

Review

# Evolution and emerging themes in commitment research among early childhood educators: A bibliometric analysis

Dongsheng Xue<sup>1</sup>, Ooi Boon Keat<sup>2,\*</sup>, Arun Kumar Tarofder<sup>1</sup><sup>1</sup> Post Graduate Center, Management and Science University, University Drive, Off Persiaran Olahraga, 40100 Shah Alam, Selangor, Malaysia<sup>2</sup> School of Education and Social Sciences, University Drive, Off Persiaran Olahraga, 40100 Shah Alam, Selangor, Malaysia\* Corresponding author: Ooi Boon Keat, [bkooi@msu.edu.my](mailto:bkooi@msu.edu.my)

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**Abstract: Purpose:** This article presents a bibliometric analysis of the global research trends and future research directions of commitment research in early childhood education (ECE) from 1971 to 2023. This study investigates scholarly publications published throughout the past fifty years, employing several analytical methods such as performance analysis, co-citation analysis, bibliographic coupling, and scientific mapping. **Design/methodology/approach:** The article uses the Scopus database to collect 205 articles related to the topic and applies various bibliometric methods, such as authorship, citation, co-citation, bibliographic coupling, and co-occurrence analysis, to visualize and interpret the data. The article identifies the most influential authors, organizations, countries, journals, and articles in the field and the thematic clusters and patterns of commitment research in ECE. The research utilized VOSviewer as a tool for performing performance analysis and topic grouping. **Findings:** The year 2021 exhibited the highest level of productivity, as evidenced by the publication of 26 scholarly works. Regarding influence, Rutgers University, located in the United States, emerged as the most influential institution, while the United States emerged as the most impacted country. Similarly, the publication that holds the most significant influence within the field is the “International Journal of Early Childhood,” while the journal that demonstrates the highest level of productivity is the “International Journal of Early Years Education.” Additionally, the article titled “Work process and quality of care in early childhood education: The role of job crafting” has received the most citations. The authors have identified seven theme groups of commitment research in early childhood education. **Research limitations/implications:** Relevant researches from other databases are not included in the findings because they are restricted to papers indexed in the Scopus database. The analysis might be broadened to incorporate more sources in future study, and longitudinal studies could be used to examine how commitment changes over time in different types of educational settings. **Originality/value:** An exhaustive bibliometric analysis of fifty years of commitment research in early childhood education is presented in this study. It identifies significant works and thematic clusters, and it offers valuable insights into future research directions that can improve educational practices and policies. This study makes a unique contribution to the field.

**Keywords:** commitment; early childhood education; bibliometric analysis; co-citation analysis; bibliographic coupling

## 1. Introduction

The discipline of early childhood education (ECE) assumes a crucial role in molding the fundamental basis of a child’s enduring educational trajectory. Meanwhile, a person’s professional commitment is the extent of their emotional investment in and dedication to their chosen profession (Wang et al., 2023). Central to this transformative process are early childhood educators, who bear the crucial task

of fostering the intellectual development of young people during their critical developmental period (Archer, 2024; Chapman and O’Gorman, 2022; Hayes et al., 2022). The dedication exhibited by these educators toward their vocation not only impacts the caliber of early education but also carries significant implications for the advancement of child development, education policy, and the overall welfare of society (Boeskens et al., 2020; Ye and Zhou, 2023). This introduction initiates an investigation into the complex notion of career commitment among early childhood educators, examining its importance, the factors that influence it, and the consequences it holds within the dynamic field of education.

The professional commitment of early childhood educators involves a multifaceted interaction between emotional attachment and active engagement in their job. This dedication is evident in emotional and behavioral aspects, demonstrating the educator’s emotional involvement in their position and readiness to devote time and effort to their instructional methods (Kwon et al., 2021). Educators’ jobs extend beyond conventional instructional duties, as they assume the responsibilities of caregivers, role models, and facilitators of holistic development during a crucial phase in a child’s life (Lehnert et al., 2022; Michelson et al., 2021). Also, professional commitment is a complex concept that encompasses both emotional attachment and the intention to stay in a chosen work. It is a reflection of individuals’ level of dedication and loyalty to their career (Abu-Tineh et al., 2023).

In light of the increasing acknowledgment of the influential effects of early education, the dedication of educators takes on an elevated level of importance. Existing research highlights the correlation between educators’ dedication and the caliber of interactions within the educational setting, thereby exerting a direct impact on children’s cognitive, social, and emotional development (Cheng et al., 2022; Sydnor et al., 2021). Educators who demonstrate a strong dedication are more inclined to establish supportive and intellectually engaging settings, cultivating a genuine enthusiasm for acquiring knowledge and a feeling of inclusion among their young students (Helm et al., 2023; Jagers et al., 2021).

Multiple personal, professional, and systemic factors influence early childhood educators’ dedication. Educators intrinsically motivated by a desire to work with young children demonstrate a more substantial commitment to their roles. Their belief in the transformative force of education influences their commitment to fostering positive learning experiences, even when faced with obstacles (Khaleel et al., 2021; Lipscomb et al., 2021; Sun et al., 2021). Furthermore, early childhood educators who have a strong sense of professional identity and perceive themselves as fulfilling their duty are more inclined to exhibit elevated levels of career dedication (Zhang and Guo, 2023).

On a professional level, supportive working conditions, opportunities for ongoing professional development, and recognition from peers and administrators significantly influence educators’ career dedication. A nurturing work environment not only increases educators’ job satisfaction but also reduces fatigue and turnover intentions, ensuring stability and continuity in the educational experiences of children (Kraft et al., 2021; Li et al., 2023; Lipscomb et al., 2021).

The dedication exhibited by early childhood educators extends beyond the boundaries of the educational setting. Dedicated educators frequently partake in

ongoing self-improvement endeavors, ensuring that they remain well informed about the latest advancements in pedagogical methodologies and ideas related to child development (Paszkievicz et al., 2021; Staudt Willet, 2024). The dedication to continuous professional development not only promotes the efficacy of individuals but also raises the prestige of the entire early childhood education (ECE) sector (Hamilton et al., 2021; To et al., 2023). Likewise, financial support for ongoing professional development and teacher assistance can improve the quality of early childhood education initiatives and, in the end, improve the outcomes for children (Duncan et al., 2023).

