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“It’s like you are in the jungle”: Using the draw-and-tell method to explore preschool children’s play preferences and factors that shape their active play

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Abstract

Issue addressed: A child’s preference for active or sedentary play is a key proximal indicator of a child’s physical activity behaviour. There is a need to understand children’s physical activity preferences in order to make physical play more enjoyable to them, and this may encourage participation and a more positive relationship with physical activity. To date, little research has incorporated the perspectives of young children on this topic. This study specifically examines (a) what activities preschool children prefer; and (b) what children consider to be barriers and facilitators to participating in their preferred activity.

Methods: The authors employed visual methodologies to explore the activity preferences of 29 preschool children. Children were asked to draw their preferred activities and answer a series of open and closed questions about their drawing and what they think are the barriers and facilitators to participating in this activity.

Results: Participants expressed a desire to play unstructured activities with friends or family, to engage in imaginative, challenging play, as well as the opportunity to have control over the activity they engage in. Children reported that rules at home and at preschool, the availability of toys, friends and family and having access to a natural environment served as both barriers and facilitators to participating in their favourite activity.

Conclusions: Listening to children’s voices about their play preferences and the barriers and facilitators to engaging in these activities provides important insight into children’s play behaviour and the promotion of active play in early childhood. Participants’ desire for more natural features within their play environment and for challenging, unstructured and imaginative play may be considered as facilitators of their engagement in physical activity.

So what? The current findings suggest the incorporation of unstructured playtime within natural environments could support young children’s participation in and increased enjoyment of physical activity.

KEYWORDS

children, health behaviours, physical activity, qualitative methods

1 | INTRODUCTION

The common perception of children being naturally active is being challenged by emerging patterns of increased sedentary behaviour and decreased physical activity in young children.^{1,2} Regular physical activity is essential for a child's growth and development and offers wide-ranging health benefits. In infants, toddlers and preschoolers, higher levels of physical activity are related to the development of better social and motor skills, improved metabolic health and decreased adiposity.³ Some researchers have identified a positive correlation between exercise and children's academic achievement, self-esteem and self-efficacy.⁴ Despite the known benefits of physical activity, just over half (56%) of preschool-aged children meet physical activity recommendations of 3 hours throughout the day.^{2,5}

Early childhood is a key age in which physical activity behaviours, attitudes and motor skills develop.⁶ Encouraging habitual physical activity in young children is therefore crucial as physical activity behaviours tend to track from childhood through adolescence to adulthood.⁷⁻¹² It is essential that children experience environments supportive of developing positive physical activity behaviours. In order to provide an environment that facilitates physical activity participation, there is a need to understand factors which may be influencing the current rates of physical activity in preschool children.

A young child's preferences for active or sedentary activities is a key proximal indicator of a child's physical activity behaviour.¹³ Parents' have reported that facilitating regular physical activity is challenging with children who prefer more sedentary activities.⁴ Encouraging a child to favour and enjoy active play is often a key objective of physical activity interventions, as children are more likely to participate in physical activities for reasons of fun and enjoyment.^{7,14} When a child participates in an activity that they enjoy, they are more likely to experience increased emotional well-being and to feel happy and secure.^{15,16} Children have their own perception of enjoyable play, which often differs from adults' perceptions of what enjoyable play is to children.¹⁵ Thus, there is a need to gain a child's account of their own physical activity preferences in order to make physical play more enjoyable to them. This may support participation and encourage a positive relationship with physical activity.

Research into children's preferences for physical play and possible factors contributing to the decrease in physical activity in Australian children has underrepresented young children's voices. For the most part, this body of research has relied on the perspectives of parents¹⁷ or has mostly involved school-aged children.^{7,18} Preschool children can be very important agents in making decisions concerning their own well-being, and their perspective is essential to understanding how they and/or others make choices for them around active play.

This study employs the draw-and-tell method to gain an understanding of children's physical activity preferences and children's perceptions of barriers/facilitators to participating in these activities, within the Australian context. The draw-and-tell method will be used as a way to engage children in the research being conducted, as opposed to simply asking them to respond to questions verbally.

