------|-----------|---------|-------------|-----------|
| understand different perspectives, develop mutually beneficial solutions).” | Agree | 16 | 30.8 | | |
| | Strongly Agree | 16 | 30.8 | | |
| 7. “I am aware of the services provided by related professionals (e.g., speech and language pathologist, physical therapist, child psychologist).” | Strongly Disagree | 2 | 3.8 | 3.42 (1.09) | 1 - 5 |
| | Disagree | 9 | 17.3 | | |
| | Neutral | 15 | 28.8 | | |
| | Agree | 17 | 32.7 | | |
| | Strongly Agree | 9 | 17.3 | | |
| 8. “I am able to effectively work with professionals from other disciplines (e.g., speech and language pathologist, physical therapist, child psychologist).” | Strongly Disagree | 1 | 1.9 | 3.46 (0.96) | 1 - 5 |
| | Disagree | 7 | 13.5 | | |
| | Neutral | 18 | 34.6 | | |
| | Agree | 19 | 36.5 | | |
| | Strongly Agree | 7 | 13.5 | | |
| 9. “I am familiar with how to develop an Individualized Education Plan (IEP) (e.g., team input, parental rights, development of annual goals with corresponding short-term objectives).” | Strongly Disagree | 5 | 9.6 | 3.10 (1.24) | 1 - 5 |
| | Disagree | 14 | 26.9 | | |
| | Neutral | 12 | 23.1 | | |
| | Agree | 13 | 25.0 | | |
| | Strongly Agree | 8 | 15.4 | | |
| 10. “I understand how to implement IEP goals and objectives into an existing curriculum.” | Strongly Disagree | 5 | 9.6 | 3.17 (1.17) | 1 - 5 |
| | Disagree | 10 | 19.2 | | |
| | Neutral | 14 | 26.9 | | |
| | Agree | 17 | 32.7 | | |
| | Strongly Agree | 6 | 11.5 | | |
| 11. “I am able to implement positive guidance approaches to encourage appropriate behavior with all children, including children with disabilities (e.g., assist children to learn expectations, environmental considerations).” | Strongly Disagree | 2 | 3.8 | 3.65 (1.14) | 1 - 5 |
| | Disagree | 6 | 11.5 | | |
| | Neutral | 15 | 28.8 | | |
| | Agree | 14 | 26.9 | | |
| | Strongly Agree | 15 | 28.8 | | |
| 12. “I use effective strategies to facilitate positive behavior with all children, including children with disabilities (e.g., smooth transitions, natural consequences, redirection).” | Strongly Disagree | 3 | 5.8 | 3.52 (1.15) | 1 - 5 |
| | Disagree | 6 | 11.5 | | |
| | Neutral | 16 | 30.8 | | |
| | Agree | 15 | 28.8 | | |
| | Strongly Agree | 12 | 23.1 | | |

| | | Frequency | Percent | Mean (SD) | Min - Max |
|---|-------------------|-----------|---------|-------------|-----------|
| 13. "I incorporate strategies to encourage communication skills with children with disabilities (e.g., self-talk, using descriptive statements)." | Strongly Disagree | 2 | 3.8 | 3.50 (1.04) | 1 - 5 |
| | Disagree | 5 | 9.6 | | |
| | Neutral | 20 | 38.5 | | |
| | Agree | 15 | 28.8 | | |
| | Strongly Agree | 10 | 19.2 | | |
| 14. "I am familiar with alternative forms of communication and their use (e.g., sign language, picture systems, specialized augmentative devices)." | Strongly Disagree | 9 | 17.3 | 3.04 (1.28) | 1 - 5 |
| | Disagree | 8 | 15.4 | | |
| | Neutral | 13 | 25.0 | | |
| | Agree | 16 | 30.8 | | |
| | Strongly Agree | 6 | 11.5 | | |
| 15. "I know the characteristics of children with motor impairments (e.g., reflexes, muscle tone, range of motion)." | Strongly Disagree | 4 | 7.7 | 3.23 (1.13) | 1 - 5 |
| | Disagree | 9 | 17.3 | | |
| | Neutral | 17 | 32.7 | | |
| | Agree | 15 | 28.8 | | |
| | Strongly Agree | 7 | 13.5 | | |
| 16. "I know how to position children with motor impairments (e.g., proper lifting techniques)." | Strongly Disagree | 6 | 11.5 | 2.94 (1.19) | 1 - 5 |
| | Disagree | 14 | 26.9 | | |
| | Neutral | 15 | 28.8 | | |
| | Agree | 11 | 21.2 | | |
| | Strongly Agree | 6 | 11.5 | | |

The score "Inclusive Skills" was computed by adding the sum of its related 5 items which follow a Likert scale from 1 "Strongly Disagree" to 5 "Strongly Agree" (table 5 and figure 3).

Table 5 provides a summary of the teachers' overall IS. The average score "Inclusive Skills" was 55.38 ± 13.27 over 80, which suggests a relatively moderate level of IS among the teachers. The minimum score of 25.00 and the maximum score of 80.00 illustrate the range of skills within the group of teachers, with some holding lower skills and others holding very high skills in the principles of IE.

These statistics provide an overview of the teachers' IS in the study. The mean score suggests a moderate level of inclusive skills among the teachers, with some variability in the

responses. The range between the minimum and maximum scores indicates the diversity of skills among CBECE teachers with more positivity. According to Ajzen's Theory of Planned Behavior, teachers' inclusive skills reflect their attitudes towards IE. Following the principles of Ajzen's theory, an individual's behavior is influenced by their attitudes, perceived social pressures (subjective norms), and their perceived ability to perform the behavior (perceived behavioral control). In this context, teachers' moderate score in IS suggests they hold neutral attitudes towards IE, likely contributing to hesitant intentions to implement IE in their teaching environments. This result reflects a gap between what teachers believe about IE and their actual practices in implementing IE in their regular classrooms.

Table 5: Representation of the score “Inclusive Skills” among teachers (N = 52)

| | Inclusive Skills |
|----------------|------------------|
| N | 52 |
| Mean | 55.38 |
| Median | 56.00 |
| Std. Deviation | 13.27 |
| Minimum | 25.00 |
| Maximum | 80.00 |