Moreover, the dedication of educators significantly impacts the conversation surrounding education policy (Renn et al., 2024). Educators who demonstrate a solid commitment to their profession are more inclined to support the implementation of fair remuneration, thorough training initiatives, and evidence-based instructional approaches (Carver-Thomas et al., 2022). The active participation of individuals in advocacy initiatives has a significant role in molding the educational environment and promoting the recognition and support of early childhood educators. As a result, this enhances the overall influence of early childhood education on societal outcomes (Correia et al., 2023; Hine et al., 2022; Yang et al., 2022).

The dedication of early childhood educators to their careers plays a crucial role in ensuring the delivery of high-quality early education (Bryant et al., 2023; Corbin, 2021). The preceding introduction provided a comprehensive examination of the importance of commitment, the factors that influence its formation, and its impact on the development of children and the formulation of educational policies (Atashbahar et al., 2022). The commitment of educators to their vocation plays a crucial role in facilitating the development of engaging and empowering early educational encounters, hence cultivating a cohort of individuals who possess a lifetime thirst for knowledge and exhibit responsible civic engagement (Prieto et al., 2024; Wilcoxon et al., 2020). In light of the ongoing transformation of the educational field, it is imperative to recognize and cultivate the dedication of early childhood educators as a crucial undertaking to secure a more promising future for our youngest scholars (Berk, 2022; Brunetti et al., 2020; Yang and Rao, 2023).

## **2. Background of commitment in early childhood education**

In the last few decades, there has been substantial development and advancement in the examination of commitment in the field of early childhood education (ECE). The evolving nature of education, advancements in research methodology, and enhanced comprehension of the elements impacting instructors' dedication have collectively contributed to a more holistic viewpoint of this crucial facet of educational implementation (Cooper et al., 2020; Holst et al., 2020; Neuman and Powers, 2021; Sliwka et al., 2024). This section examines the advancements in commitment research in early childhood education during the past decades, elucidating developing perspectives and patterns.

The primary focus of research undertaken in the early 2000s in the field of early childhood education (ECE) was the educators' commitment to their profession and the achievement of their students (Bostic et al., 2023; Lipscomb et al., 2021). The

cognitive and social-emotional development of students is significantly influenced by the emotional attachment and dedication of educators to their students, and this has been the focus of numerous studies (Guo et al., 2023; Khalfaoui et al., 2021; Váradi, 2022).

Subsequent studies probed more into what elements influenced teachers' dedication. Beyond individual traits, organizational design is also being emphasized; management styles and institutional policies might either encourage or discourage employees' dedication to the company. Scholars have recognized that teacher dedication is interwoven with the working environment and institutional resources available to them (Gaias et al., 2022; Ho and Lu, 2024; McLean et al., 2021; Souto-Manning and Melvin, 2022).

Thanks to improvements in research methods, audiences now have a more nuanced picture of dedication in ECE. Studies that follow the dedication of teachers through time have shed light on how such dedication evolves and ebbs at different points in their careers. The intricate interaction of feelings, motivations, and behaviors that constitute commitment has been captured through mixed-method approaches, which have allowed for the examination of both quantitative and qualitative components (Hansson et al., 2020; Lindeman et al., 2021; Vincent et al., 2023).

In addition, the incorporation of neuroscientific methods has shed light on the neural pathways connected to dedication and its effect on teachers' mental health. These approaches have deepened our knowledge of the numerous ways in which dedication is expressed, from psychological to physiological, and have brought into sharp focus the interdependence of teachers' commitment and their total experiences (Allee et al., 2023; Li et al., 2020; Pakulak and Lipina, 2021).

In recent years, there has been an increase in the discussion and analysis of commitment within the field of early childhood education (ECE) (Gibbs, 2022; Heikka et al., 2021; To et al., 2023). A noteworthy phenomenon that has garnered attention is the investigation of the intergenerational transmission of commitment. Scholars are currently examining the potential impact of educators' dedication on the educational experiences of their pupils and, subsequently, how this may influence future educators' career goals and commitment levels. This field of inquiry highlights the wider societal ramifications of educators' dedication that extend beyond immediate educational achievements (Attanasio et al., 2022; Gu and Dupre, 2021; Solomon and Zerach, 2020; Yan et al., 2023).

Moreover, integrating digital technology into the field of education has brought forth novel aspects in the examination of dedication. The incorporation of technology within early childhood education (ECE) environments has sparked investigations on the effects of virtual interactions on instructors' emotional bonds with their children and educational institutions (Lim et al., 2024). The advent of digital technology has provided opportunities to explore the many manifestations and perceptions of commitment within online educational settings (Ford et al., 2021; Gouseti et al., 2023; Su and Yang, 2022).

For the research gaps, although there has been substantial research on the professional commitment of early childhood educators, the majority of studies have concentrated on the individual and organizational factors that influence commitment. Conversely, there is an apparent deficiency in the literature concerning the

intergenerational transmission of commitment and the longitudinal impact of these factors in early childhood education settings. Moreover, the impact of technological advancements and virtual interactions on educator commitment is still largely unexplored. In order to achieve a more comprehensive comprehension of the dynamics at play, future research should strive to resolve these gaps by integrating broader data sources and utilizing mixed-method approaches.

### 3. Research method

#### 3.1. Defining the appropriate search terms

This paper used a bibliographic research method, and the jargon employed in this research draws from a mix of two different academic fields: commitment terms and preschool education. The inclusion of relevant phrases for both commitment and early childhood education helped guarantee that no bases were left unexplored. The two string and keyword sets employed for data extraction and document choices from Scopus are displayed in **Table 1**. The writers conceived these concepts after a preliminary search for high-quality, applicable literature. The commitment terms include employee commitment, teacher commitment, organizational commitment, goal commitment, workplace commitment, job commitment, career commitment, affective commitment, affective organizational commitment, commitment foci, and escalation of commitment. Likewise, terms related to early childhood education are early childhood educators, preschool education, preschool educators, and preschool teachers.