Drawings may also work to facilitate verbal discussion between the child and researcher, as children may be less inclined to feel as though they are being tested.⁶ When used in combination with a child's verbal interpretation of their drawings, a child's drawing serves as a valuable resource of children's perspectives and enriches interpretation of the data that is being collected.⁶ In the current study, children were asked to draw themselves in their preferred way of playing and were asked questions about their drawings to understand their behaviours and ideas. The key objectives of this study were to:

1. Determine preschool children's activity preferences; and
2. Explore preschool children's perceived barriers and facilitators to participating in their preferred activity.

Gaining a child-centric view of the factors that prevent and facilitate engagement in their preferred physical activity may help to identify plausible, context-specific behaviours and aspects of the environment that influence physical activity participation.¹⁹

2 | METHODS

A cross-sectional design was used for the current study. Data collection was completed over a 2-week period in December 2017. Participants were recruited using convenience sampling and included 40 children aged 3-5 years attending preschool centres located on the Gold Coast, Australia. Data collection included child semi-structured interviews. Upon return of parental consent, children were asked whether they would like to participate in a drawing activity, and if consent to participate was given, they were asked to draw themselves engaging in their preferred activity (see a description of interview format in Cammisa et al.,⁶) Interviews were conducted by two of the researchers (NW and CR), who were introduced to the children by the preschool educators and spent the morning with the children prior to the interviews so that children felt comfortable speaking to the researchers. The interviews were conducted two at a time with one researcher sitting with one child each. Children/researchers sat at the same table, to ensure participants had a peer nearby so that they would feel comfortable, but far enough from each other, to prevent children copying from each other. This was done as previous research using the same technique demonstrated that children tend to copy each other's responses/drawings when interviewed in groups.⁶ The interviews were conducted at the participating preschool centres and took approximately 20-30 minutes (including the drawing task) in a quiet part of the classroom monitored by the preschool room educator. Interviews were conducted using an interview guide incorporating a list of questions. This was to ensure that the most central issues of inquiry were covered with all the children,^{20,21} while keeping an open mind and appreciating the children's own initiative for telling stories that they were eager to communicate to the researcher. The questions were asked while the child was drawing, and this ensured that the activity did not feel like an interview-testing situation. Further, this allowed children to

stay focused at the time of data collection so that other children or the environment did not distract them. The interview questions used were drawn from a study conducted in Europe by Cammisa and colleagues.⁶ Whilst at each preschool, two of the researchers took general field notes of the physical activity environment of the preschool centre.²² Notes were taken regarding observed activities at the centre, available equipment (eg, fixed, portable, electronic), the indoor and outdoor space and the social environment (eg, rules or encouragement around physical play). This was done to understand whether any environmental variables aligned with children's drawings.

The results, including children's drawings and responses to questions, were analysed using inductive thematic analysis which allowed researchers to identify, organise, explain and report patterns and themes within data.²³ The audio-recorded child responses were transcribed into a word document. The transcripts were reviewed by two researchers independently, and open coding was used to cluster ideas under broader themes and subthemes.²⁴ NVivo was used to classify, sort and arrange information and examine relationships in the data.

3 | RESULTS

3.1 | Participant and preschool centre characteristics

A total of three preschools participated in the study. Forty parents consented for their child to participate, with 29 of these children agreeing to participate in the study activity. Participating children were aged between three and 5 years ($M = 4.28$; $SD = 0.71$) with 15 (51.7%) girl participants. The proportion of children who identified an active vs a sedentary activity as their preferred activity was almost even (sedentary: 44.8%; active: 55.2%). Girls reported a preference for more active outdoor activities played at home, while boy participants reported a preference for sedentary indoor activities played at home (see Table 1). There appeared to be no distinct difference in preferred activities between children of different ages. At preschool 2, children reported a preference for sedentary and active behaviours equally; children at preschool 1 reported preferences for more sedentary activities (eight children sedentary and three children active); and at preschool 3, children reported preferences for more active play (seven active and one sedentary).

The play areas at all three preschools were similar in size and design. The outdoor area of each preschool was small to medium-sized, and the floor was constructed of a combination of artificial grass, concrete, wood chips and rubber. The centres were equipped with both portable and fixed equipment (eg, sandpit, climbing equipment, slides, tricycles, trucks). All of the centres had organised sport available to children (eg, yoga, soccer) delivered by an external professional. None of the outdoor areas at the participating preschools included access to trees or grass. At all of the centres, children did not have access to electronic devices, such as computers, unless being used for learning purposes. Further, no

centres permitted children to bring their own toys to the centres for play.

