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Supporting the inclusion of young children in childcare settings through professional development: perceptions of educators and managers

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Background: Inclusion in early childhood contributes to building equitable and diverse educational settings, fostering societal acceptance to differences. Nevertheless, obstacles remain to implementing inclusive practices from an early age. Professional development, particularly through coaching, is seen as a factor facilitating quality early childhood education practices. As part of an action-research project, therefore, this study aims to document the perceptions of educators and managers after 1 year of professional development based on the use of a curriculum-based assessment and embedded intervention/instruction in inclusive childcare settings.

Method: This article describes a qualitative study aimed at documenting the perceptions of educators and managers as regards changes perceived following the professional development received. The perceptions of 14 educators and 6 managers are analyzed using semi-structured interviews.

Results: Results suggest that professional development helps support quality inclusive educational practices. Participants address certain aspects of their educational practices, such as observation and intervention planning, to fine-tune the learning opportunities offered consistent with children's development. They report that coaching is an opportunity to examine their practice, which fosters their sense of competence. Results also underline the importance of the leadership role of childcare managers in supporting educational staff.

Discussion: The perceptions of educators and managers highlight the value of coaching in supporting educational practices in inclusive childcare settings. Improved individualization of educational practices based on the developmental needs of each and every child enhances environments' capacity for quality intervention for all children.

KEYWORDS

inclusion, childcare center, professional development, coaching, educational practices

1 Introduction

Inclusion can be defined as both a process and an outcome resulting in actions and practices that welcome diversity and create a feeling of belonging (UNESCO, 2020); it should be a commitment from early childhood (UNESCO, 2021) as outlined in the United Nations Sustainable Development Goals (SDGs). According to target 4.2 of the SDGs, the commitment is to ensure that by 2030, "all girls and boys have access to quality early childhood development, care and preprimary education so that they are ready for primary education." Inclusive early childhood environments are essential for creating equitable learning spaces where all children can grow and explore differences. Inclusion fosters acceptance of diversity (Turner, 2019) in educational environments and beyond (Lalvani and Bacon, 2019). Central to this concept is the recognition of diversity as a strength that requires the implementation of comprehensive strategies to support all learners (National Association for the Education of Young Children [NAEYC], 2019). In short, rather than emphasize the differences between children with and without disabilities, the inclusive context privileges an individualized response to the developmental needs of each child (Guralnick and Bruder, 2016).

Beyond the environment attended by the child (e.g., childcare), inclusion concerns the child's participation, group belonging, social relationships, friendships with other children, and development and learning accompanied by appropriate support (Division for Early Childhood (DEC), and National Association for the Education of Young Children (NAEYC), 2009; Odom et al., 2011). In environments that support inclusion, young children can develop social skills and openness by interacting with peers having a wide range of characteristics (Diamond and Hong, 2010; Odom et al., 2004).

The benefits of inclusion are many and impact all children (Odom et al., 2011; Weiland, 2016). Although such benefits are documented, however, barriers remain, including access to inclusive environments, attitudes and beliefs toward inclusion, collaboration with parents and other partners, policies, access to financial support and necessary resources, and the individualization of practices to meet the needs of each child (Barton and Smith, 2015).

1.1 Implementing inclusion

Implementing inclusion requires a rigorous approach and synchronized efforts across different facets and levels of partnership (Barton and Smith, 2015; Ring et al., 2019; UNESCO, 2021). Educators play a central role in implementing inclusive practices in early childhood (Danniels and Pyle, 2023; Siljehag and Westling Allodi, 2022) and are responsible for providing the appropriate educational interventions to foster the development of each child. Educators must use practices that support learning via the environment's activities and routines, while monitoring children's progress and using the information to individualize their educational actions (Burchinal, 2018). This includes understanding diverse learning needs, adapting teaching methods, and overcoming systemic barriers to inclusive practices (Florian and Black-Hawkins, 2010). Thus, it's important for educators to have skills and knowledge regarding educational interventions such as the Universal Design for Learning (CAST, 2018), the Multilevel System of Support for Early Intervention (Buysse and Peisner-Feinberg, 2013), and inclusive pedagogy (Florian and

Sretenov, 2021), which focus on differential learning to maximize quality interventions. These approaches emphasize on a continuum of strategies and intensity of support to meet the developmental needs of each child. It combines educational, material, or environmental adaptations as well as individualized and specialized interventions, when needed. Indeed, staff working with young children and their families to provide quality educational services must have access to professional development based on best practices (Child Care Aware of America (CCAoA), and National Association for the Education of Young Children (NAEYC), 2023; Dunst et al., 2013, 2019).

