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Parents' perceptions of preschool activities: exploring outdoor play

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Abstract

Research Findings—Outdoor play is important for children's health and development, yet many preschool-aged children in childcare settings do not receive the recommended 60 minutes/day of outdoor play. Childcare providers have previously described parent-related barriers to increasing outdoor playtime, including parents not providing appropriate clothing for their children and parents' preference for academics over active play. This study explored parent perceptions and knowledge of outdoor playtime in childcare environments. On average, parents reported wanting their child to spend significantly more time playing outside during a full day of childcare than the recommended minimum. However, over one-half of parents reported that they did not know how much time their child actually spent playing outside and 43% reported that they did not know their childcare center's outdoor play policies.

Practice or Policy—Childcare providers may over-perceive parent-related barriers to outdoor play. Parents generally support outdoor play for their preschooler during center-based childcare but are not well informed about outdoor playtime and policies. Encouraging communication between parents and early childhood educators about these topics could lead to more universal support and strategies for promoting outdoor and active play opportunities for children which are important for their health and development.

Keywords

Childcare; Parent Perceptions; Active Play; Physical Activity; Preschool Children

Introduction

Physical activity is beneficial for children's health, including obesity and chronic disease prevention, (Biddle, Gorely, & Stensel, 2004; Flynn et al., 2006) but also is important for various aspects of their cognition, learning and well-being (Becker, McClelland, Loprinzi, & Trost, 2014; Biddle et al., 2004; Flynn et al., 2006; Janssen & Leblanc, 2010; Lees & Hopkins, 2013; Palmer, Miller, & Robinson, 2013). Outdoor playtime, in particular, is one of the strongest and most consistent correlates of physical activity in young children as children play more vigorously when outdoors compared to indoors. (Dolinsky, Brouwer, Evenson, Siega-Riz, & Ostbye, 2011; Sallis, Prochaska, & Taylor, 2000; P. S. Tandon, Saelens, Zhou, Kerr, & Christakis, 2013). Outdoor play also fosters social-emotional and cognitive development through exposure to nature, activities that engage problem-solving skills and creativity, and unique opportunities for imaginative group- and free-play (Harte, 2013; National Association of Early Childhood Specialists in State Departments of, 2001). Despite these benefits and recommendations for daily outdoor playtime (American Academy of Pediatrics Council on Sports Medicine and Fitness, 2006), nearly half of all U.S. preschool-aged children do not receive at least one opportunity for parent-supervised outdoor play per day (P. S. Tandon, Zhou, & Christakis, 2012). Since a majority of U.S children under the age of five spend on average over 30 hours per week at out of home childcare facilities, those early learning settings become critical for providing outdoor play and physical activity opportunities (Laughlin, 2013).

According to the third edition of *Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs*, children attending childcare centers should have a minimum of 60 minutes and multiple opportunities for outdoor play each day (Pediatrics, Association, & Education, 2011). The guidelines also include weather and clothing recommendations to support daily outdoor play. However, one study of Head Start centers reported that children spent an average of 36 minutes per day playing outdoors (Marino, Fletcher, Whitaker, & Anderson, 2012). Another study of licensed child care centers found that preschoolers received an average of 33 minutes per day of outdoor playtime (P. S. Tandon, Saelens, B.E., Christakis, D.A., 2015). Compared to those in half-day programs, children enrolled in full-day center-based programs spend less daily time in physically active play suggesting that childcare programs may not be providing sufficient active play opportunities (O'Dwyer et al., 2013). While the positive relationship between physical activity and cognition has been demonstrated in both school age children (Committee on Physical, Physical Education in the School, Food, Nutrition, & Institute of, 2013) and preschoolers (Carson et al., 2015), outdoor play may not be prioritized as a fundamental learning opportunity. However, the field is beginning to acknowledge emerging research in support of outdoor play as a unique and important developmental opportunity for young children ((NAEYC), 2012).

