

# Exploring Hong Kong student teachers' perspectives on children's play and learning

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**Abstract:** The concepts of *learning through play* and a *play-based curriculum* have gained widespread recognition and popularity in the 21st century. However, in Hong Kong (HK), parents, teachers, and other stakeholders still exhibit limited confidence and capacity in applying these notions to the field of early childhood education (ECE). Moreover, how ECE student teachers perceive and understand these concepts remains largely unknown. To address these issues, this research adopted the ecological system theory as a theoretical framework to 1) investigate HK ECE student teachers' views on implementing a play-based curriculum and 2) understand the associated difficulties they encounter in the HK context. The study employed a mixed-methods approach, including a Play Belief Survey and a qualitative focus group interview. In total, 200 survey responses and 100 minutes of interview data were collected from a group of ECE student teachers from teacher education institutes in HK. The findings revealed a salient contradiction and concern among student teachers, who expressed positive beliefs about a play-based curriculum yet faced insufficient support in terms of its practical implementation in local ECE settings. This finding underscores the need to closely scrutinise a play-based curriculum in terms of the uniqueness of the HK ECE context. In addition, the implications of this research for the wider Asia-Pacific region are discussed.

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## Introduction

The significant role of play in early childhood education (ECE) is acknowledged globally. While play has been viewed as the *business of childhood* or a *way of learning*, it remains a matter of discussion as to whether stakeholders can utilise it to optimise children's early development as well as academic learning. In Hong Kong (HK), where the educational system is highly academic and examination-oriented, the Education Bureau values and promotes a play-based curriculum in kindergartens (i.e., ECE settings for children aged 3 to 6 years). The Kindergarten Curriculum Guide (Curriculum Development Council, 2017) particularly highlights the value of *learning through play* for children's holistic development (e.g., Karupiah, 2020; Rodriguez-Meehan, 2020; Siu & Keung, 2022). However, research has indicated that factors such as kindergarten teachers' insufficient knowledge and sometimes misinformed views about play-based learning hinder the successful implementation of a play-based curriculum (Fung, 2007; Fung & Cheng, 2011; Fung & Lam, 2008). Therefore, it is important to understand how pre- and in-service ECE professionals perceive a play-based curriculum, as teachers' beliefs directly influence their decision-making and curricular practice. However, prior research has predominantly focused on the views of parents and in-service teachers regarding a play-based curriculum for children's academic learning, leaving pre-service kindergarten teachers' perceptions of teaching children academic knowledge through play largely unexplored. This study aims to address this knowledge gap.

## International Perspectives on Children's Play and Academic Learning

The United Nations Convention on the Rights of the Child (UNCRC) states that every child has the

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right to play (United Nations Children's Fund [UNICEF], 1989). In recent decades, scholars around the globe have generated ample evidence indicating that play, as a learning vehicle for learning, is shaped by distinct pedagogical, sociocultural, and contextual factors (Rogers, 2010).

In the United Kingdom (UK), Scott-McKie and Campbell's (2019) study examined a capabilities approach in Scotland. The study revealed that when children's play is voluntary and flexible, with a focus on the means rather than the ends, it can facilitate children's academic learning. More importantly, the authors demonstrated that play supports the early development of autonomy, affiliation, and practical reasoning. Similarly, the studies of McNair et al. (2019) and Molinari et al. (2017) underscored the developmental benefits and power of children's self-directed play within self-chosen play spaces.

At the government level, the Scottish government has incorporated play into its early education policymaking. Policymakers have launched relevant policies (e.g., the National Play Strategy for Scotland) aiming to promote the importance of play in strengthening children's holistic growth, rather than focusing on children's academic achievements alone. The Scottish government has also reinforced the significance of children's play by embedding the commitment to play stipulated in the UNCRC into a Scottish law of 2021 (Scottish Government, 2019). This can be seen as a national response to the global discourse of play-based pedagogies in ECE.

In addition to the UK, Australia highly values play-based learning for children's holistic development. Since 2010, a series of educational reforms has advocated the inclusion of play-based pedagogies in ECE settings. The implementation of the National Quality Standard (NQS) has also led to an overall pedagogical shift from a didactic and structured approach to a more child-centred approach (Jay & Knaus, 2018). As a result, ECE practitioners and educators across Australia have begun placing more value on play as a fundamental right of children, with the implication that ECE programmes should be based on developmental appropriateness and children's interests and delivered through play-based pedagogies (Hesterman & Targowska, 2020; Pascoe & Brennan, 2017).

Aside from Western societies, play-based learning has gained substantial popularity in Asian ECE contexts. In Malaysia, the National Preschool Standard Curriculum emphasises play-based learning as one of the key endeavours for fostering children's critical-thinking, creativity, problem-solving, and leadership skills (Malaysian Ministry of Education, 2017). The Malaysian government believes that children should have the opportunity to learn in a safe, joyful, and meaningful environment through their most natural behaviours and intuitions. Therefore, ECE settings in Malaysia are encouraged to provide children with three sessions of free-play time each week (20 minutes per session). However, Aquino et al. (2017) found that despite the government's promotion of play-based learning, Malaysian ECE teachers still face challenges associated with insufficient teaching materials and parents' results-oriented expectations.

In China, educational reforms since 2010 have also advocated play-based learning on a nationwide scale, but the effectiveness of promoting a play-based curriculum in ECE settings has met many practical challenges. For example, Wang and Lam's (2017) research found that while Chinese ECE teachers demonstrated positive beliefs towards play-based learning for facilitating children's development, their teaching practice did not mirror their stated beliefs. Instead, teachers tended to adopt authoritarian roles, learning content, and activities, as well as strictly following the prescribed curriculum.

Regarding this belief-practice gap in Asian contexts, Fung and Cheng (2011) argued that in addition to traditional teacher beliefs, the results-oriented culture and school and parental factors have contributed to the various difficulties in implementing play-based learning. Although the value of play for children's development has been widely accepted, it appears that many practitioners are reluctant or unable to translate their beliefs into classroom practices. Therefore, it is necessary for ECE stakeholders to facilitate children's play in a strategic and coherent manner (McKendrick, 2019a; 2019b).

As discussed above, play-based learning is perceived and practised differently in different cultures and countries. However, there remains a lack of research conducted in HK, a unique Asian society, regarding how play-based learning is perceived by local ECE stakeholders. Therefore, this study aims to

explore pre-service teachers' beliefs about play-based learning in the HK ECE context.

### **ECE Teachers' Beliefs About Playing and Learning**

Bubikova-Moan et al.'s (2019) systematic review indicated that ECE in-service teachers hold varying perspectives regarding the conceptual compatibility between play and learning for children's development. On the one hand, some ECE teachers express how play and learning are inherently linked, with learning being a product of play. On the other hand, some ECE teachers see the combination of play and learning as forming an *integrated lesson* (Moon & Reifel, 2008). In Fesseha and Pyle's (2016) study, kindergarten teachers demonstrated positive perspectives regarding children's play-based learning, yet more than half of the participants expressed that there is a complete separation between the enactment of play and children's learning in the ECE setting.

According to Baker (2014), there is a gap and disconnection between the positive beliefs of student teachers and their authentic practices in kindergarten settings. Moreover, Cheng (2012) investigated the contradictory perspectives between pre-service teachers' play beliefs acquired in teacher training programmes and the practical situations that they experienced in their practice. This research indicated that while pre-service teachers held positive beliefs about play as the most desirable learning mode for children's holistic development, the constraints of reality, such as the results-oriented education system and Chinese parents' traditional perspectives on play, could be obstacles to enacting these beliefs in practice.

