Influences on Preschool Children’s Physical Activity Exploration Through Focus Groups

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This study explored mothers’ perceptions of influences on preschoolers’ physical activity. Six semistructured focus groups with 23 mothers were conducted across a range of socioeconomic position locations. Mothers identified 4 key areas of influence: child fundamentals (eg, sex, personality), parent power (eg, rules, support), people to share with (eg, peers, adults), and places and things (eg, physical environments, toys). No substantial differences in themes were identified among socioeconomic position groups. Influences on preschoolers’ physical activity are multidimensional, multifactorial, and support the use of ecological models to conceptualize and understand the influencing factors. Associations among factors influencing preschoolers’ physical activity should be further investigated through quantitative research. **Key words:** children, ecological model, focus groups, health behavior, physical activity

Physical activity behaviors are established during the critical preschool developmental period (broadly 3-5 years of age). Objectively measured physical activity is inversely related to adiposity in cross-sectional studies, and positively associated with smaller increases in adiposity during childhood in longitudinal studies. In addition, limited evidence suggests that physical activity during the preschool years may have a beneficial effect on other health outcomes, including more favorable blood pressure, blood lipids, and bone health. Therefore, it is imperative that children engage in optimal levels of physical activity to reduce the risk of obesity and improve other health outcomes during the critical preschool years.

The prevalence of young children’s physical activity and the factors that influence this behavior are not well understood. Recommended levels of physical activity for preschool children vary internationally, with many countries not having specific guidelines for that age group. However, the National Association for Sport and Physical Education guidelines of 2 or more hours of structured and unstructured activity every day are regularly referred to. Given the differences in recommended levels of physical activity, studies that report on the prevalence of physical activity in this age group are conflicting and difficult to compare. Some studies suggest that preschool children attain adequate levels of activity, whereas others find that overall participation rates do not meet current recommendations. A recent review has shown that almost 50% of preschool children do not achieve the minimal amount...
of 1 hour of physical activity daily. In addition, physical activity clearly declines from childhood and tracks over time. Several arguments support the promotion of physical activity during childhood as beneficial. Therefore, it is necessary to understand the correlates of young children's physical activity to assist in maximizing physical activity opportunities for preschool children, thereby attempting to prevent major declines in physical activity as children age.

Studies seeking to identify influences specific to preschool children's physical activity have focused on childcare environments, such as family daycare, risk behaviors, play activities in overweight young children, child-rearing practices, and general health behaviors. Few studies have sought to investigate correlates of young children's physical activity from parents' perspectives. Factors reported by parents to impact children's physical activity have included child's age, daycare, parental impact, child's activity preferences, child's personality, availability of facilities, and perceived neighborhood safety. Furthermore, previous research has tended to adapt correlates of physical activity from studies with older children and apply the same framework to preschoolers. This approach fails to acknowledge, however, the known differences in physical activity patterns between preschool and older children and the different circumstances in which physical activity is likely to occur in these groups.

Qualitative techniques provide rich data about perceptions of behaviors and possible influences, particularly in under-researched populations. These techniques provide insights into complex behaviors and processes from the perspective of individuals. Qualitative research methods were used in this study to provide insight into the emotional and experiential phenomena to determine the broad range of experiences of the mothers. The framework for this study was guided by the Social Ecological Model (SEM), which has been shown to be appropriate in understanding influences on young children's behaviors.

The aim of this study was to examine, from a qualitative perspective, parents' perceptions of the influences on their preschool-aged children's physical activity.