3.2 | Themes

Table 2 shows the results of the thematic analysis and the six key themes which emerged from participant responses. The themes collectively depict children's preferred activities, why they prefer these activities and what they perceive as barriers or facilitators to engaging in their favourite activities.

3.3 | Unstructured play

All activities preferred by participants were unstructured activities. The authors considered unstructured play as open-ended play that has no specific learning objective.²⁵ Although it is difficult to determine whether some activities mentioned by the children were instructor-led (eg, instructions from teachers or parents), all activities appeared to be an activity of the participants' own volition, for example, "playing in the sandpit" or "climbing." There was no specific mention of class activities by participants, nor was this evident in participant drawings. When children were asked the reasoning behind why they enjoyed their chosen activity, a consistent response was being able to choose the activity. Some children also reported the desire to perform activities which they perceive as challenging, for example, to jumping off something or running as fast as possible (see Table 2).

3.4 | Social connections

Participating with others featured significantly in children's favourite activity and acted as a key facilitator to why children participate in their preferred activity. This was also evident through the participants' drawings, with a number of the children focusing their drawing on who they were playing with, rather than the activity itself (see Figure 1A, B). The majority of preferred activities included the participation of friends, siblings or parents, which can be seen as subthemes in Table 2. Although children stated that their favourite activity was a game they played with friends, for example, "Well I like playing tag with my friends," parents were often cited as a reason for the enjoyment of the activity, for example, "[like activity because] because I get to play with Mumma and Dada" and "[like activity] because my dad plays."

3.5 | Indoor and outdoor play

Both outdoor and indoor play emerged as key themes and were mentioned equally by children as preferred play activities. The theme of indoor play comprises two subthemes, including screen time and indoor games. Many of the children's preferred activities played at home were indoor activities (see Figure 1C, E). In all cases, when children mentioned screen-based activities as a preferred game, these were played at home only, for example, "At home I only watch

TABLE 1 Participants' preferred activity

ID	Age	Gender	Activity	Location	Active type
CC1_1	5	B	Playing Frisbee with friends	Home inside/outside	Active
CC1_2	3	G	Drawing	Home/kindergarten/inside	Sedentary
CC1_3	4	B	Watching batman on TV	Home/inside	Sedentary
CC1_4	5	B	iPad game (Monkey and Star Wars game)	Home/inside	Sedentary
CC1_5	4	B	Playing with toy spider and ninja turtle	Home/inside	Sedentary
CC1_6	4	B	A block and a snake game (iPad game)	Home/Inside	Sedentary
CC1_7	5	G	Building blocks	Home/Inside	Sedentary
CC1_8	4	B	Computer game—keyboard climber	Home/Inside	Sedentary
CC1_9	5	B	Frisbee	Kindergarten/home outside	Active
CC1_10	4	B	Train tracks	Home/kindergarten/inside	Sedentary
CC1_11	4	G	Doggy, doggy, where's your bone?	Home/outside	Active
CC2_1	5	B	Monopoly	Home/inside	Sedentary
CC2_2	5	B	Hide-and-seek	Home/outside	Active
CC2_3	5	B	I spy	Home/outside	Sedentary
CC2_4	3	B	Rollercoaster	Home/inside	Sedentary
CC2_5	4	G	Playing tag	Kindergarten/outside	Active
CC2_6	4	G	Colouring and playing with cousins	Home/inside	Sedentary/active
CC2_7	4	G	Hide-and-seek	Home/outside	Active
CC2_8	5	G	Duck, duck, goose	Kindergarten/inside	Active
CC2_9	4	G	Monkeys (computer game)	Home/inside	Sedentary
CC2_10	4	G	Trampoline	Home/outside	Active
CC3_1	3	G	Sandpit	Kindergarten/outside	Active
CC3_2	5	G	Run around and play	Kindergarten/home/outside	Active
CC3_3	3	B	Dinosaur game	Home/inside	Sedentary
CC3_4	4	G	Hide-and-seek	Kindergarten/outside	Active
CC3_5	5	G	Playing sticks	Home/outside	Active
CC3_6	5	G	Climbing	Kindergarten/outside	Active
CC3_7	5	G	Doggy, doggy, where's your bone?	Home/outside	Active
CC3_8	4	B	Dinosaur games	Home/outside	Active

TV at home and sometimes I draw.” Indoor games included activities such as board games, playing with toys (eg, blocks, racing cars) and craft activities.

