EDUCACIÓN INFANTIL Y CALIDAD DOCENTE

Revisión de la literatura especializada

High-quality Early Childhood Teaching: Review of Specialized Research

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ABSTRACT

Relatively little research has been conducted on either the knowledge, skills, and attitudes needed to educate effectively in the early years, or the factors that influence acquisition of a high-quality professional identity among Early Childhood (EC) teachers. By synthesizing recent specialized research this integrative review has found that (1) high-quality EC teachers attend to diversity among children, (2) communities of practice contribute to acquisition of a high-quality EC teaching identity, and (3) weaknesses in Teacher Education programs and contextual factors hinder EC teachers' high-quality performance. This study concludes by discussing practical implications and directions for future research.

RESUMEN

Es escasa la investigación sobre las competencias necesarias para educar eficazmente en los primeros años de vida, y sobre los factores que influyen en la adquisición de una identidad docente de calidad para trabajar en Educación Infantil (EI). Los resultados de la presente revisión integradora apuntan que (1) el profesorado excelente de EI atiende a la diversidad de su alumnado, (2) las comunidades de práctica contribuyen a la adquisición de una identidad docente excelente, y (3) ciertas deficiencias en los programas de formación docente y determinados factores contextuales obstaculizan un desempeño docente excelente.

1. Introduction

Early childhood education and care (hereinafter ECEC) is currently regarded as the most effective long-term investment in education (Schweinhart & Fulcher-Dawson, 2009). The Heckman Curve (Heckman, 2017) and many other revealing studies world-wide have helped to persuade policymakers of the powerful influence of early childhood experiences on children's lifetime outcomes. In assessing the features that define the 'best-performing school systems' in the Programme for International Student Assessment (PISA), Barber and Mourshed (2007) find that 'the quality of an education system cannot exceed the quality of its teachers' (p. 16).

Current recognition of high-quality ECEC as a major predictor of children's overall development (Georgeson & Campbell-Barr, 2015) may be the force behind the growing interest in ECEC teachers' role in supplying high-quality early learning opportunities. There is broad consensus that factors related to the quality of teachers and the act of teaching constitute the single most predominant variable influencing student learning and achievement (OECD, 2005).

Although researchers have been investigating the features that define good teaching for years (Chen et al., 2012), there is a clear need for deeper and more frequent research on the knowledge, skills and attitudes required for teachers to work effectively in the early years (Rekalidou & Panitsides, 2015). Three domains are commonly highlighted as significant to teacher effectiveness, regardless of educational level: cognitive resources (knowledge, beliefs, attitudes, and dispositions), performance in the classroom and children's outcomes (Knight et al., 2015). In sum, it is challenging to articulate the essential qualities of a high-quality ECEC teacher. What seems clear is that teacher performance is influenced by both professional qualifications and personal traits (Lamorey & Wilcox, 2005).

2. Method

This paper understands a review as a research method similar in many ways to a survey, but in which answers are provided not by people but by the literature (Petticrew & Roberts, 2006). Inspired by classifications of reviews provided by expert review authors (Grant & Booth, 2009; Xiao & Watson, 2017), we define this review as *integrative* because it reflects the main strengths of several types of review. It relies on previous studies to identify what has been accomplished (literature reviews); identifies hot issues in current research (state-of-the-art reviews); provides a descriptive account of the evidence (narrative review); and formulates analytical themes to guide us in answering the review/research questions (thematic synthesis).

Our review process began with a definition of specific research questions to be addressed:
- What defines a high-quality ECEC teacher?
- Which factors influence acquisition of a high-quality professional identity among ECEC teachers?

During the initial stages of the process and acquisition of deeper understanding of the research topic, the questions were narrowed. This review thus examines various indicators of ECEC teachers' *qualifications and credentials*, *initial and continuous training*, and *experience and successful classroom practice* conducive to high-quality teaching performance in the early years. It also reports findings from research conducted worldwide to attend especially to differences in ECEC service terminology (Fig. 1).

Figure 1. Perceived differences in ECEC service terminology in the sample of papers reviewed
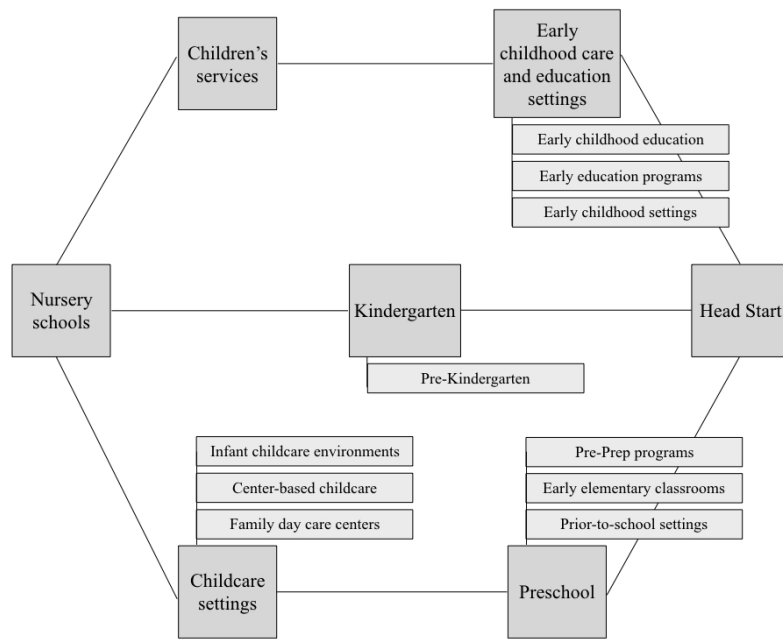
Source: Authors' own.

