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ECE teachers' views on play-based learning: a systematic review

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ABSTRACT

In recent years, play-based learning (PBL) has attracted attention, debate and controversy across different national contexts. There is no definitional consensus which may have undesirable consequences for enacting its potential in professional practice. The aim of our study was to synthesize international research on ECE practitioners' views on PBL. Based on a meta-synthesis of 62 studies from 24 national contexts, we show that they have differing views on the degree of conceptual compatibility between play and learning. While they may adopt numerous roles in PBL, they also express uncertainties as to how and when to get involved. Lastly, practitioners report on experiencing many challenges in enacting PBL, most importantly, policy and curricular delivery pressure. Throughout our review, we underscore both general trends and local nuances.

KEYWORDS

Play-based learning; ECE teachers; kindergarten; preschool; systematic review; meta-synthesis

Introduction

In the last few decades, national and transnational educational policy initiatives have called for enhanced learning outcomes delivery, greater educational accountability and improved academic standards (Ministry of Education and Research 2010; No Child Left Behind Act of 2001 2002; OECD 2015). An early commitment to such efforts is often underscored. In many national contexts, this has led to a greater focus on direct, teacher-led instruction in early childhood education (ECE) (see e.g. Hesterman 2018; Rogers and Evans 2007). In a number of countries, a growing concern has simultaneously been voiced regarding the 'alarming disappearance of play' from kindergarten and preschool practice (Nicolopoulou 2010, 1). Likewise, calls for safeguarding children's spontaneous and free play have been brought forward (e.g. Sundsdal and Øksnes 2015). Popular discourse further amplifies an image of preschool pedagogy as a binary choice between more learning, early assessment and focus on school preparedness, on the one hand, and free, child-initiated and child-led play with no adult intrusion, on the other. In addition to having potentially detrimental consequences, not least for preschool children with special needs (Klem and Hagtvet 2018), this may leave little room for nuance (Nicolopoulou 2010).

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Against this backdrop, play-based learning (PBL) has gained currency as a recommended curricular approach in a number of national ECE contexts (Danniels and Pyle 2018). Although combining play with a viable preschool pedagogy lies at the core of PBL, there is, nonetheless, no definitional consensus. As such, PBL continues to attract heated debate and controversy. Research literature has, in fact, warned that such definitional ambiguity makes PBL a potentially difficult concept for ECE practitioners to translate into their professional practice (Rogers 2010a). By the same token, the educational potential of play may remain unrealized (Bennett, Wood, and Rogers 1997).

There is a substantial body of empirical research that has interrogated teachers' views on the connections between play and learning in a range of national contexts. Despite its far-reaching significance and relevance for theory-building, practice, teacher education and future policy developments, we have located only one previous study that has reviewed some of this literature in a systematic manner (Pyle, DeLuca, and Danniels 2017). As a scoping review, however, it included a vast range of both theoretical and empirical contributions, employing various methodologies and examining not only practitioners' but also other stakeholders' views on play and PBL, such as policy-makers, parents and children themselves. Moreover, it had a specific focus on children in the age bracket four to five years.

The principal aim of our study was therefore to narrow the scope and systematically synthesize international empirical research on ECE practitioners' understanding of PBL in the context of their professional work with and care for children in the age bracket zero to six years. Zooming in on specifically teachers' voices from across different national and educational policy contexts, we wish to contribute to the scientific debate on PBL with identifying general trends and patterns while simultaneously paying attention to local idiosyncrasies and peculiarities. By focusing specifically on ECE practitioners rather than other stakeholders, our review also underscores their role as key ECE policy agents impacting most directly the central beneficiaries of such policies, children themselves.

Play-based learning: theoretical and empirical insights

Although there is a long-established agreement about the centrality of play in early childhood, conceptualizations and theories of play abound (Bennett, Wood, and Rogers 1997; Bergen 2014). Indeed, the vast scientific literature on play draws on multi-disciplinary perspectives and, rather than offering a universal definition, it bears witness to play's embedded conceptual diffusion and complexity (see e.g. Sutton-Smith 1997). Given the multifaced theoretical influences that also undergird learning, attempts at combining the two concepts have generated a wealth of scholarship with no definitional consensus either (Brooker, Blaise, and Edwards 2014, 1). As Brooker and colleagues argue, this is despite the fact that play is routinely recognized as a basis for learning in early childhood.

Numerous taxonomies of play are in circulation. They are constructed along several inter-related themes. While some emphasize the content of play, distinguishing, for example, between functional, symbolic and rule-governed play (e.g. Vorkapic and Katic 2015), others revolve around play behaviour types, such as physical (e.g. exercise or rough-and-tumble play), object (involving purpose-made toys) or pretense play (e.g. role or socio-dramatic play) (Smith 2005).

Another widespread variant focuses on participants in play, particularly the degree and nature of their involvement. Essentially, child-adult participation in play may here be visualized as a multi-dimensional continuum, with the so-called child-initiated and child-led free play with voluntary participation, no predetermined instructional aim and no adult intrusion at one end, and structured, adult-led non-play with an avowed instructional purpose (cf. direct teaching) at the other (Bennett, Wood, and Rogers 1997; Wood 2009a, 2009b). Placed in-between free play and non-play, one may find variations of guided play and play-based learning. Along this continuum, adult roles may range from parallel players, teammates, mentors and guides, to mostly supervising outsiders (Wood, McMahon, and Cranstoun 1980).

Another essential dimension in the scholastic debate on play pedagogies is the question of play's beneficial effects on fostering children's development. Traceable to the 'theoretical giants' of the twentieth century – Freud, Erikson, Piaget and Vygotsky – (Bergen 2014, 14), this line of research often makes distinctions between different developmental areas, particularly cognitive, academic, social and emotional, and how these may be supported through different forms and types of play. While the scope of current empirical evidence is substantial, it does not provide a uniform and consistent picture of the connections between different play forms and their distinct developmental benefits (see e.g. Pyle, DeLuca, and Danniels 2017; Lillard et al. 2013).