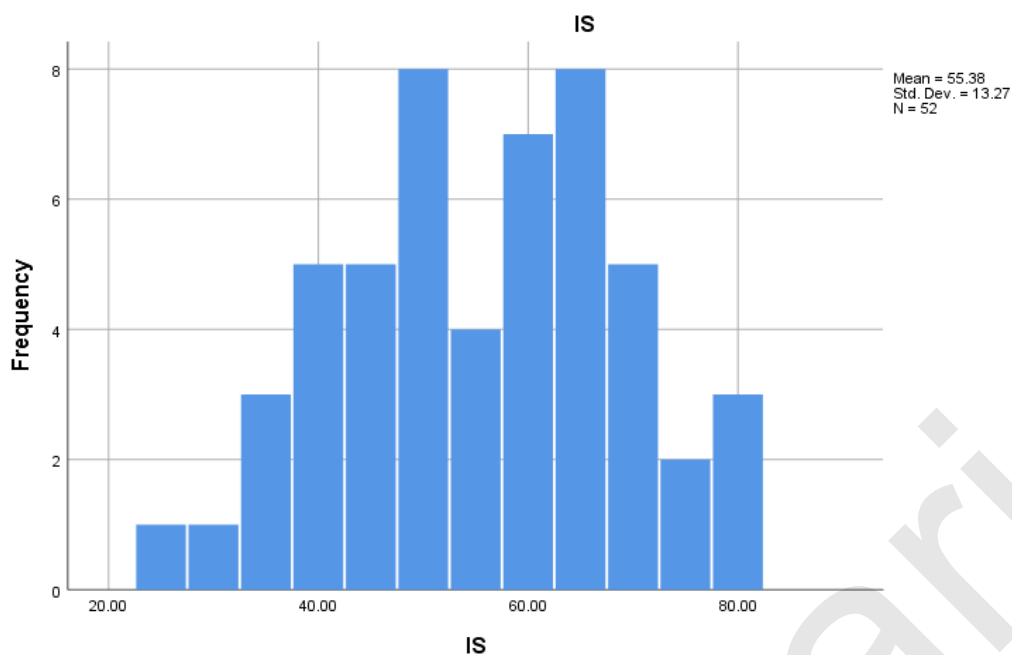


Figure 3: Representation of the score “Inclusive Skills” among teachers

4.5 Training Needs

Figure 4 shows teachers’ responses to the question of whether they have undergone trainings in special educational needs, 75% mentioned that they have received training in SEN, whereas 25% indicated that they have not undergone any training in SEN.

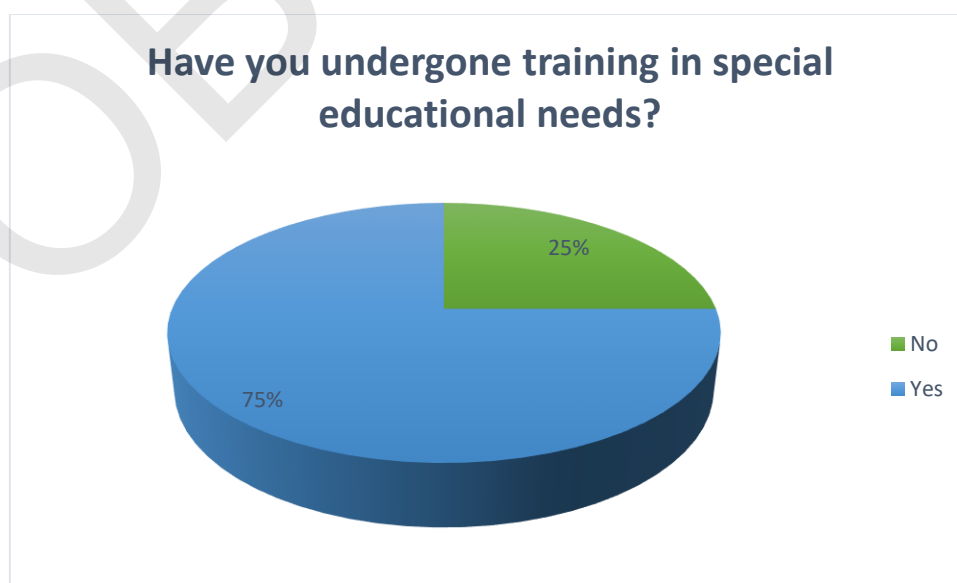


Figure 4: Training in special educational needs among teachers (N = 52)

Figure 5 presents the professional training needs related to working with SEN children, along with the frequency and percentage of respondents indicating each need. Each participant was asked to pick 3 training needs from the list provided.

Assessment (40.4%): Approximately 40.4% of respondents expressed a need for training in assessment related to SEN children. This suggests that teachers recognize the importance of accurately assessing the needs, progress, and abilities of students with SEN. Training in assessment can help educators tailor their teaching strategies to meet individual needs effectively.

Health and Safety Concerns (28.8%): About 28.8% of respondents identified health and safety concerns as a top training need. This highlights the significance of ensuring the well-being and safety of SEN students. Training in this area likely encompasses understanding and addressing specific health needs and creating a safe learning environment for these students.

Behavioral Issues (50.0%): Behavioral issues emerged as a significant training need, with half of the respondents (50.0%) recognizing its importance. Training in managing and addressing behavioral challenges in SEN children is crucial for maintaining a positive and effective learning environment.

Adapting Materials for Students' Level (55.8%): A majority of respondents (55.8%) indicated a need for training in adapting materials to suit the level of SEN students. This underscores the importance of creating customized teaching materials and resources that cater to the diverse needs and abilities of these students.

Environmental Considerations (15.4%): While a smaller percentage of respondents (15.4%) mentioned environmental considerations as a training need, it's still noteworthy.

Training in this area likely involves creating an inclusive physical environment that supports the participation and comfort of SEN students.

Partnerships with Families and Professionals (55.8%): Similar to adapting materials, 55.8% of respondents identified the need for training in building partnerships with families and professionals. Collaborative efforts between educators, families, and specialists are vital for the holistic development of SEN children.

Communication Strategies (65.4%): The highest percentage of respondents (65.4%) expressed a strong need for training in communication strategies. Effective communication is critical when working with SEN children, as it involves not only the students but also their families and other professionals. Training in communication can enhance understanding and collaboration among all stakeholders.

In summary, this analysis indicates that educators working with SEN children recognize several key training needs, including assessment, behavioral management, adapting materials, fostering partnerships, and improving communication. Addressing these needs through targeted professional development can contribute to more effective support and education for students with special needs.



Figure 5: Professional training needs related to working with SEN children (N = 52)

4.6 Challenges

Figure 6 presents the challenges faced by teachers when teaching children with special needs. It includes the frequency and percentage of respondents who identified each challenge. Here is an analysis of these challenges:

Classroom Size (38.5%): Approximately 38.5% of respondents cited classroom size as a significant challenge when teaching children with SEN. This challenge may stem from the need to provide individualized attention and support to students with diverse needs in a classroom that might be too large to facilitate such personalized instruction effectively.

Number of Students with Special Educational Needs (42.3%): A significant portion of respondents (42.3%) indicated that the number of students with SEN in their classrooms is a challenge. Having a higher number of SEN students can strain available resources and time for individualized instruction and support.

Parents' Support/Acceptance of the Case (48.1%): Nearly half of the respondents (48.1%) identified parental support and acceptance of the case as a challenge. Collaboration with parents is essential for the success of SEN students, and when parents are not fully supportive or accepting of their child's needs, it can create additional hurdles for educators.

Awareness of the Society (61.5%): The highest percentage of respondents (61.5%) considered societal awareness as a major challenge. This suggests that there is a concern about the general awareness and understanding of special educational needs within society. Lack of awareness can lead to misconceptions and stigmatization, making it challenging to create inclusive environments.

Support (e.g., support from administration, etc.) (30.8%): While still significant, a smaller percentage of respondents (30.8%) mentioned support-related challenges. This may

include inadequate support from school administration, lack of resources, or insufficient professional development opportunities for teachers working with SEN students.

