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Inclusion in Quebec childcare centers: financial support, adaptation, and training

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Background: Inclusion in childcare centers involves a support system that includes funding policies, inclusive practices and access to ongoing training. The province of Quebec (Canada) benefits from a network of subsidized childcare services for children from birth to 5 years old. Although two financial measures support educational childcare centers welcoming children with disabilities, there is a lack of knowledge about how these measures are used.

Research questions: The research questions are: (1) How do childcare centers use financial measures to support inclusion? (2) What adaptations are made in childcare centers? and (3) What is the ongoing training of educators to support inclusion?

Method: This research presents the results of an online survey completed by 94 childcare management staff and 154 childcare educators. The survey was developed using a two-way process involving the researchers along with representatives from government ministries and agencies and childcare management staff.

Results: Results reveal that just over half of management staff request financial measures for all children with special needs and does so mainly to hire additional and specialized human resources and replace staff in meetings with specialized services. The financial measures are perceived to meet material adaptation needs better than those for human resources. Adaptations made by educators relate to instructions, individual interventions, equipment, group activities, physical environment, and schedule and routines. Over half the educators report that adaptations involving group activities and schedules and routines are the most difficult to implement. Less than half the managers and educators had received ongoing training on inclusive practices. Issues addressed during such training include commonly recognized interventions based on diagnoses, collaboration with parents, collaboration with partner agencies or institutions, instructions, individual interventions, group activities, equipment, physical environment, and schedules and routines.

Discussion: Results are discussed in terms of (1) needs met and funding model, and (2) dimensions of quality inclusive practices such as leadership of childcare management staff, training and professional development, collaboration with health and specialized social services, learning environments and partnership with families.

KEYWORDS

inclusion, childcare centers, financial support, adaptations, children with special needs

1. Introduction

Inclusion emerges through policies and practices to support the social participation of all children, including those with special needs [Division for Early Childhood (DEC) and National Association for the Education of Young Children (NAEYC), 2009]. For United Nations Educational, Scientific and Cultural Organization (UNESCO) (2017, p.12), the key message is that "every learner matters and matters equally." Indeed, the Incheon Declaration and Framework for Action aims to implement the means to enable equitable, inclusive, and quality education for all [United Nations Educational, Scientific and Cultural Organization (UNESCO), et al., 2016]. The Joint Position Statement of the Division for Early Childhood (DEC) and National Association for the Education of Young Children (NAEYC) (2009) bases inclusion on three axes: (1) access to various learning opportunities, activities, contexts and environments, (2) provision of supports and accommodations to promote participation and a sense of belonging for children with and without disabilities, and (3) availability of a support system for individuals and organizations that implement inclusive services. Essential to quality inclusion is an education that respects the uniqueness of the child, creates connections with the family, and provides specialized support based on needs (Barton and Joseph, 2015; Love and Horn, 2021). To this end, Barton et al. (2016) maintain that adaptations and accommodations can apply to the environment, materials, activities, and specialized equipment. Furthermore, actions taken regarding accommodations should be performed in collaboration with the family [Division for Early Childhood (DEC), 2014]. These actions, however, also call for implementing effective management practices that include the kind of policies and access to professional development that foster inclusion (Barton and Joseph, 2015; Love and Horn, 2021). A number of authors underscore the importance of policies to promote successful preschool inclusion and the importance of support measures offered to practitioners [Underwood et al., 2012; Barton and Smith, 2015; European Agency for Special Needs and Inclusive Education (EASNIE), 2015; Bricker et al., 2020].

As an example, the ecosystem model of inclusive early childhood education developed by European Agency for Special Needs and Inclusive Education (EASNIE) (2017) illustrates the role of supportive structures in the physical, social, cultural and educational environment of the setting. Practitioners perceive the availability of these support measures as a factor that enables successful inclusion (Hammond and Ingalls, 2003). They also agree on the usefulness of professional development (Schachter, 2015; Özsirkinti and Akay, 2019). Indeed, Purcell et al. (2007) emphasize the importance of properly assessing training needs. Professional development includes a set of practices focused on learning and the application of knowledge and skills in the field [National Professional Development Center on Inclusion (NPDCI), 2020]. Coaching is one of the professional development practices considered effective for supporting the development of quality educational practices in preschool (Snyder et al., 2015).

