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Strengthening Early Childhood Special Education through Integrated Professional and Interagency Support

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Early Childhood Special Education, Implementation Support, Professional Support, Family-Centred Support.

Abstract

This study aims to identify and synthesize the forms of professional, organizational, family, and interagency support that contribute to the implementation of Early Childhood Special Education (ECSE), as well as to examine how these supports are accessed, coordinated, and sustained. This study employed a Systematic Literature Review (SLR) following the PRISMA 2020 guidelines. Relevant studies published between 2021 and 2026 were systematically identified from Scopus, Web of Science, ERIC, PubMed, PsycINFO, and Education Source, with Google Scholar and reference-list searches as supplementary sources. A total of 32 studies met the eligibility criteria and were included in the final synthesis. Data were analyzed using thematic synthesis through coding, categorization, and interpretation of findings related to the four dimensions of support. The findings revealed four major themes: professional capacity and implementation support; organizational conditions and inclusive implementation; family access, equity, and responsiveness; and interprofessional and interagency coordination and continuity. The synthesis further identified a conceptual continuum consisting of availability, accessibility, responsiveness, coordination, and continuity. These findings indicate that the availability of training, resources, services, and collaboration alone does not guarantee effective ECSE implementation without accessible, responsive, coordinated, and sustainable support. This study concludes that effective ECSE implementation requires an integrated support ecosystem in which professional, organizational, family, and interagency dimensions function interdependently. The proposed continuum provides a conceptual framework for understanding the development of support effectiveness, although further empirical testing is required.

Kata Kunci:
Pendidikan Khusus Anak Usia Dini, Dukungan Implementasi,

Penelitian ini bertujuan untuk mengidentifikasi dan menyintesis berbagai bentuk dukungan profesional, organisasi, keluarga, dan antarlembaga dalam implementasi Pendidikan Khusus Anak Usia Dini (*Early Childhood Special Education*/ECSE), serta menganalisis bagaimana dukungan tersebut diakses,

Dukungan Profesional, Dukungan Berpusat pada Keluarga.

dikoordinasikan, dan dipertahankan secara berkelanjutan. Penelitian ini menggunakan metode *Systematic Literature Review* (SLR) dengan mengikuti pedoman PRISMA 2020. Studi yang relevan dan diterbitkan pada periode 2021–2026 diidentifikasi secara sistematis melalui basis data Scopus, Web of Science, ERIC, PubMed, PsycINFO, dan Education Source, dengan Google Scholar serta penelusuran daftar referensi sebagai sumber tambahan. Sebanyak 32 artikel memenuhi kriteria kelayakan dan dimasukkan dalam sintesis akhir. Analisis data dilakukan melalui sintesis tematik dengan tahapan pengodean, kategorisasi, dan interpretasi temuan berdasarkan empat dimensi dukungan. Hasil penelitian mengidentifikasi empat tema utama, yaitu kapasitas profesional dan dukungan implementasi, kondisi organisasi dan implementasi inklusif, akses keluarga, kesetaraan dan responsivitas, serta koordinasi dan kontinuitas antarprofesional dan antarlembaga. Sintesis lebih lanjut menghasilkan sebuah kontinuum konseptual yang mencakup ketersediaan, aksesibilitas, responsivitas, koordinasi, dan kontinuitas. Temuan ini menunjukkan bahwa ketersediaan pelatihan, sumber daya, layanan, dan kolaborasi belum cukup menjamin efektivitas implementasi ECSE apabila tidak didukung oleh sistem yang mudah diakses, responsif, terkoordinasi, dan berkelanjutan. Penelitian ini menyimpulkan bahwa keberhasilan implementasi ECSE membutuhkan ekosistem dukungan terpadu yang mengintegrasikan dimensi profesional, organisasi, keluarga, dan antarlembaga secara saling bergantung. Kontinuum yang dihasilkan menjadi kerangka konseptual untuk memahami efektivitas dukungan, meskipun masih memerlukan pengujian empiris lebih lanjut.

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1. Introduction

Early Childhood Special Education (ECSE) is a multidimensional field that brings together education, early intervention, assessment, inclusion, family involvement, and professional collaboration to meet the developmental and educational needs of young children with special needs. Its implementation cannot be reduced to the competence of individual teachers or practitioners. Professional standards underpin personnel preparation, professional development, and interdisciplinary practice(Stayton et al., 2024), and field experience is central to preparing ECSE teacher candidates (Szocik et al., 2024). Yet gaps in training, knowledge, and confidence continue to limit the use of evidence-based practices (Layden et al., 2024), and teachers report professional development needs ranging from trauma-informed practice to collaboration with families (Chudzik et al., 2024). Peer coaching can help practitioners implement family-centred practices (Romano et al., 2023).