In summary, the challenges faced by teachers when teaching children with special needs encompass various aspects, including classroom size, the number of SEN students, parental support, societal awareness, and administrative support. Addressing these challenges may require a combination of strategies, such as improved teacher training, increased awareness campaigns, and enhanced support systems within educational institutions.

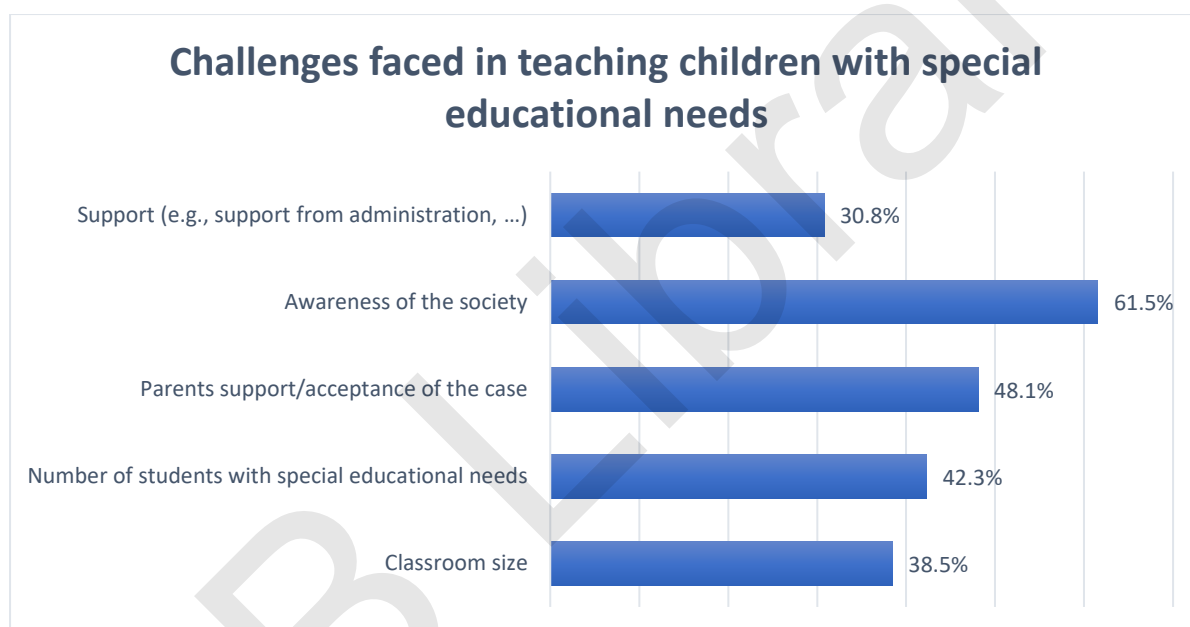


Figure 6: Challenges faced in teaching children with special educational needs (N = 52)

4.7 Factors Associated with Inclusive Beliefs

Table 6 shows the correlation between the Inclusive Beliefs and teachers' demographics and professional characteristics. Results show that the score "Inclusive Beliefs" was not statistically associated with teachers' gender ($p = 0.482$), age ($p = 0.958$), marital status ($p = 0.840$), educational level ($p = 0.142$), years of experience in early childhood education ($p = 0.197$), years of experience with children with special educational needs ($p = 0.349$) and undergoing a training in special educational needs ($p = 0.870$).

Table 6: Inclusive Beliefs in function of teachers' demographics and professional characteristics

| | | N | Mean | Std. Deviation | Minimum | Maximum | P.value |
|--|-------------------|----|-------|----------------|---------|---------|--------------------|
| Gender | Male | 3 | 16.00 | 7.00 | 11.00 | 24.00 | 0.482 ^a |
| | Female | 49 | 17.63 | 3.69 | 10.00 | 25.00 | |
| Age | 20-29 years | 23 | 17.87 | 4.08 | 11.00 | 25.00 | 0.958 ^b |
| | 30-39 years | 18 | 17.28 | 3.94 | 10.00 | 23.00 | |
| | 40-49 years | 8 | 17.38 | 3.42 | 13.00 | 22.00 | |
| | 50 years older | 3 | 17.00 | 4.58 | 12.00 | 21.00 | |
| Marital status | Not married | 20 | 17.40 | 4.08 | 11.00 | 25.00 | 0.840 ^a |
| | Married | 32 | 17.63 | 3.77 | 10.00 | 25.00 | |
| Education level | High school | 1 | 12.00 | | 12.00 | 12.00 | 0.142 ^b |
| | Vocational degree | 8 | 15.88 | 2.80 | 12.00 | 20.00 | |
| | Bachelor | 30 | 17.53 | 4.22 | 10.00 | 25.00 | |
| | Masters | 13 | 19.00 | 3.00 | 11.00 | 23.00 | |
| | Total | 52 | 17.54 | 3.86 | 10.00 | 25.00 | |
| Years of experience in early childhood education | 0-2 years | 12 | 19.17 | 3.13 | 15.00 | 25.00 | 0.197 ^b |
| | 3-5 years | 18 | 17.72 | 4.10 | 11.00 | 25.00 | |
| | 6-10 years | 13 | 15.85 | 4.38 | 10.00 | 23.00 | |
| | Over 10 years | 9 | 17.44 | 2.88 | 13.00 | 21.00 | |
| Years of experience with children with special educational needs | No experience | 10 | 17.90 | 3.75 | 13.00 | 24.00 | 0.349 ^b |
| | Less than 1 year | 18 | 16.83 | 4.23 | 11.00 | 25.00 | |
| | 1-3 years | 15 | 18.87 | 3.64 | 10.00 | 25.00 | |
| | More than 3 years | 9 | 16.33 | 3.39 | 12.00 | 21.00 | |
| Have you undergone training in special educational needs? | No | 13 | 17.38 | 4.09 | 11.00 | 24.00 | 0.870 ^a |
| | Yes | 39 | 17.59 | 3.83 | 10.00 | 25.00 | |

Tests done using independent t-test (a) and ANOVA test (b); Bold: statistically significant correlation set at 5%

4.8 Factors Associated with Inclusive Skills

Table 7 shows the correlation between the Inclusive Skills and teachers' demographics and professional characteristics. Results show that the score "Inclusive Skills"

was not statistically associated with teachers' gender ($p = 0.151$), marital status ($p = 0.227$), educational level ($p = 0.721$), years of experience in early childhood education ($p = 0.585$), years of experience with children with special educational needs ($p = 0.494$) and undergoing a training in special educational needs ($p = 0.364$).

The score "Inclusive Skills" was statistically associated with teachers' age ($p = 0.019$).

Results show that teachers with lower ages (20 – 29 years) had higher score "Inclusive Skills" (average = 60.65 ± 11.03 over 80), comparing to other age groups. This result sheds light on the importance of differentiating professional development for each age group, since each group might have different skill development needs.