**Table 1.** Article inclusion and exclusion criteria.

Selection criteria	Exclude	Include
Database: Scopus	-	-
Date of search: “7 August 2023”	-	-
Period of publications: 1971–2023	-	-
Search term: “commitment” OR “employee commitment” OR “teacher commitment” OR “organizational commitment” OR “goal commitment” OR “workplace commitment” OR “job commitment” OR “career commitment” OR “affective commitment” OR “affective organizational commitment” OR “commitment foci” OR “escalation of commitment” AND TITLE-ABS-KEY “early childhood education” OR “early childhood educators” OR “preschool education” OR “preschool educators” OR “preschool teachers”	-	246
Subject area: business, management & account, economics, econometrics and finance, social sciences, psychology, arts humanities, decision sciences, social science	17	229
Publication type: articles & review, conference proceedings, journal conference proceedings	5	224
Language screening: English	19	205

#### 3.2. Data collection

Scopus was utilized to obtain the data because of the database’s extensive collection of double-blind peer-reviewed articles from prestigious academic journals. Scopus is a database that gives 20% greater coverage than Web of Science and automatically removes self-citations, making it possible to calculate an absolute citation total (Chen et al., 2023; Jandrić, 2021). A systematic approach was utilized to obtain the final count of 205 articles presented in **Table 1**. The keywords

“commitment” OR “employee commitment” OR “teacher commitment” OR “organizational commitment” OR “goal commitment” OR “workplace commitment” OR “job commitment” OR “career commitment” OR “affective commitment” OR “affective organizational commitment” OR “commitment foci” OR “escalation of commitment” AND “early childhood education” OR “early childhood educators” OR “preschool education” OR “preschool educators” OR “preschool teachers” were utilized to encompass papers exclusively published in the English language, originating from a diverse range of subjects as illustrated in **Table 1**. Data obtained from online databases such as Scopus may have mistakes due to erroneous bibliographical and bibliometric information that arises from the inclusion of the original publication in later publications. In a previous investigation, notable discrepancies were observed in the disciplinary categorization of Scopus; in the Dimensions disciplinary classification system, documents are allocated to specific disciplines regardless of their original source. The veracity of the disciplinary categorization of dimensions has been scrutinized, and the classification system also exhibits the drawback of being incomplete. A significant number of documents within the Dimensions database lack a designated disciplinary assignment (Amiri et al., 2023; Bornmann, 2018; Herzog and Lunn, 2018; Visser et al., 2021; Wang and Waltman, 2016).

Consequently, this study used many methods to cleanse and organize the data, which led to the search for bibliographic and bibliometric data and the visualization and interpretation of the results using the tool VOSviewer. As suggested by Amiri et al. (2023), Börner et al. (2003) and Mokhtari et al. (2020).

### **3.3. Selecting the techniques for analysis**

Bibliometric approaches, also known as bibliometric analysis, have become well established as distinct scientific disciplines and are essential components of research evaluation methodologies, particularly in the realms of scientific and applied areas. Donthu et al. (2021) offered a comprehensive guide to the process of conducting bibliometric analysis, providing researchers with practical steps and methodologies. The authors established a structured framework that delineates the primary phases of conducting a bibliometric study, which encompasses data acquisition, analysis, and interpretation. Also, the study examined several bibliometric tools and software, offering instructions on how to utilize them to improve the precision and effectiveness of bibliometric research (Donthu et al., 2021).

Meanwhile, the software utility VOSviewer, which is intended for the construction and visualization of bibliometric networks, is introduced by Van Eck and Waltman (2010). They elucidated the capabilities of VOSviewer, which encompass its capacity to manage extensive bibliometric maps and its intuitive interface for visually exploring bibliometric data. As a result, VOSviewer has had a profound impact on the area by offering researchers a robust tool to examine and illustrate intricate bibliometric connections, hence enhancing comprehension and communication of research patterns (Van Eck and Waltman, 2010).

To further expand the breadth and depth of our analysis, this study incorporates approaches from Khanra et al. (2021) and Nazari et al. (2024). After reviewing the

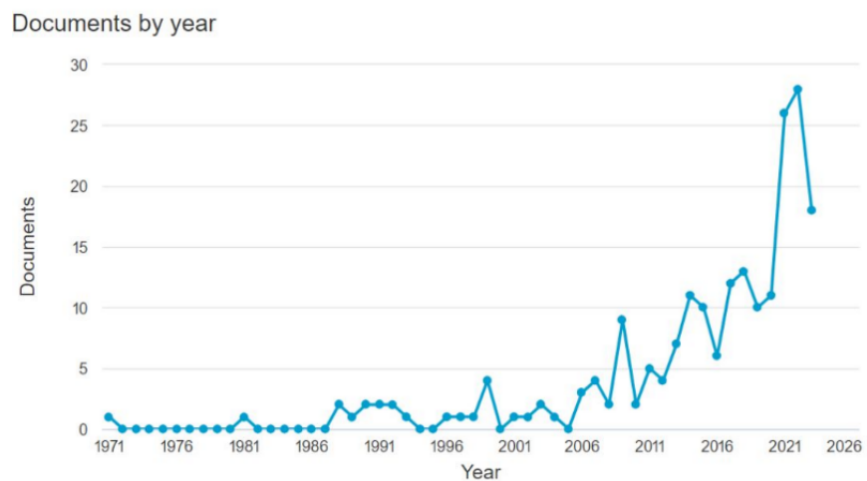
existing literature on the topic, Nazari et al. (2024) made some recommendations for where the field of social innovation impact evaluation might go from here. The approach to analyzing the impact of research contributions inside ECE was informed by the strategy for mapping and evaluating the impact of social innovations. Part of this process was gauging the comprehensiveness and significance of research findings in relation to policy and practice.

Khanra et al. (2021) also conducted an extensive literature survey and bibliometric analysis. For this study, it has modified the approach to tracking the evolution of commitment research in ECE and looking for signs of promising new directions for this field's investigation, which highlights important topics for future research and practical applications by using these proven approaches, which ensure a rigorous and comprehensive overview of the sector.

The utilization of these methodologies has witnessed a growing trend in examining many scientific phenomena and the global ranking of educational institutions and universities (Amiri et al., 2023; Ellegaard and Wallin, 2015). To analyze the information on biographic data, researchers employ bibliometric analysis approaches, including authorship, citation, bibliographic coupling, co-citation, and co-word analysis (Amiri et al., 2023; Badola and Agrawal, 2023).