In recent years, ECE scholars have challenged the dichotomization of play and learning as false and the 'free play' - 'non-play/direct instruction' continuum as misguided (Nicolopoulou 2010, 2). With recourse to sociocultural learning theories, where learning and development are seen as facilitated through shared co-construction of meaning, scaffolded aid and guided participation in cultural activity, such as play (Rogoff 1990; 2003; Vygotsky 1978), they underscore the following: 1) the interwoven nature of play and learning, 2) the proactive and variable roles that adults may adopt in children's play and 3) how different play-based learning practices may contribute and foster not only children's social, emotional and physical development but also their academic and cognitive development in a holistic and mutually supportive manner (Pyle, DeLuca, and Danniels 2017; Samuelsson and Johansson 2006; Stephen 2010; Wallerstedt and Pramling 2012). Within this framework, participants in imaginative play, for example, can adopt a form of doublesubjectivity whereby they position themselves as being both inside and outside of play (Kravtsov and Kravtsova 2010; Kravtsova 2014). On the whole, this work advocates the enhanced value and meaning of learning through play in ECE curricula. Also, it calls for nuancing pedagogies of play conceptually (Rogers 2010a; Walsh et al. 2010) and provides critical insights on the conceptualizations of play as both policy and practice (Hunter and Walsh 2014). At the same time, this scholarship underscores the importance of instructional differentiation in line with children's developmental needs, warning against the one-size-fits-all rationale in play pedagogies (see Vogt et al. 2018).

A substantial body of literature has also investigated empirically teachers' views and beliefs about play and play's role in early childhood education, drawing on different theories and terminology. Broadly speaking, there is a wide-spread recognition that teacher beliefs crucially influence practice as well as pre-service training and professional development (Vorkapic and Katic 2015; Hegde and Cassidy 2009; Hegde et al. 2014; Fang 1996). While it is beyond the scope of this paper to discuss the various insights this literature has generated, suffice it to say that the apparent 'rhetoric-reality divide' has long been noted (Bennett, Wood, and Rogers 1997, 31) and 'the two competing theses' of consistency versus inconsistency between teacher beliefs and their enactment in practice continue to attract much empirical interest (Fang 1996, 47), as also studies included in our review bear witness to (see Table 1 for studies pursuing a combined interview/surveyobservational design).

In what follows, these theoretical concerns and empirical findings are used as a platform that in part informs our analytical approach to data and as a lens that affords a theoretically robust exploration of issues emerging from the synthesized studies.

Method

Methodically, this paper is informed by qualitative meta-synthesis. While there are disputes and disagreements among scholars as to its precise definition, Thorne and colleagues argue that it represents 'a family of methodological approaches to developing new knowledge based on rigorous analysis of existing qualitative research findings' (2004, 1343). Meta-synthesis is integrative rather than interpretative (Saini and Shlonsky 2012) and aims to offer 'a coherent description or explanation of a target event or experience' (Thorne et al. 2004, 1358). As in qualitative methodology in general, some of its central elements are the extraction of concepts or themes, their comparison and contrast as well as the synthesis of results across studies in the form of conceptual taxonomies. To arrive at robust explanations and descriptions of phenomena, it may start off with identifying a research problem, stipulating inclusion and exclusion criteria and defining a strategy for how findings across the included primary studies will be synthesized (Sandelowski and Barroso 2007). Acknowledging the contextual and relational boundedness of qualitative data as well as the complexity of the task at hand, Thorne et al. (2004) nonetheless underscore the need for a common standard and methodical transparency. Below, we provide a succinct overview of each methodical step that has guided this study.

Inclusion criteria and issues of study quality

Given the aim of our review, we expected most of the included studies to have a specifically qualitative design with interviews as the primary data collection method, potentially combined with observations of practice. This assumption was corroborated through our search. In a few cases, questionnaires were employed, either exclusively or in combination with qualitative data collection methods. These studies were also included. In addition to these design conditions, we had the following inclusion criteria:

Sample: we limited our review to specifically empirical studies on ECE practitioners' understanding of PBL in the context of kindergarten and preschool/early school years. While definitions of ECE may include children as old as eight years of age, in many national contexts, children will normally enter school in the age bracket four to six years. Wary of such national differences and in need of a cut-off point, we address studies that target primarily children between zero and six years.

Publication year: we limited the publication period to studies published after 1995 and up to November 2018 when our database search was completed. Given the relative novelty



Table 1. List of included studies (in alphabetical order).

Author and year	Country	Method	Country Cluster
(Aldhafeeri, Palaiologou, and Folorunsho 2016)	Kuwait	Survey	Asia
(Aras 2016)	Turkey	Interviews and observations	Single study / Uncategorized
(Aubrey and Durmaz 2012)	UK	Case study with interviews, survey and observations	English-speaking
(Baker 2014a)	Abu Dhabi	Interviews	Asia
(Baker 2014b)	Abu Dhabi	Interviews	Asia
(Baker 2015)	Abu Dhabi	Interviews	Asia
(Broström et al. 2014) (Broström et al. 2015)	Sweden/Denmark Australia, Denmark, Estonia, Germany, Greece, Sweden	Survey Survey	Europe Comparative
(Cheng 2001)	China - Hong Kong	Case study of two teachers – interviews and observations	Asia
(Cooney 2004)	Guatemala	Observations + survey among teachers and parents	Single study / Uncategorized
(Cutter-Mackenzie and Edwards 2013)	Australia	Video-observations + group interviews with children + interviews with teachers	English-speaking
(Edwards and Cutter- Mackenzie 2011)	Australia	Interviews and observations	English-speaking
(Fesseha and Pyle 2016)	Canada	Survey	English-speaking
(Foote, Smith, and Ellis 2004)	New Zealand	Interviews and observations	English-speaking
(Fung 2009)	China - Hong Kong	Interviews and observations	Asia
(Fung and Cheng 2012)	China - Hong Kong	Interviews and observations	Asia
(Gray and Ryan 2016) (Guilfoyle and Mistry 2013)	Ireland UK	Interviews, survey and observations Exploratory case study - observations, interviews and questionnaire	English-speaking English-speaking
(Hegde and Cassidy 2009)	India	Interviews	Asia
(Hegde et al. 2014)	Japan	Interviews	Asia
(Hope-Southcott 2013)	Canada	Action research - drawing on photos, observational notes used for own reflection	English-speaking
(Howard 2010)	UK	Semi-structured questionnaires	English-speaking
(Howard, Miles, and Rees-Davies 2012)	UK	Interviews with teachers, video-observations of children, focus groups with children to rate playfulness of computer practice	English-speaking
(Hu et al. 2014)	China - Hong Kong	Case study - interviews, observations and document analysis	Asia
(Hunter and Walsh 2014)	UK	Observations and survey to teachers	English-speaking
(Hvit 2015)	Sweden	Interviews	Europe
(Izumi-Taylor, Samuelsson, and Rogers 2010)	Japan; USA; Sweden	Survey	Comparative
(Johansson and Sandberg 2010)	Sweden	Critical incident questionnaire	Europe
(Kim 2004)	South Korea	Interviews and observations	Asia
(Kroll 2017)	USA	Interviews and observations	English-speaking
(Leggett and Ford 2013)	Australia	Case studies including observations, focus group interviews, researcher memoes and journal / diary keeping by practitioners	English-speaking
(Lynch 2014)	Canada	Exploratory netnography	English-speaking
(Lynch 2015)	Canada	Exploratory netnography	English-speaking
(Martlew, Stephen, and Ellis 2011)	UK	Exploratory study including interviews and observations	English-speaking
(McInnes et al. 2011)	UK	Interviews and observations	English-speaking
(Miller and Smith 2004)	UK	Interviews and observations	English-speaking
(Moon and Reifel 2008)	USA	Interviews, informal conversations, observations and self-reflexive notes	English-speaking