Table 7: Inclusive Skills in function of teachers' demographics and professional characteristics

| | | N | Mean | Std. Deviation | Minimum | Maximum | P.value |
|--|-------------------|----|-------|----------------|---------|---------|--------------------------|
| Gender | Male | 3 | 44.67 | 20.60 | 29.00 | 68.00 | 0.151 ^a |
| | Female | 49 | 56.04 | 12.72 | 25.00 | 80.00 | |
| Age | 20-29 years | 23 | 60.65 | 11.03 | 36.00 | 80.00 | 0.019^b |
| | 30-39 years | 18 | 49.89 | 10.32 | 29.00 | 70.00 | |
| | 40-49 years | 8 | 57.25 | 19.54 | 25.00 | 80.00 | |
| | 50 years older | 3 | 43.00 | 8.72 | 37.00 | 53.00 | |
| Marital status | Not married | 20 | 52.55 | 14.17 | 25.00 | 71.00 | 0.227 ^a |
| | Married | 32 | 57.16 | 12.58 | 37.00 | 80.00 | |
| Education level | High school | 1 | 64.00 | | 64.00 | 64.00 | 0.721 ^b |
| | Vocational degree | 8 | 59.25 | 16.74 | 37.00 | 80.00 | |
| | Bachelor | 30 | 54.83 | 13.20 | 25.00 | 80.00 | |
| | Masters | 13 | 53.62 | 11.98 | 29.00 | 70.00 | |
| | Total | 52 | 55.38 | 13.27 | 25.00 | 80.00 | |
| Years of experience in early childhood education | 0-2 years | 12 | 55.50 | 9.06 | 41.00 | 70.00 | 0.585 ^b |
| | 3-5 years | 18 | 57.39 | 14.36 | 29.00 | 80.00 | |
| | 6-10 years | 13 | 51.08 | 13.12 | 25.00 | 68.00 | |
| | Over 10 years | 9 | 57.44 | 16.41 | 39.00 | 80.00 | |
| Years of experience with children with special | No experience | 10 | 54.10 | 9.72 | 37.00 | 68.00 | 0.494 ^b |
| | Less than 1 year | 18 | 52.17 | 14.35 | 25.00 | 76.00 | |
| | 1-3 years | 15 | 59.07 | 13.80 | 39.00 | 80.00 | |

| | | | | | | | |
|---|-------------------|----|-------|-------|-------|-------|--------------------|
| educational needs | More than 3 years | 9 | 57.11 | 13.82 | 37.00 | 80.00 | |
| Have you undergone training in special educational needs? | No | 13 | 52.46 | 10.58 | 29.00 | 68.00 | 0.364 ^a |
| | Yes | 39 | 56.36 | 14.04 | 25.00 | 80.00 | |

Tests done using independent t-test (a) and ANOVA test (b); Bold: statistically significant correlation set at 5%

4.9 Correlation between Inclusive Beliefs and Inclusive Skills

Table 8 displays the correlation analysis between Inclusive Beliefs (IB) and Inclusive Skills (IS) among the teachers. The Pearson correlation coefficient quantifies the degree and nature of the straight-line association between two different variables. The correlation between Inclusive Beliefs (IB) and Inclusive Skills (IS) is 0.365. The p-value associated with this correlation is 0.008, showing a statistically significant positive correlation between IB and IS.

The positive Pearson correlation coefficient of 0.365 suggests a weak positive linear relationship between IB and IS (figure 7). This means that teachers who hold more IB about working with SEN children are also more likely to possess higher IS and vice versa.

Overall, the previous results' analysis of a positive teachers' IB score and neutral IS score suggest that the focus should be more on fostering and developing teachers' IS.

Table 8: Correlation between Inclusive Beliefs and Inclusive Skills

| | | IB | IS |
|------------------------|---------------------|--------------|--------------|
| Inclusive Beliefs (IB) | Pearson Correlation | 1 | 0.365 |
| | P.value | | 0.008 |
| | N | 52 | 52 |
| Inclusive Skills (IS) | Pearson Correlation | 0.365 | 1 |
| | P.value | 0.008 | |
| | N | 52 | 52 |

Tests done using Pearson Correlation test; Bold: statistically significant correlation set at 5%

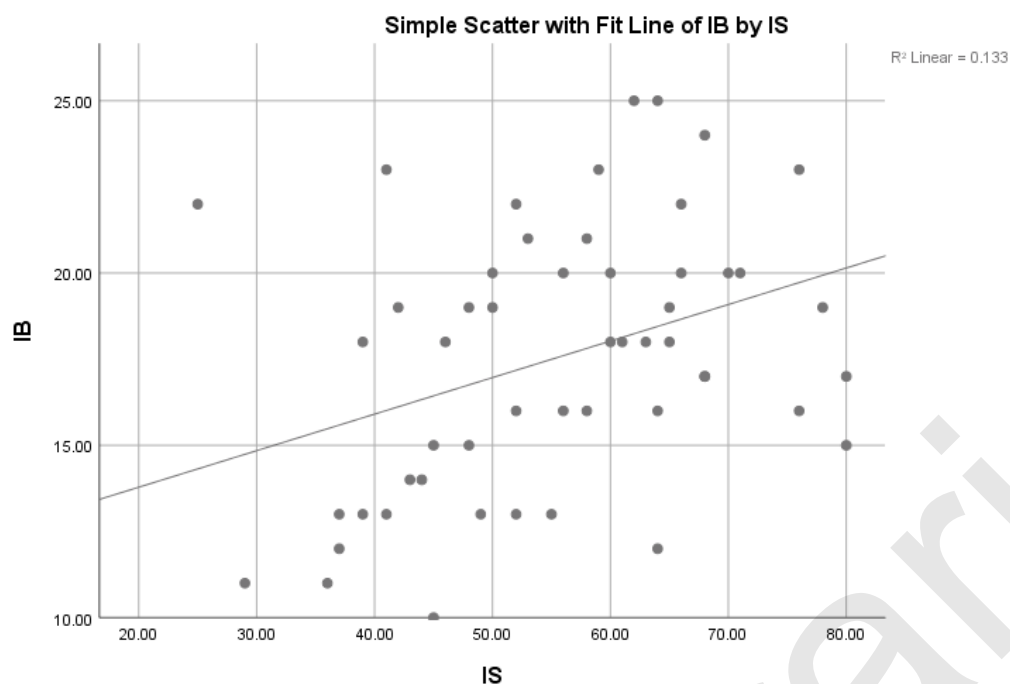


Figure 7: Scatter plot for the correlation between Inclusive Beliefs and Inclusive Skills

4.10 Results of the Focus Group Discussion

The focus group discussion aimed to provide qualitative insights that build upon the initial quantitative survey findings. Specifically, it explores teachers' perspectives regarding their beliefs, skills, and challenges concerning inclusive education practices. The themes for analysis were identified based on the study's research questions, literature review, survey content, and common issues frequently raised by teachers during the discussion. A coding process was then used to categorize teachers' statements into pertinent themes aligning with the study aims. Research participant teachers are identified with T (Teacher 1-10).

