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Preschool Teachers' Role and Beliefs about Developmentally Appropriate Practice: A Systematic Literature Review

MISAHUN SHUMETU TAYE^{*1}, FITUMA YADASA KANA² AND

TESEMA REGASSA JEKIL³

☞ This systematic literature review has examined the various functions assumed by preschool educators in promoting developmentally appropriate practice, the differing beliefs held by preschool teachers concerning it, and the factors that influence the beliefs and perceptions of preschool teachers about it. To carry out this review, a comprehensive search strategy was employed across different databases to identify relevant studies published between 2010 and 2023. The inclusion criteria comprised studies that focused on the role and beliefs of preschool teachers in promoting developmentally appropriate practice. The review includes a total of 14 studies. The results indicate that preschool teachers play different roles in promoting developmentally appropriate practice, such as creating a safe and supportive learning environment, providing diverse learning experiences customised to the specific needs and interests of each child, working in collaboration with families to ensure that children receive the necessary support at home, and advocating for the needs of young children and their families. The beliefs of preschool teachers regarding developmentally appropriate practice are attributed to various factors, including their personal experiences as learners, their training and professional development, the culture of the preschool or school where they work, and the availability of resources and support to implement developmentally appropriate practice. The findings highlight the importance of preschool teachers having a strong comprehension of developmentally appropriate practice and being able to implement it effectively in their classrooms. Moreover, it is crucial to provide preschool teachers with professional development opportunities that can enhance their beliefs about developmentally appropriate practice and help them learn how to implement it effectively.

Keywords: developmentally appropriate practice, early childhood education, preschool teachers, teachers' beliefs, teachers' role

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Vloga in prepričanja vzgojiteljev o razvojno primerni praksi: sistematični pregled literature

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~ V tem sistematičnem pregledu literature so bili obravnavani: različne naloge, ki jih imajo vzgojitelji pri spodbujanju razvojno primerne prakse, različna prepričanja vzgojiteljev o njej ter dejavniki, ki vplivajo na prepričanja in zaznave vzgojiteljev o njej. Za izvedbo tega pregleda je bila uporabljena obsežna iskalna strategija v različnih podatkovnih zbirkah, da bi našli ustrezne študije, objavljene med letoma 2010 in 2023. Merila za vključitev so zajemala študije, ki so se osredinjale na vlogo in prepričanja vzgojiteljev pri spodbujanju razvojno primerne prakse. V pregled je bilo vključenih skupno 14 študij. Izsledki kažejo, da imajo vzgojitelji pri spodbujanju razvojno primerne prakse različne vloge, kot so: ustvarjanje varnega in spodbudnega učnega okolja, zagotavljanje raznolikih učnih izkušenj, prilagojenih specifičnim potrebam in interesom vsakega otroka, sodelovanje z družinami, da bi otrokom zagotovili potrebno podporo doma, ter zagovarjanje potreb majhnih otrok in njihovih družin. Prepričanja vzgojiteljev o razvojno primerni praksi pripisujemo različnim dejavnikom, vključno z njihovimi osebnimi izkušnjami kot učenci, njihovim usposabljanjem in s strokovnim razvojem, kulturo vrtca ali šole, v kateri delajo, ter z razpoložljivostjo virov in podpore za izvajanje razvojno primerne prakse. Ugotovitve poudarjajo, da je pomembno, da vzgojitelji dobro razumejo razvojno ustrezno prakso in jo lahko učinkovito izvajajo v svojih razredih. Poleg tega je ključnega pomena, da se vzgojiteljem zagotovijo možnosti strokovnega razvoja, ki lahko okrepijo njihova prepričanja o razvojno ustrezni praksi in jim pomagajo, da se naučijo, kako jo učinkovito izvajati.

Ključne besede: razvojno ustrezna praksa, predšolska vzgoja, vzgojitelji, prepričanja učiteljev, vloga učiteljev

Introduction

The importance of the early stages of a child's life in their development has gained increasing attention in recent years, leading to more research, policy changes, and programmes aimed at supporting early childhood development. Research has shown that the experiences and surroundings a child encounters during this period can have a profound impact on their cognitive, social, and emotional well-being, which can last a lifetime (Nold et al., 2021). This period is fundamental to a child's academic and social success in the future (Alzaharani et al., 2019; Kern & Friedman, 2009; Nold et al., 2021; Stacey, 2018, 2023). Therefore, it is imperative that this developmental phase adheres to all quality benchmarks, encompassing high-quality pedagogical practices that are founded on an interdisciplinary approach led by proficient experts and the active participation of all principal stakeholders within the child's proximate milieu (Majcen & Drvodelić, 2022). Additionally, the connection between pertinent policies and practices plays a pivotal role in ensuring the quality of early childhood education and care (Majcen & Drvodelić, 2022).