**METHODS**

**Participants**

Focus groups were conducted at preschool and childcare centers located in the Melbourne metropolitan area of Australia. One local government area from each of the lowest, middle, and highest socioeconomic position (SEP) quintiles based on the Socio-Economic Index for Areas were randomly selected. Within each of the selected local government areas, 2 childcare centers and 2 preschools were randomly selected. All of the 6 invited preschools and 3 of the 6 invited childcare centers agreed to allow the investigators to approach parents. Recruitment of parents was standard across all centers and involved a written invitation distributed to the parents of each child attending the center and posters were placed around the center. Parents were eligible to participate if they spoke English and had at least 1 child between 3 and 5 years of age attending the center in which the focus group was conducted. Although mothers were not specifically recruited, no fathers participated. Because of the lack of parent response, focus groups were not conducted in 1 of the preschools and 2 of the childcare centers. The study was approved by the Deakin University Human Research Ethics Committee.

**Procedure**

One trained and experienced female researcher facilitated all 6 focus groups in March 2007. Focus groups lasted between 50 and 75 minutes. All were tape-recorded, and key points were written down at the time. The focus groups followed a semistructured schedule, developed to explore parental views of influences on preschool children's physical activity.
Influences on Preschool Children's Physical Activity

activity, with questions operationalized from the SEM and variables identified from the literature. The SEM posits that variables in the key domains of individual, social, and environmental levels act to influence behavior.34,37 The schedule (Table 1) initially included 3 topics for discussion (topics 1-3). Following the first focus group, 2 additional topics (4 and 5) were added. Saturation was reached by the sixth focus group, at which point no new information was emerging. No measures were taken of parent or child weight or physical activity.

DATA MANAGEMENT AND ANALYSES

Each focus group discussion was transcribed verbatim. Using the open-coding process of thematic analysis,38 several passes of the transcripts were made. A line-by-line analysis of the data was undertaken, whereby terms and concepts used by mothers in the study were identified and used as initial codes. Each comment in all transcripts was coded according to its thematic emphasis. These codes were grouped together into major themes. Where necessary, themes were subsequently divided into subthemes, which then incorporated the initial coding categories. Themes and issues that arose during the discussions that had not been intentionally sought were also identified and included.

Coding instructions were created to provide guidelines for the type of information to be allocated within each category and subcategory during the coding process. Each transcript was coded by assigning the relevant code(s) to each section of printed text that related to 1 or more of the categories. Once all transcripts were coded, the range of views within each theme was synthesized. One transcript was randomly selected and was cross-coded by an independent researcher by using the coding frame and instructions contained therein. Coding agreement was 87%. The data were investigated by SEP grouping and as no differences were noted; all data were presented for the entire sample.

RESULTS

The 6 focus groups contained between 2 and 7 mothers (mean = 4), with 23 mothers in total. Participant characteristics are summarized in Table 2. The sample contained a mix of mothers across age, country of birth, education, employment status, SEP, and marital status. However, the sample lacked male participants, and almost twice as many mothers of boys participated as mothers of girls. No differences by SEP were identified.

KEY THEMES

Four key themes were identified (Table 3). These themes were consistent with the domains of the SEM.

Theme 1: Child fundamentals

A number of individual factors were perceived to influence young children's physical activity levels. This theme, child fundamentals, included child's personality, sex, age/level of maturity/responsibility, child requests for activity, balancing the child's energy requirements, the perception that preschool children are naturally active, and health issues. While recognizing that boys were generally more active than girls, mothers distinguished between the influence of sex and personality and reported that some children were highly physically active regardless of their sex. Some mothers also reported that girls needed less activity than boys.

Anna's never, it's just not her thing, she's a typical girl, a lot different from my friends' boys, it always seems to be the girls, they're happy to sit at the craft table and the boys are always outside running around like nutcases.

I have a friend, who she encourages them to go outside, and she says "I wanna get them out there and they don’t want to." Two girls, 'cos they don't really,...whereas with my daughter, she was an outside child, and my son is the same, whereas her children aren't.