1.2 Needs for professional development

It is recognized that professional development can improve the skills and practices of early childhood educators (Egert et al., 2018). It aims for the acquisition of skills, knowledge and even attitudes through a process of learning focused on practical application that goes beyond the teaching of theoretical content (Child Care Aware of America (CCAoA), and National Association for the Education of Young Children (NAEYC), 2023; Dunst, 2015; Hemmeter and Fox, 2009; National Professional Development Center of Inclusion, 2008). There are different types of professional development, including support such as mentoring, coaching and communities of practice (Child Care Aware of America (CCAoA), and National Association for the Education of Young Children (NAEYC), 2023; Egert et al., 2018). Such development, in fact, should not be limited to training workshops, but should involve a combination of several activities and learning methods, although a particular one may predominate (Child Care Aware of America (CCAoA), and National Association for the Education of Young Children (NAEYC), 2023; Dunst et al., 2019). To this end, the results of Dunst et al. (2019) highlight four types of activities/methods that, when combined in an in-service professional development process, help improve the practices of early childhood educators: (1) provision of theoretical content, (2) concrete examples, using video, in real-life situations, (3) opportunities to experiment with new knowledge and skills, and (4) coaching with appropriate feedback. Among the processes put in place as part of professional development, we mention the importance of supporting staff skills through experience and practical application in the actual intervention context, through exchanges that enable a reflective look (Sheridan et al., 2009). Zaslow et al. (2010), in light of their review, state that professional development for early childhood educators should include: identification of specific objectives, include opportunities to make connections between knowledge and practice, the intensity and duration of professional development should be tailored to content, support staff skills in conducting child assessments and interpreting results as a tool for monitoring the effects of their intervention, and align with recognized practices and current standards.

With specific regard to coaching, different studies (Brunsek et al., 2020; Dunst, 2015; Dunst et al., 2019; Egert et al., 2018; Snyder et al., 2015) demonstrate its positive contribution to the improvement of practices. Coaching consists of a relationship based on respect and trust between a learner (the educator) and a more experienced person who supports the learner in developing these new skills (Brunsek et al., 2020; Child Care Aware of America (CCAoA), and National Association for the Education of Young Children (NAEYC), 2023). It is a collaborative process that involves the assessment of learners'

needs and the development of an action plan, observation *in situ* or use of a video, and a reflective and feedback process based on the observations made (Child Care Aware of America (CCAoA), and National Association for the Education of Young Children (NAEYC), 2023; Snyder et al., 2015, 2022).

Professional development plays a critical role in ensuring that educators and childcare managers are properly equipped with the knowledge and skills needed to foster inclusive environments (Snyder et al., 2015). Thus, as Dunst et al. (2013) point out, it's important to offer the professional development required to implement the practices and learning methods deemed effective for obtaining the anticipated results. Relating to the professional development of educational leadership, a meta-analysis by Lacerenza et al. (2017) identified elements promoting effectiveness such as conducting a needs analysis, providing feedback, using a face-to-face meetings and holding multiple sessions. Daniëls et al. (2019) highlight that professional development should considering the context and participants' own practice to facilitate the transfer of knowledge, skills and attitudes. For Campbell and Sawyer (2009), professional development should clearly articulate the beliefs underlying the practice and consider participants' actual beliefs and perceptions and offering opportunities for reflection.

1.3 Research context

In 1997, the province of Quebec (Canada) developed a network of subsidized childcare services for all children from birth to 5 years old. The network consists of early childhood centers, which are non-profit organizations managed by an independent board of directors composed of at least two-thirds of parents using childcare services. To provide a framework for these services, the Ministry of the Family created an educational program to ensure the quality of childcare services. Each educator is responsible for a group of 8 to 10 children in accordance with current legislation. The ministry provides financial support for the inclusion of children with disabilities (Dionne et al., 2023).