Studies have shown that it is vital to ensure that children are exposed to developmentally appropriate practices (DAP) (Li et al., 2019) to foster their best possible development and learning. DAP is a research-driven framework that outlines practices in the early childhood environment that offer the best educational opportunities for young children's growth and development or 'best practices' (Chan & Okamoto, 2006). As the National Association for the Education of Young Children (2018), elaborated by Alghamdi and Ernest (2019), DeGennaro (2012), Helm and Katz (2011), and Sanders and Farago (2018), the concept of DAP is described as educational instruction that draws on established knowledge about young children's development and learning, effective early education practices, and individualised understanding of each child (Copple & Bredekamp, 2009; Sanders & Farago, 2018; Thompson & Stanković-Ramirez, 2021). It is methods that promote each child's optimal development and learning through age-appropriate, individual-appropriate, and culturally appropriate practices. Hence, DAP is founded upon extensive investigation into the growth and education of children, thereby encouraging the highest level of learning and development in young individuals (Grantham-McGregor et al., 2007). Additionally, this framework is deeply rooted in the study of developmental science and theory (National Association for the Education of Young Children, 2018; Gestwicki, 2016; Helm & Katz, 2011; Sanders & Farago, 2018; Stacey, 2018).

Although DAP overlaps with older concepts and theories such as Vygotsky's proximity zone and scaffolding (Vygotsky & Cole, 1978),

Bronfenbrenner's socio-ecological contexts (Bronfenbrenner, 2000), and the importance of children's early life stages, DAP is unique in its focus on intentional educator practice and decision-making within an early childhood education setting, and early childhood educators who apply DAP base their practices and decisions on research evidence (Kim, 2011). It is a child-centred approach that recognises the uniqueness of each child and their individual developmental trajectory (Stacey, 2023). It highlights the significance of play, exploration, and inquiry, which support the overall development of the child (Hutapea et al., 2021; Stacey, 2018). Moreover, DAP is responsive to evolving pedagogical challenges, emerging research on explicit teaching practices with young children, and the needs of preschool educators and the children they serve in a continual effort to provide high-quality early childhood education (Gestwicki, 2016).

DAP mandates that preschool teachers possess a comprehensive understanding of children's developmental stages, tailor their teaching methods to suit each individual's needs, and possess knowledge about the diverse social and cultural environments that each child inhabits (Chan & Okamoto, 2006). Thus, the role of preschool teachers in promoting DAP is crucial (Thompson & Stanković-Ramirez, 2021), as they are responsible for creating a learning environment that supports each child's optimal development and learning. Preschool teachers' beliefs and perceptions about DAP can have a significant impact on the quality of early childhood education that young children receive. However, despite the importance of DAP, research has shown that preschool teachers' beliefs about DAP and their understanding of what it constitutes can vary widely (Laleye, 2019; Raftery, 2016). This lack of consensus on what constitutes DAP and how to implement it effectively poses a significant challenge for preschool teachers. Without a clear understanding of DAP principles, preschool teachers may struggle to create a learning environment that is developmentally appropriate for young children. This can have negative consequences for children's learning and development, as they may not receive the support they need to reach their full potential (Raftery, 2016).

Therefore, it is important to understand preschool teachers' roles and beliefs about DAP and how they define and interpret it (Kim, 2011). This systematic literature review aims to examine the existing research on preschool teachers' roles and beliefs about DAP. The review explored the various functions assumed by preschool educators in promoting DAP, the different beliefs that preschool teachers hold about DAP, and the factors that influence preschool teachers' beliefs and perceptions about DAP. The review also examined the impact of preschool teachers' beliefs about DAP on their classroom practices and the quality of early childhood education that young children receive.

To this end, the systematic review was guided by the following basic research questions:

1. What are the roles assumed by preschool educators in promoting DAP?
2. What are the different beliefs that preschool teachers hold about DAP?
3. What are the factors that influence preschool teachers' beliefs and perceptions about DAP?