Prior to the literature search, we established several inclusion criteria. The goal was to analyze the scholarly production on ECEC teaching in the last 10 years in the best specialized journals in ECEC, indexed in the two most renowned databases, JCR and SJR, and considering their impact factor corresponding to the year 2021 (the most recent) (Table 1). The final number of journals assessed was 27.

Table 1. Final number of peer-reviewed journals assessed

Database	Web of Science (WoS)	Scopus
Impact Factor Rankings	InCites Journal Citation Reports (JCR)	Scholarly Journal Rankings (SJR)
Journals (27)	Early Childhood Research Quarterly (JIF 2021 = 3.815) Topics In Early Childhood Special Education (JIF 2021 = 2.313) Journal of Early Childhood Literacy (JIF 2021 = 2.227) Early Education and Development (JIF 2021 = 2.115) European Early Childhood Education Research Journal (JIF 2021 = 1.752) Early Childhood Education Journal (JIF 2021 = 1.656) Australasian Journal of Early Childhood (JIF 2021 = 1.238) Early Child Development and Care (JIF 2021 = 1.206) Infants & Young Children (JIF 2021 = 1.125) Early Years (JIF 2021 = 1.069)	Child Development (SJR 2021 = 2.18) Children and Youth Services Review (SJR 2021 = 0.8) International Journal of Early Childhood (SJR 2021 = 0.79) Journal of Research in Childhood Education (SJR 2021 = 0.62) Journal of Early Childhood Research (SJR 2021 = 0.5) International Journal of Early Years Education (SJR 2021 = 0.49) Contemporary Issues in Early Childhood (SJR 2021 = 0.42) International Journal of Child Care and Education Policy (SJR 2021 = 0.37) Education 3-13 (SJR 2021 = 0.37) Journal of Early Childhood Teacher Education (SJR 2021 = 0.36) Child Care in Practice (SJR 2021 = 0.35) Infancia y Aprendizaje (SJR 2021 = 0.33) Global Studies of Childhood (SJR 2021 = 0.28) Journal of Children's Services (SJR 2021 = 0.28) Asia-Pacific Journal of Research in Early Childhood Education (SJR 2021 = 0.2) Childhood Education (SJR 2021 = 0.17) International Journal of Early Childhood Special Education (SJR 2021 = 0)

Source: Authors' own.

Note. JIF = Journal Impact Factor.

To screen the first sample of potential papers for inclusion, we read all their abstracts. Studies unrelated to the research questions were excluded from the initial sample. Ultimately, 111 papers were assessed.

3. Findings

The following section presents findings based on three indicators of a high-quality ECEC teaching performance examined in this review.

3.1. Experience and successful classroom practices

In attempting to summarize what it means to be a high-quality preschool teacher, Howes et al. (2013) conclude that 'good teaching' requires ECEC practitioners to pay attention to the relationships they form with children, to implement a wide range of instructional approaches sensitively and responsively, to know how to advance

children's skills by using content aligned with their interests and needs, and to arrange a supportive classroom environment where everyone feels valued and safe.

What is meant by 'Listening-Based Pedagogy'?

The findings obtained in a previous study (Rodríguez-Carrillo et al., 2020), in which the perspectives of children attending ECEC settings on the quality of the role of their teachers were gathered, through drawings and narratives, are relevant to inaugurate this theme, as they referred to good ECEC teachers as those who adapt to children's culture and who respond to the unique situation of each child in the classroom.

Capturing each child's voice

Children's happiness in the educational program in which they are enrolled requires ECEC teachers to incorporate children's opinions and views into the classroom's daily teaching-learning flow (Ikegami & Agbenyega, 2014). Decker-Woodrow (2018) found that teachers capable of creating warmer, more participatory and engaging learning environments for young children hold more positive beliefs about the teaching profession and endorse a child-centered approach to teaching and learning. Similarly, Baker (2019) found that the exemplary teachers who participated in her study viewed DLL children and their families as knowledgeable agents of the community. Nakamichi et al. (2022) have found that child-centered teaching attitudes significantly contribute to reducing behavioral problems in classrooms with very young children.

A study performed in Finland and Greece (Koivula et al., 2019) stressed the importance of listening to and incorporating children's perspectives, as well as finding moments for meaningful encounters. Similarly, ECEC teachers in an international study by Broström et al. (2015) believed that achieving children's active participation and the feeling that they are listened to and valued requires practitioners to create conditions in which children can make autonomous choices. In Reggio Emilia schools, teachers carefully plan and organize the learning context so that children easily become engaged and focus (McNally & Slutsky, 2017). Further, classrooms characterized by a high degree of classroom organization provide environments conducive to more behaviorally and emotionally engaged children (Hoang et al., 2018). The formula 'I wonder…' was suggested in the study by Houen et al. (2016) as a teaching strategy to motivate children's participation in the classroom, considering that pedagogical strategies that motivate children's participation and decision in the school context clearly stand out as indicators of a high-quality teacher-child interaction. In addition to specific approaches to the teaching-learning process, specific moments throughout the school day can become meaningful for children. The morning meeting, for example, can be a strategy to encourage active listening and response to children's particular interests and ways of thinking (Delaney, 2018).