Surveys of childcare providers have identified barriers to increasing outdoor play in childcare centers including parents not providing appropriate clothing for playing outdoors (Copeland, Sherman, Kendeigh, Saelens, & Kalkwarf, 2009), parental preference for children to be inside learning, and societal concerns about potential injuries (Copeland, Sherman, Kendeigh, Kalkwarf, & Saelens, 2012). Furthermore, one study found that parents

overestimate the amount of time they thought their preschooler spent engaged in daily physical activity (Irwin, He, Bouck, Tucker, & Pollett, 2005). Other studies of school-aged children reported that both children and parents consider any school related activity to be healthy because school is perceived as a “healthy place.” (Hesketh, Waters, Green, Salmon, & Williams, 2005; Patino-Fernandez, Hernandez, Villa, & Delamater, 2013). These studies suggest that parents may not engage in efforts to promote outdoor play in childcare settings for a few reasons: 1) they do not have a clear understanding of their child’s activities at childcare, 2) they assume that childcare activities are healthful and are following best practices and/or 3) they are not aware of the health and cognitive benefits of active play (Copeland et al., 2009; J. P. O’Connor & Temple, 2005). Strategies to overcome parent-related barriers in improving young children’s early development include forms of parent engagement which Sheridan et al. (2011) describe as, “behaviors that connect with and support children or others in their environment in ways that are interactive, purposeful, and directed toward meaningful learning and affective outcomes.” (Sheridan, Knoche, Kupzyk, Edwards, & Marvin, 2011). As previous studies have primarily focused on the perspectives of childcare providers, the purpose of this study was to evaluate parents’ perceptions and knowledge of the role of outdoor play in their child’s childcare center to better inform parent engagement in strategies to promote outdoor play and physical activity in early learning settings.

Methods

This was a descriptive exploratory study that used a convenience sample to gather information regarding parents’ views of their child’s activities while attending center-based childcare. The study included a cross-sectional self-report survey of open- and closed- ended questions. This study was considered exempt by the University Institutional Review Board.

Study participants consisted of primary caregivers of children, ages three through five years, enrolled in pre-kindergarten licensed childcare centers (referred to as “center”). Primary caregivers under 18 years of age and those who did not self-identify as the primary caregiver were excluded. Given that over 90% of respondents consisted of mothers and fathers, the survey respondents will be referred to as “parents” in order to avoid confusion between primary caregivers and childcare center caregivers. If a parent had more than one preschool-aged child enrolled at the center, only one survey was completed. Non-English speaking parents were excluded from the study. Survey answers were collected anonymously.

The study was conducted in 12 licensed centers in the greater Seattle area. The communities in which the centers were located varied in income and race/ethnicity. The median income of the communities ranged from \$43,263 to \$98,604 (Census Bureau, 2010). Each center has two to three classrooms of about 20 children per classroom and all of them had an outdoor play area with play equipment. All centers have policies for outdoor play communicated to parents through newsletters and center handbooks distributed at orientation. The centers had similar outdoor play schedules posted in the centers with a minimum of one 30-minute session in the morning and one 30-minute session in the afternoon.

Study participants were recruited through one of three methods: 1) in-person, on-site communication between researcher and parent; 2) center distribution of survey; 3) electronic distribution of survey. The method of recruitment was determined by the preference of the center director. The survey instrument was informed by previous research, survey methodology text, and the input of the authors. The survey was piloted with parents of preschool-aged children and the final instrument included: (a) parent and child characteristics, (b) parents' perceptions of the value of outside playtime relative to other center activities, (c) open-ended questions about parents' knowledge of center active play policies, (d) parents' perceptions of potential barriers to outdoor play at childcare, and (e) parents' experience of discussions with childcare providers about outdoor playtime.

Data analysis included frequencies, means and standard deviations of responses of all survey questions and demographic characteristics. A two-sided, one-sample t-test was used to compare the mean of parents' reported ideal daily amount of outdoor play relative to the recommended 60 minutes of outdoor play.

