Parent Perceived Barriers and Facilitators of Children's Adventurous Play in Britain: A Framework Analysis

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Abstract

Background: From a public health perspective there is growing interest in children's play, including play involving risk and adventure, in relation to children's physical and mental health. Regarding mental health, it is theorised that adventurous play, where children experience thrilling, exciting emotions, offers important learning opportunities that prepare children for dealing with uncertainty and help prevent anxiety. Despite these benefits, adventurous play has decreased substantially within a generation. Parents have a key role in facilitating or limiting children's opportunities for adventurous play, but research identifying the barriers and facilitators parents perceive in relation to adventurous play is scarce. The present study therefore examined the barriers to and facilitators of adventurous play as perceived by parents of school-aged children in Britain.

Methods: This study analysed data from a subsample of parents in Britain (n=377) who participated in the nationally representative British Children's Play Survey. Parents responded to two open-ended questions pertaining to the barriers to and facilitators of children's adventurous play. Responses were analysed using a Framework Analysis, an approach suitable for managing large datasets with specific research questions.

Results: Four framework categories were identified: Social Environment; Physical Environment; Risk of Injury; Child Factors. Social Environment included barriers and facilitators related to parents, family and peers as well as community and society. Dominant themes related to perceptions about the certainty of child safety, such as supervision and the safety of society. Beliefs about the benefits of adventurous play for development and well-being were important facilitators. Physical Environment factors focused on safety and practical issues. Risk of Injury captured concerns about children being injured during play. Child Factors included child attributes, such as play preference, developmental ability and trait-like characteristics.

Conclusions: Improved understanding of what influences parent perceptions of adventurous play can inform public health interventions designed to improve children's opportunities for and engagement in adventurous play, with a view to promote children's physical and mental health.

Background

Children's play, including play involving risk challenge and adventure, is increasingly recognised from a public health perspective as important for children's physical and mental health (1). Adventurous play, synonymous with risky play, is defined as "child-led play where children experience subjective feelings of

excitement, thrill and fear; often this occurs in the context of age-appropriate risk-taking” (2). It includes activities such as climbing, jumping or running at great speed (3) and tends to occur more during outdoor than indoor play (2, 4).

Research has shown that adventurous, outdoor play has positive effects on children’s physical and mental health (5). For example, a systematic review exploring risky play in children aged 3-13 concluded there were several benefits for children’s health, including increased physical activity, reduced sedentary behaviours, increased social competence and improved creativity, resilience and social health more broadly (5). Adventurous play has also been theorised as protective against the development of fears (6) and anxiety (2). It is proposed that, by providing natural exposures and corresponding learning opportunities, where children can learn about uncertainty, coping and arousal, adventurous play may help to prevent the development of fears and anxiety. Importantly, research shows that children enjoy the emotions that they experience during adventurous play. Common feelings elicited are a sense of thrill and exhilaration which borders on fear, and feelings of pride and achievement after the play (4, 7, 8).

Research examining the benefits of adventurous play for children’s development indicates that this type of play may support children’s mental well-being and development (9). For example, in Lavrysen and colleagues, (10), two school classes of children aged 4-6 were given the opportunities to engage in risky play over three months, including play at great height and speed. Post-intervention, significant improvements were observed in teacher ratings of children’s self-esteem, conflict sensitivity and concentration.

Despite the recognised benefits of adventurous play and the knowledge that children enjoy playing adventurously, there is convincing evidence that engagement in adventurous play across westernised countries has declined significantly in recent decades (9, 11). For example, in a survey of mothers in the USA, 60% reported that they played in adventurous ways as children, compared to only 22% of their children (12). Large surveys conducted in Australia (13) and New Zealand (14) provide further support for this decline in adventurous play. For example, Jelleyman and colleagues (14) found that less than half of parents surveyed reported their children engage in risky play activities on a regular basis. This decline may have considerable implications for children’s physical and mental health (2, 5).

Whilst recognising the influence of the wider system around the child, as highlighted by socio-ecological and psychological frameworks (15, 16), parents have a core role in providing or restricting children’s opportunities for adventurous play (17, 18). This role of parents is highlighted by the British Children’s Play Survey (19), where parents’ tolerance of risk and attitudes to child risk-taking were positively associated with children’s time spent playing adventurously. There has also been some emerging evidence for the role of parenting styles, in particular overprotective styles, in predicting whether children take risks in their play or not (20). Parent sex may also be important, with fathers, on average, more comfortable with child risk-taking than mothers (21) (see also 22).

Previous research indicates that parents often hold positive beliefs about the benefits of adventurous play. For example, Jelleyman and colleagues (14) reported that the majority of parents surveyed believed

risk in play supports the development of risk management skills and development more generally. This aligns with the findings of Little and colleagues (23) and Little (24), where parents often stated that risky play fosters learning and development and supports children's self-esteem. This highlights a disconnect between parent positive beliefs and children's play opportunities. It is unclear therefore how interventions should address the decline in children's adventurous play; interventions are unlikely to be successful if they focus solely on the benefits of adventurous play for children given that parents likely already hold these positive beliefs. Instead, interventions will need to address the barriers that prevent parents from translating positive attitudes towards adventurous play to increased opportunities for their children.