Acknowledging each child's uniqueness

Although it is always essential to focus on the unique needs of each child in the classroom, such focus is even more important when children face tough personal situations such as parental separation and divorce (Mahony et al., 2015). Hu et al. (2021) have found that the individualized emotional support children receive from their teachers is associated with an increase in children's attention and effort skills. Reggio Emilia ECEC programs require teachers to plan learning experiences aligned with children's individuality, incorporating full awareness of how personal situations affect each child's natural rhythms (McNally & Slutsky, 2017).

Finnish practitioners also stress individual support for each child, acknowledging children's specific skills and competences, and giving children enough time to express their thoughts and opinions (Koivula et al., 2019). According to Kinkead-Clark (2018), teachers must figure out how each child learns in order to meet their students' needs and help them in reaching their potential. Reggio Emilia teachers implement several useful techniques to gather information about each child's learning style, including participant observation, pedagogical documentation, and meetings with other educational agents (McNally & Slutsky, 2017).

One factor impeding such individualized attention is high child-to-teacher ratios (Park et al., 2014). Whole-group teaching has been shown, however, to be the most valuable and predominant approach in Chinese ECEC (Hu et al., 2015). Õun et al. (2018), for example, find that some participant teachers rely on a 'child-dominated' approach –little-to-no involvement in children's activities, no supervision, and no support of children's social relationships with peers– when there were 10 or fewer children in the classroom.

The benefits of a 'Pedagogy of Play'. Do teachers need to get involved in children's moments of free play?

A key feature of the well-known Reggio Emilia approach (McNally & Slutsky, 2017) stresses teachers' use of a 'pedagogy of play', in which practitioners try to discover children's theories and interpretations of the learning experiences in which they have been involved. Children's social development, initiative, and free play are in fact important in defining what is meant by learning (Broström et al., 2015). Findings in Hu et al. (2015) are discouraging, however; this study reveals that Chinese children do not have enough opportunities for meaningful free play.

Other findings show that involving educators in infants' attempts to form relationships with peers creates and sustains primitive forms of dialogue in infant-peer encounters (Redder & White, 2017). Further, when teachers involve themselves in children's play, they may sensitively develop and expand the play themes chosen (Devi et al., 2018). When ECEC professionals have a deep understanding of infants' individualities, they interact playfully

with children in a more efficient way (Recchia & Shin, 2012; Jung & Recchia, 2013). Nevertheless, high teacher-infant ratios again make it difficult for teachers to know when and how to take part in infant-peer relationships (Redder & White, 2017).

The study by Loizou et al. (2019) found that the participating ECEC teachers used different forms of support during playtime, especially indirect participation: incorporating new elements in the scenario arranged by the children, making the roles adopted more complex, and guiding in the use of the material. Ivrendi (2020), in her work on the teaching role during free play, found that the role of leader was the least popular among the participating teachers, while the role of scene supervisor was the most frequently chosen out of the five teaching roles during free play.

The pivotal role of child-teacher relationships

As part of the present thematic core, the results of White's (2020) study revealed attempts by the participating teachers to intentionally plan for relationship building in the classroom and to consider this issue as an essential part of the academic curriculum. Broström et al. (2015) found children's feeling respected and cared for by their reference adults to be an important condition for early learning. Further, Hu et al. (2017) suggested that children's pre-academic skills depend more on experiences with their ECEC teachers than on socio-economic and educational conditions at home. Children who are not securely attached to their teachers may thus find it more difficult (than their securely attached peers) to take advantage of the learning opportunities provided in the ECEC environment (Commodari, 2013). Guay et al. (2019) also found that the closeness of ECEC teachers to their students served as a predictor of children's intrinsic motivation to read. In contrast, the results of the study by Varghese et al. (2019) revealed that troubled teacher-child relationships were significantly related to lower literacy performance, as well as to poorer prosocial skills.

Phillips et al. (2022), controlling for the variable of overall quality of the ECEC program, have found that those children whose teachers frequently relied on disciplinary strategies based on disapproval and punishment exhibited considerably less progress in self-regulation skills. The findings of the Hu et al. (2019a) study found that the quality of teacher-child interaction, especially regarding the dimension of classroom organization, fairly consistently predicted the incipient development of pre-academic and cognitive skills in childhood.

In determining how to enact a caring pedagogy in ECEC classrooms, Shin (2015) presents a selection of teachers' roles that have been proven effective, such as being an active observer and facilitating play. Howes et al. (2013) propose factors linked to establishment of more secure trusting teacher-child relationships, including teachers' ability to provide quality feedback and to engage children productively by implementing a wide variety of instructional learning formats. Choi et al. (2019) noted that ensuring the quality of teacher-child interactions is particularly important for children who experience a change of teachers during the ECEC stage, especially the younger they are. Classroom emotional support has been shown to be a predictor of the harmonious development of the teacher-child relationship (Moen et al., 2019). In the case of children with ASD, Pinchover and Shulman (2019) found a significant and negative correlation between behavioral problems and predisposition to play. But the emotional availability of teachers moderated this relationship.