Table 1. Continued.

Author and year	Country	Method	Country Cluster
(Nikolopoulou and Gialamas 2015)	Greece	Survey	Europe
(Palaiologou 2016)	UK, Luxemburg, Malta, Greece & Kuwait	Survey followed by focus group interviews	Comparative
(Pui-Wah and Stimpson 2004)	China - Hong Kong	Interviews	Asia
(Pyle and Bigelow 2015)	Canada	Interviews and observations	English-speaking
(Pyle and Danniels 2017)	Canada	Interviews and observations	English-speaking
(Pyle and Luce-Kapler 2014)	Canada	Interviews and observations	English-speaking
(Pyle, Poliszczuk, and Danniels 2018)	Canada	Interviews and observations	English-speaking
(Pyle, Prioletta, and Poliszczuk 2018)	Canada	Interviews and observations	English-speaking
(Roberts-Holmes 2012)	UK	Interviews	English-speaking
(Sandseter 2012)	Norway	Interviews	Europe
(Sisson and Kroeger 2017)	USA	Interviews and observations	English-speaking
(Sundberg et al. 2016)	Sweden	Case studies based on interviews and observations	Europe
(Sæbbe and Samuelsson 2017)	Norway	Interviews and observations	Europe
(Tsai 2015)	Taiwan	Interviews and observations	Asia
(Tsai 2017)	Taiwan	Interviews	Asia
(Vogt et al. 2018)	Switzerland	Interviews (as part of a large-scale intervention)	Europe
(Vong 2012)	China	Observations, interviews and document analyses.	Asia
(Vu, Han, and Buell 2015)	USA	Questionnaire and observations	English-speaking
(Wager and Parks 2016)	USA	Teacher stories on learning	English-speaking
(Walsh and Gardner 2006)	UK	Survey and focus group interviews	English-speaking
(Wang and Hung 2010)	China - Hong Kong	Intervention with pre-post supplemented with observations and teachers' reflective journals	Asia
(Wood and Bennett 1997)	UK	Interviews and video-observations of play	English-speaking
(Wu 2014)	Germany and China - Hong Kong	Interviews and observations	Comparative
(Wu, Faas, and Geiger 2018)	Germany and China - Hong Kong	Interviews and observations	Comparative
(Wu and Rao 2011)	China; Germany	Video-observations, group discussions and questionnaires	Comparative

of PBL as a concept and taking into account major education policy changes and reforms occurring in various national contexts since the turn of the millennium, this was considered a long enough time span to capture the most relevant studies Given that this meta-synthesis was guided by qualitative epistemology, we also considered this time span to provide sufficient grounds for reaching thematic saturation.

Language of reporting: we targeted studies published in English, Norwegian, Swedish and Danish, given our shared linguistic competence in these languages.²

Thematic focus: studies were included if they specifically targeted ECE teachers' views of either PBL or the connections between play and learning (i.e. play in relation to learning), such as play's potential learning benefits. Studies that did neither (i.e. focused exclusively on either play or learning) were excluded. While our literature search was broad and did not specifically target studies within the discipline of pedagogy or studies exploring various instructional approaches towards fostering the development of specific academic skills or subject knowledge, such as literacy or science, that may potentially challenge the traditional dichotomy between play and learning without explicitly drawing on PBL as a concept, our final study sample does feature studies that could be categorized as such (e.g. Moon and Reifel 2008; Sundberg et al. 2016; Nikolopoulou and Gialamas 2015).

Study Quality: while there are a number of different checklists to assess the quality of qualitative studies, there is a great deal of discrepancy between them in terms of their rigour, usefulness and applicability (Saini and Shlonsky 2012; Atkins et al. 2008). Having applied an adapted version of the CASP qualitative checklist in their systematic qualitative review, Atkins et al. (2008, 21), for example, argue that the critical appraisal procedure became 'an exercise in judging the quality of the written report rather than the research procedure itself. Aligning ourselves with Atkins and colleagues' view of no straightforward interdependence between rigorous application of methods and rigorous qualitative research, we decided to assess study quality by looking at the overall coherence between research aims, methods applied and the reported findings in each study. Aiming at thematic breath and bearing in mind each study's strengths and limitations (see also Saini and Shlonsky 2012, 137), no studies were excluded based on this procedure alone.

Search strategy

We conducted a systematic literature search in three international research databases: 1) the Education Resources Information Center (ERIC), 2) the Web of Science (WoS) and 3) PsycINFO, in addition to a search in Google Scholar. The systematic search in these databases was supplemented with a hand search in the Nordic Early Childhood Education Research Journal (NECERJ). Apart from serving validation purposes, the rationale for including NECERJ rests on our access and linguistic possibilities of conducting systematic searches therein.