Method

Database selection

The methodology employed for this literature review involved a systematic search of internet resources, abstracts, and databases, including ERIC, Web of Science, and Google Scholar, to identify appropriate materials to ensure that the review was comprehensive and included all relevant studies on the topic. The current review considered studies in the form of journal articles published between 2010 and 2023 from all over the world, using descriptors such as the role of preschool teachers, the role of early childhood teachers, beliefs of preschool/early childhood teachers, and developmentally appropriate practice. Findings and research from 2010 onward were considered, with a few exceptions when the research was deemed particularly significant. This criterion was chosen to ensure that the review included the most recent and relevant studies on the topic. Moreover, the evidence sourced for the review was derived from peer-reviewed journals to ensure that the studies included in the review were of high quality and had undergone rigorous scrutiny by experts in the field.

Evaluation of the studies and data extraction

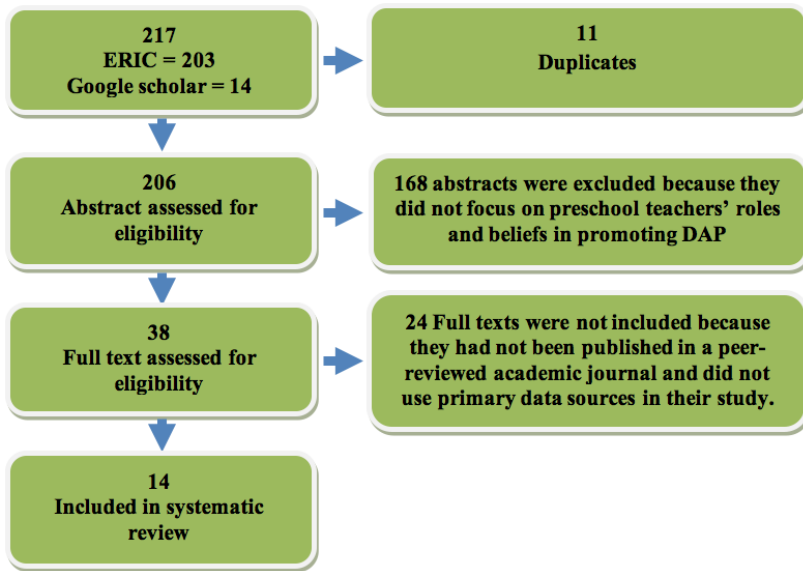
The authors identified relevant studies using a thorough search strategy that was then screened using strict inclusion criteria. Each study's data was extracted using a clear method, ensuring consistency throughout the review. As a result, studies that focus on the role and beliefs of preschool teachers in promoting DAP, which examined the impact of preschool teachers on child development and explored effective teaching practices in early childhood education, were published in a peer-reviewed academic journal, were published in English, used primary sources of data in their study, were published between 2010 and 2023, etc., were included. Table 1 depicts the inclusion and exclusion criteria employed in the current review of the literature.

Table 1
The Inclusion and Exclusion Criteria

Inclusion criteria	Exclusion criteria
- Studies that focus on the role and beliefs of preschool teachers in promoting DAP.	- Studies that did not focus on the role and beliefs of preschool teachers in promoting DAP.
- Studies that were published in a peer-reviewed academic journal.	- Studies that were not published in a peer-reviewed academic journal.
- Studies that were published in English.	- Studies that were not published in English
- Studies that used primary sources of data in their study.	- Studies that did not use primary sources of data in their study.
- Studies that were published between 2010 and 2023.	- Studies that were published before 2010.

Procedures

The systematic literature review that examines the role and beliefs of preschool teachers in promoting DAP follows a series of steps. Initially, the researchers establish the research question and the review’s scope. In this particular case, the question focused on the role and beliefs of preschool teachers in promoting DAP. Secondly, the researchers conducted an exhaustive search of pertinent literature through various databases and search engines. The search is grounded in specific keywords and inclusion criteria. Thirdly, the researchers evaluate the identified studies based on their relevance to the research question and the inclusion criteria in which systematic analysis of data was conducted from a total of 217 journal articles. Figure 1 displays the search’s methodology. Fourteen publications were included in the final data collection after the evaluation of the titles, abstracts, keywords, and full-text reads in certain cases (Table 3). Fourthly, the researchers extrapolate applicable data from the chosen studies and integrate the findings. Finally, the researchers interpret the results and draw conclusions based on the evidence outlined in the literature.