Socio-emotional learning (hereinafter SEL) in ECEC: The foundation of any later pedagogical intervention

Early years teachers participating in the study by Salminen et al. (2014) as good inspirational examples contributed to social life in Finnish preschool classrooms by supporting children's development of a constructive attitude towards others, kind treatment of friends, and efficient involvement in group activities by acknowledging the social norms agreed upon. Hollingsworth and Winter (2013) identify several equally inspiring strategies as useful in providing children with opportunities to practice their social skills. As to setting the tone of the classroom as a social environment, teachers reported using positive reinforcement or supporting desired prosocial behaviors. Although such strategies are recommended as effective in most intervention programs, Yumuş and Bayhan (2017) find that most teachers in their study did not rely on opportunities that emerge during daily activities or provide children with ongoing support to incorporate appropriate behavior patterns into their repertoire. In the study by Ng and Bull (2018), it was observed that small groups, compared to large group activities, favored social-emotional learning, as well as outdoor play sessions and structured teaching-learning moments, compared to those moments when children were in centers, at lunch time, or transitioning from one activity to another.

Participant ECEC teachers in Hollingsworth and Winter (2013) asserted that family involvement could strengthen their professional role in supporting children's friendships. Participant teachers in Papadopoulou et al. (2014) work to provide children with optimal conditions for group work, integrate children as members of a group of peers, and encourage children to listen and follow rules—skills that would contribute to easier classroom behavioral management and a smoother teaching-learning process. Yumuş and Bayhan (2017) find ECEC teachers ages 46 or older to be the participant group most successful in coping with children's behavior problems. Zachrisen (2016) found that group interactions provide the ideal conditions for children to get a more authentic sense of what behaving democratically entails.

Research on ECEC teachers' group-centered positioning (van Schaik et al., 2014) finds alignment between teachers' beliefs and classroom practices. Variables such as the role of the teacher in the classroom, whether

or not he/she has a higher education degree, his/her years of professional experience, the implementation of a specific curriculum for the socioemotional area, the teacher-student ratio, the inclusion in the classroom of children with disabilities, as well as children's age, have been shown to be significantly correlated with the frequency of use and with the professional confidence expressed by the teachers participating in the study by Luo et al. (2021) regarding the implementation of socioemotional education practices. Rakap et al. (2018) found a positive correlation between the number of adults in the classroom and the degree to which ECEC teachers implemented social-emotional education practices. On the other hand, it has been found (King & La Paro, 2018) that there is a negative relationship between the 'emotion-minimizing' language used by teachers -understood as that type of language used by teachers to distance themselves from the emotions of their students and that limits the emotional expression of children- and the harmonious development of the socioemotional competence of younger children.

Early years learning: Much more than acquiring early literacy and numeracy skills

In Koivula et al. (2019), participating Greek kindergarten teachers viewed promoting children's autonomy as a way to help children to gain abilities very useful for undertaking daily routines and promoting independent learning. In fact, advancing skills to foster children's autonomous performance at the ECEC stage is one of Greece's most important goals. Strasser et al. (2018) find that activities such as book readings, story discussions, and greetings create favorable conditions for children's language development. Children talked more often when ECEC teachers provided more information, explained more, encouraged more language use, extended children's statements, and used very few directive commands.

In investigating Reggio Emilia's ECEC approach, McNally and Slutsky (2017) highlight Reggio practitioners' acknowledgment that mutual understanding-based and connectedness-based relationships form between children and their peers, materials, and the environment. Such relationship formation is not, however, a spontaneous or straightforward process, and Reggio teachers believe in giving children countless opportunities for encounters over long periods of time throughout the school year. Sigurdardottir et al. (2019) refer to care, respect, and discipline as important values in which to socialize children of young age. In their study, ECEC teachers communicated these values to their students preferably implicitly, through very varied approaches, depending on their personal and professional backgrounds.

ECEC teachers participating in a study by Cheung (2012) on teaching for creativity mentioned providing children with an inspiring learning environment, flexible school hours, ample opportunities for children to explore and interact with their peers, and open-ended questions as necessary conditions to foster children's creativity. Kang's (2020) study concludes that a creative classroom organization positively influences not only children, but also teachers and their role in promoting the development of creative ability in children.

To develop young children's awareness and sensitivity to social justice issues (Hawkins, 2014), related in most cases to diversity and human dignity, ECEC teachers should be open to activities such as intense ongoing discussions after story-time on any social-justice-oriented topic. The work of Mackey and Vocht-van Alphen (2016) presents picture books as a resource for ECEC teachers to promote deep dialogue with their students on issues related to social justice, helping children to express their points of view more easily. Brown and Mowry (2016), as well, demonstrated how a literary genre, *testimonio*, can become a valuable resource to create enriching and meaningful learning experiences in ECEC, by being a medium that awakens the awareness of people of all ages about various situations of marginalization narrated in first person by their protagonists.