The results presented in this article are part of a larger study on inclusion in childcare settings in the province of Quebec (Canada). This larger project involves 19 organizations dedicated to enhancing inclusion in Quebec's early childhood centers (educational childcare services, regional and provincial organizations, policymakers from governmental ministries). This 7-year action research aims to develop, implement, and evaluate a model supporting children's holistic development in inclusive settings.

One specific aspect of this action research concerns support for educators' implementation of educational practices in their day-to-day work with children of all ages, including those with special needs. This is explored based on two aspects of the educational practices for which they received support, namely: (1) creating a developmental portrait of all children in their group, (2) embedding learning opportunities appropriate for the developmental needs of all children, through daily routines.

The research question is as follows: What changes in educational practices do childcare educators and managers perceive following a year of professional development? The specific objectives are: Identify educators'/managers' perceptions of (1) the learning and skills they have developed, (2) the professional development they have received

and (3) their experience of using a child assessment tool (i.e., AEPS-3/*ÉIS-3*)?

2 Materials and methods

2.1 Ethical considerations

This research project has received ethical approval from the Université du Québec à Trois-Rivières, with certification code CERPPE-23-25-08-02.27. The research therefore comply to the ethical rules and regulations established by local laws and the institutional policies of the parties concerned. The research strictly followed ethical standards, ensuring that all stages of experimentation were conducted in an ethical manner and respected the rights of the participants. Prior to participation, all persons involved in the study were fully informed about the nature and purpose of the research and gave their written consent, thus confirming their voluntary participation and understanding of the study objectives.

2.2 Design and type of research

A qualitative methodology was used to investigate the perceptions of educators and managers concerning the perceived changes to their educational practices after 1 year of professional development. To this end, semi-structured interviews were conducted with participants and field notes were collected by the professionals after each coaching meeting.

2.3 Population and sample

Participants were from eight childcare centers located in three socio-administrative regions of Quebec. One center was in an urban area, while 7 others were in small or medium-sized towns. A total of 16 educators (2 from each center) and 8 managers took part in the project. All educators were women training in keeping with ministerial requirements. Fourteen of the educators participated to a semi-structured interview by the end of the experimental year. Their number of years of professional experience as an educator varies considerably, from less than 5 years to over 25 years (Table 1). Reasons for non-participation in the interviews included medical leave and lack of replacements. Six managers took part; the two who did not justified their absence by medical leave and work overload. Managers

TABLE 1 Years of working experience as educator.

Years of working experience	Number of educators
0–5	5
6–10	3
11–15	2
16–20	1
21–25	2
>25	1

possessed 2–24 years of experience (under 5 years: $n = 3$; more than 20 years: $n = 3$).

The inclusion criteria for the childcare centers were: (1) to be recognized as an early childhood center (public network of childcare centers in Quebec), (2) to be available to participate in the coaching sessions (educators and mangers), (3) to have a child with significant and persistent limitations in their group. This criterion is guaranteed by the fact that the child benefits from a financial support from the Family ministry. In addition, a diversity of childcare settings was considered, including urban and rural settings, with children from multi-ethnic backgrounds or living in disadvantaged situations.

An educator's participation in the project depended on the presence of a child with significant and persistent limitations. Thus, children with special needs in the 16 groups of children presented a variety of diagnoses: global developmental delays ($n = 4$), autism ($n = 5$), language and cognitive delays ($n = 1$), language difficulties ($n = 6$), language and sensory difficulties ($n = 1$) and motor difficulties ($n = 1$). The children were aged between 3 and 5 years (3–4 years: $n = 8$, 4–5 years: $n = 8$).

2.4 Instruments

Interview guides including a range of themes for a total of 8 questions were developed for this purpose (Table 2). The open-ended questions address: the learning they have achieved and the skills they have developed, their opinion on the use of AEPS/ÉIS-3, the professional development they have been offered, the personal characteristics they consider favorable to such a project, and what they retain from this project.

2.5 Professional development offered

Professional development consisted mainly of coaching support, accompanied by short training sessions in the form of video capsules. Coaching took place over a 10-month period from September to June. An average of 6 individual 2-h meetings per educator were held. Educators were invited to make video recordings of daily routines or free play. Coaching was offered by two professionals with degrees in education and psychology. One had a master's degree in education and 30 years of experience in early childhood education, while the other was in the process of

TABLE 2 Questions guiding individualized semi-structured interviews.