Figure 1*Operational steps*

Results

The current review included studies from nine different countries: Ethiopia, Greece, Hong Kong, Jordan, Japan, Oman, Turkey, Saudi Arabia, and the United States. In terms of the research approach used in the studies, 11 were quantitative, two were qualitative, and the remaining one used a mixed research approach. The review included 14 studies published between 2010 and 2023. The review found various functions assumed by preschool educators in promoting DAP, including creating a positive and nurturing environment where children feel safe and respected; providing a variety of learning experiences that are tailored to the individual needs and interests of each child; collaborating with families to ensure that children are receiving the support they need at home; and advocating for the needs of young children and their families. The review also found the beliefs that preschool teachers hold about DAP and the factors that influence preschool teachers' beliefs and perceptions about DAP, including the preschool teacher's training and experience, the culture of the preschool or school where the teacher works, and the availability of resources and support for implementing DAP.

Generally, the analysis revealed three major themes: various functions assumed by preschool teachers in promoting DAP, beliefs that preschool teachers hold about DAP, and factors that influence preschool teachers' beliefs and perceptions about DAP. Table 2 depicts the major themes and subthemes that emerged from the current review of the literature.

Table 2
The Main Theme and its Subthemes

Main theme	Subthemes
Various functions assumed by preschool teachers in promoting DAP	- Creating a positive and nurturing environment where children feel safe and respected - Providing a variety of learning experiences that are tailored to the individual needs and interests of each child - Collaborating with families to ensure that children are receiving the support they need at home - Advocating for the needs of young children and their families
Beliefs that preschool teachers hold about DAP	
Factors that influence preschool teachers' beliefs and perceptions about DAP	- The teacher's training and experience. - The culture of the preschool or school where the teacher works. - The availability of resources and support for implementing DAP.

Table 3
The Studies' Characteristics and Main Findings

No	Author(s) (publication year and country)	Participants	Research Approach of the study	Major findings
1	Abu-Jaber et al. (2010) Jordan	285 teachers	Quantitative	Preschool teachers have firm beliefs toward DAP, except for establishing reciprocal relationships with families. No noteworthy variations in the convictions of teachers exist with regard to the instruction of children based on their educational level, duration of experience, or age.
2	Alford et al. (2016) USA	450 students and 91 teachers	Quantitative	Students taught by preschool teachers with higher developmentally appropriate instructional practices (DAIP) scores were more engaged and less distracted; Students taught by preschool teachers with lower DAIP scores were less engaged and more distracted.
3	Alghamdi and Ernest (2019) Saudi Arabia	37 teachers	Mixed Method	The study yielded four primary perspectives that exhibit a prevailing consensus within the DAP framework regarding the optimal approach to early childhood education. The findings furnish substantiation that numerous facets of DAP can be suitable in diverse cultural and national contexts.
4	Cheung et al. (2022) Hong-Kong	717 teachers	Quantitative	This research validates the significance of executing a comprehensive curriculum that is suited to a child's developmentally appropriate in the initial years of their growth and development.

No	Author(s) (publication year and country)	Participants	Research Approach of the study	Major findings
5	Cobanoglu et al. (2019) Turkey	251 teachers	Quantitative	The efficacy of teaching, in general, was found to be a significant predictor of preschool teacher beliefs regarding Developmentally Appropriate (DA) and Developmentally Inappropriate Practice (DIP). Furthermore, preschool teacher self-efficacy with regard to parental involvement was observed to be a significant predictor of preschool teacher beliefs about DAP, although not for DIP.
6	Donegan-Ritter and Kohler (2017) USA	1 students and 1 teachers	Qualitative (case study)	Preparing preschool teachers of young children for inclusion necessitates a harmonious amalgamation of superior DAPs, tailored environmental adjustments, and personalised instructional approaches.
7	Hegde and Hewett (2021) Japan	85 preservice teachers	Quantitative (online survey)	The paper examines the effectiveness of online teaching modules (DAP) for guiding young children's behaviour from the perspectives of both students and instructors. The results showed that both students and preschool teachers were satisfied with the implementation of these modules, and they found them helpful in learning and teaching strategies.
8	Hegde et al. (2014) Japan	10 teachers	Qualitative	Japanese day nursery and kindergarten teachers believe in play-based learning, social-emotional development, and the importance of teacher observation and facilitation.
9	Jumiaan et al. (2019) Jordan	180 teachers	Qualitative	Preschool teachers have a high knowledge of DAP, but those with early childhood education specialisation and high academic qualifications have more knowledge.
10	Li et al. (2019) USA	107 teachers	Qualitative	The maths lesson was evaluated by the preschool teacher participants to be of superior quality and developmentally fitting. Nonetheless, they observed certain inadequacies, such as insufficient peer interactions and inadequate differentiation of the lesson.
11	Mages et al. (2018) USA	28 teachers	Qualitative	Application-focused workshops were more valuable to participants than content-focused workshops. Professional development initiatives should focus on both student learning outcomes and teacher knowledge and skills.
12	Mengstie (2022) Ethiopia	6 teachers	Qualitative	The findings revealed a discernible disparity between the convictions of preschool teachers and their tangible classroom applications of DAP. The respondents expressed unwavering beliefs regarding the criticality of DAP in nurturing children's growth and knowledge acquisition. Nevertheless, the participants did not adhere to the DAP recommendations whilst imparting knowledge to the children.
13	Mohamed and Al-Qaryouti (2016) Oman	264 teachers	Qualitative	Most of the preschool teachers espoused convictions regarding child-initiated learning and integrated socio-cultural curriculum. As for self-reported practices, the majority of preschool teachers embraced extensive integrated activities.
14	Rentzou and Sakellariou (2011) Greek	55 teacher candidates	Qualitative	The preschool teacher participants exhibit a preference for developmentally appropriate beliefs in terms of both their beliefs and the instructional activities that they carry out. Despite the analysis indicating correlations between DAP and Developmentally Inappropriate Practice (DIP) beliefs and practices, it has been observed that beliefs do not serve as a predictor of practices.