Findings in Ikegami and Agbenyega (2014) suggest that children's happiness should be the most important goal in any ECEC program and should thus have a prominent place in every early childhood curriculum. The work of Karjalainen et al. (2019) found that joyful moments between teachers and children provided opportunities for conversational encounters that demand from teachers an attitude whereby every day moments are valued as ideal spaces for creating reciprocal relationships with children based on mutual respect. The findings of Ebbeck et al. (2020) regarding how ECEC teachers can contribute to preparing their students for before, during and after any type of disaster are very interesting in this regard. In this sense, they mention strategies such as making it easier for children to express what they feel and strengthening their empathy and resilience when facing a complicated situation.

Does subject-specific learning content have a place in the ECEC curriculum? Young children learning how to do science

Klaar and Öhman (2014) stress the complexity of ECEC teachers' role due to its multi-dimensional orientation. Nature-oriented content should not be presented to young children as something detached from other learning experiences. ECEC teaching performance should be guided by sequential steps of inquiry that help children to complete the 'full circle' of deep thinking. Along similar lines, the outdoor environment has been shown (Hollingsworth & Vandermaas-Peeler, 2017) to have strong potential for providing children with fruitful inquiry experiences. Walan and Enochsson (2019) found that combining drama with storytelling can be a teaching-learning strategy with promising potential for learning and teaching science at the ECEC stage.

Research shows a twofold relationship between play and mathematics. Results from Björklund et al. (2018) advise against fostering mathematical learning in the early years through play only, instead recommending 'mathematizing' certain elements of children's play. Computational thinking is defined as the ability to systematically analyze, explore, or test possible solutions to usually complex problems, and there are more and more studies that support its development from an early age. Thus, the study by Wang et al. (2021) reveals various teaching strategies for developing computational thinking experiences in childhood, as well as recommended attitudes for the development of computational thinking, such as communication, collaboration, and perseverance. Breive (2020), in relation to the teaching and learning of mathematics in ECEC, refers to the inspiring example of a five-year-old girl and her teacher who co-construct, thanks to mutual trust and shared responsibility, a zone of proximal development by expanding the possibilities of action of one and the other.

Looking beyond classroom walls. How community and society influence ECEC teachers' role

'Nearby' influences

A strong connection between home and school environments has been argued to increase the likelihood that children perceive both essential contexts as implementing coherent practices for their development and well-being (Kinkead-Clark, 2018). Reggio Emilia educational philosophy (McNally & Slutsky, 2017) provides an inspirational example in which collaboration and cooperation serve as cornerstones. As an integral part of the teaching-learning process, collaboration facilitates every teacher's receipt of feedback from every other, for example, in analyzing observational notes or documenting how children's learning occurs. Naqvi et al. (2013) suggested a rethinking of classroom practices to accommodate the participation of students' families. For example, the work of Hou and Hsieh (2019) showed how, following meetings between teachers and families, the latter better understood how literacy skill development takes place, increased their confidence in their children's literacy skills, and expressed the benefits of exchange meetings between teachers and families. Along the same lines, the results of Schriever's (2021) study invite ECEC teachers to reflect on how they address and respond, in this case, to the concerns of their students' families about the use of ICTs, and to reconsider how they can efficiently communicate to their students' families how and why ICTs are used in a certain way in the daily life of the ECEC program.

In a child-centered pedagogy, however, parents' and administrators' beliefs too often become the major impediments (Sak et al., 2016). This is not a trivial issue. Cassidy et al. (2017) found that some factors influencing ECEC teachers' provision of emotional support in the classroom are related the autonomy teachers are given in the work environment. For teachers in the study by Kinkead-Clark (2018), freedom to make pedagogical decisions was a factor contributing to successful performance in the classroom. External pressure, both from colleagues and from school administrators, was mentioned by the teachers participating in the study by Scherr and Johnson (2019) as one of the causes that forced them to worry about the level of student academic performance at the end of the ECEC stage, most of the times neglecting their own conceptions of what quality ECEC entails. Virtually the same findings were obtained in the study by Canaslan-Akyar and Sevimli-Celik (2022), in which the participating teachers referred to academic proficiency and pressure from their students' families as variables that explained their adoption of a teaching role centered on objectives and not very permissive in moments of free play.

Lipscomb et al. (2022) concluded in their study that the perception of professional support in the workplace increases teachers' professional commitment. Along the same lines, Yin et al. (2022) have shown that the pedagogical leadership exercised by the school administration is positively associated with teachers' willingness to implement active and innovative pedagogies such as play-based learning.

Other powerful influences

ECEC programs with better resources (Hu et al., 2017) make teachers more likely to implement more developmentally appropriate teaching styles to stimulate such areas as children's vocabulary and science learning. In this regard, the study by Şahin-Sak et al. (2018) found that the participating teachers stated child-centered pedagogical beliefs, which were far from their actual pedagogical practices, and that their pedagogical practices were highly dependent on the characteristics and physical conditions of the schools where they worked.

Vietnamese ECEC practitioners in Hoang et al. (2018) provided lower levels of emotional support than their counterparts from other countries due to the many fast-paced activities they had to cover in a single learning session. In Turkish public schools (Doğan & Erdiller Yatmaz, 2018), teachers with permanent contracts are supposed to experience fewer or no problems of job insecurity. These teachers are not, however, granted PD and career advancement opportunities, lack of which has been shown to hinder teachers' professional identity, engagement, and motivation.