The focus group discussion was held with 10 ECE teachers working in different community-based centers in Lebanon. All ECE teachers who participated in this discussion have experience in working with SEN children, have knowledge of IE, and have undergone professional development training in the field of IE. The teachers' working experience with SEN children varied from one to four years, and teachers had different educational degrees that varied from vocational to bachelor and masters' degrees (Table 9).

Table 9: Teachers' Demographic Data

| Professional Degree | Number of Teachers | | Years of Experience with SEN Students |
|---------------------|--------------------|-----|---------------------------------------|
| Vocational Degree | 1 | T1 | 4 |
| Bachelor Degree | 6 | T2 | 1 |
| | | T3 | 1 |
| | | T4 | 2 |
| | | T5 | 2 |
| | | T6 | 2 |
| | | T7 | 3 |
| Master's Degree | 3 | T8 | 1 |
| | | T9 | 2 |
| | | T10 | 4 |

Table 10 displays the key themes that emerged from this qualitative content analysis of the focus group discussion.

Table 10: Focus Group Discussion Themes and Results

| Categories | Themes | Description |
|--|--------------------|--|
| How do teachers define inclusive education | Inclusive believes | <ul style="list-style-type: none"> - Inclusion principles - Right to education - Accommodating differences - Ensures students with disabilities learn alongside peers without disabilities to promote interaction - Goal is to integrate children with difficulties into regular schools and provide quality education - Encompasses students academically behind grade level - Forms a supportive and accepting community circle |
| Importance and benefits of inclusive education | | <ul style="list-style-type: none"> - Social development - Holistic development - Life preparation |

| | | |
|---|------------------|--|
| | | <ul style="list-style-type: none"> - Prevents feelings of inferiority or exclusion - Ensures education as a fundamental right for all children - Prepares children for a diverse society and counters bullying - Nurtures individual differences and helps children see their strengths - Impacts self-esteem, character development and empowerment |
| Implementation of IE in mainstream classrooms | Inclusive skills | <ul style="list-style-type: none"> - Comprehensive teacher training - Collaboration - Assessment and adaptation - Individualized Education Plans - Involves training teachers on potential challenges and adjusting teaching methods - Requires collaboration between schools, families and support specialists - Necessitates assessing learning difficulties prior to adaptation - Includes developing personalized learning plans catered to each child |
| ECE teachers' skills needed to implement IE in their classrooms | | <ul style="list-style-type: none"> - Relationship building - Collaboration - Patience and communication - Accommodating different needs - Comprehensive training on various scenarios and practical case studies - Ability to build strong connections with students - Collaborative teamwork and constructive communication - Guiding and engaging students with diverse needs |
| Barriers and challenges to implementing IE in CBEC centers | Challenges | <ul style="list-style-type: none"> - Inadequate infrastructure - Classroom management - Need for adaptations - Limited class sizes, resources, and support staff - Hesitance and difficulties accommodating physical and behavioral differences - Burdens and discrepancies - Inaccessible buildings and inadequate facilities - High student-teacher ratios and discipline issues |

| | | |
|---|--|---|
| | | <ul style="list-style-type: none"> - Parental attitudes and varying levels of parental acceptance and support - Overloaded teacher responsibilities |
| <p>Teachers' preparedness and readiness for IE implementation in CBECE centers.</p> | | <ul style="list-style-type: none"> - Expressed hesitation and found prospect of inclusion challenging - Noted difficulties accommodating physical and behavioral differences - Emphasized need for infrastructure improvements - Discussed limitations in class sizes and support staff - Stated some integration possible but full inclusion requires adaptations |

4.10.1 Inclusive Beliefs

The teachers expressed strong inclusive beliefs aligned with principles upholding education as a fundamental right for all children regardless of disabilities. Their definition emphasized that IE ensures students with special needs learn alongside their peers without special needs to promote positive interaction. They viewed inclusion as more than simply integrating these children into regular schools but actually providing quality education that facilitates learning for all by accommodating individual differences.

Several teachers highlighted IE as a mean of fostering a supportive and accepting community that nurtures diversity. One teacher (T3) likened it to creating a community circle integrating those with special needs. T3 said, "It is like having a big circle and a small circle, and IE is the way of combining these two circles to become one circle that includes everyone." All teachers agreed that IE benefits all students by enabling those academically behind to progress alongside their peers. The discourse revealed perceptions of IE as a modern, child-centric educational approach that emphasizes customized developmental support over a one-size-fits-all model. Teachers declared that IE is:

"Engaging students with special needs in mainstream classrooms to provide them with high-quality education like their peers" (T1).

"Providing a place for SEN children where they feel accepted and comfortable" (T2).

"A right that must be provided. It's not something additional" (T3).

"Not only for students whose needs are notable. Some needs are mental or psychological, and they cannot be seen" (T4).

Overall, the teachers' discourse revealed a perception of IE as a modern, inclusive approach that celebrates diversity, fosters acceptance, and tailors educational experiences to individual needs, benefiting both students with and without identified disabilities or challenges.

Additionally, teachers strongly endorsed IE's multifaceted benefits. They stated it prevents marginalized children from feeling inferior or excluded, setting them up for success rather than failure experiences. IE was seen as essential preparation for living in a diverse society, promoting tolerance and countering bullying. Notably, some situated it as a mean for integrating students feeling isolated by societal prejudices or community exclusion. Several emphasized how embracing differences enables children to see their uniqueness as strengths rather than limitations. They explicitly situated IE as nurturing self-esteem, character building and empowerment owing to its lasting impacts across family, school and community contexts. Some teachers expressed the importance and benefits of IE as follows:

"It makes SEN students feel that they are equal to their peers, and vice versa" (T5).

"It helps in preparing a future generation that is raised on acceptances of differences" (T2).

“Implementing IE in schools will limit school dropouts” (T6).

“It is the door to building a society against bullying” (T3).

“IE helps in building good characters. It makes with SEN feel more confident in themselves and makes typical students feel the same when helping others” (T7).

“When schools implement IE, they help parents of SEN children accept them more and feel proud of them instead of feeling ashamed” (T4).

“Inclusive schools make parents understand that schools are not only for grades and academic learning, but also for social development” (T2).

4.10.2 Inclusive Skills

The teachers demonstrated their skills and knowledge regarding the effective implementation of IE in mainstream classrooms. They emphasized the need for comprehensive teacher training, which involves training on potential challenges faced by students with diverse needs and equipping teachers with the ability to adjust their teaching methods accordingly. Collaboration was identified as a critical element, necessitating a collaborative approach involving schools, families, and support specialists working together. The teachers recognized the importance of assessment and adaptation, highlighting the necessity of assessing learning difficulties prior to adapting the educational environment, resources, and instructional strategies to meet individual needs. Furthermore, they underscored the significance of IEPs, which involve developing personalized learning plans tailored to each child's unique strengths, challenges, and goals, ensuring that every student receives the customized support and accommodations necessary for their academic and personal growth within an inclusive setting.