Short responses to open-ended questions included in the survey were analyzed using a qualitative content analysis approach. Using keywords, responses were coded and counted. Primary coding was completed by one researcher and confirmed by the remaining authors. Any differences were reconciled through consensus. These results were used to contextualize the survey responses. An *a priori* list of keywords derived from review of prior literature was used for coding.

Results

Participant Characteristics

The survey was completed by 98 respondents. Of the 98 respondents, 25 responded by center distributed mail-in paper surveys, 2 responded by electronic flyer distribution, and 71 responded by direct researcher approach. Each participating center had 8 to 10 respondents and results did not vary by center. The response rate among potential respondents approached directly by the researcher was 83%, with 17 potential respondents declining to participate. The characteristics of the study participants and their children are shown in Table 1. The sample which is referred to as "parents" was comprised of biological mothers, fathers, grandparents, siblings and a foster parent. Parent age ranged from 18 to 54 with a median age of 33 years. Children's ages ranged from 3.0 to 5.9 years of age. Parents reported that their child played outside at home for an average of 81 minutes (SD: 77) on days the child attended childcare, and 151 minutes (SD: 110) on days the child did not attend childcare.

Importance of Activities and Reported Outdoor Playtime

Table 2 shows the parents' responses to the survey questions regarding the importance of different preschool activities: (a) in general, and (b) with regard to kindergarten readiness. "Learning ABCs and numbers" had the highest average score on both scales. "Outside play" ranked 5th relative to general importance and 4th relative to kindergarten readiness.

In response to the statement, “I think outside playtime is an important learning activity at school”, 87% of parents agreed or strongly agreed. In response to the statement, “Active outdoor playtime helps my child get ready for kindergarten”, 82% of parents agreed or strongly agreed. In response to the statement, “I think story time, ABC’s, numbers and science are more important for my child than going outside to play”, 32% of parents agreed or strongly agreed compared to 32% who disagreed or strongly disagreed and 36% of parents who neither agreed nor disagreed.

Figure 1 displays the distribution of parents’ reported times for the ideal amount of outdoor playtime for a full day at the center. The majority of parents (65%) reported wanting their child to spend more than 60 minutes playing outside compared to 35% of parents who reported wanting their child to spend 60 minutes or less playing outside. The mean amount of time that parents reported wanting their child to spend in outdoor playtime during a full day of childcare was 99 minutes (95% CI: 90–108). Compared to the recommendation of 60 minutes of daily outdoor playtime, parents wanted significantly more time at child care ($p < 0.0001$).

When parents were asked to report how much time their child currently spent playing outside at the center, 62% responded “don’t know”. The average time reported by parents who reported that they did know was 65 (SD: 32) minutes per day.

Parent Reported Perceptions of Barriers to Outdoor Playtime

In response to statements about weather as a potential barrier to outdoor play, most parents disagreed or strongly disagreed with the statement that their child should not play outside in the rain (68%), in the snow (68%), or in cold temperatures (72%), while 18% of parents agreed or strongly agreed that their child should not play outside in the rain, in the snow (11%) or in cold temperatures (8%). Other potential barriers that parents were asked to rate included child’s illness, being too rushed in the morning to prepare weather-appropriate clothing, and being worried that their child might be hurt while playing. Half of parents reported agreement with not allowing their child to play outside when sick (50%), although a quarter of parents reported they would let their child play outside when sick (26%). Few parents reported that they feel too rushed in the morning to get their child’s outdoor clothes ready (6%) or were worried about their child getting hurt playing outside (9%).

Parent Knowledge of Childcare Center Outdoor Play Policy

Table 3 displays parents’ responses to questions regarding their childcare center’s policies for outdoor play. When asked if their center had an outdoor play policy, 40% of parents responded “not sure”. Of the 56% parents who responded that they knew that their center had a policy, they reported that they knew the center’s specific policy in the following areas: amount of time spent outside (60%), weather requirements (40%), clothing requirements (33%).