## 4. Findings

### 4.1. Performance analysis



**Figure 1.** Commitment in ECE research publication trends.

**Figure 1** illustrates the patterns of publishing in the field of commitment research in early childhood education. The year 2022 had exceptional productivity, with significant advancements in research. Notably, the groundwork for these achievements was laid by Martin (1971), who initiated the exploration of this particular field. In his seminal work, Martin (1971) examines the commitment and initiatives of the Bureau of Education for disabled people pertaining to their involvement in early childhood education for children with disabilities. It can be seen from the graph that 2021 was the year with a skyrocketing increase in publications in commitment to early childhood education. The paper written by Heikka et al. (2021) was cited 27 times, which

examined the relationship between distributed pedagogical leadership and teacher leadership in early childhood education settings in Finland and found that sufficient enactment of distributed pedagogical leadership was associated with higher teacher commitment to pedagogical improvement. In light of the prevailing trend observed in the present year, there is anticipated to be notable growth in research and scholarly pursuits within this field in the coming years.

#### 4.2. Prominent authors, organizations and countries for commitment research in early childhood education

**Table 2.** Most influential authors, organizations and countries.

TC	Author	TP	TC	Institution	TP	TC	Country	TP
389	Leana C.	1	389	Rutgers Uni., United States	1	1099	United States	53
104	Dockett S.	1	389	Uni. of Pittsburgh, United States	1	428	Australia	29
91	Sumsion J.	3	104	Uni. of Western Sydney, Australia	1	155	New Zealand	14
89	Grant A. A.	2	96	Uni. of Illinois, United States	1	83	China	16
75	Jorde-Bloom P.	1	79	Johns Hopkins Uni., United States	1	78	Sweden	4
63	Pramling Samuelsson I.	1	79	The Ohio State Uni., United States	1	71	Norway	4
53	Biglan A.	1	75	National College of Edu., United States	1	56	Canada	7
48	Schweinhart L. J.	1	69	Macquarie University, Australia	2	51	United Kingdom	12
45	Haslip M. J.	1	63	Gothenburg Uni., Sweden	1	36	Finland	5
37	Henrich C. C.	1	63	Broadoaks Children’s School, United States	1	36	Italy	2
33	Hedges H.	1	63	Western Norway Uni. of Applied Sciences, Norway	1	26	Israel	3
33	Maloney C.	1	53	Oregon Research Inst., United States	1	22	Spain	14
30	Pearson E.	1	48	Highscope Educational Research Fdn., United States	1	21	Ireland	3
30	Schweinhart L. J.	1	45	Drexel Uni., United States	1	19	Brunei Darussalam	2
30	Stooke R.	1	37	Georgia State Uni., United States	1	19	Portugal	8
27	Heikka J.	1	34	Uni. of Auckland, New Zealand	2	10	South Africa	3
26	Thornton K.	1	34	Beijing Normal Uni, Beijing, China	3	8	India	4
26	Zhou S.	1	33	Edith Cowan Uni., Australia	1	8	Pakistan	2
25	Brody D. L.	1	30	HighScope Educational Research Fdn., United States	1	7	Brazil	2
25	Guo K.	1	30	Uni. of Western Ontario, Canada	1	6	Nigeria	2

Note(s): TP = total number of article(s) publications; TC = total citations.

**Table 2** provides an overview of the authors, institutions, and nations that have exerted significant influence in the field of commitment research within the domain of early childhood education. Leana, etc., are the most influential authors, with 389 citations and one published paper. Dockett and Perry authored one publication that received a total of 104 citations. The two most prominent universities, namely, “The Rutgers University” and “The University of Pittsburgh,” received 389 citations each. Following closely is “The University of Western Sydney,” with 104 citations and one document. Similarly, the United States emerges as the most influential nation, garnering 1099 citations from 53 publications, while Australia follows closely with 428 citations from 29 documents. Moreover, it is worth noting that Sumsion has emerged as the most prolific author in the field, garnering a notable 91 citations over



a total of 3 publications. Additionally, it is evident that the United States continues to maintain its position as the leading country in terms of productivity in commitment research within the domain of early childhood education.

### 4.3. Most influential journals for commitment research in early childhood education

**Table 3** illustrates the primary sources of commitment research in the field of early childhood education (ECE) that have had a significant impact. The primary scholarly magazine that has significantly impacted commitment research in the field of early childhood education (ECE) is the “International Journal of Early Childhood,” which has garnered 132 citations and published seven articles. Subsequently, the “Journal of Early Childhood Research” also played a notable role, accumulating 108 citations and publishing two articles in this study area. The journal that has demonstrated the highest level of productivity is the “International Journal of Early Years Education,” which has published ten articles. The “International Journal of Early Childhood” is closely behind, which has published seven articles. The period spanning from 2018 to 2023 is often regarded as a highly productive phase in terms of scholarly output, particularly within the most prestigious academic journals. The “International Journal of Early Childhood” is widely recognized as the most prominent publication in the field of early childhood education.

**Table 3.** Most influential journals for commitment research in ECE.

Journal	TP	TC	1971– 2002	2003– 2007	2008– 2012	2013– 2017	2018– 2023
International Journal of Early Childhood	7	132	1		2	2	2
Journal of Early Childhood Research	2	108		1		1	
Exceptional Children	2	98	2				
Journal of Research in Childhood Education	2	84	1			1	
Teaching and Teacher Education	3	76	1				2
European Early Childhood Education Research Journal	6	69				3	3
International Journal of Early Years Education	10	53	2	3		2	3
Teachers and Teaching: Theory and Practice	2	49					2
International Journal of Leadership in Education	3	30					3
Professional Development in Education	2	29					2
Research in Early Childhood Education for Sustainability: International Perspectives and Provocations	2	16				2	
Young Children and the Environment: Early Education for Sustainability	2	12			1	1	
Teaching Education	3	9		1		1	1
International Journal of Educational Development	2	7	1				1
Sustainability (Switzerland)	2	6					2
Journal of Early Childhood Teacher Education	4	4			2		2
International Journal of Child Care and Education Policy	3	3					3
International Perspectives on Early Childhood Education and Development	4	3				1	3
Early Years	2	1					2
Turkish Online Journal of Educational Technology	2	0				2	

Note(s): TC = TP = total number of article(s) publications, total citations.

On the other hand, the journal “Sustainability (Switzerland)” has been identified as the most prolific non-early childhood education journal. Although the investigation into commitment in early childhood education (ECE) commenced in 1971, it is worth noting that just one publication was produced in that year. However, a notable increase in the number of related papers has been observed in major academic journals since 2008.