Research regarding what parents perceive to be the barriers and facilitators of children's adventurous play is scarce. Some inferences can be drawn from small scale studies exploring parent perceived barriers to risky play in young children (25, 26) and large surveys that have explored unsupervised outdoor play in nature (11) as well as children's independent mobility, defined as the freedom children have to travel and play around their local neighbourhood (27, 28). Though outdoor nature play and independent mobility are not synonymous with adventurous play, both afford increased opportunities for it (2). Frequently identified barriers across these studies include concerns about road safety (25) and "stranger danger" (11, 29, 30). Concern about the risk of physical injury involved in adventurous play has also been identified as a key barrier for parents (25, 26, 31).

Other previously cited barriers in relation to children's safety when playing are the absence of adult supervision (32, 33), the potential for bullying (27) and perceptions of low social cohesion in neighbourhoods, leading to an expectation that neighbours will not look out for each other's children (17). Practical barriers have also been acknowledged, such as having the time to facilitate adventurous play (25), poor weather conditions (14) and poor accessibility to play spaces or activities (32, 34).

Some parents have also identified barriers related to themselves, such as concerns about other parents' judgements of them as parents (35) and their own anxieties (24). Children's attributes and preferences have been highlighted in some studies, with some parents citing difficulties encouraging their children to play outdoors, unsupervised or adventurously because they do not enjoy it, or because they prefer to play indoors using technology (12, 33). Together, the barriers ascertained by parents across several countries demonstrates the multifaceted nature of parents' perceptions in relation to their children's play. This highlights the challenge of supporting parents to overcome these barriers and the difficulty in translating this into increased play opportunities.

In previous research, findings related to barriers and facilitators have typically been obtained using multiple choice questions where a set of predefined options are provided or via agreement ratings against predetermined statements. An example is the New Zealand State of Play Survey, where parents rated their level of agreement with statements about the barriers of risky play from '*strongly disagree*' to '*strongly agree*', such as '*unsupervised activities increase the chance of injury*' (14). Whilst this provides an efficient way of collecting quantitative data, it has limited utility when inferring what is most pertinent or important to parents and necessarily restricts responses to options the researchers have considered. A further

limitation is that evidence has been gathered almost exclusively on barriers, rather than also gathering information on the perceived facilitators. This information is required to improve understanding of what might support parents to encourage their child to play in an adventurous way. Asking parents to respond to open-ended questions regarding both barriers and facilitators of children's adventurous play would have greater utility for the design of future public health interventions.

The aim of the present study was to explore and identify the barriers and facilitators for parents in Britain with regards to encouraging their children to play adventurously. Data was collected as part of the British Children's Play Survey (BCPS) (19), a nationally representative survey of parents and caregivers with a primary school-aged child. Two open-ended questions asked parents to identify the barriers and facilitators they perceive when encouraging their children to engage in adventurous play. Responses were analysed using Framework Analysis, a qualitative method that involves a systematic yet flexible process of organising, charting and arranging data in line with key themes and issues (36).

Method

This paper analysed data collected as part of the BCPS. For full details of the survey and the recruitment of participants, see Dodd and colleagues (19).

Design

This paper describes the analysis of a subset of written responses to two open-ended questions included in the BCPS. To explore parents' responses to the open-ended questions asking about barriers to and facilitators of adventurous play, a qualitative approach to sampling and data analysis was adopted.

Participants and Procedure

The BCPS centred around play in primary school-aged children. Participants were a nationally representative sample of 1919 parents and caregivers of children aged 5-11 years old, living in Britain. This study analysed data from a subsample of 377 parents and caregivers. Data saturation was reached and so no further responses were included in the sample. 22 parents and caregivers did not provide any answers to the questions analysed and 9 expressed that they were unsure how to answer. For simplicity, we refer to participants as parents.

Sampling

It was not feasible to analyse in depth all 1919 responses to the open-ended questions included in the BCPS, and so, consistent with our methodological design, a sub-sample was selected using purposive sampling (37). The aim was to achieve a sample of parents who were diverse on key demographic characteristics that were relevant: parent sex, child sex, child age group (Younger: 5-7-years-old; Older: 8-11-years-old), parent education and parent ethnicity. The final sample included 377 parents. For details of how these parents were selected see supplementary material Additional file 1 or download here: https://osf.io/yhr89/?view_only=882c0d1f90b444748553e92c2ff080df .

Measures

As part of the survey, parents were given a definition of adventurous play and were asked two open-ended survey questions. The first question asked, 'Which factors, if any, allow you to let / encourage your child aged (5–11) to play in an adventurous way?'. The second question asked, 'Which factors, if any, make it difficult for you to let / encourage your child aged (5–11) to play in an adventurous way?'. Parents were encouraged to provide as much detail as possible in their answers. Answers aimed to elicit responses to the barriers to and facilitators of adventurous play. The data is available here: https://osf.io/yhr89/?view_only=882c0d1f90b444748553e92c2ff080df. The wider survey included detailed demographic questions.

Data analysis

Responses to the two open-ended questions were analysed using Framework Analysis. This method was chosen due to its suitability for analysing large samples and its position as a systematic yet flexible approach which is not bound by a particular philosophical perspective (36). It is also suited to research with specific research questions and a priori ideas, while equally encouraging an inductive, data-driven approach (38).