2. Study context

2.1. Public childcare center network in Quebec

In 1997, the province of Quebec (Canada) implemented a network of subsidized childcare services for all children from birth to 5 years old. This "universal" program distinguishes Quebec from other Canadian provinces (Statistique Canada, 2015). 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 Ministère de la Famille (MF) created an educational program to ensure the quality of childcare services. Parents' contribution is small in comparison with public daycare services; the current flat rate is $8.35 per day per child. In 2003 and 2014, extensive surveys (Drouin et al., 2003; Gingras et al., 2015) were conducted to document the quality of educational childcare services in Quebec. Overall, the quality of educational services is considered acceptable and good. The main weakness relates to the design of the environment and includes the limited available spaces and the lack of flexibility in educators' activities. The importance of promoting the value of play in childcare contexts is also mentioned. These surveys contain few data on children with special needs.

2.2. Financial measures for inclusion

Two measures were implemented to provide financial support for educational childcare centers welcoming children with special needs or disabilities. Thus, the Ministère de l'Éducation et de l'Enseignement supérieur (MEES) (2018) adopted a plan titled "It's All About the Children; Strategy for Children from Birth to Age 8" that aimed to promote equal opportunities. One of the proposed actions was the improvement of the key financial measures offered to educational childcare centers to support the inclusion of children with disabilities. These measures include: (1) an Allowance for Integrating a Disabled Child aged 59 months or younger into educational Childcare (AIDC) and (2) an Exceptional Assistance Measure (EAM) for the inclusion of children with special needs or disabilities in educational childcare settings [Ministère de la Famille (MF), 2019b, 2020]. Because the title of the government department responsible for this measure changed gradually over time, the name Ministère de la Famille (MF) is used in this paper to avoid confusion. Although they are not legally required to do so, childcare settings in Quebec welcome many children with special needs or disabilities. In 2016–2017, for example, just over 9,000 childcare settings received the AIDC [Ministère de la Famille (MF), 2018]. In other words, these settings received a child "with an impairment causing a significant and persistent disability, who is likely to face barriers in his/her integration process at a childcare facility" [Ministère de la Famille (MF), 2020, p.2]. Note that the term "special needs or disability" has been retained because it occurs frequently in various Quebec government documents. Indeed, the educational program proposed by the Ministère de la Famille (MF) (2019a) employs the term "special needs," but the financial measures use "disability" when referring to a significant and persistent disability [Ministère de la Famille (MF), 2017].

The AIDC, designed to support the inclusion of children with disabilities in childcare centers, was introduced in 1977 [Ministère de la Famille et des Aînés (MF), 2008]. From 2004 to 2005, a total of $13.5 million was set aside for this program. Just over 10 years later, in 2016–2017, the amount had increased to $82.6 million. The AIDC has two components: component A, which consists of $2,200 ($400 for file management and $1,800 for the purchase of materials and equipment), and component B, which covers the costs of hiring additional staff,

training, and monitoring of the integration plan for a basic allowance of $39.93 per day for childcare centers [Ministère de la Famille (MF), 2017]. In 2004–2005, the Ministère de la Famille et des Aînés (MF) (2008) evaluated the AIDC; results reveal it is used mainly to purchase materials or equipment for 63% of the children while allowing 47% of childcare centers to hire specialized staff. To access AIDC, a professional report should indicate the child's disabilities, and an inclusion plan should be developed by the childcare center in collaboration with parents and other professionals.

In 2004, an Exceptional Assistance Measure (EAM) was established by the MF in collaboration with the MSSS. In 2014–2015, the budget for this measure was $1,580,000 and benefitted 255 children [Ministère de la Famille (MF), 2015]; in 2017–2018, the allowance was $4.7 million and benefitted 404 children [Ministère de la Famille (MF), 2018]. The EAM complements the AICD in that it is a sum given when the AIDC fails to meet the child's needs. To be eligible for the EAM, a child must, in addition to a disability, have a significant need for additional support. The EAM covers the supervision hours of a person who accompanies and assists a child with disabilities in the routine activities, free play and planned activities of the childcare center. The financial support provided by this measure is granted for the duration of the child's attendance at the center.

Beyond financial measures, the ministère de la Famille supports inclusion through the educational program, mentioning that childcare services should promote The social inclusion of children with special needs. As well, a recent overhaul of the law on educational childcare services includes measures To promote accessibility to these services for children with special needs.

3. Research questions

Although Quebec has financial measures to support inclusion, there is a lack of knowledge on how these measures are actually used. Efforts should be made to document the realities experienced within these settings. This concern is echoed in the international community where quality inclusive practices are still not well documented [United Nations Educational, Scientific and Cultural Organization (UNESCO), 2021]. The aim of this project is to document the experience of educators and management staff in childcare centers regarding the financial measures that support inclusion. The research questions are as follows:

1. How do childcare centers use the financial measures to support inclusion?
2. What adaptations are made in childcare centers?
3. What is the ongoing training of educators to support inclusion?