1- What have you learned in the past year?
2- What skills have you had the opportunity to develop/consolidate?
3- What are the advantages/disadvantages of using AEPS-3/ÉIS-3 in your practice as an educator, as a manager?
4- What are the facilitators/obstacles to using AEPS-3/ÉIS-3?
5- What advantages/disadvantages did you perceive in the professional support you received?
6- What advice would you give to an educator starting to use these tools?
7- What skills/knowledge or personal characteristics facilitated your participation in this project?
8- What do you retain from this project for your future practice as an educator in inclusive childcare settings?

completing a doctorate in psychology and had experience in educational settings.

Coaching sessions for educators were structured around the same sequence of activities. They began with knowledge reactivation, which could include educators' feedback on training materials as well as discussions of their role and reflection on their current practices. To support educators' abilities to situate children's development, the French version of Assessment Evaluation and Programming System-3 (Bricker et al., 2022; Bricker and Johnson, 2023) is used. Videos then allowed them to note how they observe children's skills in daily activities and identify the strategies they use to provide learning opportunities to all children in the group. Discussions of the learning opportunities to offer children, based on AEPS-3/ÉIS-3 allowed educators to reflect on their adjustment consistent with their developmental profile. Finally, at the end of each support meeting, a review was conducted of the action plan drawn up following an initial portrait of the practices in place, the objectives pursued by the educator and the ways they were to be implemented.

For managers, the coaching process was similar: reactivation of knowledge, identification of concerns related to the support offered to educators in their interventions/instruction, exchanges fostering reflection on their practices in terms of leadership, and identification of strategies and favorable environments to support the professional development of educators. At the end of each meeting, the plan was monitored by reviewing the objectives pursued and specifying how they were to be implemented.

2.5.1 AEPS-3/ÉIS-3

To support coaching, two online training courses, lasting a total of three hours, were made available to educators and managers. The first training session briefly presented the French version of the AEPS-3 test, translated and adapted by Bricker and Johnson (2023), while the second presented the naturalistic intervention strategies of Activity-Based Intervention (ABI) (Johnson et al., 2015). The AEPS-3 test is a curriculum-based assessment for children from birth to 6 years old; the AEPS-3 is a system that integrates assessment, goal setting, intervention, and the monitoring of children's progress. Its content covers eight areas of development: fine motor skills, gross motor skills, adaptive skills, social communication, cognition, literacy, and mathematics. The AEPS-3 and the ÉIS-3 Program have both been studied: Grisham et al. (2021) focused on usefulness, validity, and interrater reliability, while Dionne and her colleagues conducted research on interrater reliability, content validity and usefulness (Bergeron, 2017; Braconnier, 2020; Guilbert, 2019; Lemire et al., 2014, 2015).

2.6 Data collection

Semi-structured interviews were conducted in June 2023. Interview guides including a range of themes for a total of 8 questions were developed for this purpose (Table 2). Interviews consisted of one-on-one meetings between the educator or manager and the coaching professional. The professionals took note of participants' answers and initiated discussion on the topics covered by progressively verifying comprehension of the participants' compiled answers. Interviews lasted between 60 and 75 min. The data were anonymized

and stored in accordance with ethical rules. Additionally, field notes were compiled for all participants after each coaching meeting.

2.7 Data analysis

Data were analyzed by the principal investigator. The process used consisted of identifying the key themes that emerged from the interviews. A thematic content analysis (Braun and Clarke, 2019; Paillé and Mucchielli, 2016) was performed, which involved systematically identifying, grouping, and examining the themes addressed in the interviews and field notes. The process used consisted of identifying the key themes that emerged from the interviews and the field notes. To do so, first transcript of the interview was read several times, as suggested by Paillé and Mucchielli (2016). Then themes were systematically grouped. A first draft of the analysis was written. Next, the professionals were consulted to ensure that thematic summaries respected the ideas put forward by the participants. The managers' content analysis was presented to them during a meeting with the research team to validate their understanding of the comments.

3 Results and findings

3.1 Educators' perceptions

Analysis of the educators' comments referred to four themes: (1) educational intervention, (2) inclusion, (3) advantages and challenges of the French version of AEPS-3/*ÉIS-3*, and (4) coaching received. The salient elements extracted from the educators' comments are summarized and illustrated in verbatim extracts. Note that because the educators were French-speaking, the extracts were freely translated by the authors.