The theme of outdoor play comprised three subthemes: nature, imagination and outdoor games. All reported outdoor games were active, and many were child games such as hide-and-seek, tag and Doggy, doggy, where’s your bone? Outdoor games requiring play equipment were mentioned by a few participants (eg, Frisbee, trampoline; Figure 1D), but many of the outdoor activities required no play equipment. Outdoor play appeared to be connected to the subtheme imagination, with many outdoor games that children mentioned requiring an element of imagination. Further, children often stated that the reason that they enjoyed their preferred activity was because they had the opportunity to use their imagination, for example, “I like to play out there on the climby things... Because it’s like you are in the jungle, because I can see lots of animals and pretend”

The subtheme “nature” emerged from children’s responses as something they would like to have at their preschool, for example, “[Would like] hide-and-seek more and some more trees to hide with them [at kindergarten].” This desire was apparent from both participant drawings and verbal responses. The pictures drawn by children showed flowers, trees and grassed areas which may be relevant to their enjoyment of physical activity (see Figure 1F).

3.6 | Rules

Rules around physical activity arose both as a key theme and as a barrier to participating in favoured activities. Under the theme “rules,” two subthemes emerged, including rules at home and rules at preschool. Types of rules included no running inside or no personal toys at preschool to prevent loss of the toy. Children indicated that they were not allowed to run inside because they would knock things over or fight with siblings. Children were also unable to play

TABLE 2 Results of thematic analysis

Theme	Subtheme and representative quotes	
Unstructured play		"I like to play out there on the climby things" (CC3_6)
		"Run away as fast as you can [favourite active game]" (CC1_6)
		"[in the perfect kindergarten where you can play moving or running] um I would like to play snakes and ladders and I would also like to chases but we can only play that a little bit" (CC3_6)
		"[in the perfect kindergarten where you can play moving or running] playing outside" (CC2_7)
		"Umm [in the perfect kindergarten where you can play moving or running] there would be heaps of toys and we would play in the sand pit more and jumping off the castles that has the slides [in the play ground]" (CC1_8)
		"[why do you like this activity] Because we get to choose [...] You can pick whatever you want" (CC2_3)
Social connections	Friends	"Well I like playing tag with my friends" (CC2_5)
		"I like playing with my friends in the classroom. And I like playing with my friends..." (CC1_7)
	Siblings	"[plays with] My sister" (CC3_2)
		"[plays with] Lennox my brother" (CC1_9)
	Parents	"[like activity because] Mum usually pushes us up on the trampoline" (CC2_10)
		"[like activity because] Because I get to play with mumma and dada" (CC1_11)
		"[like activity because] Because my dad plays" (CC2_2)
Indoor play	Screen time	"I just like watching TV [at home], it's my favourite watching TV" (CC2_3)
		"At home I only watch TV at home and sometimes I draw" (CC2_3)
		"I play Mario Kart on my iPad [at home]" (CC2_3)
		"[at home]Mummy reads my books to me at home and I like to watch some more movies" (CC2_6)
		"I would like to watch more movies [at kindergarten]..." (CC2_7)
	Indoor games	"[favourite activity] Monopoly" (CC2_1)
		"[favourite activity] building blocks" (CC1_7)
		"[favourite activity] drawing" (CC1_2)
Outdoor play	Nature	"[Would like] Trees and everything [at kindergarten], more trees, I like to climb trees, someone cut down a tree which is sad because we loved the tree" (CC1_11)
		"[Would like] Hide-and-seek more and some more trees to hide with them [at kindergarten]" (CC1_7)
	Imagination	"I like to play out there on the climby things [...] Because It's like you are in the jungle [...] because I can see lots of animals and pretend, and we have lots of crocodiles and sometimes I pretend that there is a bridge that I have to climb over and there are crocodiles like peter pan" (CC3_6)
		"[likes activity]Because we get to pretend we are big dinosaurs and little dinosaurs and we can chase each other" (CC3_8)
		"Pirate, Police and chasing [favourite active game]" (CC1_1)
	Outdoor games	"[This is—referring to drawing] Playing Frisbee with friends" (CC1_1)
		"[This is—referring to drawing] Hide-and-seek with mumma, daddy and me [...] We are playing outside" (CC2_7)
		"[favourite activity] Doggy, doggy, where's your bone?... [Likes it because] You get the bone and you have to try and find it" (CC1_11)
		"[favourite activity] climbing" (CC3_6)
Rules	Rules at home	"No we can't play those games inside [referring to playing tag with friends] we knock things over" (CC2_5)
		"We can't play tag [...] because of pushing my brother and because we are not allowed to run inside" (CC2_6)
		"Because my mum and dad don't let me do it because I might lose a card or so [referring to bring toys to preschool]" (CC3_2)
		"Cause my mom I said I can't get blocks out at home because it's too big for the house" (CC1_6)
		"It's too small [at home to play tag]" (CC2_5)
	Rules at preschool	"No [cannot play at preschool], you're not allowed to bring an iPad to day care" (CC1_4)
		"[cannot play at preschool] Because you can't bring the toys here" (CC2_1)
		"I would also like to play hide-and-seek [at preschool] but we can only play sometimes" (CC3_5)
		"[cannot play favourite activity at preschool] No we're not allowed to touch the computers at kindergarten" (CC1_8)

