Licence to be active: parental concerns and 10–11-year-old children’s ability to be independently physically active

Russell Jago1, Janice L. Thompson1, Angie S. Page1, Rowan Brockman1, Kim Cartwright2, Kenneth R. Fox1

1Department of Exercise, Nutrition and Health Sciences, University of Bristol, Tyndall Avenue, Bristol BS8 1TP, UK
2School of Psychology, University of Southampton, Southampton, UK

Address correspondence to Russell Jago, E-mail: russ.jago@bris.ac.uk

ABSTRACT

Background Physical activity independent of adult supervision is an important component of youth physical activity. This study examined parental attitudes to independent activity, factors that limit licence to be independently active and parental strategies to facilitate independent activity.

Methods In-depth phone interviews were conducted with 24 parents (4 males) of 10–11-year-old children recruited from six primary schools in Bristol.

Results Parents perceived that a lack of appropriate spaces in which to be active, safety, traffic, the proximity of friends and older children affected children’s ability to be independently physically active. The final year of primary school was perceived as a period when children should be afforded increased licence. Parents managed physical activity licence by placing time limits on activity, restricting activity to close to home, only allowing activity in groups or under adult supervision.

Conclusions Strategies are needed to build children’s licence to be independently active; this could be achieved by developing parental self-efficacy to allow children to be active and developing structures such as safe routes to parks and safer play areas. Future programmes could make use of traffic-calming programmes as catalysts for safe independent physical activity.

Keywords environment, licence, parenting, physical activity, safety

Introduction

Regular physical activity is associated with lower body mass,1,2 blood pressure3 and insulin levels4 and has also been associated with improved mental well-being5 among both children and adolescents. Despite these benefits many adolescents2,6 do not engage in the recommended amounts of physical activity. Cross-sectional4 and longitudinal7,8 studies have shown that physical activity levels decline as children age. The period around 10–12 years of age often marks a steep decline in physical activity and coincides with the transition from primary to secondary school.9 This is also a period when parental licence for children to engage in physical activity without adult supervision increases.10,11 For the purpose of this paper, parental licence will be defined as parental approval to engage in independent forms of physical activity. This unsupervised physical activity is likely to make a significant contribution to children’s overall physical activity.10 Thus, there is a need to understand the factors that influence independent physical activity and how these factors could be changed to encourage young people to be more physically active.

Emerging research indicates that increased parental safety concerns have reduced opportunities for youth physical activity10 with many parents concerned about traffic and

Russell Jago, Senior Lecturer
Janice L. Thompson, Professor of Public Health Nutrition
Angie S. Page, Senior Lecturer
Rowan Brockman, Research Assistant
Kim Cartwright, Research Assistant
Kenneth R. Fox, Professor of Exercise & Health Science
stranger danger.\textsuperscript{12} Research conducted about a decade ago indicated that the end of primary school is a period when children obtain greater licence to engage in independent physical activity with parents encouraging group activity as a safe form of physical activity.\textsuperscript{13} There is however a lack of information on the factors that influence contemporary parents’ attitudes to licence and independent activity. We do not know whether parents are happy with the licence they afford their child or whether they or their children perceive any adverse effects of limited licence. Understanding these issues is likely to be an important first step in developing strategies to help parents to feel comfortable about affording greater licence for their children to be active. As there is limited available evidence in this area and parental decision-making is likely to be complex when weighing up the pros and cons for independent activity we employed qualitative methods to examine these issues among 24 parents of 10–11 year old, UK children.

\textbf{Methods}

Participants were 24 parents of 10–11 year old children recruited through six primary schools in Bristol, UK. As previous studies have reported that physical activity differs by socio-economic position\textsuperscript{14} and it is therefore reasonable to assume parental attitudes may also differ by socio-economic status (SES) we recruited schools from across the economic spectrum. The schools were recruited to approximate the economic diversity of the local area based on the UK Index of Multiple Deprivation (IMD), an area level measure of deprivation that includes assessments of income, employment, health and education.\textsuperscript{15} We obtained the IMDs for the postcode of all local schools and then recruited three schools from the lowest third (low SES schools), two from the middle third (middle SES) and one from the highest third (high SES school). Letters were sent home to all year six parents \((n = 270)\) asking for volunteers to take part in interviews. The study was approved by the School of Applied Community and Health Studies Ethics committee at the University of Bristol and informed consent was obtained for all participants.\textsuperscript{16}

Preliminary data collection efforts in two pilot schools indicated that although parents were willing to attend focus groups, it was not possible to schedule meetings at times in which consenting participants could attend sessions. To address this issue, we employed in-depth phone interviews for data collection. We opted for phone interviews as it has been suggested that interviewee’s are more likely to answer questions of a delicate nature when the interviewer is not present.\textsuperscript{17,18} Interviews lasted between 13 and 38 min (mean 24 min) and were conducted by an experienced interviewer and were based on pilot interviews. Questions focused on three areas: (i) factors that limited independent physical activity; (ii) parental attitudes towards independent physical activity; and (iii) parental strategies to manage their child’s independent physical activity.