Discussion

Various Functions Assumed by Preschool Teachers in Promoting DAP

Creating a Positive and Nurturing Environment

The creation of a positive and nurturing environment is a crucial function of preschool teachers in promoting DAPs. According to Alford et al. (2016), the optimal learning experience for preschool children occurs when they have positive and caring relationships with adults and peers. To cultivate these relationships, preschool teachers must exhibit warmth, responsiveness, and support. Additionally, they can foster a sense of community by encouraging cooperation, idea-sharing, and the acceptance of differences (Donegan-Ritter & Kohler, 2017). Preschool teachers can establish positive relationships with children by extending a warm greeting upon arrival, attentively listening to their stories, and responding to their needs and interests. Further, they can provide positive feedback and encouragement to enhance feelings of value and respect (Li et al., 2019; Mages et al., 2018).

Preschool teachers can also advance a sense of community by promoting collaboration, interest-sharing, and mutual learning opportunities (Mages et al., 2018). They can create an inviting and inclusive classroom environment that welcomes all children (Marjanovič Umek, 2021). Additionally, preschool teachers can ensure a safe and respectful environment by establishing clear expectations and rules for behaviour (Alford et al., 2016). Modelling positive behaviour, providing guidance, and support for conflict resolution are also important. The creation of a classroom environment free from physical and emotional harm, which emphasises children's well-being, is a crucial objective (Hegde & Hewett, 2021).

In conclusion, creating a positive and nurturing environment is a vital function of preschool teachers in promoting DAPs. Building positive relationships with children, encouraging a sense of community, and providing a safe and respectful environment are crucial steps in facilitating DAP. Preschool teachers who fulfil these functions can help young children develop the skills, knowledge, and attitudes they need to be successful in school and life.

Providing Tailored Learning Experiences

Preschool teachers have the critical function of providing tailored learning experiences that meet the individual needs and interests of each child. According to Alford et al. (2016) and Donegan-Ritter and Kohler (2017), this is

achieved by adapting teaching strategies to meet the developmental needs of each child, observing their interests, strengths, and challenges, and planning activities that are engaging, challenging, and developmentally appropriate. Sakellariou and Rentzou (2011) suggest that preschool teachers should arrange firsthand, meaningful experiences that are both cognitively and creatively stimulating, invite exploration and investigation and engage children's active and sustained involvement. In order to promote DAP, Alford et al. (2016) emphasise the importance of preschool teachers recognising the unique qualities and assets that each young child brings to the early learning programme as an individual, as well as a member of families and communities. Preschool teachers should, therefore, build on each child's strengths and design and implement learning environments that help all children achieve their full potential across all domains of development and content areas. Additionally, Li et al. (2019) underscore the significance of promoting DAP by being mindful not to compromise any aspect of each child's physical, cognitive, social, or emotional well-being.

Preschool teachers can use assessment to inform instruction by observing and documenting each child's progress and development, as stated by Alford et al. (2016). This information can be used to create individualised learning plans that address each child's unique needs and to adjust teaching practices accordingly. The provision of developmentally appropriate materials and activities that are engaging, challenging, and culturally and linguistically diverse is also crucial, according to Donegan-Ritter and Kohler (2017). These materials and activities should reflect each child's interests, strengths, and needs. In summary, to provide tailored learning experiences that help young children develop the skills, knowledge, and attitudes they need to succeed in school and in life, preschool teachers must use assessment to inform instruction, provide developmentally appropriate materials and activities, and foster positive relationships with children.