Some mothers reported the need to balance their child's active time, whereby if their child...
### Table 1. Topic and discussion points for semistructured focus groups

<table>
<thead>
<tr>
<th>Item</th>
<th>Topic</th>
<th>Discussion points</th>
</tr>
</thead>
</table>
| 1. | Home family environment | What things happen in your family to help your child be physically active?  
What things happen in your family, which might restrict your child being physically active?  
What things do you think would help your child be more physically active?  
Think about the time when you might make suggestions for your child to be physically active. How do you go about this? What effect does that have?  
How do your family circumstances, that is, being a single-parent/dual-parent home, having other children, make a difference to your child’s physical activity?  
How does your child’s television time and other sedentary behavior (such as electronic games) influence their amount of physical activity?  
What other things are there/happen in your home, which you think influence your child’s physical activity? |
| 2. | Broader social environment | What things do you think would help your child to be more physically active?  
What sort of interaction is there between children in your local neighborhood?  
In what ways do other adults encourage your child to be physically active? |
| 3. | Neighborhood physical environment | What outside places does your child use to be physically active?  
What things do you think would help your child to be more physically active outside?  
Thinking about these places, what things are important to your child being physically active there?  
Thinking about your neighborhood, what concerns do you have about your child being physically active in that environment?  
What things would you like to see in your neighborhood to help your child to be more physically active? |
| 4. | Child’s personality | How do you think your child’s personality influences his or her physical activity? |
| 5. | Preschool/childcare environments | In what ways do you think the teachers and staff in your child’s preschool/childcare center may influence your child’s activity?  
Tell me about the facilities in your child’s preschool/childcare center, and how they might influence your child’s activity.  
What opportunities are there for your child to be active in his or her preschool/childcare center? |
Table 2. Participant characteristics

<table>
<thead>
<tr>
<th>Preschool child characteristics</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child sex</td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td>14</td>
</tr>
<tr>
<td>Girl</td>
<td>8</td>
</tr>
<tr>
<td>Child’s mean age, y (±SD)</td>
<td>4.4 (0.7)</td>
</tr>
<tr>
<td>Proportion of children in preschool (%)</td>
<td>80</td>
</tr>
<tr>
<td>Parent characteristics</td>
<td></td>
</tr>
<tr>
<td>Mean age, y (±SD, range)</td>
<td>35.2 (4.6, 25-45)</td>
</tr>
<tr>
<td>Country of birth</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>High school or lower</td>
<td>10</td>
</tr>
<tr>
<td>Technical/trade certificate/ apprenticeship</td>
<td>1</td>
</tr>
<tr>
<td>University/tertiary qualification</td>
<td>12</td>
</tr>
<tr>
<td>Employed</td>
<td></td>
</tr>
<tr>
<td>Employed full-time</td>
<td>3</td>
</tr>
<tr>
<td>Employed part-time</td>
<td>5</td>
</tr>
<tr>
<td>Home duties full-time</td>
<td>15</td>
</tr>
<tr>
<td>SEP (by center location)</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>14</td>
</tr>
<tr>
<td>Middle-high</td>
<td>9</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>Married/de facto</td>
<td>18</td>
</tr>
<tr>
<td>Separated/never married</td>
<td>5</td>
</tr>
<tr>
<td>Health care card(a, b)</td>
<td>7</td>
</tr>
</tbody>
</table>

Abbreviation: SEP, socioeconomic position.
\(a\)one missing data.
\(b\)Health care cards are supplied to low-income individuals.

had been at preschool or otherwise active during the morning, they felt it necessary for the child to engage in quieter activities in the afternoon. Conversely, some mothers felt that young children were always active and that this “natural state” was an indication of their state of health.

I guess if they weren’t being physically active, then something’s wrong. You think that maybe they’re not that healthy.

Theme 2: Parent power

The role that parents play in their child’s opportunities for and participation in physical activity was the strongest influence identified in the focus groups. Parental influences fell into 2 categories: child-focused factors—activities or behaviors that parents actively undertake with the child as the focus and parent-focused factors—activities or behaviors that have the parent as the focus. Each of these categories contained 3 subthemes, as illustrated in Table 3.