Professional competence operates within organizational, family, and interagency contexts. Supportive leadership is an essential element of ECSE services (Movahedazarhouligh et al., 2022), and inclusive implementation depends

on organizational structure, shared vision, qualified personnel, staff support, and adequate resources (Lundqvist, 2023). The existence of services, however, does not ensure that families can use them: families struggle to navigate service systems and encounter unequal access to professionals and interventions (Moran & Sheppard, 2023a; Sapiets et al., 2023). Cultural knowledge and experience shape how families engage with services (Abarca et al., 2024), and structural and interpersonal barriers can create inequitable pathways into early intervention (Culver et al., 2025). Across systems, differences in communication and recommendations between medical and EI/ECSE providers further complicate the coordination of support (Moran & Sheppard, 2023b).

Although evidence exists on professional development, assessment, inclusion, family involvement, and collaboration, it is dispersed across separate areas of practice. Teaming practices are inconsistent across professional groups (Steed, Stein, Burke, et al., 2023), and early assessment is constrained by training, working conditions, and interagency collaboration (Steed & Stein, 2023). Existing studies tend to examine one form of support at a time. What remains unclear is how professional, organizational, family, and interagency support relate to one another, and how such support is accessed, coordinated, and sustained across the ECSE process. A cross-domain synthesis that treats these forms of support as an interdependent system is therefore still lacking.

The question is also relevant to Indonesia. Law No. 8 of 2016 on Persons with Disabilities and Minister of National Education Regulation No. 70 of 2009 on inclusive education provide the legal basis for educating children with special needs in regular settings (Presiden Republik Indonesia, 2016). Such frameworks create an expectation of support, but they do not determine whether that support is accessible, coordinated, and sustained in practice. A synthesis of international evidence can offer a reference point for Indonesian policy and practice, with the caveat that the reviewed literature was produced largely in other service systems.

Accordingly, this systematic review addresses two questions: (1) What forms of professional, organizational, family, and interagency support for ECSE implementation are reported in the literature? (2) How is this support accessed, coordinated, and sustained throughout implementation? By answering these questions, the review aims to integrate fragmented evidence into a coherent account of ECSE support systems that can inform policy planning, programme leadership, professional development, and the responsiveness of services to families.

2. Methods

This study used a systematic literature review (SLR) to assess the evidence on support for ECSE implementation. An SLR was chosen because it aggregates literature from several domains through explicit search, selection, and synthesis procedures. The review was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), which requires explicit reporting of information sources, eligibility criteria, selection processes, and included studies (Page et al., 2021), and which is consistent with the Cochrane Handbook's emphasis on predefined eligibility criteria and traceable search and data-collection procedures (Higgins et al., 2024).

Searches were run in Scopus, Web of Science, ERIC, PubMed, PsycINFO, and Education Source, with Google Scholar and hand-searching of reference lists as

supplementary sources. Search strings combined the review's core concepts (ECSE, early intervention, implementation, and the four forms of support) using Boolean operators, exact phrases, and truncation. The main string was: ("early childhood special education" or ECSE or "early intervention") and (support* or "professional support" or "organizational "support" or "organizational support" or "family support" or collaboration or interagency or coordination) and (implement* or practice* or inclusion). Database-specific strings, search fields, and limiters. The search strategy was reported following PRISMA-S to support transparency and reproducibility (Rethlefsen et al., 2021).

Eligibility criteria were defined before the synthesis. Studies were included if they (a) were peer-reviewed journal articles available in full text, (b) were published in English between 2021 and 2026, (c) were substantially concerned with ECSE and/or early intervention for children with special needs, and (d) addressed at least one form of support relevant to the review objectives, such as professional development, leadership and organization, family engagement, inclusive practices, assessment, professional collaboration, or interagency coordination. Duplicates, non-peer-reviewed publications, articles irrelevant to the review objectives, and articles lacking sufficient information for synthesis were excluded.

Selection followed the PRISMA stages of identification, duplicate removal, title and abstract screening, full-text assessment, and final inclusion. The number of records at each stage is shown in the PRISMA flow diagram (Figure 1), and the 32 studies included in the synthesis are listed in Table 2.