Furthermore, Cheng (2012) pointed out that while student teachers held positive beliefs regarding children's play, their pedagogical knowledge of play-based learning gained from teacher training programmes was superficial and disconnected from practice, resulting in teachers' low self-efficacy in overcoming the practical challenges. Moreover, Keung and Fung (2020) suggested that the teaching environment is a crucial factor affecting the interactions among teachers' pedagogical content knowledge (PCK), pedagogical perceptions, and authentic practices, which interact to shape teachers' curricular practices and create promising learning experiences.

In sum, prior research has predominantly examined parents' and in-service teachers' perspectives on play and pedagogy in the field of ECE (e.g., Pyle et al., 2018; Vogt et al., 2018; Wu et al., 2018). By comparison, pre-service teachers' beliefs about implementing play-based learning have remained largely unaddressed, particularly in Asian contexts.

### **A Play-Based Curriculum in the HK ECE Context**

In the HK higher education sector, the notion of globalisation has been a key element over the last decade as it has attempted to maintain its world-class status (Fok, 2007). As Li and Chen (2023) stated, the globalisation of the early childhood curriculum (ECC) is not a recent occurrence, as there have been various instances in which progressive curriculum models from the West have become popularised in the East. Nevertheless, the more recent phase of globalisation of the ECC has significantly influenced Asian societies in their respective ECC reforms, leading them to embrace Western discourses, values, and ideologies. Such influences are evident in the higher education sector, and many HK educational institutions offering ECE programmes have incorporated play-based pedagogies in pre-service teacher training programmes. For example, the Chinese University of Hong Kong (CUHK) (2023) has incorporated a three-unit course related to children's play-based learning in its curriculum framework for the undergraduate ECE programme. Meanwhile, the Education University of Hong Kong (EdUHK) has designed relevant programmes to provide pre-service teachers with a comprehensive understanding of early childhood development and education that emphasises children's play-based learning (Department of Early Childhood Education, 2023). These programme designs indicate that HK pre-service ECE teachers are expected to acquire relevant knowledge and skills regarding play-based pedagogies. However, there is a paucity of research exploring the challenges faced by pre-service teachers when bringing their beliefs about play-based learning to ECE settings.

In the HK ECE sector, the concept of learning through play has been adopted and enunciated as a

key principle since 1986 (Hong Kong Government, 1986). In 2017, the HK Kindergarten Education Curriculum Guide (Curriculum Development Council, 2017) reiterated the beneficial and significant role of play for children's holistic development. The Education Bureau encourages kindergartens to adopt play-based pedagogies and requires all relevant parties to provide children with opportunities and desirable environments to learn through play. These educational reforms have brought about a paradigm shift for ECE practitioners, contributing to the many challenges they face (Yin et al., 2021). Therefore, it is important to empirically investigate whether and how this shift is reflected in HK pre-service ECE teachers' beliefs and practices.

### **Theoretical Framework**

To explore student teachers' perspectives on learning through play in the context of HK kindergartens, we adopted Urie Bronfenbrenner's (1994) ecological system theory (EST) as the theoretical framework for this study. According to EST, the reciprocal interactions between individuals and their environments shape individuals' development. This theory proposes that an individual's development is influenced by a layered and interconnected system that includes the microsystem, the mesosystem, the exosystem, and the macrosystem. EST emphasises the interplay among personal factors, behaviours, and the surrounding environment.

In applying EST to the present study, the microsystem explains how student teachers' play perspectives are developed and influenced through their immediate classroom environment, which includes their interactions with peers, mentors, and the instructional methods they learnt in training programmes. The mesosystem highlights the intricate connections between student teachers' educational settings and their perspectives on children's play-based learning. The exosystem examines the external factors that create certain constraints for teachers, such as parental and community expectations regarding children's play and learning, educational policies, and the structural resources available in kindergartens. Finally, the macrosystem considers how the predominant ideologies, cultural values, and beliefs about children's play and academic learning influence the acceptance of a play-based curriculum. Therefore, by adopting EST, this study aims to comprehensively elucidate the intricate network of factors that influence student teachers' perspectives and practices regarding the implementation of children's play-based learning in HK kindergartens.

### **The Present Study**

The purpose of this study is twofold. First, it aims to explore HK student teachers' perceptions of a play-based curriculum for children's academic learning. Second, it seeks to explore the constraints and challenges that ECE students encounter when implementing a play-based curriculum to nurture children's academic learning in HK kindergartens. Specifically, this study is led by two research questions (RQs):

RQ1) What are HK pre-service kindergarten teachers' perspectives on adopting a play-based curriculum to facilitate children's academic learning?

RQ2) What are HK pre-service teachers' perceived constraints and challenges in implementing a play-based curriculum in HK kindergartens?

## **Method**

### **Research Design**

This study employed an explanatory sequential mixed-methods research design to enable comprehensive data triangulation (Ivankova et al., 2005; Klassen et al., 2012). The research procedure consisted of two phases. In the first phase, to address RQ1, we adopted a quantitative survey – the Play Belief Survey (PBS) – to specifically collect student teachers' perspectives on implementing a play-based curriculum to facilitate children's academic learning. An online quantitative survey was adopted, as it was easily accessible, allowing the researchers to distribute it to a large number of potential participants in order to ensure an adequate level of generalisability of the findings (Fowler Jr, 2013). In the second phase, to

address RQ2, we selected student teachers from the survey sample for participation in a focus group interview, with the aim of acquiring qualitative data to glean deeper insights into their play beliefs and understand their perceived constraints and challenges when implementing a play-based curriculum in HK kindergartens. The focus group interview was conducted as a supplement to support the survey data, allowing the researchers to understand within a conversational setting how the teachers' ideas, positions, and challenges regarding children's play-based learning were implemented (Rabiee, 2004).

## **Participants**

Purposive sampling was adopted in this study, which took place during the outbreak of COVID-19, specifically November–December 2022. According to Palinkas et al. (2015) and Patton (2014), purposive sampling is widely used in qualitative research as a technique to identify and select potential individuals or groups of interested participants who are knowledgeable about certain topics and/or have relevant experiences related to the phenomenon of interest. It emphasises the availability and willingness of participants and their ability to contribute and communicate their relevant experiences and opinions (Bernard, 2018; Spradley, 2016).

Therefore, to recruit the 200 participants for the quantitative survey phase, we sent the survey in Google Forms to the instructors of relevant teacher education institutions (see the Play Belief Survey section below for details). We specifically targeted students majoring in ECE, inviting them to participate and provide their perspectives on implementing a play-based curriculum for children's academic learning. Participants who met the eligibility criteria were individuals who were pre-service teachers, were currently enrolled in an ECE programme at a recognised higher educational institute in HK, had studied play-based pedagogies or relevant subjects, and had successfully completed a teaching practicum. In the qualitative phase, six participants were selected from the survey sample based on the play belief scores they obtained in the survey (see the Focus Group Interview section below for details). As it was the peak season of the academic semester, only one focus group with six participants was conducted. The entire interview lasted for 100 minutes. Five participants completed the entire interview, and one participant left after one hour of the interview due to a teaching commitment.