Child-focused factors

Child-focused factors included family activities and supervision. The father’s role in children’s physical activity was discussed, with some mothers suggesting that fathers supported different types of activities than mothers. Mothers also discussed how they provided logistic support, encompassing material or practical issues. This support was provided through structured activities, such as taking children to swimming classes, planning and organizing for opportunities for physical activity—often involving transport and admission or other costs, and providing toys and equipment to support activity at home. It should be noted that, with the exception of swimming classes, few mothers reported that their children took part in structured activities. Mothers recognized that parental participation in the child’s activities resulted in the child being more active.

They’ll tend to sort of go “you chase me and I’ll chase you” and they’ll do that for a little while and then it’s like, “oh, I’m sick of that.” There’s only so much chasey they’ll play. But if we engage with them and play ball or kick the ball around with them or something like that, it will last longer, that activity will last longer.

Mothers reported how they used rules to support opportunities for physical activity and minimize screen-based entertainment. Rules, often stemming from fear for the child’s safety, were used to protect the child and covered issues such as stranger danger,
Table 3. Themes, subthemes, and descriptions

<table>
<thead>
<tr>
<th>Theme (description)</th>
<th>Subthemes</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child fundamentals (characteristics intrinsic to the child)</td>
<td>Child-focused factors: family activities/support, logistic support, and regulation</td>
<td>Sex, personality, health issues, intrinsic desire to be active</td>
</tr>
<tr>
<td>Parent power (the influence of parents)</td>
<td>Parent-focused factors: parental physical activity, demands on parents, and parent intrinsic interests</td>
<td>Those things the parent does to fulfill the child’s needs, for instance, taking the child to a park or playing in the yard with the child</td>
</tr>
<tr>
<td>People to share with</td>
<td>Companionship: children and adults</td>
<td>Children need other people to be active with</td>
</tr>
<tr>
<td></td>
<td>Teachers/carers</td>
<td>Opportunities for children to learn skills to support their physical activity</td>
</tr>
<tr>
<td>Places to go and things to do (places to be active, things that influence opportunities for, or choice of, physical activity)</td>
<td>Home physical environment</td>
<td>Yard size, toys, &amp; equipment</td>
</tr>
<tr>
<td></td>
<td>Places to go</td>
<td>Parks &amp; playgrounds, beaches, and specialist facilities</td>
</tr>
<tr>
<td></td>
<td>Factors influencing choice</td>
<td>Availability &amp; accessibility, some safety issues</td>
</tr>
<tr>
<td></td>
<td>Preschool/childcare centers</td>
<td>Facilities, amount of physical activity while at the center</td>
</tr>
<tr>
<td></td>
<td>Weather/season</td>
<td>Extreme weather, daylight savings, season</td>
</tr>
</tbody>
</table>

accidents, the safety of play equipment, and traffic hazards.

And they’re locked in... We’ve got huge fortress gates, and during the day they aren’t kept open, you know. So my two couldn’t walk in and out because the gates are locked down the end of the driveway, so you know that they’re safe.

However, some mothers reported that despite being concerned for their child’s safety, the child was permitted to participate in activities such as climbing because mothers recognized the importance of children undertaking challenging activities, which allowed them to learn through their mistakes.

I’ve got concerns when my son climbs the tree and goes really, really high that he’s going to fall. But I don’t know how to get around that, because I don’t want to keep him on the ground.

Parent-focused factors

Mothers discussed how some of their own needs and responsibilities influence their child’s activity. These included parental demands, such as work, financial constraints, time constraints, housework, and other children. Many mothers discussed their own physical activity and recognized the positive influence this could have on their children.

I think it’s all about what happens in the household. Like behavior comes from parents and everything else, whilst children have their own personality and their own make-up, I think if you’ve got active parents, that’s gonna make maybe even an inclined
nonactive child to be more active, and to at least get the right attitude going into it.