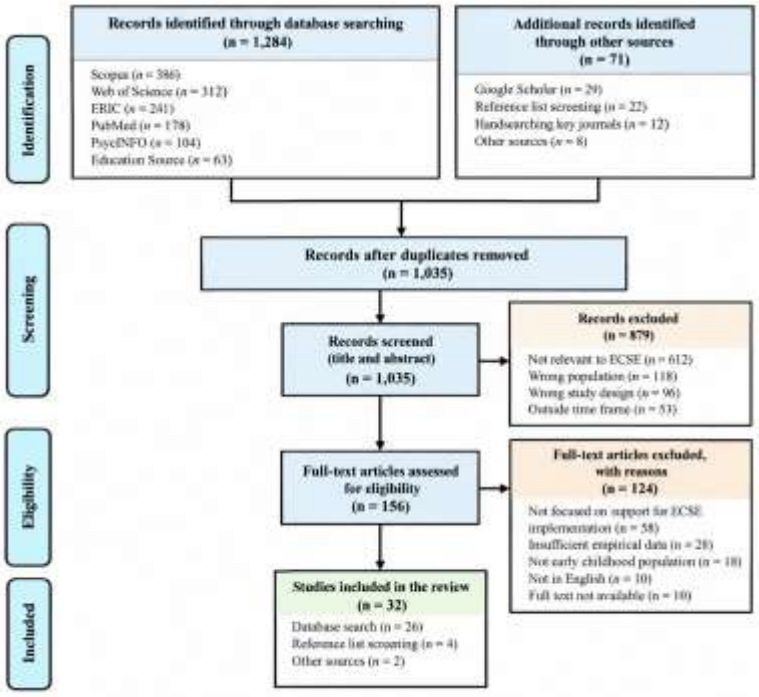


Figure 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses

Figure 1 summarises the selection process. The database search identified 1,284 records, and other sources added 71. After 320 duplicates were removed, 1,035 records were screened by title and abstract, and 879 were excluded because they were not relevant to ECSE, concerned an inappropriate population or study design,

or fell outside the publication period. Of the 156 full-text articles assessed, 124 were excluded because they were not relevant to ECSE, offered little empirical evidence, concerned an inappropriate population, did not meet the language requirement, or were unavailable in full text. Thirty-two articles met all criteria and were included in the synthesis (Table 2).

The methodological quality of the included studies was evaluated based on six criteria (QA1–QA6), namely: (QA1) clarity of the study's objectives and focus; (QA2) appropriateness of the study design and methods to the study objectives; (QA3) clarity of participant characteristics, context, or data sources; (QA4) the accuracy and transparency of data collection procedures; (QA5) the appropriateness and clarity of data analysis techniques; and (QA6) the support of research findings by adequate evidence or data. Each criterion is scored 1 if met and 0 if not met, so the maximum score for each study is 6. Based on the number of criteria met, studies are classified into three categories: high quality (5–6 criteria), moderate quality (3–4 criteria), and low quality (0–2 criteria). The assessment results show that 26 studies fell into the high-quality category with a score of 6/6, six studies fell into the moderate-quality category with a score of 4/6, and no studies were categorized as low quality. This evaluation was used to assess the level of confidence that should be placed in the synthesized themes, not to exclude or assign statistical weight to the studies.

For each included study, the authors, focus, and key findings were extracted (Table 2). The findings were then synthesized thematically: they were coded for the form of support described and for how that support was accessed, coordinated, or sustained, and the codes were grouped into four themes corresponding to the professional, organizational, family, and interagency domains. Because a study could inform more than one theme, the themes were treated as analytical categories rather than mutually exclusive ones.

3. Result and Discussion

3.1. Characteristics and Quality of the Included Studies

The search and screening process (Figure 1) yielded 32 studies for synthesis (Table 2). They were published between 2021 and 2026, most of them in 2023 (n = 14) and 2024 (n = 12), and they approached ECSE implementation through professional development, leadership, inclusion, assessment, individualized education programmes (IEPs), family access, cultural responsiveness, professional collaboration, and service transitions. Quality appraisal classified 26 studies as high quality (6/6 criteria met) and six as moderate quality (4/6 criteria met): (Butterworth et al., 2024; La Croix et al., 2023; Kim & Hardy, 2024; Love et al., 2023; Siller et al., 2024; Stayton et al., 2024). No study was classified as low quality. Three studies (Corr et al., 2023; Kesäläinen et al., 2023; Love et al., 2023) provided methodological or child-level background rather than evidence on support and were not allocated to a theme.