Moreover, teachers highlighted several essential skills that ECE teachers must possess to effectively implement IE in their classrooms. Relationship building was emphasized, with teachers needing the ability to build strong connections and rapport with all students, fostering a nurturing and inclusive learning environment. Collaboration and constructive communication were also identified as crucial, as implementing IE requires collaborative teamwork and open communication among teachers, support staff, and families. The teachers recognized the importance of patience and the ability to guide and engage students with diverse needs, accommodating different learning styles and paces. Furthermore, they stressed the need for comprehensive training that exposes teachers to various scenarios and practical case studies, equipping them with the knowledge and strategies to handle a wide range of situations and challenges that may arise in an inclusive classroom setting.

In general, teachers showed an understanding of the skills needed for a successful implementation of IE. They said:

“IE requires good communication and collaboration between teachers, parents, and schools’ administrators. Additionally, it needs patience and tolerance” (T8).

“Teachers must know how to develop IEPs and how to modify the program according to students’ needs. Also, they need to know how to use different inclusive materials if provided” (T3).

“School administrators and teachers should know how to create a nurturing environment in which SEN students can develop alongside their peers” (T9).

“Teachers must be knowledgeable of different needs that they may face in their classrooms in order to know how to deal with students’ special needs. And it is the role of school administrators to provide teachers with the necessary trainings and materials” (T2).

4.10.3 Barriers and Challenges

The teachers outlined numerous infrastructure and resource barriers confronting inclusive education application. They stated physical school buildings and community-based centers often remain inaccessible to students with disabilities while lacking adaptive equipment or assistive technologies. Financial constraints further limit providing essential materials. High student-teacher ratios and crowded classrooms also overwhelm educators attempting personalized instruction across diverse needs. Classroom management itself poses difficulties, as tailoring teaching practices and strategies is demanding. Meticulous planning is required given varied needs, classroom layouts and long school hours. Teachers mentioned:

Most of the schools, and especially the community-based center, are neither accessible nor adaptable for SEN students. (T4)

The economic crisis in Lebanon plays a pivotal role in not providing the needed materials for IE. (T10)

The high student-teacher ratio, the classroom layout, the curriculum, the length of sessions, and lack of inclusive materials are all challenges for us as teachers. (T2)

Additionally, teachers noted inconsistent parental attitudes, support levels and collaboration despite reliance on family partnerships. Others highlighted juggling overloaded responsibilities across administrative, instructional and collaborative duties which distracts focus from students. Some also conveyed hesitation about sufficiently accommodating children's extensive needs within restrictive school environments and academic policies. For instance, Lebanon's intensive curriculum pressures teachers to cover extensive content, while cultural acceptance fluctuates regarding inclusion.

In response to the question about their readiness to implement IE in their classrooms, the teachers expressed varying levels of preparedness. They were hesitant and found the prospect challenging, citing difficulties in accommodating physical and behavioral differences among students:

“I don’t feel totally ready for it” (T4).

“It could not be 100% implemented in our classrooms” (T6).

“It is still challenging, even if we have undergone several trainings. They were all theoretical and none of them taught us what to actually do on the spot with limited materials and resources provided” (T1).

Teachers emphasized the need for substantial changes in infrastructure, classroom environment, and resources to facilitate integration successfully. The teachers acknowledged that each student had unique needs, necessitating adaptations, and even though they had raised awareness, practical training, and workshops were required. They discussed the limitations posed by the small class size and the unavailability of adequate support staff, highlighting the importance of social workers, therapists, and assistants in addressing the diverse needs of students. Overall, they believed that while some integration was possible with existing resources, achieving complete IE requires significant adaptations, staff, and proper funding.

4.11 Discussion of the Study Results

This study, focused on IE in CBECE centers in Lebanon, aimed to explore three primary areas: (1) teachers' attitude on including children with special needs in regular classrooms, (2) the challenges faced in this process, and (3) the necessary trainings and skills needed for educators.

4.11.1 Teachers' Attitude towards Inclusive Education

In assessing teachers' attitudes towards IE, both their IB and IS were examined. The findings from both the survey and the focus group discussion revealed that CBECE teachers generally hold a positive attitude towards IE with a gap between their beliefs and their practices. As for IB, teachers recognize the value of IE in benefiting all children and support the idea of children with special needs learning alongside their typically developing peers. This reflected a positive IB. According to Bandura's theory (2003), teachers' positive IB reflect their positive attitude towards IE and their belief in their ability to successfully implement inclusive practices. These positive beliefs are likely to be influenced by their past experiences, observations, social support, and emotional states, all of which contribute to their sense of self-efficacy in teaching in inclusive settings.

When it comes to IS, the study uncovered some concerns among teachers. While they exhibit knowledge of the skills required for IE, many feel unprepared to implement them effectively in their classrooms. This hesitation indicates a gap between teachers' positive beliefs and their readiness to put them into practice. This aligns with the results of Bruns and Mogharreban (2009), the creators of the STARS survey, where their study revealed a gap between teachers' positive beliefs and their actual practices. The implication here is that teachers need practical trainings and support to develop their IS and enhance their perceived behavioral control. By increasing their skills and confidence in their ability to implement inclusive practices effectively, their perceived behavioral control would strengthen, which, according to Ajzen's theory (1991), could lead to a more positive attitude and stronger intentions to engage in inclusive teaching practices. This study underscores the need for further support and training to equip teachers with the practical skills necessary for successful IE implementation, beyond just theoretical understanding. This belief-competence gap

mirrored the tendency found globally (Nonis et al., 2016), now extended to Lebanon's crisis-affected educational centers.

4.11.2 Implementation Challenges

In discussing the challenges of implementing IE in CBECE centers, the survey and focus group discussion highlighted several significant obstacles. Classroom size and the high number of students with special needs in one classroom were identified by 38.5% and 42.3% of respondents, respectively, as key challenges, suggesting a strain on resources that hampers effective individualized instruction. Furthermore, nearly half of the respondents (48.1%) cited a lack of parental support and acceptance, while the highest concern (61.5%) was the general societal awareness about special needs, indicating widespread misconceptions and stigmatization. All of these barriers align with the literature on global inclusion challenges (Boyle et al., 2020; Lee et al., 2015). Administrative support and adequate infrastructure were also noted as deficient, complicating the delivery of IE. Teachers in focus group discussion voiced that physical accessibility, economic constraints, and inadequate materials due to Lebanon's economic crisis further exacerbate these challenges. They expressed a need for substantial changes in infrastructure, resources, and training to effectively integrate and support students with special needs within their educational environments. As also pointed by Tilawi et al. (2023), financial constraints, inadequate teacher preparation, and inaccessible infrastructure commonly preclude the participation of refugee children with special needs in mainstream schooling.

This result provides critical insights for all stakeholders and policymakers about where to start and how to remove the challenges that impede teachers' successful implementation of inclusive education. The data clearly outlines the primary barriers: overcrowded classrooms, insufficient resources, lack of parental and societal support, and

inadequate infrastructure. By pinpointing these specific challenges, this study offers a roadmap for intervention. Policymakers can prioritize funding for smaller class sizes, additional resources for classrooms with higher numbers of students with special needs, and improvements to physical infrastructure. Educational leaders can develop targeted training programs to enhance teacher preparedness. Community leaders can launch awareness campaigns to foster greater societal understanding and acceptance of special needs. By systematically addressing each identified challenge, stakeholders can clear the path for teachers, empowering them to translate their positive attitudes about inclusive education into effective, inclusive practices. This targeted approach not only supports teachers but also ensures that the promise of inclusive education becomes a reality for all children.