4. Materials and methods

4.1. Ethical considerations

The results presented are based on a descriptive quantitative design and were obtained from a provincial survey on inclusion in childcare centers in Quebec. This project was part of a larger scale project financed through a Partnership Grant (CRSH No. 895-2017-1010) and included 19 partner organizations (government departments, management staff of childcare centers, community resources) working together to promote inclusion and develop inclusive practices in Quebec childcare centers. The project obtained ethical certification from the organizations involved (CER-18-252-07.21 and CÉRP-2018-018-00).

4.2. Participants

Various strategies were used for the recruitment of potential participants. Information about the survey was disseminated through websites, social networking pages, e-mail, organizations' newsletters, events, posters and bookmarks distributed in childcare settings. Participants include childcare management staff ($n = 94$) and educators ($n = 154$) for a total of 248 participants from all socio-administrative regions of Quebec. The vast majority of respondents are women (98%). Within the framework of the survey, 97% of respondents from the management staff ($n = 94$) and 89% of the educators ($n = 154$) indicate they have experience welcoming children with special needs or disabilities. For management, this experience is predominantly with children having a language impairment (98%), autism spectrum disorder (92%), intellectual disability or global developmental delay (89%), or physical disability (71%). Educators' experience is mainly with children having a language impairment (92%), autism spectrum disorder (85%), intellectual disability or global developmental delay (75%) or, to a lesser extent, physical disability (48%). Furthermore, the majority (93%) of managers mention having experienced a situation of inclusion in their environment that did or did not involve help from the AIDC. Participants' sociodemographic information is presented in Table 1.

4.3. Data collection

4.3.1. Development of surveys

Development of the surveys entailed a two-way process between researchers and the representatives from different government departments and agencies and childcare center management staff. Representatives, therefore, participated in committees. The first part of the process included 11 representatives from government departments (MF, MSSS, MEES) and agencies; the second involved 7 representatives from childcare centers. There were four main stages in the questionnaire development process. The first was to identify the main dimensions to be considered in the survey. At this stage, the researchers first extracted, analyzed and synthesized data from the relevant scientific literature to present to both committees. Then, various partners identified and prioritized the important dimensions to be addressed in the questionnaire. The second stage consisted in validating the prioritized dimensions in terms of existing data, data collection constraints and the possibility of creating levers for action. Potential respondents were also identified. In the third stage, the researchers identified and formulated around 50 questions constituting a first version of the questionnaire. It was then validated with the partners, question by question, with the possibility of adding, modifying or deleting item. For the fourth and final stage a validation procedure was performed to allow for final adjustments before posting online. This procedure, termed cognitive debriefing, consisted of conducting interviews with potential respondents to ensure that questions and instructions were

TABLE 1 Sociodemographic data on management staff and educators in childcare centers.

Type of respondents/ Sociodemographic data	Number of respondents	Percentage by age group				Education level		Years of professional work				Years of experience with disabilities			
		20–29 years old	30–39 years old	40–49 years old	50–59 years old	College diploma obtained	University degree obtained	0–5 years	6–10 years	11–14 years	15 years and more	0–5 years	6–10 years	11–14 years	15 years and more
	n	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Childcare management staff	94	3.2	22.3	40.4	26.6	25.0	61.0	42.5	19.2	13.8	24.8	26.4	15.4	11.0	47.3
Childcare educator	154	14.3	29.2	33.8	22.7	55.0	34.0	17.3	21.4	14.9	45.6	33.4	26.9	10.2	28.5

understood (Patrick et al., 2011). Five educators and five managers took part in two-hour individual interviews to verify the comprehensiveness and understanding of the questions included in the questionnaire. Participants were asked to comment systematically on the content and relevance of the questionnaire. The interviews were transcribed and analyzed to make any changes needed.