The search strategy used in the selected databases combined relevant keywords with the use of Boolean operators AND and OR and truncation* to cover variations in keywords. Our keywords included: (play* OR learn*) AND (preschool* OR kindergarten*) AND teacher* OR staff*).3 The literature search was carried out in the period October - November 2018.4

Screening process

Our review process started off with each author screening the titles and abstracts of the first 200 references in each of the three international research databases and Google Scholar. The 200-cut-off point was selected on the assumption that it would provide sufficient grounds for reaching thematic saturation. In addition to the hand search in NECERJ, we thus screened the titles and abstracts of 996 studies in total. This initial screening resulted in 126 potentially relevant studies. Each author then read one third in full-text, applying our inclusion and quality appraisal criteria. To validate our preliminary inclusion decisions made in this step and, in some cases, resolve any inclusion doubts that may have arisen, two members on our team swapped ten studies with one another and conducted the same full-text inclusion evaluation procedure. This gave the total of 33 included studies.

Additionally, the first author conducted a screening review of all references (187) listed in a previously published scoping review on the subject, captured in our review process (Pyle, DeLuca, and Danniels 2017). Given that a degree of relevance to and an overlap with our conceptual design could be assumed, it resulted in the inclusion of additional 33 studies. Upon a full-text validation conducted by the second author, three studies were subsequently excluded. This search thus resulted in 29 included studies. Combined, our screening procedure resulted in the final inclusion of 62 single studies (for a graphic visualization of the screening procedure, see Figure 1: Flowchart).

Data extraction and coding

To address the review question and gain an initial overview of the included studies, we extracted the following data in each case: (1) research question, (2) first author and year of publication, (3) main themes, (4) method, (5) main results as provided by the study authors and (6) main results addressing the review question. The data were duly recorded in an Excel sheet template. Table 1 shows selected characteristics of the included

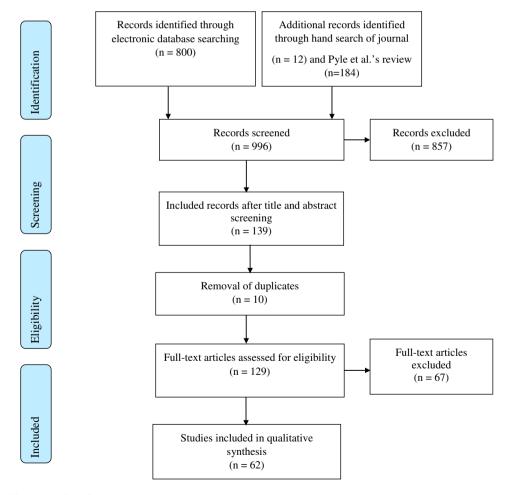


Figure 1. Flowchart.

studies based on some of the extracted information (author/s, publication year, country,

We then proceeded with a thematic analysis of each study with the use of the computerassisted qualitative data analysis software NVivo. This was mainly to ease data management and add necessary rigour and transparency to the analytical process (Richards 2009). Our coding structure was informed by theoretical insights as well as insights gained through our initial analysis and a subsequent thorough reading of each included study. As such, it transpired as an iterative process where theory and empirical data were in a dialogic relation throughout the coding process (Creswell 2013).

As already noted above, our synthesis is grounded in specifically qualitative epistemology. A key analytical principle was ensuring the construction of a viable taxonomy that would most comprehensively capture the breath of issues across the included primary studies. To enhance taxonomic validity through thematic saturation, the first author coded the first half of the included studies (33) first. This gave a provisional coding taxonomy. The second author coded the remaining half within the same taxonomic structure, expanding and adjusting as deemed relevant. The final structure emerged upon a dialogue between the first and second author, involving steps such as comparing analytical levels and considering the discreetness of nodes in consultation with theory. Following this procedure, we arrived at the following three overarching thematic nodes: (1) Teachers' beliefs about PBL, (2) Adult involvement and roles in PBL and (3) Implementing PBL. These will guide our subsequent presentation of findings.

Results

The importance of context

A strength of a systematic review is to see trends across contexts. The 62 studies, included in our meta-synthesis, span different corners of the world, representing 24 countries with their unique attributes. We have clustered these into three main groups that may share linguistic, geographic and/or cultural features relevant to ECE: (1) English-speaking countries (e.g. The United Kingdom, Ireland, The United States, Australia, New Zealand and Canada) with 30 included studies, (2) (Northern) European countries (e.g. Norway, Sweden, Denmark, Germany, Switzerland) with 8 included studies (3) Asian countries (e.g. Hong Kong, Japan, China, Oman, Saudi-Arabia, Abu Dhabi) with 16 studies included in our review. Our dataset also included 6 comparative studies and 2 studies that were not clustered.⁵

Within each cluster, there are necessarily both national and local variations, represented by peculiarities in their ECE policy regimes and other country-specific idiosyncrasies. However, they may also share traits on a more global, structural level, such socio-cultural and language history. As Mosvold and Alvestad (2011) argue, in Scandinavian and Central European countries, ECE institutions are shaped by a social pedagogy tradition where much emphasis is placed on a holistic view of learning. Child-centredness, care, play and the development of socio-emotional competences are some of the hallmarks of ECE practice in these countries. On the other hand, the pre-primary and kindergarten practice in English-speaking countries is significantly shaped by the primary school curriculum (ibid.). Indeed, in our review, studies set in the UK discuss PBL especially in

relation to what is variably labelled the reception year in England and Wales and P1 in Northern Ireland. On a similar note, as several studies in our Asian cluster foreground, their ECE policies traditionally place a much greater emphasis on school readiness and direct instruction from early on. Researchers have also drawn attention to the cultural connotations implicit in the construct of play itself, noting that particularly mother-child or free play can be seen as specifically Western constructs and play and learning as two downright incompatible concepts within non-Western cultural traditions (Gaskins, Haight, and Lancy 2006; Marfo and Biersteker 2010; Rogers 2010b; Wu, Faas, and Geiger 2018).

Steeped in different traditions and cultures of learning, contextual features will necessarily shape attitudes, beliefs and perceptions, notwithstanding also transnational trends affecting and instigating policy developments and reforms at more local scales. Wary of such nuances that necessarily complicate any form of synthesis that might be performed (Thorne et al. 2004), we nonetheless see the clusters as illustrating general contextual trends in terms of the extent to which PBL is thematized in policy as well as research.

In what follows, we will provide a systematic overview of each thematic category, as identified above. Where appropriate, we will comment upon and nuance the great variety of national contexts and culturally conditioned communities of preschool practice through relevant examples.