## **Data Collection**

### *Play Belief Survey (PBS)*

The PBS used in this study was adapted from the work of Clevenger (2016), Yin et al. (2011), and Head Start (2006). The first section of the survey collected demographic information from the participants (e.g., gender, age, academic qualifications, years of teaching, and the age group of the children taught). The second section aimed to explore teachers' perspectives on utilising play-based approaches in their teaching. It contained 11 items in total: seven items drawn from Clevenger's (2016) work and four items drawn from Yin et al.'s work (2011). The third section of the survey consisted of eight items drawn from Head Start (2006), which examined teachers' perspectives on using play-based approaches to facilitate children's academic learning. All 19 items from both Section 1 and Section 2 were rated using a Likert scale ranging from "Not important" (1) to "Very important" (4) or "Strongly disagree" (1) to "Strongly agree" (4).

Concerning the validity and reliability, multiple steps were taken to ensure the soundness of the instruments. The internal consistency of the adopted instrument was assessed using Cronbach's alpha. For the current study, Cronbach's alpha reached an acceptable level of 0.77, indicating good internal consistency for the survey. This suggested that the items within the scale were reliably measuring the intended construct.

### *Focus Group Interview*

A focus group was conducted to collect more in-depth qualitative data about the student teachers' play beliefs and to explore their perceived constraints and challenges when implementing a play-based curriculum in HK kindergartens. Six participants who obtained the highest differences in score between the play belief items and the behavioural intention items in the survey were selected

to take part in the interview. An interview protocol was developed based on a descriptive analysis of the participants' survey results and findings from the existing literature (e.g., Keung & Cheung, 2019). Before conducting the interview, the protocol draft was reviewed by the experts in ECE. During the interview, the researcher prompted questions related to the participants' survey results. Based on the interview protocol, the participants were asked about their understanding of play, their observations of children's play experiences in kindergarten classroom settings, the perceived benefits and disadvantages of play, and the challenges, constraints, and anticipated obstacles when implementing play-based learning in the kindergarten setting in HK. The interview was conducted in Cantonese via Zoom and lasted for 100 minutes. It was audio recorded, and a transcript was generated.

### **Data Analysis**

For the quantitative analysis, descriptive statistics were calculated, including means, modes, medians, and standard deviations of the survey items. These descriptive data served as a foundation, providing the researchers with an overview of the student teachers' perceived play beliefs and their views on children's academic learning. The coding software NVivo was used to determine the initial codes for the survey items. The initial codes were re-examined and compared with one another, creating new higher-order codes in response to RQ1 (what are HK pre-service kindergarten teachers' perspectives on adopting a play-based curriculum to facilitate children's academic learning?). Any disagreements that occurred during the coding process were resolved by holding meetings between the first author and the second author, who is an expert in the field of ECE studies.

Based on the coding analysis of the survey items, the HK pre-service kindergarten teachers' perspectives on play-based pedagogy for children's academic learning were grouped into three themes: 1) pre-service teachers' play beliefs (PB), 2) pre-service teachers' practical knowledge (PK), and 3) pre-service teachers' behavioural intentions (BI). The categorisation of the survey items was informed by the existing literature aiming to investigate ECE teachers' beliefs regarding children's play-based learning and play pedagogy (e.g., Bennett et al., 1997; Clevenger, 2016; Jung et al., 2016).

Survey items that highlighted student teachers' beliefs and attitudes regarding the importance of play for children's learning were grouped in the PB category. For example, items such as PB1 and PB9 were categorised here because they directly addressed the participants' beliefs about the role of play for children's academic development. Items in the PK category underscored the student teachers' understanding of the effective implementation and incorporation of play into their teaching practices. Items such as PK1 and PK2 were included because they reflected the teachers' practical implementation of a play-based pedagogy in the classroom settings. Finally, items in the BI category captured the student teachers' willingness and intention to promote and implement a play-based pedagogy in their authentic educational settings. For instance, items BI1, BI3, and BI4 directly demonstrated the participants' proactive stances towards the notion of incorporating play into their instructional practices.

For the qualitative analysis, a verbal transcript was created corresponding to the audio recording of the focus group interview. Similar to the quantitative analysis process, the qualitative data drawn from the interview was openly coded by the first author through NVivo to determine the initial codes. The initial codes of the interview data were re-examined and compared with one another, creating new higher-order codes in response to RQ2 (i.e., what are HK pre-service teachers' perceived challenges and constraints in implementing a play-based curriculum in HK kindergartens?).

Both the first and second authors discussed the coding analysis to ensure that the codes effectively reflected the interview data. Based on the coding analysis of the interview, the HK pre-service kindergarten teachers' perceived challenges and constraints in implementing a play-based curriculum in HK kindergartens were primarily structural obstacles, such as the academically packed kindergarten curriculum, time constraints, inadequate classroom resources, children's aggressive behaviours, and the predominant parental beliefs. These categorisations were drawn based on the frameworks of prior research endeavours that explored the incorporation of play-based pedagogies for children's academic development as well as systemic instructional challenges in kindergarten classrooms (e.g., Adcock & Patton, 2001; Lam,

2018).

The coding of interview responses was aligned with the previously identified themes from the quantitative analysis, which further enriched the understanding of the survey findings. For instance, the structural obstacles that were identified in the qualitative data – the academically packed kindergarten curriculum and time constraints – were connected to the quantitative findings regarding the pre-service teachers' PB and PK. This complementary approach enhanced the validity of the results and allowed for a more comprehensive perspective on the challenges faced by pre-service teachers (e.g., Clevenger, 2016; Lam, 2018).

### Findings

In response to RQ1 concerning the pre-service ECE teachers' play beliefs, as Table 1 demonstrates, a high proportion of the participants held positive beliefs about utilising play-based approaches to develop children's academic learning. They believed that play skills are significant, as they have a positive influence on children's holistic development (problem-solving skills, academic skills, etc.). For the items "how important is play in the kindergarten classroom?" and "I do not think children learn important skills by play," the mean scores were 3.77 and 1.92 out of 4, which showed that a sizeable group of respondents agreed that it is important that play should be adopted in the kindergarten setting and that children's play helps children acquire significant developmental skills that contribute to their academic learning. Moreover, the respondents expressed that it is crucial for parents to spend time playing with their children. For the items "I do not think it is important for parents to play with their children" and "play does not help children learn academic skills," the mean scores were just 1.48 and 1.83, respectively.

**Table 1**

*Theme 1 – Items on Collecting Pre-Service Teachers' Play Beliefs (PB)*

Items	Mean	Mode	Median	Standard Deviation
PB1). How important is play in the kindergarten classroom?	3.77	4	4	0.52
PB2). It is ___ for kindergarten children to play rather than to complete activities such as workbooks, worksheets, and similar activities during the school day.	3.11	3	3	0.38
PB3). It is ___ for kindergarten children to complete activities such as workbooks, worksheets, and similar activities rather than to play during the day.	2.91	3	3	0.53
PB4). I do not think children learn important skills by playing.	1.92	2	2	0.43
PB5). Reading to children is more worthwhile than playing with them.	2.83	3	3	0.45
PB6). Play does not influence children's ability to solve problems.	1.9	2	2	0.38
PB7). It is ___ for children to have good academic skills rather than to play well with others.	3.14	3	3	0.87
PB8). I do not think it is important for parents to play with their children.	1.48	1	1	0.53
PB9). Play does not help children learn academic skills.	1.83	2	2	0.45

Moreover, the qualitative data drawn from the focus group interview supported the qualitative results of the survey, revealing that the participants held strong beliefs about utilising play as a pedagogic tool for facilitating children's holistic development and valued it as an effective means to introduce new academic concepts to children. When the six participants responded to a question on how to integrate play in kindergarten, three commented that they designed play materials and games in every corner of the classroom according to the learning theme of the month. The purpose was to encourage children's free play with the resources. The participants also indicated that through their practicum, they realised that when children are allowed to play freely, they are engaged and are likely to gain knowledge about the new learning content. The following excerpts demonstrated this point:

In my practicum, teachers in the school will change the classroom setting according to their learning themes. They will make relevant play materials and sometimes include ready-made toys in the classroom for children to play with, so children can do activities that are related to the learning themes during playtime. This is different from having a lesson with the teacher. (Pre-service teacher 1; Tina)

I also agree with what Tina just said, as I think it is important to provide children with a pleasant and playful environment to boost their interest about new concepts that they need to learn. (Pre-service teacher 2; Santy)

Exactly! As I am a part-time play-group teacher, I also realise that if we give children relevant play materials to play with before the lesson, whether in a free-play manner or a guided-play manner, they are more able to learn relevant keywords and ideas during the lesson even if that is the first time they learn the theme. That is quite surprising to me. (Pre-service teacher 3; Crystal)

Table 2 presents how the pre-service ECE teachers demonstrated a relatively high level of practical knowledge about children's play. They scored 3.83, 3.51, and 3.18 out of 4, respectively, when asked to rate the level of importance of providing diverse play materials to support children's play, planning sufficient time for play, and ensuring extended outdoor play for kindergarten children to support their developmental needs. However, the results also revealed that even though the respondents held positive play beliefs, a notable number of them agreed that they would not prioritise play in their classrooms in the future. The item asking whether "playtime is a priority in my classroom" received a mean score of just 2.75 out of 4, a noticeable difference when compared to the previous items.

**Table 2**

*Theme 2 – Items on Collecting Pre-Service Teachers' Practical Knowledge (PK)*

Items	Mean	Median	Mode	Standard Deviation
PK1). It is ___ for kindergarten teachers to provide a variety of materials to support children's play.	3.83	4	4	0.45
PK2). It is ___ for kindergarten teachers to plan extended periods of time for children to engage in play.	3.51	4	4	0.55
PK3). It is ___ that kindergarten children have extended periods of outdoor play.	3.18	3	3	0.44
PK4). I would rather read to children than play together with them.	1.99	2	2	0.35
PK5). Playtime is a priority in my classroom.	2.75	3	3	0.60

In the focus group, when the participants were asked if they had encountered any challenges when incorporating play in the kindergarten curriculum, they expressed that it was challenging to strike a balance between allowing children's play and fulfilling parents' expectations. Even though all the participants understood the benefits of play for children's holistic development, they still needed to cater for parents' high expectations regarding their children's academic learning. This being the case, the participants expressed that it was sometimes necessary to include some didactic content in their teaching in order to equip children with the knowledge and skills for future learning. Moreover, they indicated that parents with high expectations concerning their children's academic learning were often impatient regarding their children's gradual improvement, as they preferred to witness their children's immediate improvement through tangible tasks. Such predominant parental beliefs greatly hindered the teachers' confidence in turning their play beliefs into authentic classroom practices:

I wholeheartedly agree that play is good for children's development, no matter whether for their daily growth or academic learning, and I can tell that play is important to children too. But we are living and studying in HK, such a results-driven city, where it is normal for parents to have such high expectations of their children, so I think it is understandable that some schools are still integrating didactic and traditional teaching methods and content in their curriculum. (Pre-service teacher 4; May)

I think we can all relate when you talk about how hard it is to balance children's play and parents' expectations. To me, I even consider it the biggest challenge for teachers to implement play, as many parents often set high hopes for their children's academic success and always think that children should win from the starting line. Regarding this, I admit that play is good for children' holistic development, but this is on the premise that the parents are patient enough to wait for their children's gradual improvement rather than believing that children should manifest significant improvement once they are involved in play. (Pre-service teacher 5; Jennifer)

Indeed, parents who have high expectations for children's academic learning are often impatient to understand how children can be improved through the play process, while they still believe that using tangible tasks like worksheets and homework is the ultimate means to see children's improvement. Such beliefs hinder teachers from putting their play beliefs into practice in the classroom, despite our recognition of the role of play for children. (Pre-service teacher 3; Crystal)



Theme 3 identifies the pre-service kindergarten teachers' behavioural intentions. In comparison to the responses shown in Tables 1 and 2, Table 3 reveals that the pre-service teachers were less confident in putting play-based pedagogy into practice. This was evident in their responses to items BI1, BI2, BI3, and BI4, for which the participants received mean scores of just 2.25, 2.69, 2.28, and 2.95 out of 4, respectively.

**Table 3**

*Theme 3 – Items on Collecting Pre-Service Teachers' Behavioural Intentions (BI)*

Items	Mean	Median	Mode	Standard Deviation
BI1). I actively and openly support the implementation of play in this school.	2.25	2	2	0.65
BI2). I agree with the idea of implementing play in this school.	2.69	3	3	0.63
BI3). I will propose the implementation of play in my behaviour and communication with other teachers.	2.28	2	2	0.59
BI4). I will tell my colleagues that play can be feasibly implemented in this school.	2.95	3	3	0.41

The data drawn from the focus group interview lent support to the above-mentioned findings regarding the pre-service teachers' behavioural intentions. For instance, when asked to describe how confident they were in their ability to facilitate children's learning through play, the participants stated that parents do not prefer teachers to use play and toys in the classroom. Moreover, most participants reckoned that meeting parents' expectations increased their confidence in teaching. They went on to comment that as novice ECE teachers, they usually did not feel confident enough to challenge parents' expectations and desires. Moreover, they expressed their apprehension about children manifesting only minimal but not obvious improvements through play. This hindered their willingness to implement play in the classroom, as it made it difficult for them to convincingly demonstrate to parents and senior teachers the effectiveness of play on children's learning. This was evident in the following teachers' comments:

To be honest, we are all fresh to the kindergarten; it is quite luxurious for us to carry out our beliefs in the classroom, irrespective of how strong our beliefs are. I would say my main goal is to meet parents' expectations, in order to gain parents' trust. (Pre-service teacher 5; Jennifer)

As a novice teacher, I often feel like I'm walking a tightrope. I want to communicate to parents and senior teachers that play can be effectively used, but I worry that they won't see its value and outcomes. So, I find myself proposing more structured activities instead. (Pre-service teacher 2; Santy)

I want to support the implementation of play, but no matter how positive my play belief is, I can honestly say that I will prioritise first aligning myself with what parents expect. I think unless I can evidently show them how play can lead to children's learning outcomes, I don't have the confidence to take the initiative to promote play as a tool for children's academic learning. As it is hard to guarantee. (Pre-service teacher 6; Connie)

### **ECE Pre-Service Teachers' Perceived Challenges and Constraints**

In response to RQ2, which aimed to explore the pre-service teachers' perceived constraints and challenges in implementing a play-based curriculum in HK kindergartens, five themes were identified in the analysis of the qualitative data. These five themes were regarded as structural constraints, namely the kindergarten curriculum, time constraints, limited classroom resources, children's behaviours, and parental beliefs.