4.3.2. Instrument

The survey largely consisted of questions with response choices or 4-point Likert scales which are: (1) never, (2) sometimes, (3) often, (4) always; (1) strongly disagree, (2) disagree, (3) agree, (4) strongly agree; (1) very difficult, (2) difficult, (3) easy, (4) very easy. Respondents could also add a comment or clarification in some cases. A few short-answer questions were proposed as well. It was suggested that participants answer based on their experience with inclusion over the past 2 years. The final version of the survey contained a total of 55 questions covering the following three dimensions: (1) financial support, (2) adaptations, and (3) ongoing training of childcare staff. For financial support (24 questions), the topics covered were experience applying for Allowance for Integrating a Disabled Child (AIDC), collaboration and use of AIDC, integration plan and the Exceptional Assistance Measure (EAM). For example, respondents are asked: "The recommendations suggested by the professionals involved in the applications for the Allowance for Integrating a Disabled Child were used to compose the integration plans." Adaptations (6 questions) covered type of adaptations, level of difficulty, planning, and creation of supportive environments. An example of item for this dimension is: "Educational staff in my childcare center created a supportive environment for children with special needs/children with disabilities within their group (e. g., adapting the environment, implementing identified strategies, etc.)." Ongoing staff training (25 questions) referred to preparation for ongoing training, training experience, joint training and knowledge sharing. For example, respondents are questioned: "I consider that my academic training adequately prepared me to intervene with children with special needs/ disabilities." Results pertaining to the three dimensions are presented below. The questionnaires were finally posted online using a computerized database operated by the Université du Québec à Trois-Rivières and were available to respondents between 28 March and 30 June 2019.

4.4. Data analysis

Descriptive analyses were conducted to provide a portrait of practices. To this end, data were transferred from the online questionnaire to SPSS software. Results related to the AIDC and the EAM are presented along with those concerning the adaptations used to support inclusion and the ongoing training of educators and management staff.

5. Results

5.1. Financial support

5.1.1. Allowance for integration of disabled child into a childcare center

For children with special needs, attendance at a childcare center does not always involve a request for the Allowance for

integration of disabled child (AIDC). Slightly over half of childcare management staff (54%) who applied for AIDC (91%) reported they request this for all children with special needs attending their childcare center. While waiting for the AIDC, 79% of managers said they used some of the center's financial resources to support the child's inclusion. As well, 20% reported they reduced the amount of time the child spent at the center. Just over half of the childcare center management staff (57%) who request AIDC said it generally meets their needs. More specifically, when considering physical and material needs, a large majority of managers said the AIDC meets these needs in 91% and 84% of cases (respectively). When it comes to human resources, however, just over half of the management staff (57%) reported that the AIDC fails to meet these needs. Managers listed the following four uses of the AIDC: hiring additional resources (80%), hiring specialized staff (61%), staff training (71%) and replacement costs for staff participation in meetings with health, social and private practitioners (70%). According to managers, decisions on how the AIDC is used are made by the childcare center management staff (96%), educators (84%), the child's parents (76%), professionals involved in the AIDC request (85%) and, to a lesser extent, persons on the board of directors (38%). A large majority of the management staff (92%) said they follow the recommendations suggested by the professionals involved in AIDC applications when developing integration plans. Managers reported that educators (92%) are generally those most involved in preparing integration plans, followed by parents (86%), childcare center management staff (77%), and health and social services practitioners (66%). According to 96% of managers, these integration plans are reviewed annually. Various stakeholders participate in this review: educational staff (92%), parents (82%), childcare management staff (66%), and health and social services workers (53%). During the review of integration plans, managers reported taking into account the observations of the educational staff (94%), child development assessments conducted by health and social services workers (79%) and parents' observations (70%).

5.1.2. Exceptional assistance measure

The Exceptional assistance measure (EAM) is the other financial measure supporting the inclusion of children with special needs or disabilities in childcare centers. In fact, 66% of the management staff said they have requested the EAM for a child with a disability in their center. However, it may not be requested for a variety of reasons: limited possibility of obtaining it (35%), time required to prepare the application (21%), difficulty accessing external professionals (17%), complexity of the application (17%) and lack of internal resources (6%). To complete the request for the EAM, the supervisory staff considers helpful internal resources (67%), health and specialized social services (62%), parent participation (58%), support from the board of directors (17%) and resources offered by the MF (17%). Concerning the use of the EAM, most of the management staff (77%) reported this support to meet the child's needs. It mainly goes toward hiring additional (83%) and specialized (54%) human resources and replacing staff in meetings with health and social services and private practitioners (44%). Additional uses are staff training (35%), lowering the child-to-staff ratio (12%) and, to a lesser extent, additional hours of support (4%).

5.2. Adaptations to support inclusion

Almost all childcare managers (94%) said that educators often or always create a supportive learning environment for children with special needs or disabilities within the group (e.g., by adapting the environment, and implementing documented strategies). Moreover, educators reported having made adaptations to promote the inclusion of these children based on observation of their developmental needs. They indicated that these adaptations are mostly related to: (1) instructions, (2) individual interventions, (3) available equipment, (4) group activities, (5) physical environment, and (6) schedule and routines (see Table 2). In the category "Other," respondents mentioned food and additional support staff, especially during outings.