Teachers' beliefs about play-based learning

Play and learning - compatible or incompatible concepts?

As a point of departure, our first thematic node relates to ECE teachers' beliefs about playbased learning. Most importantly, our analysis shows that they have differing views on the degree of conceptual compatibility between play and learning. Many ECE teachers point to a natural link between play and learning, seeing learning as something occurring naturally during play. Views of PBL as something different than play are, however, also prominent in our dataset. In addition, it is of special note that across the included studies, teachers may employ different or alternative ways of labelling PBL. For example, when discussing situations where learning and play are combined, Moon and Reifel (2008) use the term 'integrated lessons'.

Beliefs about the benefits of play-based learning

Supporting children's development is a key endeavor in early childhood education and care. This view is corroborated by a substantial number of studies in our dataset. Many ECE teachers report that play contributes to children's holistic development as well as specific developmental areas such as social, emotional, cognitive and linguistic. By the same token, many see play as laying the foundation for later learning (e.g. Hunter and Walsh 2014; Pui-Wah and Stimpson 2004). There are, however, also some voices that express uncertainty or even skepticism regarding the effectiveness of play and playbased activities for learning (see e.g. Walsh and Gardner 2006).

One finding emanating from our synthesis is that when disentangling the different views on this issue, it is important to consider not only teachers' implicit theories on the conceptual compatibility of play and learning but also their embrace of general pedagogical flexibility and variation. This point is demonstrated well in a study by Pyle, Prioletta, and Poliszczuk (2018). They identify two different groups of teachers: one that used mostly free play in the classroom and one that integrated a variety of play types. The first group reported that during free play children have ample opportunities to develop their oral language and social skills through interaction with others. However, they also commented that the development of more complex language skills, such as reading, requires a more formal and direct guidance that follows a structured, instructional plan. In contrast, the second group of teachers believed that a flexible enactment of play types supported a range of skills, including the development of academic learning (i.e. reading and writing skills).

Another finding we wish to highlight concerns the contextual independence, if not universality, of some beliefs about play's learning benefits. In a number of studies across our three clusters free play is often linked to opportunities for developing social competence, such as learning to interact with others (e.g. Vu, Han, and Buell 2015; Izumi-Taylor, Samuelsson, and Rogers 2010). In Izumi-Taylor, Samuelsson and Rogers' comparative study (2010) set in Japan, the US and Sweden, for example, teachers unanimously relate play to social skills, independently of country context. This illustrates that such views are not only reserved to practitioners working in the traditionally child- and play-centered (Northern) European ECE tradition but are common well beyond.

Adult involvement and roles in play-based learning

Adult-child involvement – a balancing act?

Our second thematic node revolves around adult involvement in play and the variable roles that ECE staff may adopt in play-based activities. In some studies, ECE teachers report that adult-led activities dominate. As might be expected, this is particularly prominent in contexts where preschool practice is traditionally shaped by school curricula, such as in the English-speaking and Asian clusters. However, we have also identified studies where the pendulum swings the other way and where play in this age group is first and foremost seen as a child-initiated and child-led activity with no instructional purpose and no adult intrusion, such as among the German participants in the comparative work of Wu and colleagues (Wu, Faas, and Geiger 2018; Wu 2014). In-between these positions, we have located voices in all three clusters that support a more balanced view where PBL represents a form of child-adult cooperation (Hope-Southcott 2013; Sundberg et al. 2016; Cheng 2001). In Cheng's Hong-Kong study, for example, one teacher participant argues that PBL requires children's active participation: 'They should not just sit down and listen. They should have pleasure in directing and managing their learning' (Cheng 2001, 863).

Types of roles and involvement

A finding across a number of studies is that the roles ECE staff may take in play-based activities change according to the type of play children engage in but also during the act of play itself. In outdoor play, adults may adopt more of a supervisory role. In more structured activities that usually take place indoor, they act more often as play facilitators but may also, in some instances, variably enter a formal instructional role (e.g. Miller and Smith 2004).

Indeed, there is a large variation in the types of roles that ECE teachers identify with and describe across our dataset. They can be placed on a continuum constructed around the nature of adult participation: at one end, one can place an authoritative role where the adult identifies with being a knowledge transmitter and, at the other, the adult acts as an insider and a play-mate. Our analysis shows that facilitating play is by far the most common role teachers report to adopt. In Moon and Reifel's study (2008), set in the USA, the participating ECE teacher describes play facilitation as, for example, setting up the environment and providing different props and materials so that the children can choose what they want to play with, how and when.

Knowing when and how to intervene in children's play requires knowledge, experience and skills. This sentiment is echoed through many of the included studies (e.g. Hunter and Walsh 2014; McInnes et al. 2011; Wood and Bennett 1997). For example, ECE teachers in Wood and Bennett (1997) report on being more comfortable about their involvement in structured play activities rather than role play. They ground this in their reluctance to impose ideas on children while they are absorbed in play. Interestingly, one of the teachers saw her role in play as a 'joint venture' with possibilities for sharing and discussing ideas, roles and props. The teachers intervened mostly to deal with inappropriate behaviour. Similarly, Sundberg and colleagues' three case studies from the Swedish ECE context (2016) bring to light the numerous challenges, dilemmas and tensions that may arise in balancing adults' goals for play-based learning with letting children's interest, imagination, creativity and voluntary engagement govern the activity. Implicit, fragmented and elusive learning objectives, lack of guidance in orchestrating meaning-making activities and keeping sight of holistic skills development are among examples that clearly complicate teachers' enactment of viable PBL pedagogy with an avowed science content.

Additionally, some studies corroborate a view that ECE teachers' intervention in play needs careful and skilful timing if children's learning is to be enhanced. A teacher in a study by Wang and Hung (2010), for example, describes a process of constant reflection about her role in play. Among other things, she underscores that in order to scaffold children's learning processes, a teacher needs to be observant of children's developmental needs. In fact, having watched a video-recording of a play situation in which she herself co-acted, she critically notes that rather than intervening, she should have given children enough time to process the available information.