(Continues)

TABLE 2 (Continued)

Theme	Subtheme and representative quotes
Availability of toys	“Um I have these big blocks at my house [Would like to bring to preschool]” (CC2_7)
	“We have toys out there [outside at preschool] and we play bikes and scooters and balls...” (CC1_8)
	“I would really like to play with my toys from home [at preschool], with my spider because it's so cool” (CC1_5)

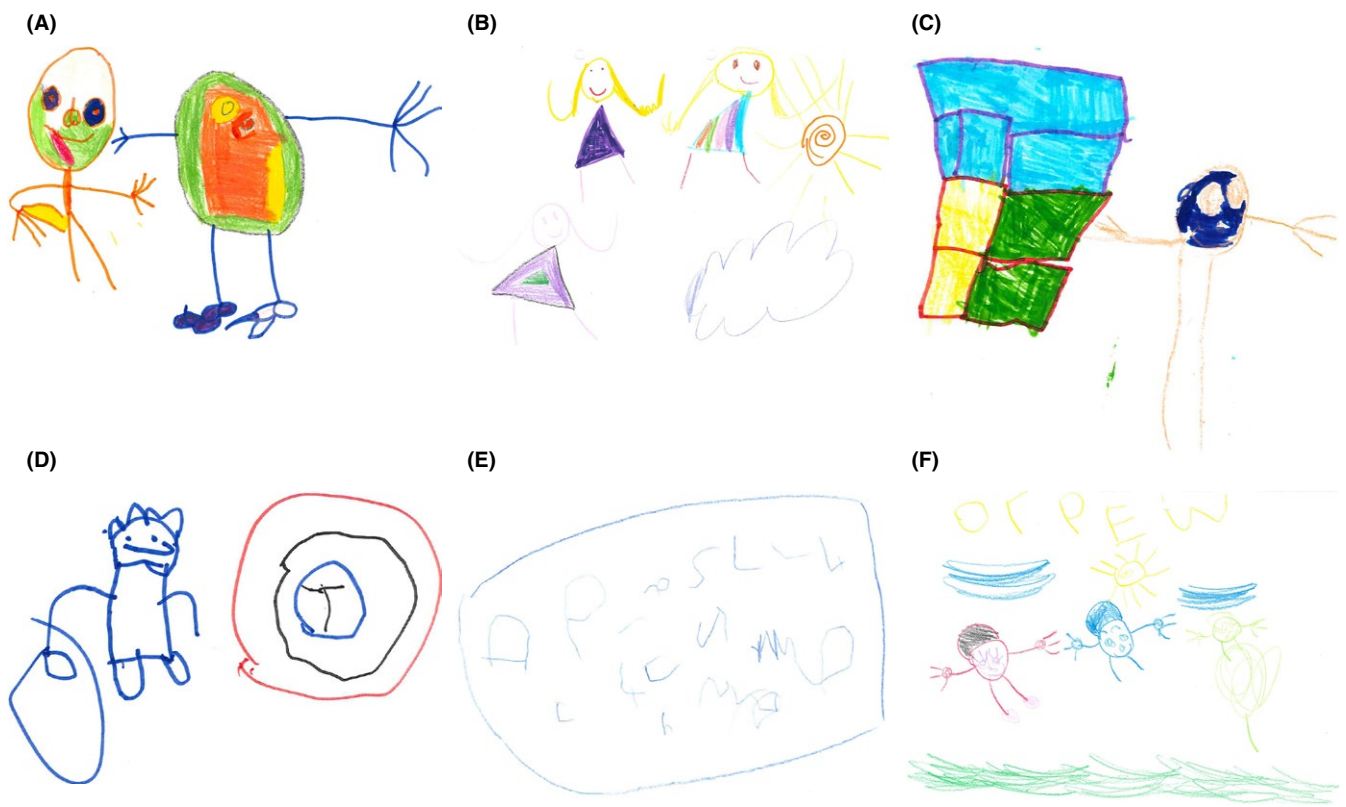


FIGURE 1 A, Playing hide-and-seek with dad (CC2_2).¹ B, Playing duck, duck, goose with friends (CC2_8). C, Playing building blocks (CC1_7). D, Playing Frisbee (CC1_9). E, Keyboard climber (computer game) (CC1_8). F, Hide-and-seek with mumma and daddy (CC2_7)

their favourite games at home due to limited space, for example, “Cause my mum said I can’t get blocks at home because it’s too big for the house.” Rules at preschool were predominantly about bringing own toys to the preschool, the usage of electronic devices or the timetable and structure of the preschool, which allowed children to play certain games only at designated times for free play, for example, “I would also like to play hide-and-seek [at preschool] but we can only play sometimes.”

3.7 | Availability of toys

The availability of toys emerged as a key facilitator in instances where a toy was a prerequisite to engage in a favoured game. Many children reported the desire to bring their favourite toy from home to the preschool, for example, “I would really like to play with my toys from home [at preschool], with my spider because it’s so cool.” Other children reported the variety of toys they have at preschool,

for example, “we have toys out there [outside at preschool] and we play bikes and scooters and balls.”

4 | DISCUSSION

This study used visual methods to gain an understanding of children’s preferences for play and their perception of factors that facilitate or hinder their engagement in these activities, within the Australian context. Children in the current study showed a desire to play unstructured activities with friends or family, to engage in imaginative play, to have the opportunity to have control over the activity they engage in and for challenging or risky play. Children reported that rules at home and at preschool, the availability of toys, friends and family and having access to a natural environment served as both barriers and facilitators to them participating in their favourite activity. These themes will be discussed in the context of