Table 1. Characteristics and key findings of the included studies

No	Author(s)	Article Title	Key Findings
1	Steed & Leech (2021)	Shifting to Remote Learning During COVID-19: Differences for Early	EC and ECSE teachers experienced substantial changes during remote teaching. ECSE teachers faced distinctive

		Childhood and Early Childhood Special Education Teachers	challenges associated with delivering specialized services and supporting children with disabilities remotely.
2	Movahedazarhouligh et al. (2022)	An Examination of Current Leadership Practices in Early Childhood and Early Childhood Special Education: A Mixed Methods Study	Effective leadership was identified as an important component of high-quality EC/ECSE programmes, highlighting the need for leadership practices that support staff, programme quality, and inclusive services.
3	Kesäläinen et al. (2023)	The Interrelation Between Children's Play Behaviour, Temperament, and Special Educational Needs (SEN) in Early Childhood Special Education (ECSE)	Children's play behaviour, temperament and SEN were interrelated, indicating that individual characteristics should be considered when designing ECSE support.
4	Steed & Stein (2023)	Initial Evaluation Practices: A Survey of Early Childhood Personnel	Evaluation generally reflected recommended family-guided and team-based practices, but professionals reported constraints involving time, eligibility decisions, training, working conditions and interagency collaboration.
5	Romano et al. (2023)	Using Peer Coaches as Community-Based Competency Drivers in Part C Early Intervention	A multicomponent PD approach involving internal peer coaches supported providers' implementation of family-guided routines-based intervention, illustrating the value of practice-based coaching.
6	Steed, Rausch, et al. (2023)	High-Quality Inclusion in Preschool Settings: A Survey of Early Childhood Personnel	ECSE personnel reported stronger implementation of several inclusion practices than related-service personnel, while teaming practices remained inconsistent across professional groups.
7	Moran & Sheppard (2023b)	Finding the On Ramp: Accessing Early Intervention and Early Childhood Special Education in an Urban Setting	Access to EI/ECSE was shaped by complex system navigation, family circumstances and service structures, demonstrating that availability alone does not guarantee equitable access.
8	Sapiets et al. (2023)	Families' Access to Early Intervention and Supports for Children With Developmental Disabilities	Families experienced uneven access to professionals, services and interventions, with unmet needs and multiple barriers affecting timely access to support.

9	Lundqvist (2023)	Putting Preschool Inclusion into Practice: A Case Study	Successful inclusion was associated with organizational structure, integrated support, shared vision, qualified staff, positive attitudes, staff support and adequate resources.
10	La Croix et al. (2023)	A Dynamic Process Model for Continued Integration Between ECE and EI/ECSE Teacher Preparation Programs	Integration of ECE and EI/ECSE preparation can align professional standards and better prepare teachers to serve all children and families in increasingly inclusive environments.
11	Corr et al. (2023)	Mixed Methods Journal Reviewing in Early Childhood Special Education	High-quality mixed-methods ECSE scholarship requires attention to methodological integration, credibility, accuracy, relevance and contribution rather than treating qualitative and quantitative components separately.
12	Steed, Stein, & Charlifue-Smith, (2023)	Initial Evaluation Practices to Identify Young Children With Delays and Disabilities During the COVID-19 Pandemic	Pandemic conditions altered evaluation procedures and exposed difficulties in maintaining accessible, comprehensive and family-centred identification practices.
13	Abarca et al. (2024)	Latin American Mothers' First-Hand Accounts of a Statewide Early Intervention Model: A Funds of Knowledge Approach	Families' histories, parenting values and cultural knowledge shaped their experiences of EI, supporting more culturally responsive and family-centred service delivery.
14	O'Grady & Ostrosky (2024)	Early Educators' Perceptions of Behavior	Teachers' perceptions of challenging and socially competent behaviour varied alongside child characteristics, highlighting possible implicit bias and the importance of culturally responsive practice.
15	Siller et al. (2024)	Bridging Priorities Between Naturalistic Developmental Behavioral Interventions for Autism and Educational Practice in Inclusive Early Childhood Education	NDBI and inclusive ECE share important priorities, but historically separate professional systems can impede integration of autism intervention with everyday educational practice.
16	Layden et al. (2024)	Discovering Practitioners' Knowledge and Use of Evidence-Based	Providers demonstrated gaps in training, knowledge, confidence and implementation of autism EBPs, suggesting a need for