Parents were given an open-ended question to describe what they knew about the specific outdoor policy areas for which the responses were summarized below with content analysis. Of the 28 parents who responded to the open-ended question about knowledge of time spent outside, 46% reported an amount of time in minutes (range: 15 –90 minutes). Typical

responses included: “*depending on the weather 15–30 minutes*” and “*I believe it’s 30 minutes outside and 30 minutes indoor activities.*”

Of the 36 parents who responded to the open-ended question about the center’s weather policy, 72% reported knowing that outdoor play is dependent on weather conditions. Of these, 58% cited some form of rain as part of the school policy for outdoor play, 38% reported cold temperatures, 8% reported hot temperatures, and 8% reported snow as part of the school policy. Typical responses included: “*switches to inside if it’s currently raining*” and “*will not go out if too hot or cold.*”

Of the 29 parents who responded to the open-ended questions about the clothing policy, 55% reported that some form of weather appropriate clothing is required by the center. Of the 29 responses, 41% reported that the center requires parents to provide specific clothing items such as hats, gloves, jackets, and waterproof shoes and 31% reported that parents are to provide extra clothing for the child for either layering or changing if the child gets dirty or wet. Typical responses included: “*if cold must wear jackets and hats etc.*” and “*wear weather approved clothing.*”

Communication between parents and staff

Table 3 displays responses to the questions regarding parent communication with center staff about outdoor play time. Most parents (81%) said they did not approach center staff to discuss outdoor play. Of the 19% of parents who reported they had initiated communication with staff about outdoor play, weather was the most cited reason for talking with staff. Weather topics included conflicting statements of parents asking childcare providers not to take their child outside in the rain and asking that their child be taken outside despite the rain. Typical responses included: “*just to ask her to make sure my child wears gloves when cold*” and “*I don’t allow my child to play outside when it’s cold, rainy, etc.*”

Parents who reported that center staff initiated conversation with them about outdoor play reported being reminded by staff to bring weather and outdoor appropriate clothing. Typical responses included: “*they wanted to make sure the kids were dressed right*” and “*they always remind us of weather changes and go over special activities.*”

Discussion

This study found that while parents place importance on academics for their preschooler, they also value and want more outdoor time than the 60 minutes per day which is the minimum recommendation and is typically written into the schedule at many centers (Marino et al., 2012; Pediatrics et al., 2011). The sixty minutes per day outdoor time recommendation comes from best practices recommendations for child care settings from various expert groups (American Academy of Pediatrics Council on Sports Medicine and Fitness, 2006; Pediatrics et al., 2011). This time recommendation is extrapolated from the considerable evidence in school-age children that at least 60 minutes/day of physical activity are important for beneficial health and behavioral outcomes (Strong et al., 2005). Given the numerous benefits of physically active and non-active outdoor time, it is reassuring that we found parents in agreement with the expert recommendations.

The remaining findings point to areas in which parents could be better engaged to help promote outdoor play time in early learning settings, which is important for children's health, development and well-being. These areas include addressing parent knowledge of how much time their child actually spends playing outside at their center, a finding that is consistent with a prior study that found parents are unable to accurately report the amount of time their child spends outside (Lau, Engelen, & Bundy, 2013). Many parents did not know if their child's center had a policy for outdoor play. Among parents who knew the school had an outdoor policy, many parents did not know the components of the policy relative to amount of time spent outdoors, clothing requirements, and weather conditions. There was also very little dialogue initiated by parents or staff around the topic of outdoor play. The gaps in communication and parent engagement in the centers' outdoor time practices may be leading to decreased opportunities for outdoor play. For example, if parents are not informed about how much time a child will spend outdoors, that they go outside even during precipitation, or that it is a priority at childcare, they may not place as much emphasis on dressing them appropriately. Conversely, if childcare providers are not aware that parents actually value outdoor play, they may de-emphasize it compared to academic or other activities.