Furthermore, some teachers' personal factors condition their professional performance. A study implementing CLASS (Sandilos et al., 2015) found teachers' depressive symptoms to be closely related to low-quality classroom organization and instructional support. Also, Sönmez and Betül Kolaşınlı (2021) delve in the same direction, highlighting a significant relationship between teacher stress and classroom climate. Specifically, they found that teacher stress negatively affects democratic classroom environments and, specifically, in the dimension that concerns flexibility. Souto-Manning and Melvin (2022) have found that the Covid-19 pandemic has seriously compromised the psychological well-being of New York City teachers of color. Specifically, during the time of

lockdown, they were exposed to many demands and long working hours, which seriously affected their overall well-being. Of interest are the findings of Jeon et al. (2019), who found that the psychological and professional well-being of the teachers who participated in their study was related to their beliefs about children and about teaching in ECEC.

Mohamed and Al-Qaryouti (2016) found participating teachers' experience to be related to their self-reported practices. Specifically, findings show that more experienced ECEC teachers are more likely to implement developmentally appropriate practices. Further, Doğan and Erdiller Yatmaz (2018) conclude from their findings that gender is an important factor determining professional identity. Teaching in ECEC was more attractive and valuable to female participants than to male. Teachers' personal life history is another noteworthy factor influencing development of their expertise as ECEC professionals (Happo et al., 2013).

3.2. Qualifications

In Clark (2012), participating practitioners from New Zealand mention both passion and professionalism as essential qualities in a good ECEC teacher. A tremendous amount of current research on ECEC teachers' professionalism attempts to establish its connection to ECEC teachers' level of qualification.

Being an ECEC teacher in complex and demanding times

Most societies and cultures (although not all) acknowledge the absence of a single-family prototype. Hegde et al. (2014) show, however, that growing acceptance of gay and lesbian parents does not always mean that teachers feel comfortable with this current topic. These authors identify a need for ECEC teaching preparation programs that enable pre-service teachers to acquire the professional competences to foster appropriate interaction with their future children's gay and lesbian parents. Jones et al.'s (2020) study found that the prospective teacher participants did not consider themselves well prepared to interact with families with a different native language than their own. Peeters and Sharmahd (2014) also reflect on competences that ECEC professionals should have acquired to work effectively with ethnic minority and economically deprived families and children at risk. Sanders-Smith et al. (2016) found that not all prospective teachers who participated in their study were willing to let go of their preconceived beliefs about family diversity, but that those who were willing showed interest in trying to find alternative ways to establish win-win relationships with their students' families.

For Hollingsworth et al. (2016), future ECEC practitioners must also gain knowledge of early childhood research, policy, and practice so that the workforce has a stronger decision-making voice in ECEC research and policy agenda. The findings of Jambunathan et al. (2022) highlight the importance of training future teachers in decision-making processes from an ethical stance, with the intention of preparing them to practice in plural, diverse, global classrooms. Crawford et al.'s (2019) study presents quality picture books as a valuable resource that prospective teachers can use to understand complex global realities. The picture books analyzed focused on issues such as refugee status, poverty, homelessness, or hunger, as well as on values such as persistence, courage, care or hope.

Consistent with the idiosyncrasies of today's digital societies, Barton et al.'s (2019) study found that text messaging works well as a method of providing individualized feedback, that is, tailored to their needs, to prospective teachers. The findings reported by McLeod et al. (2019) also point in the same direction, as they found that training and coaching via email and remote feedback were very effective strategies for the student teachers participating in the study to incorporate the practices recommended by the teacher educators into their professional repertoire.

A reflection on ECEC teacher education programs: Some problems to be solved

Some research reviewed examines inefficiencies in ECEC teacher preparation programs. Park et al. (2014), for example, identify a clear need for specialized infant/toddler teacher education. Zinsser et al. (2015) in turn find that implementing more positive socialization practices in the classroom enhances student teachers' awareness of how socio-emotional advancement takes place. The reflections of Banko-Bal and Guler-Yildiz (2021) are of great interest. They state that future ECEC teachers need to be trained in children's rights and how knowing these has a very positive impact on children's learning and, of course, on the respect for children's rights.

Kintner-Duffy et al. (2022) found that student teachers had limited knowledge about the crucial role that culture plays in child development and in teaching practices, because of a lack of exposure during initial training to concepts related to culture and cultural identity. Ribaeus et al. (2022) concluded that practicum periods in school, in combination with regular reflective seminars, is a formula that contributes to the development of a quality professional identity among candidate ECEC teachers.

Links between ECEC teachers' level of pedagogical preparation and children's outcomes

In investigating ECEC teachers' views on the value and attractiveness of the teaching profession, Doğan and Erdiller Yatmaz (2018) find that professionals with specialized training in early child development and education score higher than those without specialized qualifications. Similarly, the results obtained in Djonko-Moore's (2022) study on ECEC in contexts of diversity suggest that the ECEC teachers most willing to remain in the profession had received much more initial training focused on the issue of diversity, felt themselves adequately trained during

their undergraduate studies to teach culturally and linguistically diverse children and, consequently, developed quality pedagogical practices in working with children from culturally diverse backgrounds.