\textbf{Analysis}

All recordings were transcribed verbatim and anonymized. A second researcher listened to the recordings and checked the transcripts for accuracy with any differences reconciled by a third researcher. Thematic analysis was used to reveal the main themes of the research. Given the emergent nature of the data, and the limited literature base in this area, no hypothesis or structures were applied and no preconceived theory was tested. Codes were entered as free nodes into a newly created database in NVivo (Version 8.0, QSR, Southport, UK). Codes were checked by a second investigator, matrices of codes were developed and hierarchical codes produced. Text retrievals were then performed on codes, contents interpreted and summarized.

\textbf{Results}

Participants were 20 women and 4 men who were parents of 10–11-year-old children attending one of the six schools. There were 12 participants (10 female) from low SES schools, 9 participants (8 females) from middle SES schools and 3 participants (2 females) from the high SES school. Analysis of the parent interviews identified four themes that parents thought affected their child’s opportunities to engage in physical activity: (i) perceived lack of an appropriate space in which to be active; (ii) safety; (iii) the proximity of friends and other children’s licence; and (iv) older children.

\textbf{Perceived lack of an appropriate space in which to be active}

Some parents \((n = 7)\) commented that the environment around their home reduced their child’s options to be physically active.

\begin{quote}
“Well not having a kind of immediately accessible space where you can either be in a group or do your own thing affects their [activity] choices.” (Mother, Low SES School)

“Well their main house where they live is basically got nothing around it. It’s completely . . . . I am not sure residential the right word but it’s . . . . there are no open spaces” (Father, Low SES School)
\end{quote}

A couple of parents remarked that the lack of an appropriate space was a consequence of urban living.
“I mean we live, we live in (X) which is you know inner city, we’ve got a small garden” (Mother, Low SES School)

“I mean just living in an urban environment, I mean I sound like a middle-aged woman that I am but I grew up in a village and I’d spent my entire childhood out really” (Mother, Middle SES School)

**Safety**

Safety-related concerns, including traffic concerns, were consistently raised by the majority (n = 21) of the parents as factors that adversely affected their child’s engagement in outdoor play and physical activity. More specifically, over half of the parents (n = 13) reported that the volume of local traffic adversely affected their child’s physical activity opportunities.

“It’s not really safe to be out in the streets playing football. You know the road’s reasonably busy and I mean you know it’s just one of those things” (Mother, Middle SES School)

“They can’t play out on a street and you have to take them to the park” (Mother, Middle SES School)

There were also many other instances of other more general safety concerns, such as:

“I wouldn’t let them play on the cycle track it’s just you know unsupervised, just because I can’t see them” (Mother, Low SES School)

“You know the way society is you know you don’t know who’s out there so they’ve not had the freedom I had as a child” (Mother, High SES School)

A small number of parents (n = 4) also explicitly referred to more extreme forms of stranger danger such as child abductions.

“You know I worry about her wandering off and people getting her” (Mother, Low SES School)

“I worry about... well all the paedophiles and everything like that out there” (Mother, High SES School)

One parent, however, specifically mentioned that she did not think that safety concerns, and particularly stranger danger was a major issue.

“I certainly don’t think ‘oh god she can’t go out because someone’s gonna go and take her or something’. I don’t have those kind of fears” (Mother, Low SES School)

**Proximity of friends and other children’s licence**

A quarter of the parents (n = 6) indicated that not having friends who lived close to home adversely affected their child’s physical activity options.

“There are very few children who live around here. We’re just in an area where there just don’t seem to be that many kids” (Mother, Middle SES School)

“Most of his friends don’t live as close as I would like for him to be able to go wandering around the streets on his own yet” (Mother, Middle SES School)

A few parents (n = 3) also indicated that the limited licence afforded to other children restricted their child’s physical activity options because he or she had no friends with whom to play with.

“Not many of his friends are allowed to play out” (Father, Low SES School)

“He don’t normally go out cos it’s limited cos of his friends” (Father, Low SES School)

**Older children**

A few parents (n = 3) indicated that the presence of older children in the park or other outdoor areas where their child could be active was perceived as a barrier to physical activity for their 10–11-year-old child.