Implementing play-based learning

Thirdly, our meta-synthesis revealed that teachers encounter a great variety of challenges and barriers to enacting play-based learning in their day-to-day practice. We have synthesized these as belonging to one of six conceptual categories: 1) policy mandates and curricular concerns, 2) parental attitudes and beliefs, 3) teacher education and qualifications, 4) collegiate peer pressure, 5) structural challenges and 6) children's characteristics. Overall, the first category - policy mandates and curricular concerns - is by far the most represented and commented upon by teachers across the dataset and also one that is variably intertwined with most of the remaining issues.

Policy mandates and curricular concerns

More than a quarter of all the included studies report that teachers consider policy mandates and curricular delivery pressure as considerable obstacles in their enactment of PBL. This is either expressed in terms of a general top-down policy vigilance or as specific reflections on the enhanced focus on early learning outcomes and school preparedness. We see that this is particularly prominent in studies conducted in English-speaking national contexts, where teachers identify and discuss multiple tensions between specific curriculum objectives, their own professional philosophies as well as children's play needs (e.g. Fesseha and Pyle 2016; Gray and Ryan 2016; Guilfoyle and Mistry 2013; Hope-Southcott 2013). A common grievance is a view of play as being without a purpose and thus not serving academic learning well. As teachers in Lynch's (2015, 358) netnography from the Canadian context note, it is 'instructions from the system' and 'teaching to certain standards' that leave no time for play, daily music and movement activities or even snack time.

Also studies from other contexts, particularly in Asia, report on this issue, even if the sets of challenges teachers face are qualitatively different. Rather than trying to balance new learning imperatives with a traditional focus on play pedagogies, teachers frequently describe situations in which they struggle to enact play-based activities in a preschool culture with an entrenched, direct instructional focus on academic learning (e.g. Wu 2014; Baker 2014b, 2015; Cheng 2001). In some studies, such as in Cheng's (2001) Hong-Kong study, 'top-down interference' and an expectation of tangible learning results is reported to obstruct teachers' professional authority, handled mostly as a routine requiring minimal effort and conducted in a mechanical manner. Additionally, administrative duties related to policy imperatives, such as filling out various forms for the authorities, are reported to stand in the way of engaging in play pedagogies in a way that would match teachers' own ambitions and aspirations. As one teacher in Aras' (2016, 1179) study from the Turkish context remarks in relation to this: 'It is a miracle for my students if I play with them'.

Several studies report also on teachers experiencing uncertainties regarding the content and purpose of new preschool curricula which may stem from teachers' self-reported lack of familiarity with the policy text itself or with terms and concepts it may introduce, such as 'inquiry-based learning' (Gray and Ryan 2016). This may translate into implementation anxiety, particularly in planning time as well as designing and managing appropriate content. As Lynch (2014) notes, reliance on the government and preschool management boards rather than teachers' professional judgement and authority may feature as solutions.

Parental attitudes

Our analysis shows that parental ideas about and expectations of what their children's preschool attendance should represent is for many ECE practitioners an additional challenge in translating play-based curricula into practice. This theme runs across a number of studies in the English-speaking and Asian cluster (e.g. Baker 2015; Fesseha and Pyle 2016; Fung & Cheng, 2012; Gray and Ryan 2016; Hegde and Cassidy 2009). Teachers describe parents as variably focused on school achievement and school preparedness from early on and, relatedly, as unwilling to acknowledge the value of play in their children's preschool activities. For example, teachers in Fung's study (2009, 21) see parents as 'a tacit intervening force' trapped in their own 'overwhelming academic concern' and as an obstacle to conducting their professional duties in harmony with their own beliefs. Direct instructional time, an emphasis on worksheets, drills and homework are among examples reported as a common response to parental demands (Fung and Cheng 2012; Baker 2015).

Parental lack of knowledge about progressive approaches to early childhood education and misunderstandings about play as a platform for rich learning opportunities is another grievance expressed by teachers in this regard, in some cases adding to teachers' own existing uncertainties and ambivalence about the merits of PBL (e.g. Fung and Cheng 2012). The culturally conditioned nature of such expectations is well illustrated in Baker's studies from Abu Dhabi (2014b, 2015) where it is the indigenous Emirati rather than English-speaking guest worker parents who reject play as an appropriate instructional approach in preschool and insist on direct teaching where tangible deliverables can more easily be identified.

Teacher education and qualifications

Often discussed in parallel to both policy and parental expectations as barriers to engaging in play-based pedagogies is the issue of teacher education and qualifications. First of all, teachers report on their own limited knowledge and comprehension of play theory or PBL as a concept (e.g. Cheng 2001; Fung & Cheng, 2012; Gray and Ryan 2016; Howard 2010). In the face of such conceptual uncertainty, juggling curricular demands with parental expectations leaves little room for play and may also affect teachers' own dispositions and attitudes. For example, Howard's (2010) questionnaire study among 26 Foundation Year practitioners in Southern Wales reveals that they rated their theoretical understanding of play and their play training as moderate to low. When asked to name theoretical influences on their own pedagogical practice, more than a half of the sample chose to provide no details. Taking an even more extreme position, participants in Gray and Ryan's study (2016, 199), all employed in a Foundation setting in Ireland, described play-based learning as downright 'faffing about wasting time' and 'pointless'.

Also other studies discuss the consequences of limited familiarity with and awareness of the complexity and diversity of play theory, such as routine and repetitive instructional formats and a narrow understanding of play as free play only (Gray and Ryan 2016; Fung and Cheng 2012; Cheng 2001). In Fung and Cheng's study, it is not a specific reference to play theory as such but rather teachers' apparent belief in the conceptual incompatibility of play and learning that manifests itself as a deep frustration with, resistance to or a confusion surrounding the adoption of PBL in practice. Conceptualizing play as a free, unstructured, child-directed activity only, teachers also find it hard to plan for and integrate in often over-crowded preschool curricula (Gray and Ryan 2016). Additionally, lack of staff qualified in enacting play and PBL, collectively entrenched, traditional views of learning and limited opportunities for training and professional development are mentioned as factors that complicate the enactment of PBL in some ECE settings (e.g. Cheng 2001; Gray and Ryan 2016). Managing and planning for play-based approaches but also lack of confidence in justifying an integration of PBL in daily activities to parents and other stakeholders feature among closely-related spin-offs.