The five stages of Framework Analysis were flexibly applied, to ensure the analysis was data-driven. NVivo 12 (QSR) and pen-to-paper methods facilitated the analysis. The analysis was led by the lead author BO, who began with familiarisation of the data and then coded the data using the research aims as a guide. An initial overarching framework of 'barriers' and 'facilitators' was applied during the initial stages of analysis but was later withdrawn. We chose to withdraw this framework on reflection that being able to identify the overall factors that affect parent decisions may have greater utility in terms of interpretation and recommendations for policy and intervention. A preliminary thematic framework was then identified using an inductive approach and thematic coding. The framework went through several iterations, following discussions and reflections with co-authors. The framework was shaped by a conceptual model that accounts for the factors thought to affect children's adventurous play (2) and ecological frameworks that have been applied to children's play (15, 31). However, the framework was primarily derived inductively, to ensure a true reflection of parents' responses.

Codes were synthesised and then grouped according to dominant themes. The process was iterative and utilised fieldnotes to stimulate reflection. Codes and themes were presented and discussed regularly with co-authors, contributing to refinement of the framework. An example is reflected in the 'Risk of Injury' category (Figure 1). Originally, this category was included as a theme within the 'Physical Environment'. On reflection and discussions, it was agreed that parents were referring to the adventurous play activity itself, as opposed to the risk of injury posed from the physical environment. It appeared dominant in many parents' responses and therefore felt important as a distinct framework category.

During the first stages of analysis, it was noted that parents often recorded "safety" or "safe environment" in response to both questions. Whilst this highlighted the dominance of safety considerations underlying

parents' thoughts about adventurous play, it was difficult to determine whether such answers were specific to the type of play or play in relation to the physical or social environment. Due to this difficulty, and to ensure responses were not forced into the framework, responses here were coded into a separate, safety theme. This theme was not included in the final framework but greatly supported the final stages of analysis when interpreting the data by emphasising the dominance of underlying safety considerations.

Charting of the framework was completed but proved challenging due to the number of parents sampled. To support the deeper exploration of differences in responses amongst parents with different socio-demographic characteristics, matrix coding queries were executed. These differences are highlighted throughout the results section. This supported the final stages of analysis, where the research team explored the meaning underlying parents' responses in more depth.

It is acknowledged that the research team all had knowledge of adventurous play from a psychological perspective and were working with the same definition of adventurous play (2). It is therefore likely that the research team were inclined to view adventurous play overall as a positive phenomenon with which children should have opportunities to engage. These assumptions may therefore have influenced the nature of the analysis. The research group comprised a mixture of parents and non-parents and represented a range of personal experiences of adventurous play. As the analysis progressed, the multifaceted nature of the perceived barriers and facilitators for adventurous play became apparent. A considerable breadth of factors, perspectives and emotional responses were evident, highlighting the importance of capturing views of parents with diverse characteristics.

Results

During analysis, it became apparent that adventurous play may have different meanings for parents. For some, it appeared primarily related to the perception of risk in the play. For others, it appeared synonymous with play in natural spaces (e.g. forests, woodlands, near water) or autonomous play, including independent mobility. The remainder appeared to perceive adventurous play as a combination of some or all of these elements. Parents' views were captured in four framework categories (see Figure 1); Social Environment, Physical Environment, Risk of Injury and Child Factors.

1. Social Environment

The Social Environment category involved the most factors. The Social Environment included factors pertaining to Parents, Community/Society, Family and Peers. Themes within each are discussed below.

1.1 Parents

Parent factors were one of the most commonly referenced factors within the Social Environment, particularly in terms of facilitators. Themes identified within parent factors were: Supervision, Parent Attitudes, Parent Assessment of Risk, Teaching the Child about Risk, Parent Attributes and Parent's Social Environment (Figure 1). Factors which increased or decreased perceptions about the certainty of child safety coupled with beliefs about the benefits of adventurous play appeared to underlie this theme. These insights were captured predominantly in the themes Supervision and Parent Attitudes.

1.1.1 Supervision. Supervision was regularly cited as both a barrier and facilitator, with lack of adult supervision forming a key barrier for parents with regards to adventurous play. Parents' views on inadequate supervision ranged from lack of direct supervision, to not knowing where their child is playing. Similarly, as a facilitator, presence of supervision was commonly identified but varied in terms of the degree of supervision, from direct adult supervision, to playing in close proximity to the home, to being able to contact their child via a mobile phone. Adult supervision as a facilitator for adventurous play tended to be more of a consideration for parents with younger children in this sample.

"You can't just let them go and play. You can't let them out of your sight" (P154; Mother of younger boy, higher education level, White British)

"Adult supervision not to dictate and control the play but to be watching in case they're needed" (P94; Father of younger girl, medium education level, White British)

"Need to know where he is, who with, what time he'll be back, ideally with his mobile phone." (P21, Father of older boy, lower education level, White British)

1.1.2 Parent Attitudes. Beliefs about the benefits of adventurous play for children's learning and development, health and well-being were often referred to as facilitators. These factors were grouped under the theme of Parent Attitudes. Most parents with positive attitudes acknowledged the benefits of adventurous play for learning and development, including the ability to assess risk and problem solve. Also present but appearing to be less readily acknowledged was knowledge about the benefits for physical and psychological health and well-being, such as confidence and resilience. Some parents attributed their attitudes to their occupation or their own play experiences as a child. These attitudes aligned with some who identified their self-attributes as parents who were focused more on following the child's interests and who did not want to be overprotective. Only one parent appeared to hold a negative attitude about adventurous play, suggesting that it represents irresponsible parenting.