#### 4.4. Most influential articles on commitment research in ECE

**Table 4.** Most influential articles on commitment research in ECE.

Author(s)	Title	TC
Leana et al. (2009)	“Work process and quality of care in early childhood education: The role of job crafting”	389
Dockett and Perry (2007)	“Trusting children’s accounts in research”	104
Bennett et al. (1997)	“Putting inclusion into practice: Perspectives of teachers and parents”	96
Grant et al. (2019)	“Relating early childhood teachers’ working conditions and well-being to their turnover intentions”	79
Jorde-Bloom (1988)	“Factors influencing overall job satisfaction and organizational commitment in early childhood work environments”	75
Sumsion (2002)	“Becoming, being and unbecoming an early childhood educator: A phenomenological case study of teacher attrition”	66
Biglan et al. (2013)	“The value of workshops on psychological flexibility for early childhood special education staff”	53
Schweinhart (2013)	“Long-term follow-up of a preschool experiment”	48
Haslip and Gullo (2018)	“The changing landscape of early childhood education: Implications for policy and practice”	45
Henrich and Gadaire (2008)	“Head start and parent involvement”	37
Hedges and Cooper (2018)	“Relational play-based pedagogy: Theorising a core practice in early childhood education”	33
Maloney and Konza (2011)	“A case study of teachers’ professional learning: Becoming a community of professional learning or not?”	33
Pearson and Degotardi (2009)	“Education for sustainable development in early childhood education: A global solution to local concerns?”	30
Stooke and McKenzie (2009)	“Leisure and work in library and community programs for very young children”	30
Schweinhart and Weikart (1981)	“Effects of the perry preschool program on youths through age 15”	30
Heikka et al. (2021)	“Distributed pedagogical leadership and teacher leadership in early childhood education contexts”	27
Zhou et al. (2020)	“Family/friends support, work-family conflict, organizational commitment, and turnover intention in young preschool teachers in China: A serial mediation model”	26
Thornton and Cherrington (2019)	“Professional learning communities in early childhood education: A vehicle for professional growth”	26
Brody (2015)	“The construction of masculine identity among men who work with young children, an international perspective”	25
Guo and Dalli (2016)	“Belonging as a force of agency: An exploration of immigrant children’s everyday life in early childhood settings”	25

Note(s): TC = total citations.

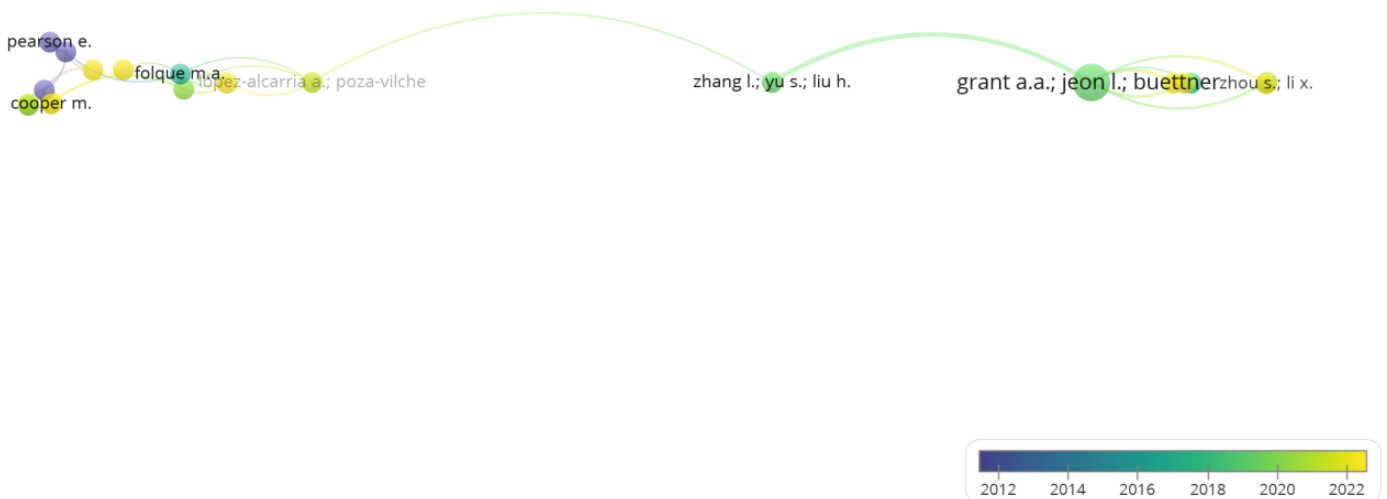
**Table 4** presents a comprehensive overview of the highly cited and influential works in the field of commitment research in ECE. The paper titled “Work process and quality of care in early childhood education: The role of job crafting” authored by Leana et al. (2009) holds the highest level of influence, as evidenced by its 389 citations. The importance of job crafting in preschool is the main topic of this research study. Employees engage in job crafting when they adjust their responsibilities and

interpersonal interactions to suit their needs and skill sets better. Job crafting was found to improve preschool instructors’ job satisfaction and the quality of care they gave their students. The paper also offered implications for managers and policymakers to encourage job crafting in ECE contexts.

Meanwhile, Dockett and Perry (2007) conducted the second impactful study on the topic of “Trusting children’s accounts in research,” which is supported by a substantial number of 104 citations. The study investigates the moral complications that arise when researchers rely on the words of young participants. The report delves into the difficulties of assuring the validity and dependability of research findings while simultaneously giving youngsters a chance to have their voices heard. Methodological diversification, data triangulation, and including young people as coresearchers are just a few of the solutions proposed in this paper. The report concludes that a critical and reflexive approach is needed to believe children’s stories in research, one that strikes a balance between the rights and duties of researchers and children.

#### 4.5. Knowledge foundations of commitment research in ECE through co-citation

Co-citation analysis unveils the semantic relationships among co-cited references, providing insights into a particular topic’s foundational knowledge (Amiri et al., 2023). **Figure 2** illustrates the map of co-citation of references mentioned in the top 20 within the review corpus. Grant, Jeon, and Buettner (green nodes) have extensively referenced the literature pertaining to a specific domain of commitment research in ECE (Grant et al., 2019a; Grant et al., 2019b). Specifically, Zhang et al. (2019) have one published paper with exceptionally cited works in a specific area of commitment research in ECE. This article connects the articles in the series and the past and recent publications related to commitment research in ECE.



**Figure 2.** Co-citation of references cited by articles on commitment research in ECE.

#### 4.6. Thematic and influence structure analysis through bibliographic coupling

**Table 5** presents the theme clusters of commitment research in the field of early

childhood education (ECE) as identified by bibliographic coupling. The seven topic categories are children, education for sustainability, community, early childhood teacher, early childhood education, organizational commitment, and psychological flexibility. It includes the most influential articles from each cluster. The seven groups encompass all facets of commitment research in the field of early childhood education.