3.1.1 Educational intervention

One aspect addressed by educators concerns the importance of better observing children's different skills. Numerous comments show how important it is for educators to clearly situate the child's development. Several report they are more adept at identifying observation targets and their observations are more precise and detailed. Overall, they say they have a better understanding of development, its different stages, and the way a skill builds on previous skills to emerge.

One educator indicates that it's easier to observe the successes of children, especially those with special needs: "It's super easy to make portraits where they [*children*] do not seem to be behind" (E01). This, in turn, makes it easier to identify the appropriate learning opportunity to offer the child and create good intervention targets. Many mention that the presence of criteria for each of the skills observed facilitates their work. Another person states, for example, that: "It's clear, the criteria really make it easier and it breaks down development into many small challenges so I can see the next challenge, but not too far off either" (E02).

The observation-intervention link, furthermore, is highlighted several times. The instrument is seen as useful in planning learning opportunities. One educator states that: "We can say exactly where they [the child] stand and what we are going to do to support them"

(E03). Another specifies: "I have the words to describe what they are capable of doing" (E01). Educators also say that better targeting learning opportunities allows the child to experience success and feel competent.

The relevance of a developmental portrait of all children in the group is also emphasized. In the words of one educator: "Knowing more dimensions of development and making a group portrait helps me know what to do at various times of the day, not only in targeted activities, but also in routines" (E01). Another reports that: "My vision of the group makes it easier to identify the adjustments I need to make to the same activity, so I can steer clear of problems and be proactive" (E04).

Educators report they became aware of strategies they were already using, learned new ones, and recognized the importance of using daily activities and investing in various routine moments.

Accordingly, they acknowledge their role as models and their greater influence thanks to improved understanding of children's development. They also underline the importance of appropriate intervention through planning. They add they learned to adjust to the different levels of needs and abilities of the children in their group and use the same daily life activities as opportunities to meet the children's diverse needs.

3.1.2 Inclusion

Regarding inclusion, several educators point to their successes. One reports pride in having helped children in the group become aware of differences, which transformed their view of children with special needs. Another specifies that: "What I mean is that each child is at their own stage of development and has different abilities in all areas of development. So it's not just that X is different; it's that X is in one place in their motor development and another place in their language development" (E02). A third maintains that: "Children are all different; it's up to me to know their strengths and provide opportunities to meet their challenges" (E05).

As to their educational role, most educators report they came to know themselves better through a greater awareness of their practices and a richer vocabulary for discussing child development. They report an increased sense of competence and professionalism. According to one educator, "I came to see and recognize my skills and understand that my actions and choices can have an impact on all children" (E02).

3.1.3 Benefits and challenges of using AEPS-3/*ÉIS-3*

Educators highlight advantages. They say the *ÉIS-3* makes it possible to monitor each child's development and progress. The criteria established support the drafting of the developmental portraits required by the Quebec government. The instrument helps organize observations and facilitates the analysis needed for the portrait. It is well suited to the work of the educational staff and helps expand knowledge about child development. One educator specifies that: "It allows me to give children challenges they can achieve. I see a need more clearly and understand that my demands are sometimes the reason for disruptive behaviors" (E03).

The disadvantages of using the *ÉIS-3* include wording that is less common in childcare settings and the amount of time required to complete an evaluation. Some educators find that certain items and criteria are more difficult to understand. They say that learning the instrument is initially very time-consuming. The *ÉIS*

approach is described as a change of perspective compared to their usual observational practices. Many emphasize the importance of demonstrating openness. One educator observes: "It's easy, but you must take the time to understand it" (E02). Another mentions: "It's well done, but it takes time to understand everything. I'm still discovering things. I know you [*the coach*] already described it, but I did not grasp everything or use everything at once" (E06).

3.1.4 Professional development

All educators appreciated the professional development offered and found it useful. They stress that, although the training is interesting, the most significant factor is discussion with the coaches. They describe support as emphasizing the development of knowledge and skills, improving observation skills, facilitating work, and helping with the planning and organization of the work to be performed. Many appreciate the highly individualized support and regular meetings. An aspect often identified is that support is based on the needs of the educator. One person in particular notes that:

> "I loved our discussions. I had the impression you were putting what I was doing into words, that you were making it clear what I had to do, and, above all, how useful it would be for me. You were not doing it because of the research project" (E01).