Yumuş and Bayhan (2017) find striking differences in teachers' skills in managing behavior problems effectively among children in their classrooms. Teachers with a university degree scored higher than those with lower levels of education. Õun et al. (2018) highlight that teachers with pedagogical education are more likely to engage in child-centered practice than are teachers without this training. Practitioners with a university qualification are found to use language patterns conducive to infants' language development (Hu et al., 2019b). Morris et al. (2013) also found that children in classrooms of teachers with at least a bachelor's degree have higher levels of emotional knowledge than children with less-educated teachers. Wang et al. (2020) found that the professional qualifications of the teachers participating in their study, in particular, their level of education, specialization in ECEC, professional background and experience, as well as the training received, in general, were positively and significantly related to the developmental gains of the young children with whom they worked on a daily basis.

3.3. Training

In addition to specialized qualifications in ECEC, in-service training is a determining factor in high-quality teaching.

What does it take for a PD initiative to be successful? Key features and conditioning factors

Teachers participating in the study by Davis et al. (2015) stressed attending workshops that provide practical-oriented notions. Brown and Inglis (2013) conclude that, for professional learning to be transformative, teachers must undergo experimentation and reflection processes. Bleach (2014) demonstrates that PD programs should provide conditions that foster reflexivity in which ECEC practitioners can evaluate their professional role. Brown and Weber (2019) also reinforce this type of teacher professional development actions, where the concrete experience of each teacher in his or her classroom is placed at the center of the in-service training opportunities. In other words (Munchan & Agbenyega, 2020), a continuous training that stems from the daily needs of ECEC teachers. Equally revealing are findings in Guerra and Figueroa (2018), where ECEC teachers viewed an action-research experience as an opportunity to reflect on-and-about their daily performance.

In studying teachers with higher levels of education, Visković and Višnjić Jevtić (2018) find that these professionals considered themselves as ready to self-organize and personalize their own PD. Among external factors influencing PD initiatives success, transformational experiences seem to be defined by continuity over a long period of time (Visković & Višnjić Jevtić, 2017). Participants in a study by Brown and Inglis (2013) viewed collaboration with other staff as essential for professional learning. Similarly, those in charge of mentoring programs in Victoria (Morrisey & Nolan, 2015) argued that ECEC teachers' busy workloads and lack of time prevent mentoring programs from achieving the success expected. Equally noteworthy, Gregoriadis et al. (2018) found that some of the kindergarten teachers studied believe PD would be a more attractive professional requirement if associated with financial incentives.

To be mentored, or the importance of support from highly experienced and trained colleagues

Peeters & Sharmahd (2014) demonstrated the benefits of relatively long-term pedagogical support from specialized staff or pedagogical coaches in helping ECEC practitioners to gain new and specific knowledge and to improve their practice. A mentor is a professional who helps teachers facing multifaceted educational challenges and suggests solutions (Kinkead-Clark, 2018). The research by Shannon et al. (2021) helps to clarify the role of coaches or mentors in the professional development of teachers, who usually spend most of their time talking with teachers, encouraging their reflection, and providing constructive feedback, clarifying doubts, as well as setting goals and an individualized action plan for each teacher.

In addition to the 'traditional' method of coaching teachers, Dennis and Horn (2014) find that coaching via email creates a written record that can be reviewed whenever needed to facilitate pedagogical dialogues between teacher and coach. In Morrisey and Nolan (2015), participating teachers found mentors from outside of their own workplaces to be a positive factor in successful mentoring/coaching, as professional distance encouraged mentees to be honest in expressing comments and opinions on their growth.

Growing as an ECEC teacher within a group of teachers who learn

Being part of a safe, independent group helps teachers to find support and engage in critical pedagogical dialogue (Farquhar & Tesar, 2016). ECEC teachers should participate in 'networks of support', understood as professional spaces in which practitioners can engage in active critical processes of thinking and discussion; be involved in 'communities of practice', a PD strategy that provides teachers with a fruitful environment in which to reflect on their practice; and become members of learning communities, a phenomenon inspired by their daily practice through the intellectual dialogues that take place (Clark, 2019). In a recent study, Wagner (2021) advocates the virtues of teacher professional learning in a synchronous, online modality, which enables the easy connection and maintenance of ECEC teacher communities and provides an accessible and effective space for teacher professional learning and development.

In Vujičić and Čamber Tambolaš (2017), participant teachers stressed strengthening the importance of collaborative educational research with other educators in their ECEC program. Similarly, Visković & Višnjić Jevtić

(2018) show that Croatian kindergarten teachers' PD advanced when they had the opportunity to share good classroom practice, dialogue, and discussion with other ECEC colleagues. Farquhar and Tesar (2016) presented focus groups as both a research method and an empowering PD space for ECEC practitioners. Gragg and Collet (2022) found that the teachers participating in their study enjoyed collaborating with their peers, immersed in deep dialogue and reflection, thanks also to the climate of trust that had been generated among them by sharing collaborative processes of improving their practice through the Lesson Study.