**Table 5.** Thematic clusters of commitment in ECE through bibliographic coupling.

Theme	Author(s)	Title	TC
Children	Dockett and Perry (2007)	“Trusting children’s accounts in research”	104
	Brody (2015)	“The construction of masculine identity among men who work with young children, an international perspective”	25
	Cheeseman et al. (2015)	“Infants of the productivity agenda: Learning from birth or waiting to learn?”	16
	Lazzari (2012)	“The public good. Historical and political roots of municipal preschools in Emilia Romagna”	13
	Ritchie (2015)	“Social, cultural, and ecological justice in the age the Anthropocene: A New Zealand early childhood care and education perspective”	11
	Ritchie et al. (2011)	“He Tatau Pounamu. Considerations for an early childhood peace curriculum focusing on criticality, indigeneity, and an ethic of care, in Aotearoa New Zealand”	8
	Vasconcelos (2006)	“Children’s spaces as sites for ethical practices: A ‘School-as-a-Tree’ in an economically impoverished neighbourhood”	5
	Mitchell (2015)	“Shifting directions in ECEC policy in New Zealand: From a child rights to an interventionist approach”	4
Education for sustainability	Pearson and Degotardi (2009)	“Education for sustainable development in early childhood education: A global solution to local concerns?”	30
	Klaus and Marsh (2014)	“A special challenge for Europe: The inclusion of Roma children in early years education and care”	18
	Pearson (2011)	“Avoiding recolonisation in early childhood: Promoting local values as mediators in the spread of globalization”	12
	Irvine and Farrell (2013)	“Are we there yet? Early years reform in Queensland: Stakeholder perspectives on the introduction of funded preschool programs in long day care services”	10
	Davis and Davis (2021)	“Probing the gap between policy and practice in initial early childhood teacher education in Australia in relation to education for sustainability”	5
	Miller (2014)	“Intercultural dialogues in early childhood education for sustainability: Embedding indigenous perspectives”	5
	Macfarlane et al. (2016)	“Integrated practice in the early years in Australia: The assumptions, omissions and contradictions of policy reform”	4
Community	Thornton and Cherrington (2019)	“Professional learning communities in early childhood education: A vehicle for professional growth”	26
	O’Keeffe and McNally (2021)	“‘Uncharted territory’: Teachers’ perspectives on play in early childhood classrooms in Ireland during the pandemic”	21
	Dockett et al. (2012)	“Recognising young children’s understandings and experiences of community”	17
	Majoko (2018)	“Effectiveness of special and inclusive teaching in early childhood education in Zimbabwe”	6
	To et al. (2023)	“Principal leadership practices, professional learning communities, and teacher commitment in Hong Kong kindergartens: A multilevel SEM analysis”	6
	Tamati et al. (2021)	“Understanding strengths-based māori child development constructs in kaupapa māori early years provision”	4

**Table 5. (Continued).**

Theme	Author(s)	Title	TC
Early childhood teachers	Grant et al. (2019b)	“Relating early childhood teachers’ working conditions and well-being to their turnover intentions”	79
	Zhang et al. (2019)	“Understanding teachers’ motivation for and commitment to teaching: Profiles of Chinese early career, early childhood teachers”	16
	Grant et al. (2019a)	“Chaos and commitment in the early childhood education classroom: Direct and indirect associations through teaching efficacy”	10
	Cramer et al. (2021)	“The role of teachers’ commitment to implement in delivering evidence-based social-emotional learning programs”	6
	Yang et al. (2021)	“Development and validation of the STEM Teaching Self-efficacy Scale (STSS) for early childhood teachers”	5
Early childhood education	Bennett et al. (1997)	“Putting inclusion into practice: Perspectives of teachers and parents”	96
	Henrich and Gadaire (2008)	“Head start and parent involvement”	37
	Longobardi et al. (2016)	“Examining student-teacher relationship from students’ point of view: Italian adaptation and validation of the young children’s appraisal of teacher support questionnaire”	23
	Thao and Boyd (2014)	“Renovating early childhood education pedagogy: A case study in Vietnam”	12
	Omdal (2018)	“Creating teacher capacity in early childhood education and care institutions implementing an authoritative adult style”	6
Organizational commitment	Zhou et al. (2020)	“Family/friends support, work-family conflict, organizational commitment, and turnover intention in young preschool teachers in China: A serial mediation model”	26
	Li et al. (2021)	“Chinese preschool teachers’ income, work-family conflict, organizational commitment, and turnover intention: A serial mediation model”	8
Psychological flexibility	Biglan et al. (2013)	“The value of workshops on psychological flexibility for early childhood special education staff”	53
	Bigras et al. (2021)	“Early childhood educators’ perceptions of their emotional state, relationships with parents, challenges, and opportunities during the early stage of the pandemic”	17

Note(s): TC = total citations.

Cluster 1 (children) is involved with children in ECE. Dockett and Perry (2007) delved into the question of how to get kids to participate in studies meaningfully. This paper explores the ethical, methodological and practical challenges associated with including children in research and suggests protocols and strategies to overcome these obstacles. Two studies conducted in Australia with the active participation of children as informants and co-constructors of meaning serve as the basis for this work. The study proposes that researchers should pay attention to and value children’s voices because they provide honest and insightful insights. Brody (2015) demonstrated that men working with young children in diverse countries create male identity. The paper finds that gender, culture, and professional positions present obstacles and opportunities for men with early childhood education. The report recommends increased support and recognition for men in this field.

Cluster 2 (education for sustainability) includes sustainability research related to ECE. Pearson and Degotardi (2009) examined the significance of education for sustainable development (ESD) in the context of early childhood education. It posited that ESD presents a beneficial framework for effectively tackling the various difficulties arising from globalization and cultural diversity within this sector. The study additionally demonstrated several instances illustrating the practical application of ESD concepts within diverse early childhood settings. Klaus and Marsh (2014)

examined the potential of education for sustainable development (ESD) to improve the quality and inclusivity of early childhood education in Europe, with a particular focus on Roma children who experience various forms of disadvantage and marginalization. It does so by analyzing instances of successful implementation in different countries and contexts.