Several comments reveal that coaching promotes a feeling of competence and allows educators to see their strengths and successes. Video feedback, even if it seems intimidating at the beginning, is described as particularly helpful to identify the educator's strengths. It is described as a powerful tool for understanding their practices and discovering ways to improve.

3.2 Managers' perceptions

Managers' perceptions were drawn from comments during interviews and field notes during meetings. In this regard, five main themes emerge: (1) inclusion, (2) skills developed, (3) advantages and challenges of using *ÉIS-3*, (4) advantages and challenges of the professional support received as managers, and (5) perceptions of the professional support received by the educational staff.

3.2.1 Inclusion

Regarding inclusion, managers mention the need to offer children support and adapt practices to their needs. One gives the following example:

> "A parent calls the childcare crying and says, 'I was told in another [*childcare center*] that my child was too disabled.' Too disabled? There's no such thing as too disabled or not disabled enough. He is what he is, and we'll do whatever's necessary to make him well and so will our staff" (M01).

Several comments underscore the importance of having the necessary resources to support inclusion, such as a lower child/educator ratio and additional educators. Several managers highlight educators' need to feel supported, for example: "For us, inclusion is not an option, but we have to be creative in offering the staff elements

to facilitate its adoption, for example, supportive environments that make inclusion possible and pleasant" (M01).

Managers specify that inclusion benefits from integration into childcare policies when it's supported by all members of the childcare center. They argue that inclusion must be a shared responsibility. According to one comment, all actions taken to support educational quality in childcare settings can improve inclusion. Several opportunities should be offered in various contexts to support inclusive practices. One manager maintains that her role is to make the team more aware that pedagogy is part of each of their practices in addition to a shared responsibility.

3.2.2 Skills developed

Many participants underscore the importance of leadership from the manager and staff in this process. Leadership as regards inclusion is shown by identifying what is to be done, and by demonstrating and validating the staff's understanding. Participants also state the importance of giving reasons for the choices made. They report the need to clearly indicate how to move forward by providing clear expectations and criteria for measuring the progress made. Many report they must be convinced themselves to motivate the team, and they clearly explain the added value of inclusion for the educational staff, the children and the families. In the words of one manager:

> "I think this is my greatest learning experience: the importance of naming what I do and why and how I do it to ensure my colleagues also follow suit and are convinced it is their responsibility to do so" (M01).

Several comments target the importance of communication skills, planning and organization, problem solving, and teamwork with partners to promote a shared vision.

3.2.3 Benefits and challenges of using AEPS-3/*ÉIS-3*

Managers say the instrument makes it possible to create a detailed portrait of children's development and quickly target needs. Several comments point to its accuracy. In the words of one person: "It allows us to observe children, all children, regardless of their development, and give educators ideas for adjusting their goals and activities" (M02).

Several comments indicate that the *ÉIS-3* facilitates discussions with various specialists (e.g., occupational therapists, psychologists) involved with the children by promoting a common language. However, the importance of offering support to educators, particularly by giving them time, must be considered to avoid a sense of work overload. The time required to learn the instrument was also viewed as a disadvantage.

3.2.4 Professional development received as managers

Managers' comments underscored the many benefits of professional development, a process they say helps them to feel supported, to normalize the challenges encountered, and to feel less alone. They indicate that the coaching received models a reflective approach, which they can then use with educators. They point to coaches' availability and support, which make them feel better equipped to support their team: "Management coaching helped us organize and develop ourselves and, above all, become aware of our

role as leaders and the importance of working with [the educators], not for them" (M02).

3.2.5 Managers' perceptions of professional development received by educators

Several comments show that the educational staff feels supported by the professional development they received. They report that the educators found the approach highly facilitating and the coaching highly supportive.

> "It was great, the educators said, but above all, they gained self-confidence in their abilities. They're terrific *ÉIS* ambassadors. They're convincing and support the knowledge of others [educators]. The fact that there are several meetings lets them validate each other and maintain their motivation" (M02).

4 Discussion

Results of this qualitative study revealed three important aspects of educators' and managers' perceptions regarding changes in practices following the professional development received during the year: (1) perception of their role within inclusive childcare environments, (2) managerial leadership in support of inclusion, and (3) impact of the professional support offered to them.