Collaborating with Families

Collaboration with families is an essential task of preschool teachers in promoting DAPs, as evidenced by Donegan-Ritter and Kohler (2017) and Mages et al. (2018) studies. Preschool teachers are mandated to work alongside families to ensure that children receive adequate support at home. Furthermore, they are required to involve families in the learning process by sharing curriculum information, providing opportunities for family involvement, and encouraging families to share their insights and experiences. According to Mages et al. (2018), preschool teachers should establish robust partnerships

with families by being respectful, responsive, and supportive of their needs and interests. Therefore, in order to align with the principles of DAP, it is imperative for educational practices to encompass a wide range of cultural, linguistic, and ability diversity. This is because DAP recognises and values each individual as an esteemed member of the learning community. To accomplish this, preschool teachers should establish a collaborative relationship with families to design a learning environment that is inclusive of cultural, linguistic, and ability diversity (Hegde & Hewett, 2021).

To collaborate with families effectively, preschool teachers must build positive relationships with families by being warm, responsive, and supportive. They must also communicate regularly with families to share information on the progress and development of each child. Additionally, they should involve families in decision-making that impacts their child's education (Mages et al., 2018). Moreover, preschool teachers should respect families' cultural and linguistic diversity by comprehending each child's cultural and linguistic background, providing materials and activities that reflect each child's cultural and linguistic background, and involving families in creating a culturally and linguistically responsive learning environment (Mages et al., 2018). Similarly, preschool teachers ought to involve families in the learning process by providing opportunities for families to participate in classroom events and activities and counselling parents (Skočić Mihić et al., 2019). Lastly, they should provide families with information on how to support their child's learning at home.

Advocating for the Needs of Young Children and Their Families

Preschool teachers have a crucial responsibility in advocating for the requirements of young children and their families, as indicated by Alford et al. (2016). To achieve this, they must remain abreast with current research and best practices in early childhood education, engage in professional development opportunities, and support policies that promote the welfare of young children and their families. As posited by Mages et al. (2018), preschool teachers can be effective advocates by fostering positive relationships with policy-makers, sharing their proficiency and insights, and working collectively with other stakeholders.

Beliefs that preschool teachers hold about DAP

Preschool teachers hold varying beliefs regarding DAP. Some preschool teachers posit that DAP is of utmost importance and that they must strive to cultivate a learning environment that caters to the developmental needs of all

children (Hegde et al., 2014; Jumiaan et al., 2019; Mohamed & Al-Qaryouti, 2016). These preschool teachers maintain judicious expectations and furnish each child with an optimal blend of challenge, support, sensitivity, and stimulation (Cobanoglu et al., 2019). They espouse the notion that DAP embodies a comprehensive educational outlook that fosters optimal healthy advancement for every child. In addition, DAP enables preschool teachers to perceive children as unique individuals and to gauge their growth and progress at their own pace. It also facilitates the matching of activities and lessons to a child's specific interests and developmental requirements. Moreover, the experience of preschool teachers and the size of their classrooms were significant predictors of their views on DAP. Preschool teachers who implement DAPs aid children in acquiring the essential skills, knowledge, and attitudes necessary for success in both academic and non-academic domains (Mohamed & Al-Qaryouti, 2016). The conclusions of the study by Alghamdi and Ernest (2019) provide proof that several aspects of DAP can be suitable for diverse cultures and nations.

In contrast, some preschool teachers of early childhood education may lack familiarity with DAP or may not recognise its significance. The study undertaken by Abu-Jaber et al. (2010) examined the beliefs of Jordanian preschool teachers with respect to the utilisation of DAP and ascertained that they failed to fully comprehend the significance of tailoring pedagogical methodologies to cater to each child's unique developmental needs. Furthermore, the preschool teachers exhibited limited recognition of the distinct strengths that young children possess as individual entities and members of their families and communities. Similarly, Mengstie's (2022) investigation examined the beliefs of Ethiopian preschool teachers concerning DAP, which uncovered a positive correlation between the teachers' educational background, classroom quality, and the academic abilities of young children with DAP practices. Despite acknowledging the crucial roles that DAP plays in children's learning and development, the preschool teachers did not strictly adhere to DAP guidelines while teaching. The educators pointed to external factors such as resource shortages, large class sizes, lack of parental support, and administrative issues as the cause of this discrepancy. Furthermore, the practices of teachers in regard to DAP were found to be influenced by both their prior teaching experiences and individual dispositions, highlighting the significant role that a combination of personality and work experience plays in the adoption of DAP (Rentzou & Sakellariou, 2011; Sakellariou & Rentzou, 2011). Therefore, it is imperative for educational leaders to offer teachers opportunities for professional development in order to facilitate their understanding and implementation of DAPs in early childhood education (Mengstie, 2022).