Mothers’ lack of enjoyment while their children played in places, such as local parks, was perceived as a constraint on children’s activity, with several reporting that they got bored at such times, thereby wanting to leave and reduce their child’s active time. Mothers felt that social interaction in such situations helped them enjoy themselves more and therefore allowed their children to be active for longer. Mothers reported that their level of tiredness could have a negative impact not just on themselves, but also on their ability to provide active opportunities for their child.

My own tiredness impacts on that as well... and you say, “can I just watch you” or “this is the last one” but they want another one. And they want you to keep going and you just have to say, “Oh, darling, I’m really tired.” And it’s a real physical tiredness, it’s not laziness, it’s complete and utter exhaustion that you can’t get out of.

People to share with

Mothers generally agreed that preschool children need companionship to support their physical activity. Mothers reported that their children were more active when with other children compared with when they played on their own. Social gatherings provided good opportunities for adults and children to be active together. Grandparents were also an important influence, with many mothers reporting that their children were cared for by grandparents while the parents worked.

They’re not great at doing a lot of physical activity by themselves. They need someone else there.

And generally social gatherings are physical play, they go outside and play, rather than, so when there are friends and kids, you don’t sit. They go outside and get active.

Furthermore, most mothers recognized the importance of positive role models and commented that sports stars, parents, and media personalities could all have an influence on children’s behavior. Mothers discussed how teachers provided opportunities for children to learn important skills, such as gross motor skills, and sport/game-specific skills, which the children could then apply in other situations. Teachers and childcare staff were also perceived to be an important source of information about what was necessary and appropriate for young children.

I think in this day and age a lot of little boys, and little girls, don’t get to run around enough... and get to see football skills, tennis skills, balance, and games that they can play with their siblings, like what’s the time Mr Wolf... I think the earlier you can get them moving, I think, the better, you know. I mean, every kindergarten, there’s no reason why every kindergarten teacher can’t build that into their program with a few simple games.

Places and things

Issues surrounding the physical environment and its influence on preschoolers’ physical activity included several subthemes, identified in Table 3 and discussed below.

Home physical environment

The home physical environment, including yard space, toys, and equipment, was seen as important. Many mothers felt that having a small backyard constrained children’s opportunities to be active, although others felt that even small backyards could support a great deal of activity. Despite several mothers suggesting that young children could be quite active with minimal toys and equipment, others felt that equipment and toys generally supported higher levels of activity. Mothers reported that more vigorous physical activity took place outside; however, dancing to music or DVDs inside was a regular activity for some families.

My place, because it’s so confined, you know... within 20 minutes they’re bored. They’ve done everything. Whereas outside with the grandparents they’re there for about 3 or 4 hours and they won’t come back in. And I think its space.

We play cricket most nights of the week. We’re out in the backyard either playing cricket or totem
tennis or chasey around the deck ‘cos we’ve only got a small backyard.

**Places to go**

Mothers took their children to many places to be active outside the home, including parks, playgrounds, and beaches, and fee-for-use facilities, such as indoor play centers, specialist facilities (eg, the zoo), shopping, and restaurants with indoor play areas. In addition, mothers discussed visiting locations close to their homes and others at some distance away.

**Factors influencing choice of location and activity**

Availability and accessibility were important considerations when choosing a location for children to be active, with some mothers suggesting, “when you have to get into the car [to go to a park], I can’t be bothered.” Others, however, suggested that they “prefer to put them in the car and drive for an hour and go somewhere on the weekend just to get away.” In addition, safety issues, such as bicycle tracks being unsafe for young children when they were next to roads or waterways, and suitability of play spaces and equipment influenced decisions about choice of play locations. Infrastructure, including fencing, shade and seating, stranger danger, traffic, aesthetics, and incivilities (eg, graffiti, vandalism), were also raised as important issues. Quality of playground equipment (age-appropriate, variety, safe, and useable), and the frequency with which a park was used by other children, were important considerations to many mothers.

It doesn’t seem to cater for all age groups, and if you take your kids, they get bored. I’ve stopped going to a lot of the parks with Jamie because he just gets so bored.