4.11.3 Trainings Needed

As for the trainings and skills needed for educators to successfully implement IE, the results highlighted significant areas where teachers feel further professional development is needed. Key training needs identified include assessment strategies for children with special needs (40.4%), addressing health and safety concerns (28.8%), managing behavioral issues (50.0%), adapting teaching materials (55.8%), and fostering effective communication strategies (65.4%). Additionally, training in building partnerships with families and other professionals was deemed essential by 55.8% of respondents. These training priorities reflect an acute awareness among teachers of the comprehensive skills required to support and enhance the educational experience for students with special needs. This suggests that a holistic approach, covering a wide array of competencies from classroom management to external collaboration, is critical for the practical implementation of IE strategies. From the focus group discussions, it is evident that enhancing infrastructure, access to resources, and direct application training are necessary to bridge the gap between theoretical knowledge and

classroom practice in inclusive settings. Overall, the critical areas warranting professional development corroborate the global research on ECE teacher preparation needs for quality IE (Lee et al., 2015; Barton & Smith, 2015).

This result provides an invaluable roadmap for educational leaders, policymakers, and teacher educators to develop targeted, ongoing training and support for both in-service and pre-service teachers, precisely tailored to their expressed needs. Instead of generic, one-size-fits-all workshops, these findings enable the creation of a differentiated professional development curriculum. In essence, this result empowers decision-makers to move beyond guesswork in professional development. By aligning training precisely with teachers' self-identified needs, they can ensure that every professional development hour translates into enhanced skills, greater confidence, and ultimately, more successful IE for all children.

CHAPTER 5

CONCLUSION

This mixed-methods study, focused on inclusive education in community-based early childhood education centers in Lebanon, aimed to explore three primary areas: (1) teachers' attitude on including SEN children in regular classrooms, (2) the challenges faced in this process, and (3) the necessary trainings and skills needed for educators. With the participation of 52 CBECE teachers in the survey and 10 experienced teachers in the focus group discussion, this study offered a comprehensive view of IE for children with special needs in CBECE in Lebanon.

5.1 Research Questions

Research question 1. What are the teachers' attitudes towards including children with SEN in CBECE regular classrooms.

Regarding the first research question on teachers' attitude towards IE, the findings revealed that CBECE teachers generally hold positive beliefs about the value of IE and including children with special needs alongside their typically developing peers. However, there was a notable gap between their inclusive beliefs and their inclusive skills to effectively implement IE practices in the classroom. While philosophically supportive of IE, many teachers felt underprepared and lacked confidence in their abilities to foster truly inclusive learning environments.

Research question 2. What are the challenges that CBECE teachers face when implementing IE in their regular classrooms?

As for the second question about implementation challenges, significant obstacles were identified, including large class sizes, high numbers of students with special needs per class, lack of parental and societal support, limited administrative backing, inadequate infrastructure, and scarce resources exacerbated by Lebanon's economic crisis. Overcoming these systemic barriers is critical to facilitating authentic IE.

Research question 3. What are the trainings needed for CBECE educators to successfully include SEN children in their classrooms?

In terms of trainings needed, teachers highlighted several priority areas for professional development, such as assessment strategies, behavioral management, adapting materials, using effective communication strategies, and building partnerships with families and specialists. A comprehensive, well-rounded upskilling approach is required to build teacher capacities across the wide range of competencies involved in quality IE implementation.

In summary, while CBECE teachers demonstrate philosophical agreement with IE's premise, their ability to successfully realize inclusive practices remains constrained by a skills gap, implementation barriers, and training needs. Sustainable investment in remedying these deficiencies through evidence-based teacher training initiatives complemented by system-level reforms is crucial for Lebanon to uphold its commitment to equitable quality education for all young learners, including those with special educational needs impacted by forced displacement.

5.2 Limitations and Future Research

As a small-scale study, findings are not generalizable to all Lebanese contexts. Almost all participants were females, limiting gender perspectives. Employing classroom

observations, student perspectives and families' attitudes could provide triangulation.

Longitudinal data tracking training impacts over time could strengthen conclusions.

Exploring school leadership experiences around resources and decision-making would also add value.

Building on this work, future opportunities exist to develop and scientifically evaluate professional development interventions tailored to Lebanon's inclusion needs among early childhood educators. Future research should aim to develop and test specific professional development programs that address the unique challenges of inclusive education (IE) in Lebanon. It would be beneficial to conduct longitudinal studies to track the effectiveness of these programs over time. Comparing CBECE teachers to public/private school teachers may reveal further contextual insights, and comparing the experiences of CBECE teachers with those in other educational settings could also provide deeper insights into systemic and contextual factors affecting IE. Overall, this study sets the foundation for enrichment through stakeholder expansions, outcome evaluations and cross-sector comparisons.

5.3 Recommendations

After the analysis of the study's findings, it is crucial that this research culminates with recommendations focused on enhancing IE practices in Lebanon. The following are the proposed recommendations stemming from this study:

- **Enhanced Training Programs:** Develop and implement comprehensive, practice-oriented training for teachers that emphasize real-world applications of inclusive strategies, beyond theoretical understanding.
- **Policy Enhancement:** Lobby for robust educational policies that support the structural and resource-based needs essential for IE, such as improved classroom resources, accessible school environments, and supportive administrative practices. Also, develop contextually

appropriate IE policies that consider the specific socio-economic and cultural context for efforts to be successful as highlighted by Antoun (2022b).

- **Pre-service Teacher Education:** Advocate for revisions to teacher education programs to integrate comprehensive coursework on IE principles, strategies, and practical experience working with students with diverse needs. This proactive approach can better prepare future teachers from the outset. Antoun and Plunkett (2023) echoed this recommendation, emphasizing the necessity of high-quality pre-service teacher training on inclusive practices, differentiated curriculum, and addressing different students' needs from disabilities to giftedness.
- **Inclusive Education Internships:** Implement structured internship programs allowing pre-service and in-service teachers to gain immersive, practical experience in inclusive classroom settings. Guided by experienced mentors, these internships enable teachers to apply learned inclusive strategies, build confidence in addressing diverse student needs, and develop essential skills through hands-on training before or during their teaching careers.
- **Mentorship and Coaching Models:** Implement structured mentorship or coaching programs that pair experienced inclusive education teachers with those newer to the practice. This ongoing, job-embedded support can provide real-time guidance, feedback, and modeling of effective inclusive practices.
- **Leadership Capacity Building:** Design specialized training programs for school leaders and administrators to enhance their capacities in leading and sustaining inclusive school cultures, managing resources effectively, and providing pedagogical support to teachers.
- **Community Engagement:** Strengthen community and parental engagement in IE through awareness programs that highlight the benefits of inclusivity for all students, aiming to build a supportive network around educational institutions.

- **Support Networks:** Establish multidisciplinary support systems that provide teachers with regular access to specialists like psychologists, therapists, and inclusive education experts, fostering an integrated approach to address the diverse needs of students.