4. Discussion

As reported above, this review aims to shed light on a multifaceted educational topic: high-quality ECEC teaching. It addresses key research questions by examining indicators conducive to high-quality ECEC teaching performance – qualifications and credentials, initial and continuous training, and experience and successful classroom practices. The last section of this paper answers these review questions explicitly through a conversation between the most salient review findings and findings from aligned previous research, including some of the authors' related works.

4.1. What defines a high-quality ECEC teacher?

This paper highlights the importance of a quality teacher-child relationship and, specifically, concludes that good ECEC teachers find moments throughout the school day to have meaningful encounters with each child, intentionally plan how to build relationships with each child, provide individualized emotional support, care for each child in the classroom, and are close to their students. As Hopkins and Stern (1996) argue, good teachers try to communicate warmth, no matter their students' age. Likewise, this review paper characterizes good ECEC teachers as those who implement, in pursuit of quality learning and development for their students, diverse teaching approaches. A study of secondary school students by Witte and Jansen (2016) reveals that, for adolescents, characteristics of an excellent literature teacher include 'giving individual attention to students' and 'achieving a multiple approach'. According to the results of this work, good ECEC teachers plan and organize the learning environment in such a way that children are easily involved and motivated in the various learning proposals, and they are also those professionals who promote children's development of autonomy, so that they are independent in carrying out routines and capable of learning on their own. High-quality ECEC teachers have been also shown to care about each child's interests, needs, perspectives, skills, questions, theories, interpretations, ways of thinking, and ways of learning. Likewise, it has become evident throughout the review that good ECEC teachers strive to create a classroom climate in which everyone feels safe and valued, to provide children with countless opportunities for encounter throughout the school day, and to help children develop a positive attitude towards others, treat friends kindly, and function well in group activities, respecting the rules and agreements of coexistence adopted by all. Rodríguez-Carrillo et al. (2019) found that teachers need not to deliberately plan moments for children to practice social skills but should rather take advantage of suitable moments that emerge naturally throughout the school day. This work also characterizes good ECEC teachers as those who are actively involved in child-initiated play time or those who, at least, take on the role of active observers or facilitators of children's play.

4.2. Which factors influence acquisition of a high-quality professional identity among ECEC teachers?

The results of the review point to teacher collaboration as a factor that contributes positively to the development of a high-quality professional identity among ECEC teachers, because it allows teachers to receive feedback from professional colleagues. In fact, teachers' self-efficacy has been shown to correlate significantly with teachers' sense of community (Guo et al., 2011). It has also been shown that the perception of professional support in the workplace increases teachers' professional commitment. Likewise, teachers' professional development advances when they have the opportunity to exchange good classroom practices and dialogue with other colleagues. The review concludes that when teachers feel part of a group of teachers, they enhance their ability to find solutions and explore new ideas through exchange and peer support.

Having the freedom to make pedagogical decisions has also been shown to be a factor that contributes to quality teaching performance in the classroom. Likewise, the pedagogical leadership exercised by school management has been shown to be positively associated with teachers' willingness to implement active and innovative pedagogies.

The material and spatial endowment of the school has also been revealed as a factor that can contribute positively or negatively to the exercise of a quality teaching role in the ECEC stage. Teachers in better endowed schools are more likely to implement child-centered pedagogies. But also the initial training of teachers contributes to the implementation of pedagogies that meet the needs and interests of children once they become in-service teachers.

Among the factors that prevent or hinder the acquisition of a high-quality professional identity among ECEC teachers, this review has found that a high teacher-student ratio is detrimental in many ways and, in particular, for providing individualized attention to each child. It also found that external pressures, whether from the students'

families or from the educational administration, become important impediments for teachers to implement a child-centered pedagogy. Tight and demanding schedules have also proved to be detrimental for ECEC teachers, for example, to provide children with the emotional support they need to develop properly.

On the other hand, the lack of opportunities for professional development and career advancement is associated with serious damage to teachers' professional identity, commitment and motivation. Mental health and, in particular, depressive symptoms among teachers have been shown to have a determining influence on the quality of teaching-learning processes in the early years, for example, negatively impacting classroom organization and instructional support. With regard to mentoring experiences aimed at contributing to the professional development of teachers, an excessive workload, as well as lack of time, prevents these continuous training experiences from obtaining the desired positive effects. This situation turns the school day into a sequence of fast-paced activities and the school environment into a complex situation that calls for immediate action and decision making, resulting in low-quality work motivation (Fernet et al., 2016).

4.3. Practice implications and directions for future research

Overall, the results of this review stress acquiring a high-quality ECEC teaching identity as a complex phenomenon influenced by many forces, both external and internal. At the same time, the processes by which a high-quality teaching identity emerges and develops are ongoing. This review also identifies key ideas on what defines a high-quality ECEC teacher. As this review first and foremost provides a broad picture of several high-quality ECEC teaching indicators, we recommend that researchers conduct independent in-depth systematic reviews of each of the three indicators analyzed here. As to successful classroom practices, exploring commonalities in participatory pedagogies could be a fruitful avenue for future research. The review also shows a clear need for more integrative reviews. The current trend is to associate systematic reviews with meta-analysis, although some topics (high-quality ECEC teaching among them) should not be approached from a quantitative perspective only.

5. Acknowledgments

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