4.1 Educators' role

Educators report that the support they were given helped them create developmental portraits of the children, which, in turn, enabled them to better understand the children's needs and adjust their educational interventions accordingly. Individualization and differentiation of educational interventions are recommended practices in inclusive early childhood settings (Underwood et al., 2012).

Educators also emphasize the usefulness of observation, a seemingly simple practice that calls nevertheless for certain knowledge and skills, particularly about the way children learn and develop their own various skills and knowledge (Giardiello et al., 2013). Planning for learning opportunities must be based on an understanding of each child's needs to ensure the opportunity provided is developmentally appropriate. Use of data to support decisions regarding the individualization of educational practices is also recommended (Division for Early Childhood, 2014). Thus, use of the French version of the AEPS-3/*ÉIS-3* to document child development facilitates the identification of observation targets. All parties involved in this project recognize the relevance of using continuous observation to guide action instead of depending solely on response to external requirements.

Results suggest that professional development provided to support inclusion not only benefits children with special needs, but also improves the quality of educational practices for all children. The results are in line with the benefits of professional development documented by several authors in particular Ackah-Jnr (2020). Indeed, educators talk about improving their educational practices with all children, with or without special needs, which reinforces the view that inclusion supports quality (Barton and Smith, 2015).

Educators who believe in inclusion and the importance of supporting the participation of all children are better able to support each child, regardless of their needs or challenges (Underwood et al., 2012). Beyond the importance of observation and situating the child's development, participants' comments show this makes it possible to highlight what is common to all children, whether they have specific needs or not. In this sense, the processes required to situate development and identify targets for educational intervention with children with special needs are revealed to be the same as those for all children in the group. This is significant because perceptions and attitudes regarding inclusion can constitute a barrier to its implementation (Barton and Smith, 2015). An erroneous belief about inclusion maintains that specialized interventions and staff are required for all children with special needs. Although this is true for certain children at certain times and for specific skills requiring adaptations or specialized interventions, developmental support for children with special needs shares more similarities than differences with that for other children. Accordingly, educators report being able to adjust their educational practices based on the needs of each child, regardless of the presence of a diagnosis or identified difficulties.

4.2 Leadership

Managers maintain they play an active role in promoting and supporting inclusive practices. According to Óskarsdóttir et al. (2020), this means not only presenting and explaining the vision and possible directions for inclusion, but also ensuring the necessary supports and structures to be put in place. It means ensuring, among other things, the quality of practices, particularly through professional development. All of this reflects the variety of responsibilities management must assume to develop effective leadership (Muijs et al., 2004).

The manager's comments also suggest the exercise of shared leadership and emphasize the importance of communication. This shared responsibility is also considered central to inclusive practices (Moloney and McCarthy, 2018) and the characteristics of strong leaders for inclusive educational practices (Kugelmass and Ainscow, 2004). Although the Quebec government supports inclusion and has developed funding for this purpose, the decision to accept a child with disabilities rests with each childcare setting insofar as these settings are independent corporations. In the absence of a national intersectoral policy for inclusion in childcare settings (Qureshi et al., 2020), managerial leadership is of primary importance regarding these children's access to educational services. Several comments by the managers involved illustrate this commitment, which reflects an inclusive culture that values diversity and normalizes the perception of children's specific needs.

Among the learnings achieved, managers' acknowledgement of their influence as role models of inclusivity in seen in their recognition of their role with the educational staff. They also report the relevance of childcare settings in adopting policies favorable to inclusion in the interest of a collective project. This aspect is in line with the thinking of Gupta and Rous (2016) and Verheijen-Tiemstra et al. (2024) suggesting that participants' involvement in the professional development resulted in an augmented awareness of their role in creating an organizational climate through inclusive leadership. This commitment is also reflected in the measures implemented such as allowing educators to participate in training and attend support meetings, reducing the educator/child

ratio and hiring additional educators. Indeed, leadership is considered to impact the practices of educators and the experiences of children in the early childhood educational context (Douglass, 2019). A lack of strong leadership in favor of inclusion means fewer chances of inclusive educational practices (Billingsley et al., 2018). In addition to professional development, therefore, leadership is a major factor to consider when implementing inclusive practices (Bartolo et al., 2021; Barton and Smith, 2015; Batz et al., 2023; Bipath et al., 2021).