Peer pressure - within and beyond ECE units

The fourth sub-theme related to implementation challenges in our dataset is peer pressure within and across ECE communities of practice. A number of studies report on hesitance and reluctance to engage in collegiate debates on the merits of play, particularly in contexts

with strict curricular ECE regimes (e.g. Cheng 2001; Foote, Smith, and Ellis 2004; Howard 2010; Lynch 2015). Lynch (2015), for example, provides empirical evidence from Canadian settings on some ECE teachers' fear of being perceived as lazy in prioritizing playbased methods over other, direct, teacher-led activities with clear deliverables. Also, a fear of sticking out and adjusting tacitly to a communally sanctioned approach is mentioned as a reason for implementation difficulties (Cheng 2001; Howard 2010). In addition to horizontal, inter-collegiate attitudinal misalignment, differential understandings of PBL may also transpire vertically as a potential conflict between preschool staff and management and, also, cross-institutionally as a value-laden conflict between different preschools (Aubrey and Durmaz 2012) as well as preschool and school cultures of learning (Lynch 2014; 2015). This necessarily makes individual, cross-institutional mobility potentially problematic.

Structural challenges

Furthermore, a host of structural challenges are identified as relevant for the variable PBL enactment across contexts. The most prevalent one is time pressure. Teachers often express a sentiment that time is not stretching far enough in their day-to-day practice to engage in play-based activities with children (e.g. Fesseha and Pyle 2016; Hope-Southcott 2013; Hu et al. 2014). Constructed as dichotomous and incompatible, play necessarily gets in the way of learning and vice-versa. Play is, for example, described as a form of indulging (Baker 2014a) that may resonate with teachers' personal beliefs and professional philosophies but gets de-prioritized in the face of strict curricular mandates. In Fesseha and Pyle's 2016 survey study from a Canadian setting, almost half of the respondents identify time as 'a moderate to extreme barrier' to enacting PBL. As already noted above, even 'snack time' is by teachers in Lynch's study (2015) perceived negatively as an instructional time thief.

In addition to time, teachers struggle to engage in play due to large class sizes and, relatedly, understaffing (e.g. Hegde and Cassidy 2009; Lynch 2014). Alternatively, one could see this as yet another configuration of time-related pressure to cater for the needs of too many children and thus sidelining play-based pedagogies for practical reasons. We have also noted funding and insufficient PBL resources, including digital ones, as structural implementation obstacles across contexts (e.g. Baker 2015; Fesseha and Pyle 2016; Howard 2010).

Children's characteristics

Lastly, a few studies also thematize features related to children's behaviour and abilities as impeding possibilities for viable PBL pedagogies. Howard (2010, 97) has reported that children's variable ability to play features frequently as a perceived barrier among her respondents: 'What do you do with a play curriculum if a child just doesn't know how to play?'. Working in an Abu Dhabi context, Baker (2014a; 2015) notes further that children's play behaviour may not match ECE practitioners' expectations for play which may, relatedly, accentuate their own difficulties to engage in play activities with these children. Additionally, children's limited second language ability but also special physical or emotional needs of some children are reported to work against PBL (Howard 2010; Baker 2015). A unique perspective is provided by a teacher in Lynch's study (2014, 340) who articulates a view of PBL as potentially obstructing the detection of early learning difficulties in young preschoolers: 'I have had students with learning difficulties that haven't been identified because there was never any requirement to read or write or any assessment of skills or concepts'.

Summarizing discussion

As our presentation of findings makes clear, play-based learning is a topic that stimulates much interest and engagement among ECE practitioners across different national and cultural communities of ECE practice. Our meta-synthesis is based on the inclusion of 62 studies, clustered into three main groups. Although these clusters cannot do justice to the host of nuances and local specificities that each individual context may represent, we believe it nonetheless aids in visualizing some general, overarching patterns across our dataset. While reflecting in part our search strategy and choices, the differential size of these clusters may in itself be seen as an indicator of both the variable degrees of urgency with which debates surrounding PBL may feature across contexts and the corresponding empirical interest this may instigate in local research communities.

Representing by far the largest cluster, studies conducted in English-speaking countries provide multiple examples of the sets of issues surrounding the position of play-based pedagogies in their current ECE practices. Not only do these studies often appropriate the term play-based learning as a vantage point, they also most vocally frame recent policy mandates of an early focus on learning outcomes in terms of controversies and opposites to former traditions, practitioners' personal philosophies as well as current theoretical insights. The Asian cluster also illustrates a set of oppositions, yet coming from a reverse policy direction, namely, how to implement play-based features in ECE cultures that traditionally value a commitment to an early, sustained learning effort ensured through direct teaching and instruction. Interestingly, the third cluster composed of mostly (Northern) European countries is the smallest and the issues the included studies raise are qualitatively different. We note that the term play-based learning itself does not seem as central in these studies. Instead, play and learning are here mostly constructed through a web of mutual relations that may pull in various directions. However, these are mostly broad cluster commonalities and should, therefore, be approached with due analytical caution and vigilance.

In terms of our main thematic categories, we see that teachers participating in the reviewed studies may position themselves as both proponents or opponents of the inherent compatibility of the terms play and learning. This gets either articulated directly through their reflections on the issue itself or transpires more tacitly through ways in which they construct their views on the developmental benefits of play-based pedagogies, their own role and involvement in play but also their personal experiences of enacting PBL in their day-to-day practice. While potentially also situationally primed by the investigating researcher in the interview setting or through specific survey items, an understanding of play and learning as incompatible binaries will necessarily present a major challenge to embracing PBL both as a meaningful concept and as a useful pedagogical approach. As our review shows, this may materialize also as a time management concern for many, since, by implication, play and learning represent mutually exclusionary activities infringing upon each other. Most importantly however and in line with much previous scholarship (e.g. Pyle, DeLuca, and Danniels 2017; Nicolopoulou 2010; Samuelsson and Johansson 2006), we believe such bifurcate understandings of learning through play may stand in the way of capitalizing on the opportunities PBL potentially offers.