#### ***Structural Constraints***

***Kindergarten Curriculum.*** The participants indicated that the major challenge of utilising a play-based pedagogy for children's development was the kindergarten curriculum. The majority of HK kindergartens follow a half-day schedule with three hours of school time and provide classes for upper-kindergarten, lower-kindergarten, and nursery levels, with only a few kindergartens offering full-day classes. Moreover, within the regular half day of school, kindergarten teachers are expected to nurture children's holistic development in five domains: ethics, intellect, physique, social skills, and aesthetics (Education Bureau, 2023). The intense school curriculum and packed daily schedules in kindergartens meant that it was stressful for all the participants to allocate a designated time slot for children to engage in play activities on regular school days. Instead, the school simply extended the daily gross motor activity

time to include children's free play. Additionally, the participants mentioned that insufficient classroom resources acted as another major obstacle:

During my practicum, I observed that for most of the school day, children don't really have a designated period of playtime or free-play time. Rather, the teacher will add a short period of time, like around 15 minutes, for children to play freely after the gross motor activity. (Pre-service teacher 1; Tina)

At my internship kindergarten, the teachers said there was large-scale funding allocated to purchasing those virtual materials for developing children's STEM education. But the school did not put much emphasis on regular play materials. Teachers themselves have to create play materials with both their self-collected recyclable materials and handcraft materials for children based on different learning units. (Pre-service teacher 4; May)

Even though the mentor from teacher training always states that the latest ECE curriculum guide from the government emphasises the concept of having children learn through play, what I saw in the real kindergarten setting during my practicum was quite different. Their daily classroom routine is always tight, which means that the teacher even needs to ask students to take turns sitting in a group to finish classwork while the rest are having their free-play time. This classwork is usually Chinese and English handwriting drilling or a math worksheet. (Pre-service teacher 6; Connie)

**Time Constraints.** Three participants mentioned that there were only three hours for the regular school day, including the time for dealing with housekeeping and administrative affairs, snack time, and toilet time. Moreover, teachers are required to provide children with learning experiences in six learning areas (physical fitness and health, language, early childhood mathematics, nature and living, self and society, and arts and creativity), for which teachers should ensure that the learning encompasses three essential components (values and attitudes, skills, and knowledge) in order to facilitate the comprehensive and balanced growth of children (Curriculum Development Council, 2017). Additionally, kindergarten teachers are required to record, evaluate, and report on children's learning and developmental outcomes, and they barely have extra time to engage children in play activities. As Santy and Tina indicated, it was challenging to accomplish the above responsibilities by only observing children's play, as this meant that there would be a lack of evidence proving whether the children had met the general milestones. Given the tremendous workload and many teaching tasks to be included in the daily routine, the participants used the term "luxury" when describing the difficulties of arranging a regular designated timeslot for children to play freely:

I think we should stick to the reality when talking about the packed schedule of school and the kindergarten curriculum. The Educational Bureau requires teachers to cover all six learning domains in children's study and to evaluate how they learn. There are only about three hours on each school day, including the time that we have to spend on dealing with miscellaneous affairs. It is indeed a luxury for us to arrange an extended period of time for children to engage in playful activities or even free play. (Pre-service teacher 2; Santy)

Don't forget that we also need to make a student portfolio for each child, in which we have to include not just our comments about their learning performances but also a record of their schoolwork, like worksheets, pictures of their artworks, and many more. If we don't urge them to finish all these tasks, how can we have enough resources to put into their portfolios? (Pre-service teacher 1; Tina)

**Lack of Classroom Resources.** The insufficient classroom resources were found to be another constraint. This mainly included the limited play materials due to a lack of funding, as well as the noise control regulations for not disturbing the adjacent classes.

Due to the lack of clear partitions, the participants observed challenges faced by teachers in facilitating children's free play in HK kindergartens. Jennifer stated that teachers needed to constantly remind students to manage their voices and behaviours in order to avoid disturbing the adjacent classes. This highlighted the difficulties in maintaining an environment conducive to children's free play in an authentic kindergarten in HK. The participants also emphasised that it was difficult for teachers to purchase play materials for each classroom. Instead, the kindergarten expected teachers to design play materials based on each learning theme. May stated that teachers were responsible for ensuring that all the play materials in the classroom were up to date and corresponded to the current learning unit of the curriculum. Furthermore, Crystal pointed out that play materials could be worn out due to daily usage or children's misbehaviour. Therefore, teachers needed to spend extra time recreating the play materials for children.

From my latest internship experience, I can see how the teacher is struggling when trying to allow for children's free play. Since there's no clear partition between classrooms, the school only uses tall boards as classroom dividers, and teachers always need to remind children to control their voices and behaviours during their playtime in order to ensure that the adjacent class won't be disturbed. (Pre-service teacher 5; Jennifer)

My mentor from the practicum school shared with me that they have to keep the play materials updated whenever there is a change in the learning theme. To this, they said they are not just required to buy already-made materials with the limited funding, but also to use recyclable and craft materials to create play materials for the play corners in the classroom. (Pre-service teacher 4; May)

I think that even if teachers are willing to take the responsibility of updating and creating the play materials, we still cannot avoid the reality that the materials will wear out from daily use or be ruined by some naughty children. (Pre-service teacher 3; Crystal)

**Children's Behaviour.** Children's behaviours acted as another constraint impeding the implementation of play-based learning. Challenges usually arose when some children demonstrated dominating personalities in the group play. These children tended to assume the role of leaders and take control of the toys and materials. Meanwhile, other children might feel shy or even scared to ask for their turn and for opportunities to use the toys. The participants mentioned that teachers needed to respond to such situations by supervising the usage of toys and arranging a time slot for each child to use the toys to ensure fair opportunities for each child. Moreover, Crystal indicated that some teachers grouped children based on their temperaments and personalities to ensure that every child had the chance to play:

I can recall that a class teacher that I've worked with would try to split children into groups to play, since the class teacher said that each of them has different tempers. It wouldn't work to allow all the extrovert and aggressive children to play together; in that case, battles would happen. (Pre-service teacher 3; Crystal)

In addition, Connie and Jennifer mentioned that the free-play time might turn out to be more chaotic if children with aggressive behaviours interacted with children with special educational needs (SEN), as the former might not understand and use inappropriate approaches to interact with children with SEN:

I still remember that at my internship school, there were three SEN students in my class – one of them suffered from autism and the other two suffered from ADHD. Their aggressive behaviours often dominate the class activities, and other children in the class usually don't like to play with them, as they can't control their temper and dominant behaviours when they try to get along with others. (Pre-service teacher 6; Connie)

I think it is even harder for us to handle when it comes to situations where both aggressive children and SEN children stay in the same classroom. Typically, normal children might not know how to deal with SEN children, which we can't blame them for. As a result, they might sometimes say something inappropriate that may irritate SEN children. (Pre-service teacher 5; Jennifer)

**Parental Beliefs.** Parental beliefs were another major challenge perceived by the teachers. All agreed that HK parents' overall negative attitudes towards play-based learning were a major challenge that they might need to deal with. On the one hand, the participants expressed how HK parents were somehow reluctant to embrace the term *play*. Instead, most parents viewed play as just entertainment that contradicted their expectations for children to be academically successful. Tina and Santy indicated that they would choose to use the expressions *learning activity* and *free exploration* to report to parents on the school performance of their children, as parents preferred hearing the word *learn* rather than *play*. On the other hand, the participants expressed their understanding regarding the predominant parental beliefs and the expectations concerning children's learning at school.