"Build confidence, learn problem solving, being active" (P141; Father of older girl, medium education level, Asian ethnicity)

"I feel that without adventurous play he will be less likely to develop the ability to assess risk. His ability to function independently as he grows will be inhibited if he's not allowed to make good calculated decisions." (P338; Mother of younger boy, higher education level, no ethnicity information)

"Knowing that they need some form of adventurous play as it helps them learn the dangers of different activities, burning off energy." (P72; Mother of younger boy, medium education, White British)

1.1.3 Parent Assessment of Risk; Teaching the Child about Risk. Less frequently identified facilitators included parents' own assessment of the level of risk in the adventurous play activity. Teaching children about assessing and managing risk, with the addition of setting boundaries, was also occasionally referenced.

"All activities whatever time of year and in whatever location are supervised and assessed for risks and competence by both parents and we all do it together." (P320; Mother of older girl, medium education level, no ethnicity information)

"Safety of environment (risk assess the area to mitigate risk)" (P231; Father of older girl, higher education level, Mixed ethnicity)

"I educate my child on the dangers of certain activities, to make him aware of the possible dangers" (P69; Mother of younger boy, medium education level, White British)

1.1.4 Parent Attributes. Other identified parent barriers included parents' self-attributes as a "worrier" or "anxious", or attributes of their child's other parent. Only male parents cited their child's other parent when describing attributes as a barrier. Acknowledgement of parenting styles were also described within this theme, with responses pertaining to overprotective or controlling parenting, which bears similarity to and appears coherent with the attributes cited above. Collectively, these barriers alongside the aforementioned facilitators appeared to depict factors that either increased or decreased parents' perceptions about the certainty of the child's safety during adventurous play.

"I'm a very anxious person so tend to worry a lot about their safety" (P119; Mother of older boy, medium education level, Mixed ethnicity)

"My wife's anxiety of risk" (P203; Father of older boy, higher education level, Other White ethnicity)

"I don't encourage adventurous play I am over protective." (P16; Mother of older girl, lower education level, White British)

1.1.5 Parent's Social Environment. Present for a small minority of parents, and primarily a barrier, were perceptions of their social environment. Parents who perceived their social environment as a barrier tended to focus on the judgements other parents may make. One parent explicitly recognised that if they perceived less judgement from other parents, this would help them encourage more adventurous play. One parent appeared to seek support from their social environment, commenting that the presence of parents who were less risk averse than them helps them encourage their child to play adventurously.

"Concerns from other parents" (P172; Father of younger boy, higher education level, White British)

"Foster child so have to report any accidents etc. & have decisions challenged" (P370; Foster mother of older girl, lower education level, White British)

"Others there who are less risk averse than me" (P157; Mother of younger boy, higher education level, White British)

1.2 Community and Society

Perceptions of the Community and Society was a further identified factor within the Social Environment. Key themes were: Safety of Society, Neighbourhood Safety, The Media, Other Children and Sense of Community (Figure 1).

Here, only considerations related to the child's safety were indicated and, overall, more barriers than facilitators were suggested. A considerable number of parents cited the safety of society as a barrier. These concerns tended to be more of a consideration for parents with older children. The Safety of Society theme included concerns about "stranger danger", antisocial behaviour or crime and perceptions of general neighbourhood safety. This aligned with parents who cited an absence of community as a barrier, believing that neighbours do not look out for each others' children like they used to. Linked to these themes was the role of the media. Some parents suggested the reporting of accidents and incidents in the news makes it difficult for them to encourage their children to play adventurously. A small number of parents also considered other children in their responses, with one parent citing concerns about "young other children" being present and two parents citing concerns about the presence of "older kids".

"I am worried that he may get lost or be taken." (P36; Mother of older boy, lower education level, Other White ethnicity)

"A lot of bad people around" (P143; Mother of older girl, medium education level, Black ethnicity)

"Horrible stories you hear when kids have been allowed to play without adult supervision" (P319; Mother of older girl, medium education level, no ethnicity information)

When the Community and Society were cited as facilitators, it tended to be by parents who perceived a strong sense of community, a generic perception of living in a safe neighbourhood and a sense of certainty that neighbours will look out for each others' children. Collectively, the factors perceived in the Community and Society appeared to operate to increase or decrease perceptions of child safety during adventurous play.

"We also live on a quiet cul de sac with a number of young families. This unique arrangement allows us to let our children explore the local environment with minimal supervision." (P204; Father of older boy, higher education level, Other White ethnicity)

"Safe neighbourhood with good neighbours that communicate about kids and where they are" (P341; Mother of older boy, higher education level, no ethnicity information)

1.3 The Family

Family life considerations were another factor of the Social Environment, but were cited less often than Parent and Community factors. When the family was identified, this was generally to acknowledge the barriers. Key themes within The Family were: Time, Younger Siblings, Cost and Older Siblings (Figure 1).

1.3.1 Time; Younger Siblings; Cost. Practical considerations of the family appeared to underpin the themes here, with parents mainly citing a lack of time as a barrier and in contrast, having more time as a facilitator. Having another, younger child was also a practical consideration, mainly due to having to factor in activities suitable for the younger sibling. For some parents, younger siblings were also a safety consideration, due to concerns that the younger sibling may want to try the same activity. Although not present in the majority of parents' responses, the cost of adventure play spaces and having the energy to facilitate adventurous play were considerations for some.