Educators who reported implementing adaptations ($n = 140$) were asked to rate the level of difficulty associated with these adaptations. Results suggest that a majority consider adaptations involving group activities and schedules and routines to be those most difficult or very difficult to put into practice (see Table 2). In contrast, most rated adaptations involving materials, physical environment and individual interventions, and adjustments to instructions as easy or very easy to implement.

To cope with the difficulties adapting educational interventions with children having special needs or disabilities, the majority of childcare management staff reported referring to specialized services (90%), private resources (66%) and community resources (40%) for support and advice.

5.3. Ongoing training

Regarding ongoing training, less than half (39%) of the educators said they received training on inclusive practices at their center. When asked about issues addressed during training on inclusive practices they received more globally, it includes commonly recognized interventions based on diagnoses presented, or with partner agencies or institutions, instructions, individual interventions, group activities, equipment, physical environment, and schedules and routines (see Table 3). Regarding initial academic training, almost half the educators (48%) stated this adequately prepared them for work with children with special needs or disabilities.

Next, 44% of management staff said their educators receive training on inclusive practices. They reported that the training sessions most often attended involve interventions that are generally approved based on the diagnoses presented (87%), diagnoses of children with special needs or disabilities (68%), adaptations required for individual interventions (61%), collaboration with parents (58%), and adaptations to instructions (58%).

Managers also said that a variety of supports are used to encourage the participation of educators. Those mentioned most often include registration fees paid by the childcare center (90%) and release and replacement of educators (82%) to allow them to attend training. Furthermore, they said they contacted different organizations or institutions to obtain training on inclusive practices. Those most often identified are services from rehabilitation centers (76%), private resources (55%) and regional associations of childcare centers (47%). Finally, more than half the supervisory staff in childcare centers reported that the training on inclusive practices given to educators (58%) included guidance to improve their practices.

TABLE 2 Adaptations performed and their perceived level of difficulty.

Childcare educator staff—childcare centers (n = 140)					
		Level of perceived difficulty			
Adaptation categories	Adaptation performed	Very difficult	Difficult	Easy	Very easy
	n (%)	n (%)	n (%)	n (%)	n (%)
Instructions	139 (99.3)	1 (0.7)	47 (33.8)	80 (57.6)	11 (7.9)
Individual interventions	136 (97.1)	1 (0.7)	35 (25.7)	89 (65.4)	11 (8.1)
Available material	131 (93.6)	2 (1.5)	34 (26.0)	89 (67.9)	6 (4.6)
Group activities	126 (90.0)	6 (4.8)	62 (49.2)	51 (40.5)	7 (5.5)
Physical environment	125 (89.3)	2 (1.6)	40 (32.0)	77 (61.6)	6 (4.8)
Schedules/routines	96 (68.6)	7 (7.3)	45 (46.9)	39 (40.6)	5 (5.2)
Other	32 (22.9)	4 (12.5)	15 (46.9)	10 (31.2)	3 (9.4)

TABLE 3 Issues addressed during training on inclusive practices.

Childcare educator staff—childcare centers (n = 154)	
Training themes	n (%)
Diagnosis of children with special needs/children with disabilities	18 (11.7)
Commonly recognized interventions based on diagnoses presented	44 (28.6)
Adaptations to be made in the physical environment	31 (20.1)
Adaptations to be made regarding the equipment	35 (22.7)
Adaptations to be made regarding the instructions	45 (29.2)
Adaptations to be made regarding the group activities	39 (25.3)
Adaptations to be made regarding individual interventions	42 (27.3)
Adaptations to be made regarding the schedule and routines	29 (18.8)
Collaboration with partner agencies or institution	26 (16.9)
Collaboration with parents	40 (26.0)
No training	71 (46.1)
Other	9 (5.8)

6. Discussion

Results are discussed based on (1) the needs met and funding model and (2) the dimensions of quality inclusive practices.