For me, I think most HK parents are blindly holding high expectations of their children's academic performance. Most parents prioritise academic learning over children's play and even neglect the true abilities and interests of their children. As a teacher, it would be better and safer for us to use wordings that meet parents' expectations when communicating with them, such as using the word "activity time" to replace "playtime." (Pre-service teacher 1; Tina)

I think despite parents' acknowledgment of the role of play for children's development, they rather expect children to be fully dedicated to learning during school time, with playtime offered after school. But not the other way around and not simply playing both in school and outside the school. Therefore, I think it is understandable why parents expect their children to learn instead of play at school. Therefore, in order to make parents feel assured, I think I will use phrases like "learning activity" and "free exploration" rather than words like "games" or "free play" when reporting to parents. (Pre-service teacher 2; Santy)

It's true, to be honest, and even if I were a parent, I would acknowledge the role of play for children's all-round

development, , but I still think that a certain level of traditional teaching is essential to ensure the input of some foundational academic concepts. (Pre-service teacher 3; Crystal)

The participants also revealed that although most young parents had accepted the value of play in children's early learning and development, they still tended to prioritise children's learning over their free-play time. For example, May mentioned that during her practicum, parents arranged a series of after-school activities for children to attend every day and even on weekends, which targeted academic purposes. This tendency of parents posed constraints on teachers seeking to nurture children through the means of play, as these parental beliefs led to the organisation of numerous inter- and after-school activities with an academic focus. Consequently, the teachers encountered challenges in promoting and incorporating sufficient play opportunities within the educational framework:

I would say that although parents nowadays are more open to the idea of children's play, they still tend to prioritise academic-focused extracurricular activities for children outside school time. For example, I know that some children from my practicum school need to attend classes like phonics and pinyin classes, coding, and even mathematical computational thinking classes after school or on the weekend. (Pre-service teacher 4; May)

Not only are there some learning centres that offer academic-focused programmes for parents' choice; I know that some schools would also provide academic-wise after-school activities (ASA) for children to join after the regular school day or even hold these activities during their summer holiday. (Pre-service teacher; Connie)

## Discussion

It is important for all ECE stakeholders to recognise and understand pre-service teachers' perspectives on professional work. Such an understanding serves as the basis for preparing them to be well-informed, competent, and confident educators in the future. The present study set out to obtain knowledge about HK pre-service ECE teachers' perspectives on implementing a play-based curriculum in kindergartens, including the perceived difficulties and challenges. The quantitative analysis of this study revealed that HK pre-service ECE teachers generally held positive beliefs regarding a play-based curriculum, believing in and acknowledging the benefits of play in enhancing children's academic learning as well as their holistic development. This finding aligns with prior research reporting that ECE educators hold generally positive views about play-based learning (e.g., Bubikova-Moan et al., 2019; Cheng, 2012; Fung & Cheng, 2011). For instance, the systematic review of Bubikova-Moan et al. (2019) aimed to synthesise global research on ECE practitioners' perspectives on play-based learning, drawing from a meta-synthesis of 62 studies across 24 countries. The results underscored how despite teacher educators' recognition of children's play-based learning and their eagerness to implement a play pedagogy in practice, their efforts to integrate play-based learning into practice are hindered by policy and curricular concerns, parental beliefs, structural challenges, children's behaviours, and the lack of knowledge and skills necessary for applying a play pedagogy in authentic educational settings. The findings regarding teachers' paradoxical play beliefs align with the results of the present study, as both studies indicate that while teachers generally acknowledge play-based learning as beneficial for children's development, they are hesitant and less confident in applying their pedagogical knowledge of play in practice when faced with the aforementioned challenges. Surprisingly, Bubikova-Moan et al. (2019) also pointed out that peer pressure is another notable challenge that emerges within ECE communities. They stated that teachers are generally reluctant to participate in collegial discussions about the benefits of play, especially in environments with rigid ECE curricula, highlighting the concerns of some teachers about being viewed as lazy for prioritising play-based pedagogy over direct and teacher-led activities that have more straightforward outcomes.

The present study discovered that while the pre-service teachers scored highly in their practical knowledge regarding children's play and demonstrated a strong tendency to believe that children's play could facilitate children's academic learning and holistic development, they scored relatively low in terms of their behavioural intentions toward practically translating their play beliefs into practice. This implies that there are hesitant mindsets among teachers when the notion of a play-based curriculum meets children's academic learning in the local context. This was also evident in the focus group interview, in which the participants used the word "luxury" to express how the idea of arranging an extended period of

time for free play is not realistic in HK kindergarten settings. This is mainly caused by various local contextual features, such as the results-oriented education system, the packed daily schedule, and the high parental expectations.

Furthermore, the participants stated their beliefs that children's play activities do not provide adequate evidence for teachers to explicitly record children's developmental performance; instead, they tended to believe that tangible evidence, such as children's artworks and worksheets, should be included in children's portfolios for parents to see their children's learning progress and outcomes. This finding aligns with Fesseha and Pyle's (2016) and Kim's (2004) research, in which the researchers found that teachers consider time as one of the major challenges for implementing play, while parents tend to believe that direct teaching methods are more effective for producing concrete proofs of children's academic development. Moreover, the findings of Fesseha and Pyle's study (2016), which aimed to investigate how teachers' perspectives influence their implementation of children's play-based learning in Ontario, showed that time constraints were the most common challenge among the teacher participants. The other 19 identified challenges included considerations of noise levels, the need to fulfil children's academic knowledge, and limited resources and support from kindergartens. These identified challenges align with the qualitative data collected in the present study. However, regarding the challenge of limited resources, the participants in Fesseha and Pyle's (2016) study highlighted the lack of teaching assistants and resource teachers who could provide assistance to teachers in large classes. They considered this lack a common challenge, while the pre-service teachers in our study did not mention this during the interview.

The findings of this study indicated that the HK ECE educators appeared to struggle in actualising the globally accepted play-based learning ideology in their local context. Although this finding may not seem to be completely new, it shows that even among the most recent generation of pre-service ECE teachers, the global-local and belief-practice gaps persist. In the HK Kindergarten Curriculum Guide (Curriculum Development Council, 2017), which is entitled "Joyful Learning Through Play: Balanced Development All the Way," it is clear that the local educational authority highly values play, emphasising the importance of creating a joyful learning environment that nurtures children's holistic development. However, this notion runs in the opposite direction to HK parents' expectations that the ECE stage should lay the foundations for children's future academic success; thus, play is considered less important.

In fact, the challenges faced by HK pre-service kindergarten teachers are similar to those faced by their counterparts in Mainland China. According to Li and Chen (2023), over the past decade, Chinese ECE policy documents have been heavily influenced by Western, particularly American progressive educational ideologies, and many curricula originating in the West have been introduced to China. However, educational practitioners still find it challenging to fully implement a Western-based early childhood curriculum due to various contextual and cultural constraints (Li et al., 2012; Tzuo, 2007).

### **Limitations, Conclusion, and Implications**

This study aimed to investigate HK pre-service kindergarten teachers' perspectives on utilising a play-based curriculum to facilitate children's academic development. The findings indicated that although the pre-service teachers held positive beliefs about and confidence in utilising play to enhance children's academic development, they faced many challenges when translating their beliefs into practice in their classrooms. Factors such as the kindergarten curriculum, children's behaviours, and parental beliefs were perceived as the main constraints that affected how the pre-service teachers implemented a play-based curriculum.

This research has a few limitations. First, the sample size was relatively small, which may have affected the generalisability of the findings to a larger population and, in turn, limited the representativeness of the target group and the external validity of the study. Future studies should aim to include a larger and more diverse sample size to enhance the generalisability of the findings. This could involve recruiting participants from multiple institutions or participants who have taken ECE training outside HK but intend to work in HK kindergartens. Second, teachers' teaching experiences may have

varied markedly due to the outbreak of COVID-19, and this could have affected how they responded to the interview questions in the focus group. Future studies are recommended to consider conducting longitudinal studies to examine changes in teachers over time, capturing, in particular, their transition from being pre-service teachers to being in-service teachers upon graduation. Additionally, it would be beneficial to explore whether their early beliefs align with their authentic practice. Third, this study employed descriptive analysis, which only summarises the data for a simple overview but does not explore the intricate relationships between variables, such as how parental beliefs influenced the teachers' implementation of a play-based curriculum. Finally, due to the student teachers' busy schedules during the academic semester, we conducted only one focus group interview with six teachers. Future studies may consider conducting more sessions of focus group interviews to glean more comprehensive qualitative data.