		Practices for Autism Early Childhood Interventions	targeted professional learning and implementation support.
17	Butterworth et al. (2024)	Exploring the Structural Inequalities of the Individualized Education Program: A Dis/Ability Critical Race Theory Perspective	The analysis highlights structural inequities surrounding IEP development and revision and calls attention to racial, geographical and resource-related disparities within special education systems.
18	Szocik et al. (2024)	Early Childhood Special Education Teacher Candidates' Field Experiences: A Systematic Review	Field experiences are central to ECSE preparation, although substantial variability exists in how such experiences and outcomes are designed, implemented and studied.
19	Benson-Goldberg & Erickson (2024)	Reported and Enacted Emergent Literacy Instruction: Understanding 20Young Students With Extensive Support and Complex Communication Needs' Opportunity to Learn.	Students with extensive support and complex communication needs require stronger opportunities for systematic literacy instruction, with discrepancies evident between reported and enacted instructional practice.
20	Daskalakes & Cahill (2023)	"We're All Pretty Welcoming": Inclusion of Children With Disabilities in Library Storytime Programs	Librarians reported multiple strategies for supporting children with disabilities and developmental delays, but inclusive provision depended substantially on staff knowledge and programme practices.
21	Fabrizi et al. (2023)	SEE Me Therapeutic Playgroup: A Teaming Model to Promote Parent–Child Interactions	A collaborative therapeutic playgroup showed potential for supporting parent-child interactions and demonstrated the feasibility of interdisciplinary teaming in EI.
22	Chudzik et al. (2024)	Trauma-Informed Care: The Professional Development Needs of Early Childhood Special Education Teachers	ECSE teachers possessed foundational trauma knowledge but reported additional PD needs concerning classroom strategies, family collaboration and support for children with disabilities affected by trauma.
23	Stayton et al. (2024)	Standards for Early Intervention/Early Childhood Special Education: The Development, Uses, and Vision for the Future	EI/ECSE professional standards provide a foundation for personnel preparation, accreditation, professional development, policy and interdisciplinary practice.

24	Culver et al. (2025)	Caregiver Experiences of Racialization While Accessing Early Intervention (EI) Services for Their Children	Caregivers described racialized experiences during screening, referral and access to EI, demonstrating how structural and interpersonal factors can contribute to inequitable service pathways.
25	Williams et al. (2024)	What Supports and Barriers Influence Early Intervention Providers' Practices? A Qualitative Study	Provider practice was influenced by interacting organizational, professional and contextual supports and barriers; weaknesses in preservice and in-service preparation contributed to implementation gaps.
26	Mahurin-Smith & Lorio (2025)	Transition Class: A Bridge from Early Intervention to Early Childhood Special Education	A structured transition-class model offers a mechanism for supporting continuity as children and families move from EI into ECSE services.
27	Kim et al. (2024)	Early Childhood Teachers' Perceptions, Experiences, and Needs Related to the Inclusion of Autistic Children in a Developing Country	Teachers in a low-resource context identified multilevel challenges and support needs when implementing inclusion for autistic children, highlighting the importance of teacher preparation and contextual resources.
28	Moran & Sheppard (2023a)	Finding Common Ground: Medical Professionals and Special Education Providers Supporting Young Children and Families	Differences in professional recommendations and communication created coordination challenges, indicating the importance of stronger collaboration between medical and EI/ECSE systems.
29	Luna et al. (2023)	Latina Mothers of Young Children With Special Needs: Personal Narratives Capturing the Impact of the COVID-19 Pandemic	Families encountered disruptions and barriers to services during the pandemic while demonstrating important familial and community strengths, underscoring culturally responsive family support.
30	Steed et al. (2023)	Early Childhood Professionals' Reported Use of Culturally and Linguistically Responsive Practices During Initial Evaluations: A Mixed Methods Study	Professionals used some responsive practices, including interpreters and discussion of home language and routines, but implementation was not uniformly comprehensive.
31	Love et al. (2023)	Putting the "Mix" in Mixed Methods: How to Integrate	Mixed-methods ECSE studies require purposeful integration of qualitative and quantitative

		Quantitative and Qualitative Research in Early Childhood Special Education Research	evidence across research stages to produce stronger meta-inferences.
32	Kim & Hardy (2024)	A Team-Based Approach to IEP Data Collection in the Early Childhood Special Education Classroom	Team-based IEP data collection can distribute monitoring responsibilities across classroom personnel and improve systematic use of data for instructional decision-making.