"Time constraints as parents due to full time work commitments / home related commitments can make it difficult to allow our children daily adventurous play." (P332; Father of younger girl, medium education level, no ethnicity data)

"Have to factor in things that are suitable for his younger siblings too" (P71; Mother of younger boy, medium education level, White British)

"Cost of some adventure places". (P73; Mother of older boy, medium education level, White British)

1.3.2 Older Siblings. When parents did indicate the family as a facilitator, safety considerations appeared to be more readily identified than practical considerations. Here, the focus tended to be on the presence of older siblings or other family members to engage in adventurous play with the child, which again may work to increase perceptions about the certainty of child safety.

"He is allowed with his elder brother". (P218; Mother of older boy, higher education level, Mixed ethnicity)

"Playing with other children especially older siblings". (P334; Father of older girl, medium education level, no ethnicity information)

1.4 Peers

Peers were more readily cited as facilitators than barriers for adventurous play. Key themes were: Presence or Absence of Peers and Bullying (Figure 1). Safety considerations were thought to underlie these responses, possibly by increasing certainty about safety or certainty that someone can help in case of an emergency. Unknown or untrusted peers, and the possibility of bullying were sometimes listed as barriers, as well as the practical considerations of not having or knowing any peers to play with, though this did not emerge to be a general consensus across parents.

"When she's with friends" (P32; Father of older girl, lower education level, White British)

"With other trusted children" (P103; Mother of older boy, medium education level, Other White ethnicity)

"Not having/knowing of any children locally for him to play with." (P214; Mother of younger boy, higher education level, Mixed ethnicity)

2. Physical Environment

Although less commonly identified than the Social Environment, the Physical Environment also represented a consideration for many parents. Barriers in the Physical Environment were more regularly cited than facilitators, suggesting parents had more ideas about how the perceived physical environment hinders their encouragement of adventurous play. Key themes were: Busy Roads, Local Area, Adventurous Play Areas, Time of Day, Quality and Safety of Play Equipment, Weather and Accessibility (Figure 1).

2.1 Busy Roads; Local Area; Time of Day; Quality and Safety of Play Equipment. Aspects of the Physical Environment pertaining to safety considerations dominated responses of those who identified it as a barrier. In particular, busy roads, the perceived safety of the local area lived in and the play setting were most commonly identified. Concerns about the busyness of roads tended to be more of a consideration for parents with older children. Though uncommon, some parents also considered the time of day, particularly dark nights as a barrier.

Aspects of the Physical Environment that increased perceptions of child safety were also facilitators for parents, but were less often explicitly stated. Safe play equipment, well-regulated and monitored play areas, perceptions of living in a safe home area with little traffic and safe access to adventurous play opportunities were considered.

"I think the biggest challenge for any parent or child is road traffic." (P272; Father of older girl, higher education level, Other ethnic group)

"Location of our home, dangerous trunk road outside house, very rural setting" (P156; Mother of younger boy, higher education level, White British)

"Dark nights" (P296; Father of older boy, lower education level, no ethnicity information)

"My neighbourhood is rural and there's no busy roads, lots of green spaces so I feel safe letting him go out to play in this area" (P35; Mother of older boy, lower education level, Other White ethnicity)

2.2 Weather; Accessibility; Adventurous Play Areas and Activities. Practical considerations of the Physical Environment were also identified by parents, particularly as facilitators. As expected, poor weather conditions and poor access to adventurous play facilities characterised barriers, whereas good weather conditions and easy access to places that afford adventurous play characterised facilitators. The places and activities that parents perceived to foster adventurous play varied considerably, with some parents citing "forests" or "beaches" pertaining to natural spaces, others citing "trampolines", "climbing frame in garden" and some citing organised team sports, "game of cricket".

“Weather often makes it difficult to have a good time playing outside in this country” (P108; Mother of younger girl, medium education level, Any other White background)

“There is little adventurous toys or places to be this” (P79; Mother of younger girl, medium education level, White British)

“There’s not many adventurous play things nearby without driving” (P35; Mother of older boy, lower education level, Other White ethnicity)

3. Risk of Injury

3.1 Risk of Injury from Adventurous Play. Central to many parent’s responses were concerns about the risk of injury that accompanies adventurous play (Figure 1). Unsurprisingly, the risk of injury was frequently referenced as a barrier. This framework category captured both parent’s perceptions of how likely it is that the child will hurt themselves during the play and also worries and fears about the child getting hurt from the play.

“Worrying that the risks they take may result in injury” (P72; Mother of younger boy, medium education level, White British)

“Risk of injury/harm” (P234; Mother of older boy, higher education level, Asian ethnicity)

“Fear of them getting seriously hurt.” (P125; Father of older girl, medium education level, Mixed ethnicity)

4. Child Factors

Perceptions of the child also featured in parents’ responses. Key themes were: Child Attributes and Child Preferences (Figure 1).

4.1 Child Attributes. Child Attributes captured a variety of responses related to the child. This included considerations related to typical and atypical developmental and physical abilities, age and sex, as well as perceptions of trait-like characteristics. For parents who viewed child attributes as a barrier, the considerations that were most present were those related to developmental and physical abilities. Some parents of children with disabilities recorded that due to the child’s disability, adventurous play was not possible or was more difficult to facilitate.