For the local educational authority, the findings of this study imply that local policymakers may have underestimated the gap between the globalised notion of play-based learning and the local contextual features. As a result, the belief–practice and policy–practice gaps put many ECE teachers, including pre-service teachers, in a challenging situation. Therefore, more practical teacher-supporting policies and mechanisms (funding, resources, staffing, etc.) should be put in place to allow teachers to incorporate play-based learning in ECE settings. It is also imperative to raise parents' awareness and knowledge of child development and establish strong family–kindergarten communication channels. Furthermore, for higher education providers, there is a need to develop more practice-relevant curriculum subjects to expose pre-service teachers to the local educational reality, prompting them to think critically about how to connect what they learn from textbooks to their future educational practice.

## Declarations

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**Authors' contributions:** TCYW conceived and designed the study, collected the data, performed the data analysis, and wrote the manuscript. SKYL (corresponding author) and LL (third author) acted as academic advisors, providing constructive feedback and guidance to improve the content and quality of the manuscript.

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## References

- Adcock, S. G., & Patton, M. M. (2001). Views of effective early childhood educators regarding systemic constraints that affect their teaching. *Journal of Research in Childhood Education*, 15(2), 194–208. <https://doi.org/10.1080/02568540109594960>
- Aquino, L. N., Mamat, N., & Che Mustafa, M. (2017). Comparing the kindergarten curriculum framework of the Philippines and Malaysia. *Southeast Asia Early Childhood Journal*, 6, 27–40. <https://doi.org/10.37134/saecj.vol6.4.2017>
- Baker, F. S. (2014). Teachers' views on play-based practice in Abu Dhabi kindergartens. *International Journal of Early Years Education*, 22(3), 271–286. <https://doi.org/10.1080/09669760.2014.944884>
- Bennett, N., Wood, L., & Rogers, S. (1997). *Teaching through play: Teachers' thinking and classroom practice*. Open University Press eBooks.

<https://shorturl.at/hCvnr6>

- Bernard, H. R. (2018). *Research methods in anthropology: Qualitative and quantitative approaches*. Rowman & Littlefield. <https://shorturl.at/IT7qh>
- Bronfenbrenner, U. (1994). Ecological models of human development. In M. Gauvain & M. Cole (Eds.), *Readings on the development of children* (2nd ed., pp. 37–43). Freeman.
- Bubikova-Moan, J., Naess Hjetland, H., & Wollscheid, S. (2019). ECE teachers' views on play-based learning: A systematic review. *European Early Childhood Education Research Journal*, 27(6), 776–800. <https://doi.org/10.1080/1350293X.2019.1678717>
- Cheng, D. P. W. (2012). The Relation between early childhood teachers' conceptualization of "play" and their practice: Implication for the process of learning to teach. *Frontiers of Education in China*, 7(1), 65–84. <https://doi.org/10.1007/bf03396935>
- Chinese University of Hong Kong [CUHK]. (2023). *BEd in early childhood education (5-year)*. The Chinese University of Hong Kong. <https://www.fed.cuhk.edu.hk/bece/en/about-the-programme/>
- Clevenger, M. T. (2016). *Preservice teachers' beliefs about play in kindergarten* (Publication No. 1874575514) [Dissertation]. ProQuest Dissertations & Theses Global: The Humanities and Social Sciences Collection. <https://www.proquest.com/openview/438aa0dafd573647ea3d329664c9e41b/1?pq-origsite=gscholar&cbl=18750>
- Curriculum Development Council. (2017). *Kindergarten education curriculum guide*. Hong Kong Government Printer. [https://www.edb.gov.hk/attachment/en/curriculum-development/major-level-of-edu/preprimary/ENG\\_KGECG\\_2017.pdf](https://www.edb.gov.hk/attachment/en/curriculum-development/major-level-of-edu/preprimary/ENG_KGECG_2017.pdf)
- Department of Early Childhood Education. (2023). *Learning and teaching courses*. The Education University of Hong Kong. <https://www.eduhk.hk/ece/en/>
- Education Bureau. (2023). *Kindergarten administration guide*. Hong Kong Government Printer. [https://www.edb.gov.hk/attachment/en/edu-system/preprimary-kindergarten/free-quality-kg-edu/KG%20Admin%20Guide\\_Eng\\_2023\\_Dec.pdf](https://www.edb.gov.hk/attachment/en/edu-system/preprimary-kindergarten/free-quality-kg-edu/KG%20Admin%20Guide_Eng_2023_Dec.pdf)
- Fesseha, E., & Pyle, A. (2016). Conceptualising play-based learning from kindergarten teachers' perspectives. *International Journal of Early Years Education*, 24(3), 361–377. <https://doi.org/10.1080/09669760.2016.1174105>
- Fok, W. P. (2007). Internationalisation of higher education in Hong Kong. *International Education Journal*, 8(1), 184–193.
- Fowler Jr, F. J. (2013). *Survey research methods*. SAGE Publications.
- Fung, C. K. H., & Cheng, D. P. W. (2011). Consensus or dissensus? Stakeholders' views on the role of play in learning. *Early Years*, 32(1), 17–33. <https://doi.org/10.1080/09575146.2011.599794>
- Fung, C. K. H., & Lam, C. C. (2008). The pedagogical decision making of kindergarten teachers in Hong Kong: Professional autonomy versus market oriented [Paper presentation]. The 10th Cross-Strait Conference on Curriculum Decision Making.
- Fung, K. H. (2007). *Practice–expectation gap and the pedagogical decision making of teachers in pre-primary sector in Hong Kong* (Publication No. 3326140) [Doctoral dissertation, The Chinese University of Hong Kong]. <https://repository.lib.cuhk.edu.hk/tc/item/cuhk-344112>
- Head Start. (2006). *Head Start program*. <https://eclkc.ohs.acf.hhs.gov/programs/article/head-start-programs>
- Hesterman, S., & Targowska, A. (2020). The status-quo of play-based pedagogies in Western Australia: Reflections of early childhood education practitioners. *Australasian Journal of Early Childhood*, 45(1), 30–42. <https://doi.org/10.1177/1836939119885305>
- Hong Kong Government. (1986). *Education Commission report no. 2*. Hong Kong Government Printer.
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2005). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods*, 18(1), 3–20. <https://doi.org/10.1177/1525822x05282260>
- Jay, J., & Knaus, M. (2018). Embedding play-based learning into junior primary (Year 1 and 2) curriculum in WA. *Australian Journal of Teacher Education*, 43(1), 112–126. <https://doi.org/10.14221/ajte.2018v43n1.7>
- Jung, E., Zhang, Y., & Zhang, Y. (2016). Future professionals' perceptions of play and intended practices: The moderating role of efficacy beliefs. *Early Child Development and Care*, 187(8), 1335–1348. <https://doi.org/10.1080/03004430.2016.1169178>
- Karuppiah, N. (2020). *Parents' perceptions of "play" and "holistic development" in the early years*. Singapore, National Institute of Education. <https://repository.nie.edu.sg/handle/10497/22185>
- Keung, C. P. C., & Cheung, A. C. K. (2019). Towards holistic supporting of play-based learning implementation in kindergartens: A mixed method study. *Early Childhood Education Journal*, 47(5), 627–640. <https://doi.org/10.1007/s10643-019-00956-2>
- Keung, C. P. C., & Fung, C. K. H. (2020). Exploring kindergarten teachers' pedagogical content knowledge in the development of play-based learning. *Journal of Education for Teaching*, 46(2), 244–247. <https://doi.org/10.1080/02607476.2020.1724656>
- Kim, M. (2004). Teachers' philosophical orientation and practices: A study of novice preschool teachers in South Korea. *Contemporary Issues in Early Childhood*, 5(3), 276–292. <https://doi.org/10.2304/ciec.2004.5.3.3>