In summary, varying perspectives exist among preschool teachers with regard to DAP. There are those who hold that DAP is a crucial consideration in fostering a learning environment that is appropriate for all children and, thus, strive towards this goal. These preschool teachers opine that DAP aids in their ability to view children as individuals and track their progress and growth at their own pace. Conversely, others may lack familiarity with DAP or do not regard it as significant. It is incumbent on school administrators to provide opportunities for professional development that would aid in enhancing teachers' comprehension and implementation of DAPs in preschool settings. By accomplishing these objectives, preschool teachers would be better positioned to equip young children with the requisite skills, knowledge, and attitudes that would enable them to excel academically and in their personal lives.

Factors that Influence Preschool Teachers' Beliefs and Perceptions about DAP

The teacher's training and experience

Studies have shown that multiple factors can have an impact on preschool teachers' beliefs and perceptions regarding DAP. These factors encompass several aspects, such as the teacher's training, expertise, and experience. For instance, Mohamed and Al-Qaryouti (2016) reveal that teachers who have received training in DAP tend to be more aware of its significance and are more likely to implement it in their teaching practices. Likewise, Abu-Jaber et al. (2010) ascertain that a positive correlation exists between the educational background of teachers and their implementation of DAP. Moreover, preschool teachers who possess prior experience working with young children are more likely to possess a more profound comprehension of child growth and development, which, in turn, empowers them to create optimal learning experiences that are developmentally appropriate. Likewise, Skočić Mihić et al. (2019) affirm that participation in in-service training is positively associated with greater self-efficacy in counselling parents. While it is apparent that they have obtained the necessary skills for counselling parents through both personal and professional development, the provision of in-service training serves as a pivotal factor in attaining such competence (Skočić Mihić et al., 2019).

DAP is an all-encompassing and overarching concept that pertains to a wide range of developmental domains for children aged 0 to 8 years. Preschool teachers who receive training in DAP understand that it is a research-based framework that outlines best practices in early childhood education that can facilitate optimal learning and development for young children (Jumiaan et al.,

2019). Moreover, they recognise that DAP necessitates awareness of each child's developmental stage, individualisation of learning experiences, and sound understanding of the social and cultural contexts in which each child resides. These three guiding principles constitute the foundation of DAP.

Preschool teachers who have experience working with young children may also have a better understanding of child development and how to create developmentally appropriate learning experiences (Mohamed & Al-Qaryouti, 2016). The awareness among educators is that DAP is grounded in knowledge, rather than presumptions, pertaining to the growth and development of children. As a result of this knowledge, teachers are empowered to design activities that sufficiently challenge children, thereby facilitating their advancement and engagement (Jumiaan et al., 2019). Furthermore, it is understood that educators acknowledge the fact that DAP enables them to obtain personal insight into each child's characteristics by means of observations and building connections with their families, as indicated by Hegde et al. (2014). This, in turn, empowers teachers to actively involve children in purposeful and gratifying activities and impart knowledge based on their inclinations and proficiencies. Consequently, through a thorough understanding of the impact of teacher training and experience on their beliefs and perceptions about DAP, school administrators can offer professional development and support to facilitate the implementation of DAP in teaching practices. Thereby, preschool teachers can create developmentally appropriate learning experiences that assist young children in acquiring the skills, knowledge, and attitudes essential for success both in school and in life.

The culture of the preschool or school where the teacher works

The influence of the preschool or school's culture on a preschool teacher's beliefs and perceptions about DAP is highlighted by Mohamed and Al-Qaryouti (2016). When a school culture prioritises academic achievement over play and exploration, teachers may feel compelled to focus on academic skills instead of creating developmentally appropriate learning experiences. Conversely, if the school culture values play and exploration, preschool teachers may feel more encouraged to implement DAP in their teaching practices, as noted by Cheung et al. (2022). It is crucial that the culture of the preschool or school where the preschool teacher works acknowledges each child's unique strengths, interests, and needs, as emphasised by Mohamed and Al-Qaryouti (2016). Preschool teachers in a culture that values play and exploration are likely to feel more supported in creating developmentally appropriate learning experiences that are engaging, challenging, and developmentally appropriate for each child. However, in a culture that prioritises academic achievement over

play and exploration, teachers may feel pressured to emphasise academic skills rather than creating developmentally appropriate learning experiences, as noted by Sakellariou and Rentzou (2011). This mismatch can lead to a difference between the teacher's beliefs and perceptions about DAP and their actual teaching practices.