existing literature to identify implications for future research and public health practice.

4.1 | Children's activity preferences

4.1.1 | Unstructured play

Children in the current study preferred to engage in unstructured play, to have choice over the activity they engaged in, with some children reporting a desire for this activity to be challenging. Children's preference for unstructured play aligns with previous research.^{1,26} This preference for unstructured play may be due to limited exposure to structured or guided activities such as yoga or soccer, at such a young age. Nonetheless, young children, particularly those who attend preschool, are increasingly being offered opportunities to engage in structured or "packaged play," in which trained professionals teach students a specific exercise or sport. This was the case for each preschool involved in this study. Thus, it would be expected that some children might prefer these activities, which was not evident in the current findings.

Participants indicated a desire to have more autonomy over the activities they engage in. Despite children reporting parental involvement as a facilitator of their activity participation in this study, literature suggests that the involvement of an adult in a child's play narrows a child's activity options.^{15,16} This appeared to be particularly relevant in this study in the preschool setting, where children were more conscious of rules and restrictions on play: "... I would also like to play hide-and-seek but we can only play sometimes." It has been argued that if children do not have a choice over the activity, or whether they would like to participate, they do not demonstrate behaviours associated with increased emotional well-being compared to those that do have choice.¹⁶ Giving a child autonomy and independence to engage in their preferred physical play facilitates increases in confidence and self-esteem.¹⁵ However, it is noted that a child's choice for play does not necessarily need to be completely free of adult intervention. For example, giving a child opportunity to make a choice from a variety of activities, rather than telling the child what to do, may lead the child to perceiving an increase in their level of choice.²⁷ If a child perceives an activity as play, they are more likely to deeply engage, focus and feel more competent to try a wide range of behaviours, perceiving these behaviours as activities with minimal risk of failure.²⁷ This may offer an opportunity to promote a preference for being physically active.¹⁶