The synthesis of the 32 studies produced four themes, each corresponding to one domain of the review objectives. The themes overlap because some studies contribute to more than one of them; for example, (Butterworth et al., 2024; Romano et al., 2023). Professional, organizational, family, and interagency support therefore cannot be treated as independent components. This section reports what the studies found for each theme. How the findings relate across themes is interpreted once, in the Discussion.

Table 2. *Categorization of the included studies by theme*

Theme	Key Focus / Subthemes	Corresponding Studies	Synthesis of Evidence
Theme 1: Professional Capacity and Implementation Support	Professional standards; preservice preparation; field experience; professional development; practitioner knowledge; evidence-based practices; coaching and competency development	Movahedazarhouligh et al. (2022); Romano et al. (2023); Ferguson et al. (2023); Chudzik et al. (2024); Layden et al. (2024); Stayton et al. (2024); Szocik et al. (2024)	Professional competence is fundamental to ECSE implementation, but initial preparation alone is insufficient. Effective implementation requires continuing professional development, practice-based learning, coaching, access to expertise, collaboration, and opportunities to translate professional knowledge into everyday practice.
Theme 2: Organisational Conditions and Inclusive Implementation	Leadership; organisational structures; resources; working conditions; inclusive practices; assessment; IEP implementation; instructional support; data-informed practice	Steed & Leech (2021); Movahedazarhouligh et al. (2022); Lundqvist (2023); Steed & Stein (2023); Steed et al. (2023); Butterworth et al. (2024); Benson-Goldberg & Erickson (2024); Kim & Hardy (2024); Kim et al. (2024)	ECSE implementation is shaped by the organizational environment in which practitioners work. Leadership, staffing, resources, time, shared vision, supportive structures, and opportunities for teamwork influence whether recommended inclusive, assessment, instructional, and

			individualized practices can be implemented consistently.
Theme 3: Family Access, Equity, and Responsiveness	Family-centred practice; service access; system navigation; family engagement; cultural and linguistic responsiveness; equity; structural barriers	Luna et al. (2023); Moran & Sheppard (2023); Sapiets et al. (2023); Steed et al. (2023); Abarca et al. (2024); Butterworth et al. (2024); Culver et al. (2025)	The availability of ECSE and early intervention services does not necessarily ensure equitable access. Family experiences are influenced by service navigation, professional relationships, language, culture, socioeconomic and structural conditions, and the responsiveness of service systems to family knowledge, priorities, and concerns.
Theme 4: Interprofessional and Interagency Coordination and Continuity	Professional communication; interdisciplinary teaming; interagency collaboration; shared responsibility; referral; IEP data coordination; transition; follow-up and continuity	Romano et al. (2023); Moran & Sheppard (2023); Steed & Stein (2023); Ferguson et al. (2023); Fabrizi et al. (2024); Siller et al. (2024); Kim & Hardy (2024); Mahurin-Smith & Lorio (2025)	ECSE involves multiple professionals, organizations, and service systems. The presence of multiple forms of support does not automatically produce coordinated support. Effective implementation depends on communication, shared responsibility, interdisciplinary collaboration, transition planning, information exchange, follow-up, and continuity across settings and stages of service delivery.

3.2. Professional Capacity and Implementation Support

Stayton et al. (2024) describe EI/ECSE professional standards as the basis for personnel preparation, professional development, accreditation, policy, and interdisciplinary practice. In preservice preparation, field experience is central to developing ECSE teachers' competence despite wide variation in how it is designed and implemented (Szocik et al., 2024), and integrating ECE and EI/ECSE preparation programmes can align professional standards and ready teachers for inclusive settings (La Croix et al., 2023).

Initial preparation did not guarantee consistent practice. Layden et al. (2024) found gaps in knowledge, training, confidence, and use of evidence-based practices among providers of early autism intervention. Chudzik et al. (2024) reported that ECSE teachers hold foundational knowledge of trauma but need professional development on classroom strategies, family collaboration, and

support for children with disabilities affected by trauma. Williams et al. (2024) showed that providers' practices were shaped by interacting professional, organizational, and contextual supports and barriers, and that weaknesses in preservice and in-service preparation contributed to implementation gaps.

The most promising form of support was practice-based. A multicomponent professional development model that used internal peer coaches helped providers implement family-guided, routines-based intervention in community Part C services (Romano et al., 2023).