Nonetheless, our review shows also that many teachers emphasize the intertwined nature of these concepts and underscore a holistic view of child development through play. We see that teachers report on a range of positions they adopt in play, stretching from either fully participatory or non-participatory, with many shades and hews available between these poles. Adopting a flexible approach, switching between roles while paying due attention to children's individual needs as well as situational and other contextual demands seem common across the dataset. However, a number of studies also nuance these views through practitioners' testimonies of struggles with positioning themselves in play and with keeping a balance between leadership, involvement and co-participation that would be non-intrusive and respecting of children's agency as autonomous players and learners. As already pointed out by existing scholarship (Bennett, Wood, and Rogers 1997; Wood 2009b), this underscores a dire need for a continuous engagement and refinement of the concept of play-based learning in early childhood education as well as further critical interrogations of a range of related issues, particularly the exact nature, timing and extent of adult involvement in play.

By extension, we wish to highlight the importance of providing tailored professional development to practitioners on how to engage in play while respecting the participating child as an agent and a dialogic partner in play but also how play may provide a platform for scaffolding essential emotional, social and academic skills in an age-appropriate and sensitive manner (Samuelsson and Johansson 2006). Interestingly, our review identified professional qualifications and teacher education as an area of concern for teachers across many national contexts. Traditional views of learning as well as limited knowledge and comprehension of play theory were among factors practitioners listed as limiting opportunities for a viable PBL enactment. Understaffing and underqualified staff were likewise identified as barriers, as were withstanding collective peer pressure in a professional environment dominated by staff with traditional views or when launching innovative instructional approaches. On this point, we applaud calls for professional development opportunities, where one could build on one's knowledge and competence within play theory and play-based pedagogies, as in fact articulated by authors of some of the reviewed studies (Fung and Cheng 2012; Hegde and Cassidy 2009). Given the theoretical and conceptual complexities play and PBL represent (Sutton-Smith 1997; Bergen 2014; Rogers 2010a) and the lack of consensus that exits in the research community on these matters (Brooker, Blaise, and Edwards 2014), this could also provide a fruitful ground for mutually-beneficial research-practice collaboration. We also suggest that workplace-based, collaborative reflections on own practice, including cross-collegiate observations and guidance, may represent a valuable tool for practitioners on which they could capitalize. Professional confidence gained through such efforts may also prove useful in building successful home-kindergarten/early school collaboration, particularly in the face of parental pressure for direct teaching but also in offsetting collegiate pressure for status quo. While parental pressure is mostly thematized in the English-speaking and Asian clusters, we believe that, in our globalized world, with migrants of diverse ethnolinguistic heritage crossing borders and settling in new national settings and, by implication, often in need of communicating with their children's pre-school and school institutions,

teachers' awareness of diverse parental expectations and a competence in handling these in a professional manner are imperative across all contexts.

Lastly, we see that policy mandates function as a very real PBL implementation challenge for many ECE practitioners that send many echoes through their professional practice. As reports from studies conducted in the English-speaking cluster bear witness to, an increasing policy pressure on school preparedness and raising academic standards may translate into professional resistance and uncertainty with important spin-offs such as time management concerns. In countries with an entrenched focus on direct instruction in academic skills, it may be novel play-based policy directives that cause similar sentiments. While potentially a consequence of our search strategy choice, the significant absence of studies in our European cluster is of note in this regard, particularly given that policy changes are not restricted to specific national contexts but rather a part of transnational trends. Despite this absence, experiential reports from ECE teachers working in other, comparable contexts have a potential transferability value and may serve as a platform for reflection well beyond. We see particularly professional confidence, fostered through continuous collegiate dialogue and opportunities for professional development, but also successful practice-research partnership, as key mechanism for offsetting some of these pressures.

Concluding remarks

Conducting qualitative reviews in early childhood education and, arguably, other areas within the social sciences, where human interaction, situational specificities and socio-cultural contexts call for nuancing rather than a neat boundary-setting, is by no measure an easy task. In our meta-synthesis, balancing contextual attention with a search for broader patterns served as an analytical principle, enabling us to shed light on the complex sets of issues practitioners are likely to encounter both within and across research settings. In line with much scholarship on specifically qualitative systematic reviews (e.g. Thorne et al. 2004; Sandelowski and Barroso 2007; Saini and Shlonsky 2012), we would like to draw attention to the importance of conducting systematic syntheses of qualitative research with necessary rigour, transparency and consistency, whereby methodic choices are laid out clearly and potential caveats interrogated with a critical eye. We acknowledge that some of our methodical decisions necessarily impact our findings. For example, the choice of including studies published in scientific journals only precludes potentially relevant studies published as book manuscripts, scientific anthologies and research reports. Furthermore, our focus on studies published in English and, to some extent also, Scandinavian languages necessarily creates a certain linguistic, thematic and geographical bias. As with any scientific review, these decisions reflect in part limitations and possibilities of our own digital and physical access as well as shared linguistic competence. Last but not least, we have chosen to look at studies based on teachers' beliefs constructed through self-reports rather than studies on actual PBL practice in ECE settings. As much research underscores (Fang 1996; Vogt et al. 2018), the theory-practice misalignment can be a very real one. Despite these potential shortcomings, we see a systematic insight into teachers' beliefs, perspectives and experiences with PBL as a core issue in the field of early years that has importance and relevance for a broad range of policy agents, including national policy stakeholders, educators, ECE practitioners but also parents and, most importantly, children themselves.



Notes

- 1. By practitioners, we mean adults who work directly with children, including qualified teachers, headteachers or teacher assistants. In this paper, we will collectively refer to this group as either ECE teachers, practitioners or staff.
- 2. While this may have created a certain bias toward Scandinavian scholarship, our search resulted in only a handful of Scandinavian studies relevant for inclusion, a fact we comment on in our summarizing discussion.
- 3. While we are aware that some of our keywords have synonyms that could potentially have been included among our search words, such as 'daycare' or 'nursery', we do not consider this to be problematic, given the specifically qualitative design of our meta-synthesis and hence the principle of thematic saturation rather than an exhaustive inclusion of relevant studies as key.
- 4. We have opted for the combination of keywords (play* OR learn*) rather than (play* AND learn*) because it enabled us to conduct a broad search through literature that would include at least one of the terms and not only the combination of the two terms, assumed in the latter. Given the relative novelty of PBL as a concept, it also gave us a chance to explore whether, and if so, what alternative conceptualizations and terminology may be in circulation, an issue we take up in the sub-section 'Teachers' beliefs about play-based learning'.
- 5. See Table 1 for further information on all individual studies included in each main cluster, comparative studies and uncategorized/single studies.

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