6.1. Needs met and funding model

The Quebec government offers two types of financial measures to support the inclusion of young children with disabilities in childcare centers. In terms of the needs addressed by the AIDC, there is a relatively large discrepancy between physical and human resource requirements. A vast proportion of management staff in childcare centers reported it is possible to meet their physical and equipment needs. Regarding human resources, however, just under half said the AIDC meets these needs. The AIDC is widely used for hiring staff; childcare establishments, however, feel it does not meet their human resource needs. These results are consistent with those of the survey conducted in 2004–2005 [Ministère de la Famille et des Aînés (MF), 2008] indicating that the AIDC met material needs better than needs in human resources. Furthermore, only slightly over half of childcare center managers said the AIDC generally meets their needs. This result possibly highlights the difficulty or complexity of the AIDC process for support that only partially meets needs. The other financial measure, EAM, is requested by two-thirds of childcare center managers. Given this number, the unusual nature of the measure is questioned. Finally, does the exceptional measure meet the child's needs? The majority of management staff in childcare settings said that it does. However, access to the measure appears difficult, a problem dating back to 2011 [Office des personnes handicapées du Québec (OPHQ), 2014]. Despite these improvements, many needs remain unmet. Recall that, as with the AIDC, the exceptional measure is mainly used to hire human resources.

It must also be noted that, for the purposes of the AIDC, a child with disabilities is defined as one who has a disability causing significant and persistent impairments and who is prone to encounter barriers to inclusion in a childcare setting. The disability must be certified by a government-recognized professional [Ministère de la Famille (MF), 2017]. This financial support is therefore not available to children with delays or difficulties that are not significant and persistent. Moreover, the difficulty of diagnosing young children is well-documented (Guralnick, 2019). First-level screening is possible in the context of childcare services (Janvier et al., 2016), but it is sometimes difficult to identify the persistent nature of a difficulty in a preschool child. And what are the support needs of childcare settings for children who have special needs but do not meet AIDC criteria?

Finally, associating the addition of resources with the diagnosis presented by a child can testify to the influence of an individual-medical model of disability on inclusive practices (Ianes et al., 2020). For example, while the idea is to provide an inclusive environment with programming and strategies to meet a range of needs, funding for support is based on identifying the disabilities of particular children. Of course, funding is provided to the childcare setting as a whole, but a report attesting to the disabilities and needs of a specific child is nevertheless required [Ministère de la Famille (MF), 2019b]. This raises the question of whether this may confuse the issue, given that educational intervention should focus on accessibility and participation for all.

6.2. Dimensions of quality inclusive practices

6.2.1. Leadership of childcare management staff

First, results confirm that the inclusion of a child with special needs or a disability does not always involve a request for the AIDC. It should be noted that the majority of childcare center managers reported using financial resources from their center to support inclusion, thereby demonstrating their leadership and commitment to inclusion. The above is consistent with the values and principles highlighted by the educational program, which reminds practitioners of the importance of supporting children based on their specific learning needs [Ministère de la Famille (MF), 2019a,b]. It is important to emphasize that the sample is composed of managers with experience in inclusion (93% have experienced an inclusion situation in their setting). One could therefore ask whether this investment would be even more significant for inexperienced child care center management staff unfamiliar with available support measures.

On the other hand, some childcare centers reported having reduced the child's hours of attendance while waiting for the AIDC. Such a practice runs counter to recommendations regarding the possibility for all children to attend the early childhood center at the same hours and on the same day, as defined by van Rhijn et al. (2019). This principle implies that management staff will ensure that children with special needs can participate in all activities at the center at the same frequency and on the same schedule as all other children (van Rhijn et al., 2019).

Regarding the role of management in childcare centers in relation to inclusion, a large proportion of childcare centers reported being involved in decisions on how the AIDC is used. In a smaller proportion, the majority reported being involved in the preparation of inclusion plans. However, for the participation in the annual review of inclusion plans, the percentage is lower.

It is important to highlight the low level of participation of the board of directors regarding decisions on how to use the AIDC and support the childcare center in completing a request for the EAM.

A useful recommendation, therefore, is that managers develop stronger leadership in the situation of children with disabilities in childcare settings. But this leadership must also be shared by board members. For now, the Framework and Procedure [Ministère de la Famille (MF), 2017] stipulates that the childcare provider must obtain a resolution from the board of directors that supports the inclusion of the child with special needs or disabilities. Is this measure sufficient to encourage the development of stronger leadership for inclusion as many recommend (e.g., Barton and Joseph, 2015; Jordan, 2016)?