Cluster 3 (community) contains community research related to ECE. Thornton and Cherrington (2019) examined the sustainability of professional learning communities (PLCs) within the context of early childhood education (ECE) in New Zealand. The findings indicate that PLCs have the potential to facilitate professional development, collaboration, and enhanced outcomes for both educators and children. However, the successful establishment and maintenance of PLCs necessitate effective leadership, a shared vision, and favorable structural and relational circumstances. O’Keeffe and McNally (2021) investigated teachers’ perspectives on the role of play in early childhood classrooms in Ireland during the COVID-19 pandemic. The findings revealed that teachers faced challenges in implementing play-based pedagogy due to pandemic restrictions, but they adapted their practices to support children’s play and well-being.

Cluster 4 (early childhood teachers) focuses on the facet of teacher research related to ECE. Grant et al. (2019b) investigated the association between working conditions, well-being, and turnover intentions among early childhood instructors. The findings showed a significant correlation between the working conditions of early childhood instructors and their well-being and inclination to leave their jobs. Zhang et al. (2019) examined the motivation and dedication of Chinese early career and early childhood teachers. This article took a person-centered approach to define four teacher profiles based on self-reported motivation and commitment. The article also compared profiles’ demographics, professional development, and work satisfaction. The article found that motivational orientations, commitment levels, and work outcomes vary greatly among profiles. The essay recommended that teacher education and professional development should examine teachers’ motivation and commitment and provide targeted assistance for varied profiles.

Cluster 5 (early childhood education) looked into the ECE research. Bennett et al. (1997) examined teachers’ and parents’ views on inclusive education for disabled pupils. The article found that teachers and parents supported inclusion but worried about its implementation and results. Teacher training, teamwork, resources, curriculum, and attitudes affected inclusiveness. Inclusion positively and negatively affected students’ academic, social, and emotional development. Henrich and Gadaire (2008) studied head start’s (a major early education program) parent participation policy and guiding principles. The report discovered that Head Start’s dedication to supporting parents’ maximum practical participation in their children’s education persisted despite obstacles such as government social regulations on low-income households.

Cluster 6 (Organizational commitment) is related to commitment within organizations research in ECE. Zhou et al. (2020) examined family/friends support, work-family conflict, organizational commitment, and turnover intention in young Chinese preschool instructors. The article found that family/friend support directly decreased work-family conflict and turnover intention and increased organizational

commitment. Work-family conflict mediated family/friends support on organizational commitment and turnover intention. Organizational commitment mitigated work-family conflict-induced turnover intention.

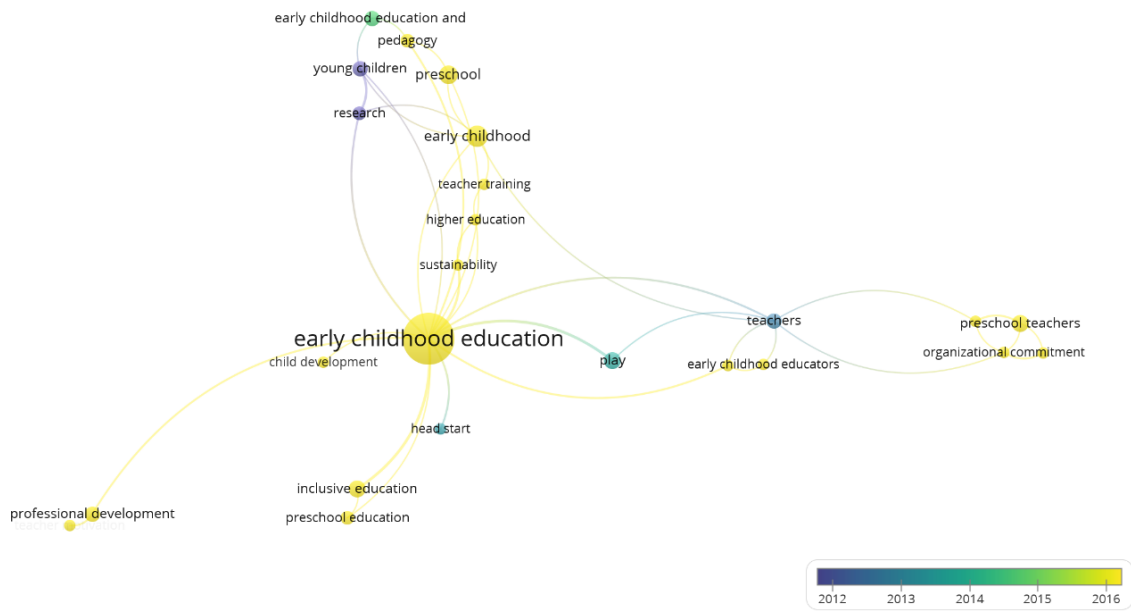
Cluster 7 (psychological flexibility) discussed the aspect of psychology research in ECE. Biglan et al. (2013) examined how workshops affected the psychological flexibility of early childhood special education staff. The sessions improved employee psychological flexibility or the ability to adapt to shifting events and emotions, according to the article. The training boosted staff self-confidence, job happiness, and well-being. The sessions also lowered employee stress, burnout, and emotional depletion.

In brief, the examination of these seven theme clusters in the framework of early childhood education (ECE) highlights the rich and varied character of this field's study. Together, these clusters emphasize the following issues: the need to incorporate children's voices into research (Cluster 1), the need to integrate sustainable development principles into early childhood education (Cluster 2), the value of professional learning communities for professional development (Cluster 3), the significance of comprehending and addressing early childhood teachers' working conditions (Cluster 4), the importance of inclusive education for disabled students and its various challenges (Cluster 5), the importance of family and friend support in preschool instructors' organizational commitment and well-being (Cluster 6), and the benefits of psychological flexibility workshops for staff well-being and adaptability (Cluster 7). In addition to offering a thorough grasp of the profession, this holistic approach to ECE research highlights the need for ongoing acknowledgment, support, and specialized tactics to enhance early childhood education for the benefit of both children and teachers.

Collectively, these thematic clusters serve as a rich resource for practitioners, policymakers, and researchers in the field of ECE. They offer valuable insights into commitment research, advocating for inclusivity, sustainability, and children's and educators' well-being. As the field of ECE continues to evolve, these clusters provide a roadmap for further exploration and development, ultimately contributing to the enhanced quality and impact of early childhood education.