For parents of typically developing children, considerations included both perceptions of capabilities relating to the adventurous play itself, such as not yet being able to assess and manage risks, or perceptions of the child as clumsy or accident prone. Others focused on trait-like characteristics, such as shyness or lack of confidence. Some concerns were noted in relation to playing independently, such as being too trusting of strangers.

Age of the child was considered by some parents, but the nature of this varied. Some parents reported their child is too young to play adventurously and others reported concerns in relation to playing unsupervised. Child sex was reported by one parent as a barrier, with a father reporting that he finds it

harder to let his daughter play unsupervised. No other parents explicitly identified child sex as a barrier or facilitator.

“Severe disability means this isn't possible” (P373; Foster father of younger boy, higher education level, White British)

“She is scared to do this” (P110; Mother of older girl, medium education level, Other White ethnicity)

“I think he is young for adventures” (P321; Father of younger boy, medium education level, no ethnicity information)

When regarded as a facilitator, perceptions of child attributes almost exclusively focused on views of the child as needing or having a sense of responsibility and maturity to manage risks and keep themselves safe. Some parents considered the developmental capabilities of the child, such as assessing how ready the child is to play adventurously or ensuring the child plays appropriately for their age and developmental level.

“He is a sensible child and knows boundaries” (P311; Mother of older boy, medium education level, no ethnicity information)

“She is sensible and conscious of risk” (P179; Father of younger girl, higher education level, White British)

“How ready she is to play in an adventurous way” (P124; Father of younger girl, medium education level, Mixed ethnicity)

4.2 Child Preferences. Views of the child's play preferences were also identified by some parents. With regards to barriers, parent views tended to focus on perceptions that their child does not enjoy adventurous play. Regarding facilitators, responses were focused on perceptions that their child enjoys playing adventurously, with some parents specifying the types of activity their child enjoys, such as climbing or swimming.

“My child doesn't really enjoy adventurous play even when given the opportunity” (P71; Mother of younger boy, medium education level, White British)

“My kids love it” (P10; Mother of a younger girl, lower education level, White British)

“She loves climbing, walls, trees the big climbing frame at the park. Running and jumping off things, trying to cartwheel at the beach.” (P78; Mother of younger girl, medium education level, White British)

Discussion

This is the first study to explore the barriers of and facilitators to adventurous play for parents of school-aged children in Britain. The findings highlight that parents perceive a multitude of barriers and

facilitators. This discussion focuses on the factors that appeared to stand out as being most important to parents and those that have particular relevance for policy and public health intervention design.

A common facilitator of children's adventurous play was parents' positive beliefs and attitudes towards its benefits, which they identify as offering children learning and development opportunities. Specifically, many parents cited improved risk assessment and problem-solving skills as positive outcomes of adventurous play. It was uncommon for parents to state that adventurous play was not worthwhile. In addition to learning and development, although less readily identified, parents considered adventurous play as beneficial for children's well-being, including their confidence and resilience. These findings are in keeping with several studies which report that parents hold positive attitudes towards adventurous play (14, 24).

These positive attitudes towards adventurous play compete with a range of perceived barriers. The most cited barriers related to concerns for child safety, specifically, the absence of supervision; concerns regarding the safety of society, including "stranger danger"; and concerns regarding the risk of injury. Some consistencies are seen with studies such as McFarland and Laird (25), McFarland and Laird (31), where parents identified concerns about the risk of injury as a barrier to risky play and concerns about "stranger danger" as a barrier to unsupervised, risky play. Interestingly, we did not state that adventurous play was necessarily unsupervised, but the responses indicate that some parents interpreted adventurous play to involve play without supervision.

Factors related to the physical environment, such as busy roads, accessibility of play areas and the weather were cited but appeared less central than in previous research (e.g. Jelleyman and colleagues (14)). This may be because, in previous research, findings relating to barriers have often been obtained by asking parents to select from a set of predefined options or via agreement ratings against predetermined statements. The current study differed in that parents were invited to respond to open-ended questions and it may be that the weather and roads, while important, are less salient to parents than factors they chose to describe. A further explanation could be that previous studies often asked parents about outdoor play specifically, or focused on examples of risky play that occur outdoors, such as climbing or playing near water (14, 30), priming parents to think about the conditions required for outdoor play. By contrast, in this study parents were given a definition of adventurous play that did not specify its occurrence exclusively in indoor or outdoor settings.

In general, it appeared that parents tended to hold similar views on adventurous play despite different socio-demographic characteristics. Some themes however, such as concerns about busy roads and societal safety appeared to be more frequently perceived by parents of older children. This could infer that, although independent play or mobility and adventurous play are not considered theoretically synonymous, parents may perceive them as synonymous with increasing child age.

For some parents who had children with physical or neurodevelopmental disabilities, it appeared that facilitating adventurous play was challenging due to the child's disability. This aligns with findings from the BCPS that children with disabilities spent significantly less time playing adventurously than their

typically developing peers (19). Additionally, Beetham and colleagues (39) found parents of children with disabilities had a lower tolerance of risk in relation to their children's play than parents of typically developing children. When parents were asked to select activities that caused them discomfort, these parents selected activities that involved a lower risk of injury than those selected by parents of typically developing children, such as swimming underwater compared to climbing trees. The category of child disability used in the BCPS was very broad and it seems likely that the barriers and facilitators will differ depending on the nature of the child's disability. Equal access to play opportunities for children with disabilities is an under-researched area and future research could more closely work with parents and children to inform how we may better provide for their needs.