6.2.2. Training and professional development

In terms of ongoing training, educators' low level of participation is noteworthy, although less than half say their academic training has adequately prepared them to intervene and that managers in childcare centers reported problems recruiting educators trained to work with children with special needs or disabilities. Information about training content appears difficult to interpret given the discrepancies between the perceptions of managers and the educators. In the view of management, educators' training remains largely oriented toward diagnoses of children with special needs or disabilities and the interventions linked to these diagnoses. Then, less than half of educators reported having received ongoing training on inclusion. In such training, interventions related to collaboration with partners and adapting routines and schedules would be the content given the least attention. Thus, it is conceivable that better knowledge of possible interventions related to routines could help staff to make more adaptations to meet the needs of all children. Embedding learning opportunities across routines is a strategy to use with children's disabilities that has strong ecological validity (Johnson et al., 2015).

The importance of offering professional support like coaching in the field is also recognized (Hemmeter et al., 2013). However, management staff notes the absence of this ongoing practice in many of the training sessions attended by educators.

6.2.3. Collaboration with health and specialized social services

In terms of ongoing training, educators' low level of participation is noteworthy, although less than half said their academic training has adequately prepared them to intervene and that managers in childcare centers reported problems recruiting educators trained to work with children with special needs or disabilities. Information about training content appears difficult to interpret given the discrepancies between the perceptions of managers and educators. In the view of management, educators' training remains largely oriented toward diagnoses of children with special needs or disabilities and the interventions linked to these diagnoses. Then, less than half of educators reported having received ongoing training on inclusion. In such training, interventions related to collaboration with partners and adapting routines and schedules would be the content given the least attention. Thus, it is conceivable that better knowledge of possible interventions related to routines could help staff to make more adaptations to meet the needs of all children. Embedding learning opportunities across routines is a strategy to use with children's disabilities that has strong ecological validity (Johnson et al., 2015).

The importance of offering professional support like coaching in the field is also recognized (Hemmeter et al., 2013). However, management staff noted the absence of this ongoing practice in many of the training sessions attended by educators.

6.2.4. Learning environments

The results of the survey allowed us to look at the accommodations and adaptations made for children with special needs or disabilities in Quebec childcare settings. We observed that the vast majority of childcare educators considered making adaptations regarding several aspects. Adaptations concern instructions, individual interventions, available materials, group activities, physical environment and, to a lesser extent, schedules and routines. These results could be explained by the recognition of each child's unique needs and the importance of adapting environments and practices to support the development of all children. These practices are valued in the educational program that guides educational quality in Early Childhood Education and Care ECEC [Ministère de la Famille (MF), 2019a]. Moreover, for Brodzeller et al. (2018), adaptation of the environment, materials, activities and instructions supports the participation and learning of children with autism spectrum disorder or other difficulties during daily routines and activities. These adaptations are also consistent with those of Barton et al. (2016) and of international organizations concerned with inclusion in preschool settings [Division for Early Childhood (DEC) and National Association for the Education of Young Children (NAEYC), 2009; European Agency for Special Needs and Inclusive Education (EASNIE), 2017].

The results also identified adaptations that are more difficult to implement than others. This is the case for those concerning group activities as well as schedules and routines. Yet these two types of adaptations are directly associated with the quality educational practices identified in the educational program [Ministère de la Famille (MF), 2019a]. One explanation is that routines and transitions, as well as group activities, involve a large number of children at the same time. This means the needs of all must be considered in contrast to focusing only on the specific needs of the child with disabilities. Exemplary planning is thus the foundation for all educational practices. To this end, a joint statement from Division for Early Childhood (DEC) and National Association for the Education of Young Children (NAEYC) (2009) states that preschool inclusion involves the use of the universal design for learning (UDL; Meyer et al., 2014). This model has currently been applied in early childhood specifically (Conn-Powers et al., 2006; Darragh, 2007) and provides a framework to support the planning of inclusive educational practices for all. Specifically, UDL implies that the setting is prepared to accommodate young children with a wide range of needs and to demonstrate flexibility (Horn et al., 2016; Lohmann et al., 2018). In addition, the UDL supports equal opportunity, providing accessible goals, methods, assessments and educational materials in a flexible approach (Bergeron et al., 2011). Building on this planning for all, differentiation then occurs through the identification of the additional accommodations a child may require to participate and learn (Horn et al., 2016). These modifications can be made in the environment (support, materials, equipment), the content (incorporating the child's preferences, simplifying), or the process (adult support, peer support, reorganization to reduce barriers; Horn et al., 2016; Chen and Dote-Kwan, 2020).