4.3 Professional development

The professional development offered in this project is part of a process that took place over several months and with different support modalities (coaching meetings, reflective practices, online training capsules, video feedback). This proposal aligns with the point of view of different authors concerning the professional support to offer educational staff to promote improved practices (Child Care Aware of America (CCAoA), and National Association for the Education of Young Children (NAEYC), 2023; Dunst et al., 2019; Snyder et al., 2015, 2022). Regular meetings enabled educators to examine their practices closely as part of a reflective approach, including feedback. Indeed, according to Winton (2016), professional coaching must be part of a process centered on clearly defined practices, one offering practitioners multiple opportunities to learn and implement practices and to benefit from explicit feedback on their performance. Educators also indicate that this allowed them to recognize their strengths, an idea echoed by management, who note that educators developed confidence in their abilities. These findings recall those of Taylor et al. (2022), suggesting that coaching allowed some inclusive early childhood practitioners to reflect on their practices and feel more confident as educators.

The use of video feedback is considered useful despite some initial discomfort. Video usefulness and sense of discomfort are also mentioned in the systematic review by Gaudin and Chaliès (2015), who emphasize the importance of establishing a climate of trust when the videos used are those of the learners themselves in action. To this end, participants in the present study evoke certain appreciated characteristics of coaches, such as attitudes of listening and respect. This is consistent with the comments of Metz et al. (2020) regarding the characteristics looked for in coaches.

Participants also reported their appreciation of regular meetings. On this subject, Dunst (2015) identifies duration and intensity as essential to coaching for creating changes in educators' practices.

Educators and managers appreciated the professional development offered in this project, stating that it helps support their practices. Accordingly, the systematic review by Brunsek et al. (2020) reveals positive associations between the coaching offered in a professional development process and the improvement of practices among educational staff. The results of the present study support the importance of the implemented professional development process and its perceived effects for early childhood educators.

5 Conclusion

Successful inclusion relies on a set of factors with specific regard to culture, policies, levels of support, and the commitment of the resources welcoming the children. Developing the skills of educational staff must be part of a process that builds on existing strengths and considers the actual ability of the childcare environment to face the challenges of quality educational intervention for all. The development of leadership in educational settings needs to be intensified and efforts must be made to fully understand the most effective practices in this regard.

5.1 Strengths and limitations

In terms of limitations, it should be noted that the fact interviews were conducted by the coaches could have led to a social desirability effect. However, the bond of trust established with the coaches also allowed for greater exploration and authenticity in the comments. The voluntary nature of participation by educators and others may also have influenced results that were, quite possibly, already more open to inclusion. The small number of participants and the Quebec context may have limited the scope of the conclusions. Even though the participating childcare centers came from different regions, and that socioeconomic and multicultural factors were part of the selection criteria, all were recognized and subsidized by the Quebec Ministry of the Family. Other types of childcare services are available in Quebec, including subsidized private childcares and home-based educational childcares. In addition, other Canadian provinces offer childcare services according to their own rules and guidelines. Future research could evaluate the implementation of professional development in a wider variety of contexts and countries.

As regards the strengths of the study, we point the research design that offered support over a period of 10 months. The experiment also stands out for considering the reality of childcare environments. The participating groups had already welcomed a child with special needs without the researchers influencing this choice. A further strength of the study was that it gave a voice to front-line actors involved in the daily care of children with special needs.

5.2 Implication for practice

The research allowed us to look at supporting changes in practices favorable to inclusion in early childhood and strengthening the capacity of environments to offer quality interventions for all. The results suggest that professional development helps educators and managers to modify educational practices, particularly about observing children to identify their developmental needs, planning interventions and offering learning opportunities in line with children's development. These results underline the importance of having concrete tools for understanding children's developmental needs. The leadership role of childcare providers is also highlighted. Some efforts should be made to develop inclusion leadership. It's high time to consider inclusion as part and parcel of quality early childhood settings.

Data availability statement

The datasets presented in this article are not readily available because our ethic certificate does not allowed to share data. Requests to access the datasets should be directed to carmen.dionne@uqtr.ca.

Ethics statement

The studies involving humans were approved by Ethics Committee for Research with Humans, Université du Québec à Trois-Rivières: CER-19-262-07.09. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

Author contributions

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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The authors declare that no Generative AI was used in the creation of this manuscript.

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