3.3. Organizational Conditions and Inclusive Implementation

Leadership was reported as integral to staff support, programme quality, and the provision of inclusive services (Movahedazarhouligh et al., 2022). Lundqvist (2023) associated successful inclusion with organizational structure, shared vision, integrated support, qualified personnel, positive attitudes, and resources. In a low-resource context, Kim et al. (2024) found multilevel challenges and support needs in including autistic children, indicating that teacher competence needs the backing of resources and contextual conditions.

Inclusive practices differed across professional groups. ECSE personnel reported stronger implementation of several inclusion practices than related-service personnel, but teaming practices remained inconsistent (Steed, Stein, Burke, et al., 2023). Inclusive provision in library storytime programmes depended substantially on staff knowledge and programme practices (Daskalakes & Cahill, 2023), and Benson-Goldberg and Erickson (2024) found a discrepancy between reported and enacted literacy instruction for students with extensive support and complex communication needs.

Assessment and planning practices showed the same sensitivity to context. Initial evaluations generally followed family-guided and team-based recommendations, yet practitioners faced constraints of time, training, working conditions, eligibility decisions, and interagency collaboration (Steed & Stein, 2023). The pandemic altered evaluation procedures and complicated identification (Steed et al., 2023c), and the shift to remote delivery posed distinctive challenges for ECSE teachers providing specialized services (Steed & Leech, 2021). Butterworth et al. (2024) located IEP development and revision within structural inequalities of race, geography, and resources.

3.4. Family Access, Equity, and Responsiveness

Access to EI/ECSE was shaped by system complexity, family circumstances, and service structures (Moran & Sheppard, 2023a). Families of children with developmental disabilities experienced uneven access to professionals, services, and interventions, with unmet needs and multiple barriers to timely support (Sapiets et al., 2023). Culture and language were prominent. Latin American families' histories, parenting values, and cultural knowledge shaped their experience of early intervention (Abarca et al., 2024). Professionals reported using interpreters and discussing home language and routines during evaluations, but implementation of culturally and linguistically responsive practices was not uniformly comprehensive (Steed et al., 2023). During the pandemic, Latina mothers met service disruptions and barriers while drawing on family and community strengths (Luna et al., 2023).

Equity was addressed directly in three studies. Caregivers described racialized experiences during screening, referral, and access to early intervention (Culver et al., 2025); educators' perceptions of child behaviour varied with child characteristics, suggesting possible implicit bias (O'Grady & Ostrosky, 2024); and IEP processes were linked to racial, geographical, and resource-related disparities (Butterworth et al., 2024).

3.5. Interprofessional and Interagency Coordination and Continuity

Differences in communication and recommendations between medical professionals and special education providers created coordination challenges. Naturalistic developmental behavioural interventions and inclusive early education share priorities, but their separate professional histories impede integration of autism intervention with everyday educational practice (Siller et al., 2024).

Several studies described mechanisms for coordination. An interdisciplinary therapeutic playgroup showed the feasibility of teaming among service providers and families (Fabrizi et al., 2023); team-based IEP data collection distributed monitoring responsibilities across classroom personnel and supported instructional decisions (Kim & Hardy, 2024); and internal peer coaches acted as competence drivers within community services (Romano et al., 2023). Transitions were examined through a structured transition class that serves as a bridge from early intervention into ECSE (Mahurin-Smith & Lorio, 2025).

3.6. Cross-Theme Synthesis and Overall Discussion

3.6.1 Three Gaps Between Available and Effective Support

Read across the four themes, the evidence points less to missing forms of support than to gaps between support that exists and support that works. Three gaps occur. The first is the gap between knowledge and practice (Themes 1 and 2). Standards, preparation, and field experience establish what implementers should know, but competence does not become consistent practice on its own, as the gaps reported by Chudzik et al. (2024) and Layden et al. 2024) and the discrepancy between reported and enacted instruction (Benson-Goldberg & Erickson, 2024) show. Professional support is accessed effectively when practitioners can reach coaching, consultation, and feedback at the moment they face practice decisions, and it is sustained when leadership, time, shared vision, and resources allow what was learned to be applied (Lundqvist, 2023; Movahedazarhouligh et al., 2022). Literature outside the review corpus points the same way: colleagues are a main source of information on evidence-based practices (Kong et al., 2024), tiered coaching and behaviour skills training improved the use of targeted teaching and intervention strategies (Artman-Meeker et al., 2022; Mrachko et al., 2023), and job demands, stress, and the burden on early special education teachers indicate what happens when organizational support is thin (Heiskanen et al., 2025; Jeon et al., 2024; Jokinies et al., 2025). Professional and organizational support are therefore interdependent, not alternatives.