6.2.5. Partnership with families

The survey results also show that parents could be more involved in decision-making processes such as the use of AIDC or the revision of inclusion plans. However, family involvement is an integral component of quality inclusive intervention across early childhood settings [Barton and Joseph, 2015; European Agency for Special Needs and Inclusive Education (EASNIE), 2017]. Parents of children with special needs, including those with disabilities, are often in a good position to suggest accommodations that promote their child's social participation in the experiences offered at educational childcare centers. Practitioners benefit from knowing and considering the experiences of families and working in partnership with them (Keilty and Trivette, 2017). Cantin (2008), too, emphasizes that an effective family-centered approach involves mutual recognition of the expertise of the childcare center and the family. Various actions can be taken to support the active participation of families. For example, ensuring that parents have access to their child's developmental assessment results in accessible language. Indeed, one of the recommended family-centered practices according to DEC (2014) is having practitioners give parents accurate and comprehensive information so they can make the best decisions for their children.

7. Limitations and strengths

The results of this survey should be interpreted with caution. Indeed, as mentioned earlier, the questions selected for the present article are part of a larger survey on inclusion. Moreover, because the survey is based on a convenience sample, it is not possible to ensure the representativeness and generalizability of the results despite the fact that participants were from all socio-administrative regions of Quebec.

Further work is required to gain a better understanding of (1) how financial support and ongoing training impact the quality of inclusion and educational quality in childcare centers and (2) how the adaptations proposed by the educators are carried out and used to effectively support the participation of children with special needs or disabilities. These aspects will be studied as part of research projects involving the use of measures based on the observation of educational interventions in childcare settings.

This research also has a number of strengths. The questions asked to the participants were identified both by scientific literature as relevant to consider in assessing inclusion, and also from the expertise of stakeholders. The partnership approach adopted provided useful insights for decisionmakers. A second strength of the study is that it considers the perceptions of both educators and management staff.

This project also helps to promote the importance of evaluating inclusion policies in childcare settings, particularly in terms of how they are implemented. A large number of researchers and organizations [United Nations Educational, Scientific and Cultural Organization (UNESCO), 2021] stress this importance.

8. Conclusions and implications

The purpose of this research was to document the use of financial support measures by childcare centers in Quebec along with the adaptations and ongoing training practices in these centers. Some results support the idea that the allocated amounts are useful and allow certain needs to be met, especially in terms of material adaptations. However challenges persist, particularly as regards the financial support of human resources. Results also raise questions about the current design of the financial support program and its coherence with the objective pursued. Indeed, although the goal is to support educational childcare services as a whole in the inclusion process, financial support programs are currently based on an individual assessment of each child's needs. Moreover, some of the responsibilities related to applying for this financial support fall to the parents. Support aims to provide tools for the childcare center as a whole. How, then, can we harmonize financial support based on individual needs assessment with the idea of inclusion as a shared value and approach, one that concerns the childcare center as a whole and its different participants? The answer may lie in part in the development, by the board of directors, advisors and management, of a more holistic vision of childcare resources and needs.

Similarly, it would be interesting to study the relationship between the overall quality of a childcare setting and the presence of a child with special needs or disabilities. A provincial survey on the quality of childcare centers (Gingras et al., 2015) revealed significant connections between the quality of a center and certain aspects of inclusion. Quality assessment in educational childcare settings should consider access and the quality of inclusion, particularly in terms of educational practices with children with special needs.

A next step could be adopting a comprehensive inclusive policy with funding for implementation across all early childhood centers rather than a financial measure to support the inclusion of a particular

child. From this perspective, support for inclusion should consider several dimensions, including professional development and management leadership (Woodcock and Woolfson, 2019). This type of policy would also make it possible to consider more support for children with special needs without a formal diagnosis of disability. However, the adoption of a new funding model for inclusion in childcare centers does not mean reduced funding. The lack of funding and resources was also identified as one of the most significant barriers to inclusion in a U.S. survey (Smith et al., 2015) and globally [United Nations Educational, Scientific and Cultural Organization (UNESCO), 2022].

Data availability statement

The datasets presented in this article are not readily available due to ethical considerations. Requests to access the datasets should be directed to CD, carmen.dionne@uqtr.ca.

Ethics statement

The studies involving human participants were reviewed and approved by Human Research Ethics Committee, Université du Québec à Trois-Rivières (CER-18-252-07.2) and Research Ethics Committee, Centre intégré de santé et de services sociaux de la Mauricie-et-du-Centredu-Québec (CERP-2018-018-00). The patients/participants provided their written informed consent to participate in this study.

Author contributions

CD, AP, and CL contributed to the writing of this manuscript. CD and AP contributed to the literature review, data collection, and data analysis and results. CL contributed to the literature review and data analysis. SG contributed to data collection and data analysis. All authors revised and edited the manuscript and contributed to the article and approved the submitted version.

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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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