- Klassen, A. C., Creswell, J., Clark, V. L. P., Smith, K. C., & Meissner, H. I. (2012). Best practices in mixed methods for quality of life research. *Quality of Life Research*, 21(3), 377–380. <https://doi.org/10.1007/s11136-012-0122-x>
- Lam, P. C. (2018). *Bridging beliefs and practices: A study of Hong Kong kindergarten teachers' perceptions of "learning through play" and the implementation of "play" in their practices* (Publication No. 10936814) [Doctoral dissertation, Northeastern University]. ProQuest Dissertations & Theses. <https://repository.library.northeastern.edu/files/neu:m0449b715/fulltext.pdf>
- Li, H., Rao, N., & Tse, S. K. (2012). Adapting Western pedagogies for Chinese literacy instruction: Case studies of Hong Kong, Shenzhen, and Singapore preschools. *Early Education and Development*, 23(4), 603–621. <https://doi.org/10.1080/10409289.2010.536441>
- Li, P. H., & Chen, J. J. (2023). *The globalization of early childhood curriculum: Global childhoods, local curricula* (1st ed.). Routledge. <https://doi.org/10.4324/9781003274865>
- Malaysian Ministry of Education. (2017). *Preschool education: Curriculum and assessment standards document 2017 revision*. National Preschool Standard Curriculum. Putrajaya, Ministry of Education.
- McKendrick, J. H. (2019a). Realising the potential of play in Scottish education. *Scottish Educational Review*, 51(2), 137–142. <https://doi.org/10.51166/ser/512mckendrick3>
- McKendrick, J. H. (2019b). Scotland's school grounds: Playful and play-full learning environments? *Scottish Educational Review*, 51(2), 40–60. <https://doi.org/10.51166/ser/512mckendrick2>
- McNair, L., Cameron, I., & Gilbertson, L. (2019). Adult roles in support of early childhood play, encouraging sensitivity to the individual and reflexive approaches. *Scottish Educational Review*, 51(2), 61–70. <https://doi.org/10.51166/ser/512mcnairetal>
- Molinari, L., Cigala, A., Corsano, P., & Venturelli, E. (2017). Observing children's triadic play. In T. Bruce, P. Hakkarainen, & M. Bredikyte (Eds.), *The Routledge international handbook of early childhood play* (pp. 216–229). Routledge.
- Moon, K., & Reifel, S. (2008). Play and literacy learning in a diverse language pre-kindergarten classroom. *Contemporary Issues in Early Childhood*, 9(1), 49–65. <https://doi.org/10.2304/ciec.2008.9.1.49>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Pascoe, S., & Brennan, D. (2017). *Lifting our game: Report of the review to achieve educational excellence in Australian schools through early childhood interventions*. Government of Victoria. <https://apo.org.au/sites/default/files/resource-files/2018-02/apo-nid130616.PDF>
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. SAGE Publications. <https://ci.nii.ac.jp/ncid/BB18275167>
- Pyle, A., Prioretta, J., & Poliszczuk, D. (2018). The play-literacy interface in full-day kindergarten classrooms. *Early Childhood Education Journal*, 46(1), 117–127. <https://doi.org/10.1007/s10643-017-0852-z>
- Rabiee, F. (2004). Focus group interview and data analysis. *Proceedings of the Nutrition Society*, 63(4), 655–660. <https://doi.org/10.1079/PNS2004399>
- Rodriguez-Meehan, M. (2020). *Pre-service teachers' perceptions of play in kindergarten* (Publication No. 27829022) [Doctoral dissertation, Florida Gulf Coast University]. ProQuest Dissertations & Theses Global: The Humanities and Social Sciences Collection. (2385710408). <https://scholarscommons.fgcu.edu/esploro/outputs/doctoral/PRE-SERVICE-TEACHERS-PERCEPTIONS-OF-PLAY-IN/99383341650106570>
- Rogers, S. (Ed.). (2010). *Rethinking play and pedagogy in early childhood education: Concepts, contexts and cultures*. Routledge.
- Scottish Government. (2019). *Incorporating the UN Convention on the Rights of the Child into Scots law: Consultation*. <https://www.gov.scot/publications/childrens-rights-consultation-incorporating-uncrc-rights-child-domestic-law-scotland/>
- Scott-McKie, L., & Campbell, L. A. (2019). Play as a mode of capability development in Scottish primary schools. *Scottish Educational Review*, 51(2), 14–28. <https://doi.org/10.51166/ser/512scottmckieetal>
- Siu, A. F. Y., & Keung, C. P. C. (2022). Perceptions among Hong Kong parents on play in early childhood: A qualitative study. *Asia-Pacific Journal of Research in Early Childhood Education*, 16(1), 77–92. <https://doi.org/10.17206/apirece.2022.16.1.77>
- Spradley, J. P. (2016). *The ethnographic interview*. Waveland Press.
- Tzuo, P. W. (2007). The tension between teacher control and children's freedom in a child-centered classroom: Resolving the practical dilemma through a closer look at the related theories. *Early Childhood Education Journal*, 35(1), 33–39. <https://doi.org/10.1007/s10643-007-0166-7>
- United Nations Children's Fund [UNICEF]. (1989). *Convention on the Rights of the Child*. <https://ecommons.cornell.edu/server/api/core/bitstreams/c8f540df-36ad-4e6c-8dbb-7af0ab7bde7f/content>



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- Vogt, F., Hauser, B., Stebler, P., Rechsteiner, K., & Urech, C. (2018). Learning through play: Pedagogy and learning outcomes in early childhood mathematics. *European Early Childhood Education Research Journal*, 26(4), 589–603. <https://doi.org/10.1080/1350293x.2018.1487160>
- Wang, X., & Lam, C. B. I. (2017). An exploratory case study of an American-style, play-based curriculum in China. *Journal of Research in Childhood Education*, 31(1), 28–39. <https://doi.org/10.1080/02568543.2016.1243175>
- Wu, S., Faas, S., & Geiger, S. (2018). Chinese and German teachers' and parents' conceptions of learning at play: Similarities, differences, and (in)consistencies. *European Early Childhood Education Research Journal*, 26(2), 229–245. <https://doi.org/10.1080/1350293x.2018.1442034>
- Yin, H., Keung, C. P. C., & Tam, W. W. Y. (2021). What facilitates kindergarten teachers' intentions to implement play-based learning? *Early Childhood Education Journal*, 50(4), 555–566. <https://doi.org/10.1007/s10643-021-01176-3>
- Yin, H. B., Lee, J. C., & Jin, Y. L. (2011). Teacher receptivity to curriculum reform and the need for trust: An exploratory study from Southwest China. *The Asia-Pacific Education Researcher*, 20(1), 35–47.