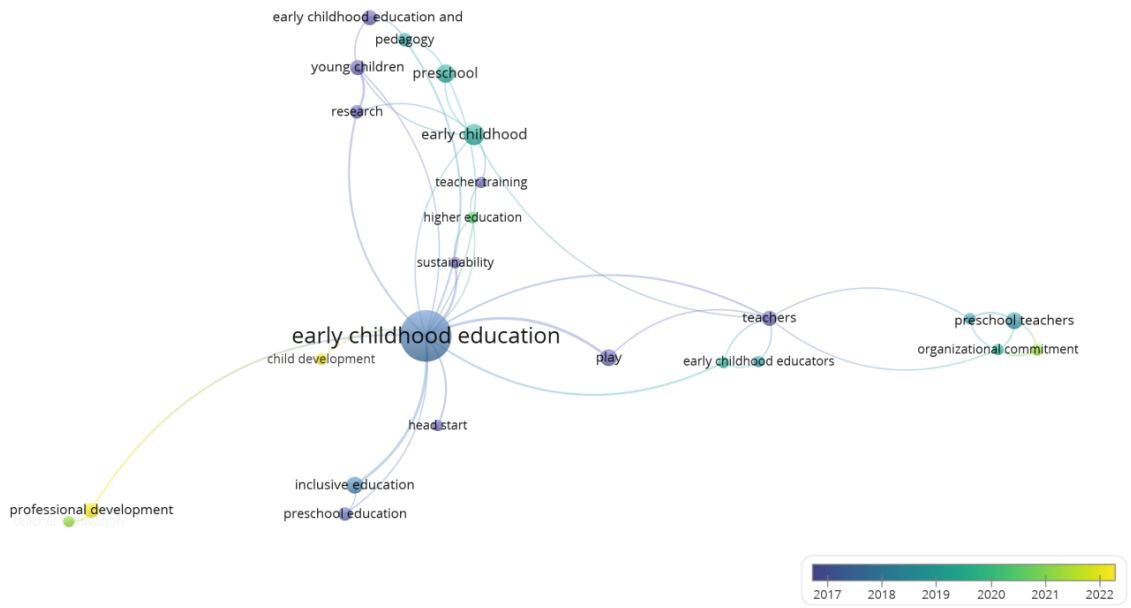
#### **4.7. Thematic trends of commitment research in ECE**

Building upon the foundational principles and subject matter presented by co-citation analysis and bibliographic coupling, the study delves into examining thematic patterns within commitment research in ECE through co-occurrence analysis. The utilization of authors' keywords is employed to conduct a co-occurrence analysis. As mentioned earlier, the keywords undergo a chronological filter to ascertain the progression of commitment research in ECE, as discussed in a minimum of three articles within our review corpus. **Figures 3** and **4** illustrate the evolution of this thematic element.



**Figure 3.** Influential topics in the “2012–2016 period”.

Note(s): Yellow nodes = early childhood education, purple nodes = research and young children.



**Figure 4.** Influential topics in the “2017–2022 period”.

Note(s): Blue nodes = early childhood education, green nodes = early childhood (educators) and preschool.

The studies have shown that commitment research in ECE between 2012 and 2016 was more intensive in early childhood education related to inclusive education than in previous decades, preschool education, sustainability, higher education, teacher training, professional development, preschool teachers, and organizational commitment (yellow nodes). Topics related to research and young children (purple nodes) are mentioned in the early years between 2012 and 2013.

The studies initiated from 2017 to 2022 on commitment research in ECE concentrated on topics of early childhood education related to sustainability, teacher training, play, teachers, head start, inclusive education, etc. (blue nodes). Themes



correlated with professional development (yellow nodes) are discussed more in recent years approximately 2022.

It can be seen that early childhood education topics related to sustainability, head start, play, teachers, and teacher training are less discussed in 2022 after the pandemic, which might be the research gaps of commitment research in ECE.

## **5. Future research direction**

Examining commitment studies in early childhood education (ECE) via a historical lens is essential to evaluate current and future implications. Through a comprehensive analysis of pertinent literature, this research aims to provide a foundational framework for the emerging field of commitment research in early childhood education (ECE). This endeavor will enable future academics to investigate the utilization and advantages of commitment within the realm of ECE.

A future study might provide a comparative analysis of commitment research in early childhood education, focusing on the trends and patterns observed across various areas and cultures. A bibliometric approach and a qualitative meta-synthesis could be employed to do this. In addition, implementing a longitudinal study is one potential research approach to investigate the effects of the COVID-19 epidemic on the dedication and welfare of early childhood educators. The study might employ a combination of qualitative and quantitative methods while also using a resilience framework.

For another perspective of future study, the paper could aim to comprehensively analyze the ethical and methodological complexities associated with including children as coresearchers in commitment research within the field of ECE. The study can adopt a participatory action research methodology and a child rights perspective to shed light on the various problems encountered in this research strategy.

Additionally, a potential avenue for future research involves performing a systematic review and meta-analysis to evaluate the efficacy of professional learning communities in promoting the dedication and professional growth of early childhood educators. This endeavor might employ a quality appraisal tool and a theory of change model to ensure rigorous evaluation and analysis.

Last, a potential avenue for future research could involve conducting a case study on the intergenerational transmission of commitment in early childhood education. The study could employ a narrative inquiry approach and adopt a life course perspective.

## **6. Conclusion**

The significance of this study's contributions to the knowledge of commitment in ECE is multi-faceted. The first thing it does is draw a comprehensive picture of the research environment, pinpointing major publications, universities, and organizations. Researchers in the future will find this mapping to be an invaluable tool for navigating the area and expanding upon current understanding. The second benefit of thematic analysis is that it highlights both the strengths and weaknesses of literature. There is a significant knowledge vacuum about the effects of technology developments on teacher dedication and the transmission of commitment from one generation to the

next, despite the abundance of literature on the topic of individual and organizational elements affecting commitment. A more complete and nuanced understanding of the dynamics of commitment in ECE could result from filling up these gaps.

The study concludes with some practical implications for educational practitioners and policymakers. The study offers practical recommendations for boosting teacher satisfaction and retention by shedding light on what makes educators more committed to their jobs, such as having a positive work environment and access to professional development opportunities. Young children's academic performance may improve as a result.

In conclusion, this study lays the groundwork for further research on the significance of commitment in ECE. Researchers can help enhance early childhood education policies and practices by filling in the gaps and discovering new aspects of dedication.

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