Participants also reported the desire to perform activities which they perceive as challenging. This is consistent with the current literature, as children's active play naturally involves challenging or risky activities.^{28,29} When children are young, they are naturally inclined to test their physical limits and learn to avoid or adjust to dangerous environments and activities.²⁰ Risky play allows a child to feel pleasant emotions such as happiness, excitement, exhilaration, fun, enjoyment and thrill.^{29,30} Risky play can also fuel unpleasant emotions in children such as feeling afraid or scared when they perceive too much danger.³⁰ There is a constant struggle for parents and

preschool educators to provide children with a stimulating environment that promotes challenging play, minimises potential for injury and allows the child to unfold creativity and test their limits.^{20,30} Further, in Australia, unintentional injuries are the leading cause of death and serious injury in young children.³ Therefore, injury prevention is considered central to promoting children's health.^{31,32} Nevertheless, it has been suggested that too many restrictions on children's risky outdoor play may have a negative influence on the child's development.³³

A qualitative study conducted by Little³⁴ found that Australian childcare workers felt as though an overemphasis on child safety by regulatory authority assessors restricted their ability to engage children in risk-taking or challenging play. In Little's study,³⁴ educators reported being told by assessors to remove equipment and trees, rocks and other natural elements as they were considered unsafe. Little³⁵ also reported that educators were apprehensive about what "risky" play they could and could not allow children to engage in. The increasing intervention of adults into the play lives of children is most evident in more developed or economically advanced countries. The ignorant perspective that adult-devised exercise and sport are better for children than their own seemingly chaotic and unplanned play, together with a genuine fear of litigation if a child is hurt while playing, has resulted in an atmosphere "unsympathetic to the traditions of reasonably free, child-directed play".³⁵ As the current study findings indicated preschool children's desire for challenging, unstructured play, future research should seek to facilitate challenging play for children within the contemporary risk-averse frameworks guiding practice.

4.1.2 | Outdoor play

Preferred outdoor play activities mentioned by children predominantly involved active play. This is consistent with previous literature, as children are more likely to be active while playing outdoors.^{36,37} Most of the outdoor activities mentioned by participants required no play equipment, yet most activities required an element of imagination, with imagination often mentioned as a reason for the enjoyment of the activity. This study finding may indicate that engaging children's imagination can be one way to facilitate their engagement and enjoyment of active play. Existing literature suggests that the design of an outdoor play area has an important role in facilitating imaginative play. Zamani³⁸ highlighted the importance of accessible natural elements for children to explore a complex and adaptable environment, which inspires teamwork, creativity and imagination.

4.1.3 | Indoor play

The home indoor area was most frequently reported by boy participants when talking about their favourite game, which in all cases included sedentary activities. This finding contrasts with existing literature which suggests that being male is linked with higher levels of physical activity and a preference for more active play.³⁹

Once established, learned sedentary habits in children tend to shape sedentary behaviour over time, particularly in boys.³⁹ The frequent mention of screen-based games as preferred activities supports the work of other studies in this area linking sedentary behaviour with screen-based activities.³⁹⁻⁴³

One explanation for the high preference for screen-based activities at home might be the prohibition of screen-based activities at childcare. Rules at preschool restricted children's participation in screen-based activities (eg, iPad/computer), with children reporting that they were unable to bring such devices to their preschool centre as it was against the rules. A study conducted by Tucker et al⁴⁴ revealed that parents of preschoolers rely on preschool staff to ensure their children are sufficiently active. Rules around screen time at preschool may contribute to the reasoning of parents to believe that their children are adequately active at preschool, and thus are more willing to permit their children to engage in screen time at home. Tucker et al⁴⁴ also described that preschool staff rely on parents to create an activity-promoting environment. These mutual expectations and mistaken perceptions are of concern, as many studies demonstrate that preschoolers in childcare do not meet the recommended level of 3 hours of active play per day.²

4.2 | Barriers and facilitators

4.2.1 | Rules

Rules within the home and at preschool appeared to both hinder and facilitate participants' active play. For example, children mentioned engaging in their preferred activity was not possible because of rules such as "no running inside" because they were likely to "knock things over" or argue with siblings. Although beyond the scope of the current study, these responses may be partially explained by a study conducted by Pesch et al,⁴⁵ in which many mothers reported that because they themselves were tired or overwhelmed, or because their children were making a mess, they put significant effort towards reducing their children's activity level. Mothers would do so by turning on the television, reading a book to the child, or setting up an activity for the child like colouring or puzzles.³⁴ This highlights the need to understand the complex contexts shaping children's activity preferences and behaviours, which make contemporary efforts of physical activity promotion inappropriate or difficult to implement.