“I won’t allow them to simply go down the park and hang out because there are older children there that I wouldn’t necessarily trust” (Mother, Middle SES School)

“There’s an adventure playground but to be honest, I’m not too keen on him going down there regularly because I wouldn’t want him to be influenced too much by older children” (Mother, Low SES School)

In the second part of the interview, we explored general attitudes towards licence and three key themes emerged. Firstly, parents reported that they felt that 10–11 years of age was a key age to begin to afford children licence to be independently active and that this licence was linked to the start of secondary school. Secondly, parents expressed concern about the licence that was afforded to other children, and that they were uncomfortable that other parents allowed their children to be active on their own. Thirdly, parents reported some regret about not allowing their child the ability to be independently active. Examples of the quotes reported for each of these themes are shown in online supplementary data, Appendix 1.

Parents reported using four strategies to manage their child’s independent physical activity. The strategies were (i) setting time limits for activity; (ii) restricting activity to within a close proximity of home; and (iii) encouraging activity within groups.

**Time limits for physical activity**

Around half of the parents (n = 11) reported that where independent activity was allowed the child was set strict time limits on how long they could be out for and when they must return.
“I will say is, is you know you need to be back at such and such a time and you know I check with him that he’s heard that” (Mother, Low SES School)

“They have times when they have to be back on and I am quite strict on that” (Mother, Middle SES School)

Restricting activity to close to home
Most parents (n = 19) reported that they had defined clear boundaries for where their child was allowed to travel in order to engage in physical activity. These boundaries were often related to perceived traffic threats or the distance away from home.

“I have boundaries for them, how far they go from home when they are on their bikes… I think it keeps them off busy roads” (Mother, Middle SES School)

“Basically she can go out the front on her scooter or on her bike as long as I can see her, that means she’s got very restricted parameters” (Mother, Low SES School)

Six parents indicated that they were not willing to allow their child to engage in independent physical activity and mentioned that their child’s physical activity was restricted to within the home or it’s immediate proximity.

“Yeah well it’s [activity] mostly it’s, it’s in the garden or they’ll go up into their room” (Mother, High SES School)

“Mainly over either in the garden or over in the (adjoining) field” (Mother, Low SES School)

“Well we’ve got quite a big garden and we’ve got a trampoline so my preference has always been that they bring their friends here” (Mother, Middle SES School)

Activity within groups or only supervised by adults
Some parents (n = 5) indicated that they would only allow physical activity if it took part in groups.

“I wouldn’t let her go to the park on her own… I just tend to think there’s more safety in numbers” (Mother, Low SES School)

“She must stay with her friends and kind of like I’ve been pretty vigilant if she’s not kept to that I won’t let her go out the next time” (Mother, Low SES School)

Two parents commented that they were only willing to allow physical activity if the child was supervised by an adult.

“If they go to the local park then there’s usually an adult with them” (Mother, Middle SES School)

“There’s a bike track [part of city] but I wouldn’t let him go on his own or with his friends. They would have to go with an adult” (Mother, Low SES School)

Discussion
Main findings
The data presented in this paper show that parents of 10–11-year-old children are concerned about allowing their children to engage in independent forms of physical activity. Concerns are a function of worries about traffic, threat of crime or attack, perceived lack of appropriate space, threats from older children and a lack of friends within close proximity to the home. Findings are consistent with those previously reported in the literature for reduced independence in young people. To promote physical activity with children of this age group, we need to attend to parental concerns.

One way to respond to parental concerns is to find methods to facilitate safe physical activity for children. Safe physical activity could be achieved by providing structured, supervised locations in which children can be physically active. Supervised sessions do not, however, build children’s capacity to be independently active. There is a need to develop strategies to help children engage in independent physical activity outside of the school setting. Consistent with earlier data from around a decade ago, our findings suggest that the age when children transition from primary school to secondary school is a key period when parents naturally begin to afford their children increased licence to be physically active. Therefore, developing strategies to promote independent physical activity at the end of primary years may be particularly productive.

The provision of increased licence for children necessitates change in the perceptions and behaviour of the parent who provides licence and also the child who has to become active. Change is likely to be a function of three different elements. First there is a need to progressively build parental confidence to allow independent physical activity. This could be achieved through campaigns that promote the health and social benefits of independent physical activity as well as approaches to managing parental concerns. As some participants in our study indicated that they view families that allow independent physical activity to be in some way neglectful, campaigns that address this negative perception may be appropriate. Campaigns could be combined with strategies to build child self-efficacy by steadily increasing licence and extending space and time boundaries. It is crucial to support strategies that target parental decision-making and behaviour with local level policy changes to support independent physical activity. The walking school bus and safe routes to school programmes have had some success at promoting safe walking to school among children, and neighbourhood watch campaigns have been shown to reduce crime.
seems plausible that these concepts could be extended to play areas and outdoor spaces.