Embedding the findings in psychological theory and evidence

The current findings can be situated within psychological theory and evidence related to child development. Using Bronfenbrenner's ecological systems theory of development (15), we can draw inferences from our findings. Bronfenbrenner's model considers development as being influenced by interactions operating between the child and their characteristics, influences in the child's immediate environment such as parents and peers, as well as those in the wider social and cultural environment. This model has also been applied to help understand children's play opportunities (31).

The child

Child individual differences, such as the temperamental trait behavioural inhibition and individual differences in sensation seeking, are relevant to the current findings. Behavioural inhibition is a temperament trait, first defined by Kagan and colleagues (40), as the tendency to be cautious, withdrawn and shy in unfamiliar situations. Given these characteristics, it is likely that children with this trait will be less inclined to play adventurously than their uninhibited counterparts. These findings align with the current findings, with child individual differences featuring in many parents' responses. When identified as a barrier, parents cited traits related to shyness as well as the child's dislike for adventurous play, which bears similarities to the characteristics of behavioural inhibition.

Individual differences in the propensity to seek out novel, complex and intense experiences, known as sensation seeking (41), have also been found in relation to children's inclination to take risks. Children who are high sensation seekers have been shown to take significantly more risks in their play than low sensation seekers (42), which means these children may be more inclined to seek adventurous play opportunities. The current study found that when parents identified child individual differences as facilitators, they often focused on the child's enjoyment of adventurous play or their trait as a natural risk-taker. These resemble the characteristics of sensation seeking and suggests that these children may therefore need less encouragement to engage in adventurous play.

Parents

Parent factors are recognised as a central influence within the child's immediate environment. Research into individual differences may have relevance to the findings in this study, particularly differences in Intolerance of Uncertainty, which refers to trait-like differences in responses to uncertainty (43) and research showing that overprotective or overinvolved parenting styles are associated with parent anxiety (44). It seems likely that parents who are high in Intolerance of Uncertainty and who have an overinvolved parenting style may place restrictions on their children's activities, including their play. This would consequently limit children's opportunities for exposure to uncertainty and the opportunity to develop skills on how to cope with and manage uncertainty (45–47). Parents who have difficulty coping with uncertainty or managing their own anxiety may therefore have more barriers to overcome in relation to their children's adventurous play than those who have less difficulty coping with uncertainty.

These individual differences align with the current findings, where it appeared that an overriding consideration for many parents was the importance of feeling certainty about their child's safety. Many responses inferred feelings of uncertainty, with concerns about child safety exacerbated by factors that increased uncertainty, such as the absence of supervision. For parents who described themselves as anxious or a "worrier", as well as parents who described their parenting style as overprotective, the uncertainty related to child safety appeared particularly difficult to overcome.

Peers and siblings

Also situated closely within the child's environment are siblings and peers. The benefits of playing with siblings and peers have been seen in relation to various aspects of development, including social competence (48). Interestingly, evidence also relates the presence of peers and siblings to *increased* engagement in injury-risk behaviours. Several studies have documented that the presence of siblings and peers significantly increases children's risk-taking decisions that carry a greater chance of injury (49, 50). This could be partially explained by the influence of positive sibling relationships or peer group social norms (51, 52), with some evidence showing that children reported their risk-taking was influenced by peer group expectations and a desire to 'fit in' (53). Given this evidence, it may be surprising that parents in the current study reported the presence of peers or older siblings as facilitators of adventurous play. This highlights that for some parents, the mere presence of a peer or sibling may operate to increase perceptions of safety due to there being another person to help the child if required. This may override concerns about the possibility of increased risk-taking. A sense of safety in numbers has been described by both parents (54) and young people (55) when considering independent and outdoor play and therefore may apply similarly to adventurous play.

The built environment

The built environment represents a more distal influence from the child in the context of Bronfenbrenner's model. Nonetheless, it has been shown to affect children's play opportunities as well as parents' perceptions of safety in relation to children's play (56, 57). Urbanisation is one aspect of the built environment that has relevance here. In Britain urbanisation is high, with 81.5% of people living in England and Wales in 2011 estimated to live in urban areas (58). Increased traffic, fewer green spaces

and reduced neighbourhood communal areas due to urbanisation (59) can impact perceptions of neighbourhood connectedness (60). There can also be consequences for children's access to nature and limitations to their free play opportunities by reducing the space to play and making safe access to play spaces more challenging (61, 62). It therefore also influences parents' perceptions of safety in their local area, which adds further limitations to children's play opportunities (56).

This influence was evident in some parent's responses in the current study in relation to both the physical and social environment. An absence of community, poor accessibility to play spaces as well as the challenges of busy roads and increased car usage were sometimes cited as barriers. Our findings highlight the importance of responsibility being placed not only on parents, but also on higher-level agents, including urban and transport planners, to improve children's adventurous play opportunities (56, 57). The design and planning of spaces, including play spaces and neighbourhoods, has the potential to 'nudge' parents towards encouraging more adventurous play opportunities (63); when parents perceive the environment as safer, it is likely they will grant their children more freedoms (56).