4.2.2 | Nature

The desire for more natural features within the outdoor area was expressed by participants and may be considered as a possible facilitator of their engagement in physical activity. The participating preschools did not provide children access to any natural features nor to a complete natural area (eg, grass, trees, dirt, rocks). Thus, the desire expressed by participants for more trees to climb or hide behind was not surprising. There is growing literature around the link between play spaces in preschools containing natural materials with improved social relationships, physical activity and well-being.⁴⁶⁻⁴⁸

A recent systematic literature review found the availability and size of an outdoor play space to be positively associated with children's physical activity.⁴⁶ When children come in contact with nature, they not only benefit from higher levels of physical activity, but also display a greater sense of responsibility, teamwork, competence and imagination.^{38,47} Literature suggests play spaces that prioritise nature, including trees and plants, and elements that can be manipulated by the child (eg, water, mud, sand), allow a child to shape the play with their imagination.^{32,48} This is supported by a recent intervention study conducted by Brussoni et al.⁴⁸ that found the addition of vegetative and natural materials to the outdoor play space resulted in improved socialisation, creativity and self-confidence. Thus, it can be suggested that embedding more outdoor play and natural elements within a child's playground may facilitate a child to prefer and engage in physical activity by allowing play to be more engaging and diverse.³⁸

4.2.3 | Social connections

At a young age, much play is social, which was reflected in children's responses. The majority of the activities preferred by children included friends, who play an important part in young children's social development and learning. This is consistent with existing literature, which suggests that the involvement of siblings and peers can facilitate children's physical activity levels.³ Participants also reported the participation of one or both parents as a reason why they liked their preferred activity. Parents may therefore be a key facilitator of their child's physical activity, not only through instrumental support or encouragement, but just because children simply enjoy doing something with their parents in a social and supportive environment.⁴⁹⁻⁵¹ Ginsburg et al.²⁶ suggest that when parents join with children in child-driven play, the interactions that occur tell children that their parents are fully paying attention to them and that this helps to build enduring relationships. It is possible that the enjoyment that a child experiences through engaging in play with their parents contributes to their positive disposition towards active play.

4.2.4 | The draw-and-tell method

The draw-and-tell method served as a suitable instrument to elicit children's preferences and understanding of barriers and facilitators. The drawings served as an indirect method for facilitating the conduct and analysis of the interviews, focusing on the children's explanation of what the drawing is about. The use of drawings facilitated communication between child and researcher as it helped to overcome the brevity of their verbal responses.⁵¹ They filled important gaps to the verbal responses of the child (eg, play partners were the focal point of the drawing rather than the activity itself). It was evident that this method is not suitable for children younger than 4 years. Three-year-old children's drawings proved difficult to interpret; thus, the drawings presented in this study are those of four- and five-year-old participants. From our experience using this method, it is also recommended to let the child sit with a peer at one

table to make her/him feel comfortable, but far enough from each other, to prevent children copying from each other.

4.2.5 | Limitations

The current study is subject to limitations. The sample was derived from communities of medium-high socio-economic status⁵²; thus, findings may only reflect this demographic. It was also evident that the preschool centres that participated in the study were similar in their resources and physical environment; thus, the themes may not reflect the diversity of preschool children's perspectives.

5 | CONCLUSION

Listening to children's voices about their play preferences and the barriers and facilitators to engaging in these activities provides important insight into children's play behaviour and the promotion of active play in early childhood. The current findings will help to facilitate participation in enjoyable, imaginative physical activity in natural environments. The results of this study show that children have a desire for unstructured activities and natural features in the environment as a prerequisite to engage in imaginative and challenging active play. It became clear that children would like to play a lead role in selecting the activity they engage in and that this may facilitate their enjoyment of active play. As the current study findings indicated preschool children's desire for challenging, unstructured play, future research should develop strategies to balance children's activity preferences with the contemporary emphasis placed on risk aversion. Further, given the finding that participants preferred sedentary activities in the home, research could explore whether parents' overestimation of their child's level of active play at preschool is resulting in them allowing their child to choose sedentary activities at home.

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CONFLICTS OF INTERESTS

The authors declare that there are no conflicts of interest in connection with this article.

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