Seats for the parents to sit down, fenced off, sun shade, and a variation of great equipment for various ages. The councils don’t seem to cater anymore.

**Preschool and/or childcare centers**

Appropriate outdoor space, facilities, and the variety of equipment were important issues discussed in relation to preschool and childcare centers. In addition, access to the facilities was important. For instance, 1 mother commented that her son had attended a childcare center with “fantastic” physical activity equipment in 1 room, which catered for children of a specific age; however, children who were not that age did not have access to that equipment. Mothers reported that physical activity facilities were an important factor in their decisions to send their child to, or keep their child at, a particular center. However, mothers generally spoke favorably of the centers their children attended and the staff at those centers.

When we were in crèche, before Tommy started kinder, that was what he loved the best was that they changed it [the outdoor equipment] completely every week. Tommy would go there and there would be completely different stuff and different ways the equipment was set up, and that was really interesting. It’s limited how much you can do at some kinders.

Water play, all sorts of different things, climbing play, sandpit, everything you could possibly think of. I can’t complain. They’re just great.

Some mothers discussed the program itself and the opportunities for active, unstructured play provided by the teachers. Another mother discussed how the childcare center her son attended engaged specialist program providers to attend the center on certain days each week to provide structured physical activity sessions for the children.

I don’t think I would be happy [with the program] if they didn’t have the Play Ball program in the crèche. I think that should be compulsory in every crèche, in every kindergarten. It is the most phenomenal program.

**Weather or season**

Mothers thought that extreme weather, such as high temperature or ultraviolet rating and very wet or cold weather, along with
Influences on Preschool Children's Physical Activity

shorter days during winter, acted to constrain their children’s opportunities to be outside, thereby limiting time for which they could be physically active.

Winter versus summer, if it’s raining, you don’t get out as much, and just the extended hours [during daylight savings], night time . . . So definitely in winter you can’t get out after dinner and at the end of the day and those sorts of things.

DISCUSSION

The use of qualitative data collection techniques in this study has highlighted the complexity of the influences acting on preschool children’s physical activity. In general, mothers understood the importance of providing children with physical activity opportunities and reported strategies to support activity. The findings clearly illustrate that the influences on preschool children’s physical activity are multidimensional in nature. This is consistent with findings of quantitative reviews of correlates of physical activity in both preschool and older children, international qualitative research, and other empirical studies. The use of the SEM as a framework through which to understand influences on young children’s physical activity is also supported. That literature, collectively, illustrates that preschool children’s activity levels and patterns are influenced by individual, social and physical environmental factors. In addition, this study identifies previously unexplored influences on young children’s physical activity.

Consistent with previous research, several focus groups identified the influence of the children’s sex on their level of activity, with many mothers commenting that they believed boys were more active than girls, and indeed, some mothers also suggested that girls needed less activity than boys. However, a greater proportion of mothers in the sample had sons and that might influence the latter perception. Some findings from this research also supported those identified by Dwyer et al, including safety concerns, companionship, perceptions of children being naturally active, and time constraints. In contrast to those findings, parents in this study reported minimal involvement by their children in structured or organized activities. This finding may result partly as a consequence of the composition of the focus groups, wherein approximately 60% of mothers were from low SEP areas, and may therefore have insufficient funds to support participation in structured activities. However, this issue was not explicitly raised by mothers, and further investigation is required to support this contention.

A unique aspect of this study was the exploration of rules and restrictions placed on children’s behaviors. Many parents reported having rules that restricted their children’s opportunities to engage in sedentary behaviors, such as television viewing, e-games, and computer use. However, parents also reported rules that restricted physical activity opportunities, including not being allowed to engage in certain activities (such as climbing) and not allowing their children to play in the street. The influence of parental rules and restrictions regarding young children’s physical activity has previously been examined in only 1 study, which found that the use of rules and restrictions, both inside and outside, acted to constrain children’s physical activity. The current study identified ways in which some rules might support young children’s physical activity. For instance, many parents reported having rules that limited time spent using electronic media and ensured that young children spend time outside each day. Previous research with older children found such rules to be inversely associated with inactivity.