The second is the gap between availability and accessibility (Theme 3). That a service exists says little about whether families can find it, qualify for it, and use it: navigation burdens, language, cultural fit, and racialized experiences determine who actually benefits (Abarca et al., 2024; Culver et al., 2025; Moran & Sheppard, 2023a; Sapiets et al., 2023). Accessibility is itself not enough, because

responsiveness decides whether access is meaningful, and the evidence suggests that responsiveness is uneven (Steed et al., 2023). Work outside the corpus describes barriers to participation in decision-making, with a call for more than presence in decision-making (Kelly et al., 2023), and on the trust professionals place in families (Pierse-Barone et al., 2024). Family-centred practice should accordingly be understood as a two-way process that recognizes family knowledge and priorities and attends to structural inequality, rather than as formal family participation alone.

The third is the gap between multiple supports and coordinated support (Theme 4). Professionals from different disciplines and systems can coexist without functioning as a system (Moran & Sheppard, 2023a; Siller et al., 2024). The mechanisms that helped were those that made responsibility and information shared: interdisciplinary teaming, team-based data collection, and peer coaching (Fabrizi et al., 2023; Kim & Hardy, 2024; Romano et al., 2023). Transitions are the test of whether coordination is sustained, because continuity requires carrying access across settings not only for the child but also for information, professional relationships, responsibilities, and follow-up. A structured transition class is one such mechanism (Mahurin-Smith & Lorio, 2025); studies outside the corpus add that communication and coordination during transition matter particularly for culturally and linguistically diverse families, and that collaboration and preschool-kindergarten differences remain a source of difficulty even where intensive transition practices are valued (Sands & Meadan, 2023).

3.6.2 The Support Continuum as a Conceptual Synthesis

Taken together, the three gaps indicate that ECSE support is best understood as an ecosystem in which professional, organizational, family, and interagency support interact, and in which the value of any one form depends on its links to the others. Professional support supplies competence; organizational support supplies the conditions to apply it; family-centred support ensures that it responds to the realities of the people it serves; and interprofessional and interagency coordination connects these through assessment, intervention, monitoring, and transition. The review conceptualizes these links as a continuum, in which each step names a condition that support must meet before it produces benefit.

Availability → Accessibility → Responsiveness → Coordination → Continuity

The continuum shifts the guiding question from whether a form of support exists to whether it is accessible, responsive, coordinated, and sustained. It is a conceptual synthesis rather than an empirically tested causal model: no included study tested it, and its value lies in integrating literatures that had been analyzed separately.

3.6.3 Implications for Practice and Policy

For practice, professional development should move from occasional training to continuous support through coaching, consultation, reflection, and context-based problem-solving (Chudzik et al., 2024; Romano et al., 2023). Programme leaders should ensure that teachers have not only resources but also routes to assistance and follow-up, and team-based practices such as shared progress monitoring offer a model of shared responsibility (Kim & Hardy, 2024).

For policy, the effectiveness of support should not be measured by the number of training sessions, programmes, or resources provided. Implementation indicators should also capture accessibility, responsiveness, coordination, follow-

up, and continuity, particularly where education, early intervention, health, and family services are involved (Moran & Sheppard, 2023a; Siller et al., 2024). Integrated ECSE policy therefore requires clear definitions of roles, referral mechanisms, communication, and follow-up responsibilities. In Indonesia, where inclusive education is already framed by Law No. 8 of 2016 and Regulation No. 70 of 2009, these implications point to how regulation is translated into accessible referral routes, defined roles across education, health, and family services, and continuing coaching for early childhood educators. Whether this is the case in practice requires local empirical study.

4. Conclusion

This review identified four forms of support for ECSE implementation (professional capacity, organizational conditions, family access and responsiveness, and interprofessional and interagency coordination). It examined how they are accessed, coordinated, and sustained. Its main conclusion is that the presence of support does not ensure effective implementation; what matters is whether support is accessible, responsive, coordinated, and continuous. These conditions are summarised in the continuum from availability to continuity, a conceptual synthesis that awaits empirical testing. Future research should test the continuum across ECSE settings, including Indonesian early childhood contexts, using longitudinal, mixed-methods, and comparative designs that draw on the perspectives of teachers, families, administrators, and support professionals.

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