By addressing these areas, the potential for successful IE in Lebanon can be significantly enhanced, ultimately benefiting a broader spectrum of students and creating a more equitable educational landscape. Antoun's findings on the gaps in Lebanese teachers' understanding of diverse student needs like giftedness (Antoun, 2022a) further reinforce the importance of the recommendations focused on enhancing teacher training, policy development, and support structures.

In this protracted crisis landscape of scarce resources and competing priorities, empowering the CBECE teaching workforce through multi-pronged capability-building efforts is crucial not only for fulfilling Lebanon's commitments to universal quality education under the SDGs but also for facilitating the societal integration of this highly vulnerable refugee population. By nurturing their formative skills from an early age in inclusive, supportive learning environments led by competent and empowered teachers, these young refugee children can gain the foundations to realize their full potentials and thrive as engaged community members. Ultimately, investing in this pivotal frontline teaching workforce is an investment in the future of an entire generation affected by displacement and marginalization.

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APPENDIX A: Survey

Section 1: Consent Form

Informed Consent

Dear Mr./Mrs.:

This study aims to assess teachers' attitudes and challenges towards inclusive education in community early childhood education centers in Lebanon.

This project is being carried out by a Master's student in Education at the Faculty of Education, University of Balamand.

The procedure includes filling out a questionnaire that takes about 10 to 12 minutes.

- Your participation is voluntary.
- Your responses will be confidential as we do not collect identifying information such as your name, email address, or mobile phone number.
- The results of this study will be used for scientific purposes only.

Please consent if:

1. You have read the information mentioned above.
2. You voluntarily agree to participate.

- I agree to participate in the study.
- I refuse to participate in the study.

Section 2: Demographics

1. Gender

- Male
- Female

2. Age

- 20-29 years
- 30-39 years
- 40-49 years
- 50 years older

3. Relationship status

- Single
- Married
- Divorced
- Widow

4. Education level

- High school

- Vocational degree
 - Bachelor
 - Masters
5. Years of experience in early childhood education
- 0-2 years
 - 3-5 years
 - 6-10 years
 - Over 10 years
6. Years of experience with children with special educational needs
- No experience
 - Less than 1 year
 - 1-3 years
 - More than 3 years
7. Types of needs your students had:
- Speech and language disorder
 - Physical impairments
 - Sensory impairments
 - Autism
 - Developmental delay
 - Social-emotional delay

Section 3: Part 1: Inclusive Beliefs

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|-------------------|----------|---------|-------|----------------|
| 1. Children with disabilities should receive services in early childhood settings alongside their same-age peers. | | | | | |
| 2. The strategies and adaptations necessary to assist a child with a disability are easy to prepare and implement. | | | | | |
| 3. Children without disabilities are positively affected by playing and learning alongside their peers with disabilities. | | | | | |
| 4. All children can learn. | | | | | |
| 5. Children are more alike than different. | | | | | |

Section 4: Part 2: Inclusive Skills

| | SD | D | N | A | SA |
|--|----|---|---|---|----|
| 1. I am aware of ways to effectively assess the skills of children with disabilities (e.g., complete data sheets, prepare progress reports highlighting strengths and needs). | | | | | |
| 2. I can effectively observe children to learn about their developmental skills and needs (e.g., observe at various times and during different activities, be objective and specific). | | | | | |
| 3. I can arrange the environment to meet the needs of all children, including children with disabilities (e.g., shelves at appropriate heights, dividers between learning centers). | | | | | |
| 4. I know where to locate and how to use adapted toys and materials (e.g., high contrast items, switch-activated toys, specialized writing implements). | | | | | |
| 5. I know how to initiate, develop, and maintain positive relationships with families (e.g., reciprocal communication, honoring preferences). | | | | | |
| 6. I know how to engage in collaboration and problem solving with parents and/or family members (e.g., understand different perspectives, develop mutually beneficial solutions). | | | | | |
| 7. I am aware of the services provided by related professionals (e.g., speech and language pathologist, physical therapist, child psychologist). | | | | | |
| 8. I am able to effectively work with professionals from other disciplines (e.g., speech and language pathologist, physical therapist, child psychologist). | | | | | |
| 9. I am familiar with how to develop an Individualized Education Plan (IEP) (e.g., team input, parental rights, development of annual goals with corresponding short-term objectives). | | | | | |
| 10. I understand how to implement IEP goals and objectives into an existing curriculum. | | | | | |
| 11. I am able to implement positive guidance approaches to encourage appropriate behavior with all children, including children with disabilities (e.g., assist children to learn expectations, environmental considerations). | | | | | |
| 12. I use effective strategies to facilitate positive behavior with all children, including children with disabilities (e.g., smooth transitions, natural consequences, redirection). | | | | | |
| 13. I incorporate strategies to encourage communication skills with children with disabilities (e.g., self-talk, using descriptive statements). | | | | | |
| 14. I am familiar with alternative forms of communication and their use (e.g., sign language, picture systems, specialized augmentative devices). | | | | | |
| 15. I know the characteristics of children with motor impairments (e.g., reflexes, muscle tone, range of motion). | | | | | |
| 16. I know how to position children with motor impairments (e.g., proper lifting techniques). | | | | | |

Section 5: Part 3: Challenges

1. Have you undergone training in special educational needs?
 - Yes
 - No
2. What challenges do you face in teaching children with special educational needs:
 - Classroom size
 - Number of students with special educational needs
 - Parents support/acceptance of the case
 - Awareness of the society
 - Support (e.g., support from administration, ...)
3. Indicate your top 3 professional training needs related to working with special educational needs children:
 - Assessment
 - Health and safety concerns
 - Behavioral issues
 - Adapting materials for students' level
 - Environmental considerations
 - Partnerships with families and professionals
 - Communication strategies

APPENDIX B: Focus Group Discussion Questions

Teachers' Focus Group Discussion:

Please note that in this study, students' SEN could be physical or mental which may delay children's capacity to learn but not impair it. SEN could be seen as Mild Intellectual Disability, Attention Deficit Hyperactivity Disorder (ADHD), Developmental Delay, Communication Difficulties, Emotional and Behavioral Disorder, and mild cases of Visual Impairment, Hearing Impairment, Physical Impairment, and Autism.

The group discussion may take between 40 to 60 minutes. It will be recorded, and no names will be mentioned.

Part 1: understanding IE

- a. How do you define inclusive education?
- b. Do you have any idea about how to implement IE in mainstream classrooms?
- c. What skills do teachers need to implement IE in their classrooms?

Part 2: Attitude

- a. What is the importance of IE?
- b. What are the benefits of IE?
- c. To what extent do you think IE is important?

Part 3: challenges

- a. What are the challenges that teachers face when implementing IE in their classrooms?

Part 4: IE in CBECE centers in Lebanon

- b. What are the elements that helps in implementing IE in the CBECE centers?
- c. What are the barriers of implementing IE in the CBECE centers in Lebanon?
- d. To what extent do you see yourself ready to implement IE in your classroom?
- e. Do you think it is possible to implement IE in the CBECE centers in Lebanon?