Only a minority of parents reported that they did not want their child to play outside in less favorable weather or that they did not have time in the morning to dress their child appropriately for the weather. While most parents in this study did not view weather conditions as barriers to outdoor play, childcare providers have previously reported that even a few parents who do not support outdoor play in light rain or cold temperatures may hinder entire classrooms from going outside. They have also reported that a single child without weather-appropriate clothing could conceivably prevent an entire classroom from going outside (Copeland, Kendeigh, Saelens, Kalkwarf, & Sherman, 2012). While the parent responses in the current study challenge previously reported childcare provider perspectives, it is possible that even the minority of parents who feel differently could create challenges for childcare staff. The Copeland (2009) study concluded that parents may need to be better educated regarding the benefits of active play for their child's development to encourage them to dress their child suitably for outdoor play. As one Australian study concluded, in addition to emphasizing national guidelines, educating parents and caregivers about the importance of active play for preschool children is the best strategy to promote and increase play opportunities (Dwyer, Higgs, Hardy, & Baur, 2008).

Our study shows that parents do consider outdoor play an important part of their child's time at childcare but they are not engaged in conversations about this with teachers and staff. Previous studies of parents show that when selecting early childhood experiences for their children, parents value confining activities and compliance with adult expectations, while they define play as for fun or amusement (Carlson & Stenmalm-Sjoblom, 1989; Rothlein & Brett, 1987). This is compared to teachers who also value play for cognitive and social development (Rothlein & Brett, 1987). A recent systematic review highlights the benefit physical activity has on cognitive development during early childhood and supports the need to consider outdoor and physically active play areas as important for learning (Carson et al., 2015). Dialogue between child care providers and parents around the multitude of physical, social and cognitive benefits of outdoor play opportunities could increase both groups' value

for active play. Child care providers can discuss the benefits for attention, affiliation and affect in a way similar to recommendations given to pediatricians for effective communication with parents about the benefits of outdoor play (Burdette & Whitaker, 2005). Forms of parent engagement could include more comprehensive written and/or posted information alongside and conversations during parent-provider meetings, or during child drop-off and pick-up. More broadly, strategies that further include parents in their preschooler's daily activities, both indoors and outdoors, have the potential to support the parent-child bond and foster continued positive behaviors even outside the child care setting. For example, hearing about how much time their child spends outdoors at child care or about how their preschooler learned to put on protective rain gear could influence practices and behaviors at home. To our knowledge, no other studies have explored parent perceptions of outdoor play in early learning settings. Several studies have focused on teacher and provider perspectives which concluded that early childhood care providers support the need for outdoor active play to facilitate learning (Copeland, Kendeigh, et al., 2012; Copeland et al., 2009; Gehris, Gooze, & Whitaker, 2015). The results of this study indicate that parents also support outdoor play although parents and childcare providers may not be actively communicating with one another about this topic. Increasing parents' knowledge of their child's outdoor time may help increase support for outdoor playtime at centers. This has been demonstrated by studies showing parenting style and engagement in preschool children's activities positively increases the child's physical activity levels (T. M. O'Connor et al., 2013; Schary, Cardinal, & Loprinzi, 2013).

There are several limitations to this study. First, the small convenience sample precludes generalization of the study findings to a broader population. This sample consisted of predominately Caucasian, highly educated, and only English-speaking participants which excludes a potentially important cultural or socioeconomic influence on parent perceptions of outdoor play. Additionally the perceptions of parents may not be accurately reported through a written self-report survey. While parents reported that they wanted their child to have more outdoor playtime than recommended, parent reporting may be inaccurate and it is possible that they would report the same when asked about how much time their child ideally spends learning ABCs, numbers and other activities. Parents may over-report the amount of time that should be spent on all activities. A comparison of reported ideal times for other activities is needed to know if the reported time for outdoor play is realistic. This limitation could be addressed in future studies by including comparison activities and qualitative interviews for greater depth in responses. In addition, direct measures of outdoor playtime and physical activity levels is needed in order to accurately assess time spent in outdoor active play. Finally, the question of what "dose" of outdoor time is sufficient to achieve optimal benefits in terms of health and other domains, needs to be better understood, including the nuances of active vs. non-active time.