The availability of resources and support for implementing DAP

Cheung et al. (2022) posited that the underlying principle of DAP is centred on the acknowledgement and endorsement of each person as a respected component of the educational community. In order to be considered developmentally appropriate, approaches and methodologies must display a range of cultural, linguistic, and aptitude diversity. Mohamed and Al-Qaryouti (2016) suggested that teachers with access to resources supporting cultural, linguistic, and ability diversity are more likely to implement DAP in their teaching practices. Such resources may include books, toys, and other materials reflecting the cultural and linguistic diversity of their students, which can create developmentally appropriate learning experiences that are engaging, challenging, and suitable for each child.

Furthermore, preschool teachers who receive support from school administrators and colleagues may feel more confident in their ability to implement DAP (Cobanoglu et al., 2019). School administrators can provide professional development opportunities to help preschool teachers understand the significance of DAP and its implementation in teaching practices. Colleagues, in contrast, can offer support and feedback to help preschool teachers refine their instructional strategies and create developmentally appropriate learning experiences. It follows that the availability of resources and support for implementing DAPs can significantly influence teachers' beliefs and perceptions about the practice. Preschool teachers who have access to developmentally appropriate materials and curriculum may be more likely to implement DAP in their teaching practices. Additionally, preschool teachers who receive support from school administrators and colleagues may feel more confident in their ability to implement DAP. Given the impact of the availability of resources and support on preschool teachers' beliefs and perceptions about DAP, school administrators should provide resources and support that help preschool teachers create developmentally appropriate learning experiences that promote the acquisition of skills, knowledge, and attitudes necessary for success in school and beyond.

Conclusion

This systematic literature review endeavoured to address three research inquiries pertaining to DAP within the context of early childhood education. The first question was about the various functions assumed by preschool educators in promoting DAP. The second inquiry pertained to the varying beliefs held by preschool teachers regarding DAP. The focus of the third inquiry was on the elements that have an impact on the beliefs and perspectives of preschool teachers regarding DAP. The results of the search yielded valuable insights into the significance of DAP in early childhood education, the pivotal role played by professional development in promoting DAP, and the beliefs and perceptions of preschool teachers regarding DAP. The diverse responsibilities of preschool educators in promoting DAP encompass creating an environment that is both secure and conducive to learning, offering varied learning opportunities that are tailored to the individual needs and interests of each child, collaborating with families to ensure that children receive requisite support at home, and advocating for the needs of young children and their families. The beliefs of preschool teachers regarding DAP are attributed to various factors, including their personal experiences as learners, their training and professional development, the culture of the preschool or school where they work, and the availability of resources and support to implement DAP. To ensure the successful implementation of DAPs, it is essential for educators, families, and policymakers to work together to advocate for and support DAP in early childhood settings. This includes providing professional development opportunities, ongoing reflection and assessment of curriculum, activities, and environments, and embracing continuous learning and growth.

Implications

The present review offers a comprehensive and rigorous analysis of the literature concerning preschool teachers' beliefs and practices with regard to DAP. The results of this review offer substantial implications for developing teacher training programmes and professional development opportunities that can effectively support the implementation of DAP in early childhood education. Additionally, the findings of this review can contribute to policy decisions pertaining to early childhood education and the creation of guidelines for DAP.

Limitations

The review is limited by the scope of the literature included. While the review is systematic, it is only as comprehensive as the literature that is available and included in the analysis. The review is also limited by the quality of the studies included. The quality of the studies can impact the validity and reliability of the findings. The review is limited by the generalisability of the findings. The studies included in the review may not be representative of all preschool teachers or early childhood education programmes. The authors only used peer-reviewed articles, which may have excluded relevant studies that were not published in peer-reviewed journals. This could have resulted in a biased sample of studies that may not have fully represented the range of beliefs and roles of preschool teachers regarding DAP. Hence, while the systematic review offers valuable insights into preschool teachers' beliefs and practices regarding DAP, it is imperative to consider the limitations of the review when interpreting its findings.

Ethical statement

The research did not involve human and animal subjects. The reviews on which it was based aggregated studies that had already received ethical approval. Consequently, no additional ethical approval was necessary.

Disclosure statement

The authors have no conflict of interest to declare.

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