As previously identified, some mothers perceive their children to have a natural propensity toward physical activity. An additional finding from this study was that some mothers thought that their child was more intrinsically motivated to participate in physical activity than others. Personality aspects and potential associations with preschool children’s physical activity have been investigated in only a handful of studies to date.
Unfortunately, different personality characteristics have been examined in each of these studies, and results are inconclusive. The potential for young children’s personality and individual preferences to influence their behavior is difficult to study, given young children’s lack of cognitive awareness and inability to self-report. Nonetheless, understanding the intrinsic factors that may drive even young children to be active may be an important component in supporting their participation in optimal levels of physical activity.

Irwin et al\(^\text{27}\) identified the importance of exploring factors that facilitate and hinder parents’ ability to provide appropriate physical activity opportunities for their preschool children. The current research has shed some light on these influences. Issues, such as parents’ level of tiredness and energy, parents’ preference for particular activities, the need to provide for other children in the family, and parents’ opportunities to be social while their child is being active, were all identified as potential influences on children’s active opportunities and should be further investigated. Further, parental logistic support, identified in this study as a potential influence, has not been investigated in empirical research in this age group to date, despite research in older populations, showing this as an important factor.\(^\text{19}\)

With respect to environmental influences, time outdoors,\(^\text{49}\) the frequency of visits to,\(^\text{45}\) and time spent in\(^\text{45,50}\) appropriate play spaces are all positively associated with children’s physical activity. While it is important to support parents in encouraging their children to spend time in appropriate outdoor play spaces, further understanding of the factors that may influence these opportunities is important. The current study suggests that children’s opportunities to spend time in play spaces may be influenced by a number of physical environmental factors, including access to and quality of playground equipment and facilities. In addition, social environmental factors, including use by other children, may be important and require further investigation.

A limitation of this study was the small number of parents of children in childcare who participated. It is likely that work and time commitments in those parents’ lives contributed to their inability to attend. However, many mothers who participated had, either previously or currently, used childcare in addition to preschool and could therefore provide valuable insights into issues relevant to childcare. Lack of participation from parents of children in childcare does not reduce the validity of the views expressed by others. Indeed, many issues around work and time commitments were raised in several groups, and some mothers who participated were in full-time employment.

Many of the parents who participated were either physically active themselves or believed that physical activity was an important component of a healthy lifestyle. Undoubtedly, those parents were also encouraging and supportive of their children developing such lifestyles. Engaging parents who did not understand the important role that physical activity plays is unquestionably a difficult task, and their contribution may have added richness, particularly in the area of potential individual and social-level influences on children’s physical activity behaviors. Nonetheless, issues around parental motivation and enthusiasm were identified by several groups, and some mothers identified themselves as being inactive.

The parents involved in this study were a self-selected group of mothers and therefore might not be representative of the preschool parent communities in terms of sex, sociodemographics, knowledge, awareness, education, or other relevant characteristics. Despite this, the views of parents accessed at the 6 sites, across 3 diverse SEP areas showed strong similarities.

**CONCLUSION**

This study explored parental perceptions of a range of potential influences across the home and social and physical environments, particularly the influence that parents
themselves have on preschool children’s physical activity. Several unique and previously unidentified influences were found. In addition, parental perceptions of these influences support the concept that preschool children’s physical activity is subject to multidimensional influences. Previous studies in this area have tended to examine only a narrow range of influences on preschool children’s physical activity behaviors and have adapted the focus of their investigations from identified correlates of older children’s behaviors.

Further quantitative research is necessary to more fully examine associations between variables, using a multidimensional model of preschool children’s physical activity. A better understanding of those influences, and how they interact to support or constrain children’s physical activity, may provide professionals with invaluable insights for future physical activity promotion and interventions.

REFERENCES