Conclusion

This study has potential implications for early childhood educators and others interested in promoting outdoor play opportunities for preschoolers. Current research indicates that early childhood care providers experience parent-related barriers to outdoor play but are interested in receiving training to expand outdoor play and increase opportunities for physically active

learning (Copeland et al., 2009; Gehris et al., 2015). However, childcare providers' perceptions of "parent barriers" may be over-emphasized as most parents in this study generally did not endorse the obstacles described by childcare providers in previous studies. Parents' limited knowledge about the amount of time their child spends outside, and the outdoor clothing and weather policies of their child's center, suggests the need for more effective communication and engagement between staff and parents. For the providers and parents that do advocate concerns about outdoor play, additional research and dissemination of information about the importance of these activities for children's health and development is necessary. Encouraging communication among parents and early childhood educators about these topics could lead to more universal support and strategies for promoting outdoor and active opportunities for children which are important for their health and development.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Figure 1.
Parent reported ideal amount of outdoor playtime.

Table 1

Characteristics of Participants (N=98)

Parent Characteristics	
Age, yrs Mean (SD)	33.8 (8.0)
Caregiver Relationship, N (%)	
Mother	81 (82.7)
Father	10 (10.2)
Grandparent	3 (3.1)
Other	2 (2.0)
Missing	2 (2.0)
Caregiver Race/Ethnicity, N (%)	
Non-Hispanic White	46 (46.9)
African American	18 (18.4)
Hispanic/Latino	14 (14.3)
Asian/Pacific Islander	8 (8.1)
American Indian/Alaska Native	4 (4.1)
Other	4 (4.1)
Prefer Not To Answer/Missing	4 (4.1)
Caregiver Education, N (%)	
Less than high school	4 (4.1)
High school/GED *	18 (18.4)
Some college	33 (33.7)
College graduate	28 (28.6)
Graduate or professional degree	13 (13.2)
Missing	2 (2.0)
Child Characteristics	
Age, yrs, Mean (SD)	4.26 (8.9 months)
Child Gender, N (%)	
Female	52 (53.0)
Male	43 (43.9)
Missing	3 (3.1)
School Enrollment, N (%)	
Full Day °	69 (70.4)
Half Day	26 (26.5)
Missing	3 (3.1)

* GED indicates General Equivalency Diploma

° Defined as more than four hours per day spent in a center-based setting

Table 2

Parent Perspectives on the Importance of Activities in Center-Based Childcare, in General and for Kindergarten Readiness (N=98)

Activity	In general Mean (SD)	For kindergarten readiness Mean (SD)
Learning ABCs and Numbers	4.74 (0.69)	4.93 (0.33)
Story Time	4.29 (0.72)	4.31 (0.73)
Science	4.23 (0.76)	4.24 (0.78)
Lunchtime/Snack time	4.22 (0.92)	3.88 (1.08)
Outside Playtime	4.19 (0.74)	4.14 (0.82)
Music	4.08 (0.79)	3.95 (0.84)
Make Believe Play	4.08 (0.83)	3.89 (0.98)
Arts and Crafts	3.93 (0.78)	3.95 (0.94)
Inside Playtime	3.71 (0.93)	3.70 (0.97)
Naptime	3.57 (1.20)	3.04 (1.17)

* Activities rated on a scale of 1 to 5, 1 being "least important" and 5 being "most important"

Table 3**Parent Knowledge and Communication with Staff about Outdoor Play Policies**

Parent Knows	Yes No. (%)	Not Sure No. (%)	No No. (%)
the school has a policy for outdoor play (N=98)	55 (56.1)	39 (39.8%)	3 (3.1)
the school has a policy for time spent outside (N=55)	33 (60)	18 (32.7)	3 (5.5)
the school has a policy for weather (N=55)	39 (70.9)	12 (21.8)	2 (3.6)
the school has a policy for clothing (N=55)	32 (58.2)	15 (27.3)	5 (9.1)
Communication			
Parent talked with staff (N=98)	19 (19.4)	0	78 (79.6)
Staff talked with parent (N=98)	23 (23.5)	0	74 (75.5)