Parents identified a lack of friends close to home as a factor that limited their child’s licence to be active. This new finding suggests that local initiatives to pull together groups of children may be a fruitful means of supporting physical activity among the children. Safe neighbourhood routes would also facilitate interaction between peers within their neighbourhood. Although some parents commented that they felt the presence of older children was a barrier to independent physical activity, using older children as leaders for younger children’s play could be an effective means of developing independent physical activity. Support for this concept can be drawn from the ASSIST study that demonstrated that a peer-based intervention was effective at reducing adolescent smoking. While the ASSIST study was limited to the school setting, it might be possible to employ some of these peer leader concepts to neighbourhood-based independent physical activity.

Parental concerns regarding traffic require macro-level solutions. A number of UK towns have implemented 20 mile per hour speed limits for residential streets. These programmes have reduced the number of children impacted by traffic accidents but their effect on independent physical activity has not been assessed. A potentially fruitful approach could therefore be to develop community programmes to promote independent physical activity alongside the introduction of traffic-calming measures.

Participants commented that they felt that the actions of other parents in providing limited physical activity licence adversely affected their child’s ability to be independently active. While this finding is interesting, it is also important to highlight that there was some evidence of cognitive dissonance in the participants’ responses. For example, one parent commented on how she was trying to afford her child more independence ‘I’m sort of trying to give her more independence’, but later in the same interview commented about other parents who allowed their child to ‘roam around the streets’ (Low SES School). Another parent talked about the benefits of a living in a cul-de-sac and how that type of home afforded opportunities to ‘run wild in the street’, and then later in the interview talked about the limits of not ‘living in an accessible space where you can be in a group’ (Low SES School). The dissonance suggests a need to find ways to help parents understand how their behaviour impacts on their child’s ability to be independently physically active and also a requirement to empower parents to manage the challenging process of facilitating their child’s independent activity.

What is already known on this topic?
Previous research has shown that many youth do not meet physical activity guidelines and physical activity levels decline with age with steep declines around 10–12 years of age. Parental logistic support for physical activity has been associated with increased activity among adolescent girls, and children’s options to engage in physical activity may be affected by parental safety concerns.

What this study adds?
This study advances current knowledge by identifying and describing the factors that influence whether parents are willing to allow their children to engage in physical activity. The paper also reinforces that the end of primary school is a period when increased licence is naturally afforded and that parents manage licence by placing time limits and boundaries on independent physical activity and encouraging activity in groups. Strategies that build on these approaches could form the foundation of approaches to increase independent physical activity and thereby overall physical activity.

Limitations of this study
The data presented in this study is limited by the small sample size drawn from six schools in one British city, which limits generalizability to other settings. The sample also predominately comprised mothers, which prevents gender or parental role comparisons. The response rate from schools was also low and ensures that results cannot be generalized to other groups, including non-participants within the same school. Finally, although the overall sample of 24 participants is comparable with many published qualitative studies and there was evidence that suggested that saturation had occurred, there was not an equal spread of participants among SES groups with a low number of participants from high SES schools. As such the ability to infer different attitudes and perceptions across SES groups is limited and more research would be needed, particularly with parents from high SES schools to draw SES comparisons.

Conclusions
Children’s options to be active on their own are limited by safety concerns, a perceived lack of an appropriate space, the proximity of friends and traffic. Parents indicated that the end of primary school is a period when they begin to afford their children increased licence to be active and manage activity. Strategies that manage parental concerns either indirectly through reducing risk in the local
environment or directly through enhanced parental licence are important to promote increased independent physical activity in young people.

**Funding**

This project was funded by a project grant from the British Heart Foundation (ref. PG/06/142). Funding to pay the Open Access publication charges for this article was provided by the British Heart Foundation.

**Supplementary data**

Supplementary data are available at the *Journal of Public Health* online.