Cultural factors

Cultural attitudes and ideologies are distally related to children and their parents (15) and it is unsurprising that parents' responses in this study rarely related to cultural influences. Some indications of cultural influences as well as the role of agents which exacerbate cultural ideologies, such as the mass media, were identified. Certain westernised societies, such as Britain, are recognised as risk-averse cultures, with a stance of surplus safety in relation to child risk-taking (9, 57). Media agents can reinforce cultural ideologies and attitudes by reporting on and therefore highlighting the rare consequences of taking risks, such as severe physical injury or stories involving child abduction. Such reporting influences perceptions of risk and the safety of society (57, 64).

In this study, we found a dominating positive attitude towards adventurous play that perhaps may be unexpected given the culture of risk-averseness. It could be that the influence of cultural attitudes and ideologies on parents affects behaviour but positive beliefs about adventurous play remain. In this study, themes related to the safety of society, the risk of "stranger danger" and judgement from others as barriers could also to some extent be implicitly related to the overall attitudes and ideologies of the culture. There were also some explicit mentions of the media as a barrier, which causes parents to question whether they should allow their children to take risks in their play or not.

Implications for policy and intervention

In view of this study's findings and the documented benefits of adventurous play for children's physical and mental health (5, 10), several recommendations for policy and intervention are proposed. These are shown in Figure 2. Given that most parents experienced barriers in relation to their child's safety, parents may benefit from support to facilitate adventurous play, with some needing more support than others. We recommend that this support is offered via public health interventions and campaigns aimed at parents.

Strengths and limitations

Using open-ended questions allowed us to analyse data from a large, diverse sample of parents, which is a key strength. This limitation of this approach is that there was a lack of depth to responses and it was not possible for us to establish a shared understanding with the participants. Employing alternative qualitative methods, for example one-to-one semi-structured interviews would likely have generated richer data. However, it would have restricted the sample to fewer participants, and given the under-representation of specific population sub-groups in research, we would have failed to capture the same breadth and diversity of perspectives (65).

Another important strength is the use of Framework Analysis, which yielded findings that captured the breadth of factors parents in Britain perceived as barriers and facilitators to adventurous play. Because of this detail, we chose to focus the discussion on factors that have particular relevance for intervention but this means that some barriers and facilitators, such as practical considerations (time, weather, younger siblings), were not discussed in-depth. Nevertheless, they are important for some parents, and we would recommend they are not overlooked in the development of policy and intervention.

A final strength is that the identified framework has utility for future research, providing a potential structure for quantitative research to be able to explore the barriers and facilitators most commonly perceived by parents and therefore identify the most important targets for intervention. Applying the framework structure quantitatively to the wider 1919 sample of parents in the BCPS could be considered.

Conclusions

Given that adventurous play has been associated with children's development, physical and mental health, the current study aimed to identify the barriers and facilitators of adventurous play perceived by parents of primary school-aged children in Britain. The findings highlight the breadth of factors operating to influence parents' encouragement or restriction of adventurous play. Interventions and campaigns that respond to parents' concerns, capitalise on existing positive attitudes and support parents with tolerating risk and uncertainty may be important to target, with a view to ultimately improve children's adventurous play opportunities, as well as their health.

Abbreviations

BCPS

British Children's Play Survey.

Declarations

Supplementary Information

The online version contains supplementary material available at (link TBC).

Ethics approval and consent to participate

The study was conducted according to the guidelines of the Declaration of Helsinki and the procedures of the study were approved by the University of Reading School of Psychology and Clinical Language Sciences Ethics Committee (2020-003-HD). Informed consent was obtained from all participants involved in the study.

Consent for publication

Not applicable.

Availability of data and materials

The data obtained and analysed in the current study are available in the Open Science Framework repository via the following link: https://osf.io/yhr89/?view_only=882c0d1f90b444748553e92c2ff080df

Competing interests

HD is funded by a UKRI Future Leaders Fellowship which also funds RN's salary. Play England, Play Wales, PlayBoardNI, HAGS and the Association of Play Industries are partners on this fellowship. Outdoor Play and Learning and Learning through Landscapes are collaborating organisations. No direct funding is received from any of these organisations. All other authors declare no conflicts of interest.

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Authors' contributions

HD and BO conceptualised and designed the study. HD, RN and RMcC provided supervision to BO. HD, KH and BO supported the design and development of the methodology. BO led the data analysis and all authors supported with interpretation and validation of the data. BO drafted the manuscript. All authors reviewed and revised the manuscript. All authors read and approved the final version of the manuscript to be published.

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Figures

Figure 1

A framework capturing parent perceived barriers of and facilitators to adventurous play

Note. Numbers in brackets highlight the results section in which the framework categories and themes are discussed.

Supporting Children's Adventurous Play: Recommendations for Policy and Intervention.

1

Acknowledge that parents have real concerns about their child's safety.

2

Capitalise on parents' positive attitudes and increase knowledge about the benefits of adventurous play for emotional well-being.

3

Help parents manage their fears about adventurous play by including support to alter their perceptions of risk.

4

Provide additional support to parents who are anxious and whose children are anxious.

5

Consider the specific concerns that parents with disabled children might have.

6

Recognise that new challenges may arise for parents of older children, including concerns related to independence and autonomy.

Other key factors facilitate adventurous play, providing a supportive environment for children and their parents.

Road safety

Community safety

Play space accessibility

Equipment safety & quality

Policy and investment that support play opportunities

Figure 2

Recommendations for policy and interventions

Supplementary Files

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- [Additionalfile1.docx](#)