**References**

1. Jago R, Baranowski T, Baranowski JC et al. BMI from 3–6 y of age is predicted by TV viewing and physical activity, not diet. *Int J Obes Relat Metab Disord*. 2005;29(6):557–64.
2. Ness AR, Leary SD, Mattocks C et al. Objectively measured physical activity and fat mass in a large cohort of children. *PLoS Med* 2007;4(3):e97.
3. Leary SD, Ness AR, Glynn NW et al. Physical activity and blood pressure in childhood: findings from a population-based study. *Hypertension* 2008;51(1):92–8.
4. Jago R, Wedderkopp N, Kristensen PL et al. Six-year change in youth physical activity and effect on fasting insulin and HOMA-IR. *Am J Prev Med* 2008;35(6):554–60.
5. Parfitt G, Eston RG. The relationship between children's habitual activity level and psychological well-being. *Acta Paediatr* 2005;94(12):1791–7.
6. Jago R, Anderson C, Baranowski T et al. Adolescent patterns of physical activity: differences by gender, day and time of day. *Am J Prev Med* 2008;35(6):547–52.
7. Kimm SY, Glynn NW, Kriska A et al. Decline in physical activity in black girls and white girls during adolescence. *N Engl J Med* 2002;347(10):709–15.
8. Nader PR, Bradley RH, Houts RM et al. Moderate-to-vigorous physical activity from ages 9 to 15 years. *JAMA* 2008;300(3):295–305.
9. Kimm SY, Glynn NW, Kriska AM et al. Longitudinal changes in physical activity in a biracial cohort during adolescence. *Med Sci Sports Exerc* 2000;32(8):1445–54.
10. Veitch J, Bagley S, Ball K et al. Where do children usually play? A qualitative study of parents’ perceptions of influences on children's active free-play. *Health Place* 2006;12(4):383–93.
11. Hillman M. One false move: an overview of the findings and the issues they raise. In: Hillman M (ed). *Children, Transport and the Quality of Life*. Policy Studies Institute, London, 1993;7–18
12. Alton D, Adab P, Roberts L et al. Relationship between walking levels and perceptions of the local neighbourhood environment. *Arch Dis Child* 2007;92(1):29–33.
13. O’Brien M, Jones D, Sloan D et al. Children's independent spatial mobility in the urban public realm. *Childhood* 2000;7:257–77.
14. Riddoch CJ, Mattocks C, Deere K et al. Objective measurement of levels and patterns of physical activity. *Arch Dis Child* 2007;92(11):963–9.
15. Noble M, McLennan D, Wilkinson K et al. *The English Indices of Deprivation*. London: Communities and Local Government, 2007.
16. Jago R, Bailey R. Ethics and paediatric exercise science: issues and making a submission to a local ethics and research committee. *J Sport Sci* 2001;19(7):527–35.
17. Sturges JE, Hanrahan KJ. Comparing telephone and face to face qualitative interviewing: a research note. *Qualitative Res* 2004;4:107–18.
18. Bryman A. *Social Research Methods*, 3rd edn. Oxford: Oxford University Press, 2008.
19. Valentine G. ‘Oh yes I can’, ‘Oh no you can’t': children and parents understanding of kids competence to negotiate public space safely. *Antigone* 1997;29:65–89.
20. Hillman M, Adams J, Whitelegg J. One false move … a study of children's independent mobility. London: Policy Studies Institute, 1990.
21. Foted T, Thomsen TU. The surveillance of children's mobility. *Surveill Soc* 2004;1:535–54.
22. Kearns RA, Collins DCA, Neuwell PM. The walking school bus: extending children's geographies? *Area* 2003;35(3):285–92.
23. Boarnet MG, Anderson CI, Day K et al. Evaluation of the California safe routes to school legislation: urban form changes and children's active transportation to school. *Am J Prev Med* 2005;28(2 Suppl. 2):134–40.
24. Boarnet MG, Day K, Anderson C et al. California's safe routes to school program: impacts on walking, bicycling, and pedestrian safety. *J Am Plan Assoc* 2005;71(3):301–17.
25. Bennett T, Holloway K, Farrington DP. Does neighborhood watch reduce crime? A systematic review and meta-analysis. *J Exp Criminal* 2006;2:437–58.
26. Campbell R, Starkey F, Holliday J et al. An informal school-based peer-led intervention for smoking prevention in adolescence (ASSIST): a cluster randomised trial. *Lancet* 2008;371(9624):1595–602.
27. Portsmouth City Council. *20mph Speed Limit on Residential Roads in Portsmouth*, 2008. http://www.portsmouth.gov.uk/living/8403.html (7 October 2008, date last accessed).
28. Bunn F, Collier T, Frost C et al. Traffic calming for the prevention of road traffic injuries: systematic review and meta-analysis. *Inj Prev* 2003;9(3):200–4.
29. Elvik R. Area-wide urban traffic calming schemes: a meta-analysis of safety effects. *Accid Anal Prev* 2001;33(3):327–36.
30. Davison KK, Cutting TM, Birch LL. Parents’ activity-related parenting practices predict girls’ physical activity. *Med Sci Sports Exerc* 2003;35(9):1589–95.