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Title

Play in Middle Childhood: Everyday Play Behaviour and Associated Emotions

Abstract

Children's reports about their play in middle childhood and the emotions they associate with play have received limited research attention. Using focus groups, this study asked 38 children in the UK about what, where and with whom they played. They were also asked how play made them feel. Children reported a wide range of play behaviours, with outdoor and traditional games being just as prominently mentioned as play with electronic devices. The emotional importance of play in middle childhood was apparent, with children associating play with strong positive emotions, and not being able to play with negative emotions and anxiety.

Introduction

Middle childhood, defined here as the age of 7 – 11 years, is an important period of childhood focused on the development of social relationships, cultural understanding and children's sense of citizenship (Sandberg, 2001). Research with children in the early years has identified how play serves an important function in promoting these things (Howard and McInnes, 2013b). As was identified in a recent ESRC funded review of play in middle childhood our understanding of the nature and function of play during this period is limited (Roberts, 2015). Importantly, the success of children's services relies on hearing children's voices and not simply providing for play (Holt, Lee, Millar and Spence, 2015). Studies of children's play in middle childhood have largely been concerned with break times in school (e.g. Pellegrini and Bohn-Gettler, 2013), social and anti-social behaviour (e.g. Vlachou, Andreou and Botsoglou, 2013) or how children use outdoor spaces (e.g. Holt, Spence, Sehn and Cutumisu, 2008). Whilst this informs policy and practice relating to play and partially describes its function and form, it does not provide a full account of play in middle childhood comparable to what we know about play in the early years.

Piaget (1952) suggests that play in middle childhood reflects the development of operational thought, enabling logical rule based games. Both Parten (1932) and Erikson (1950) emphasise social skills and propose that in middle childhood, play promotes negotiation, socialization and the adoption of cultural trends and rituals (Parten, 1932; Erikson, 1950). Progression in play from birth through to middle childhood has been linked

to the development of specific regions of the brain in contemporary neurosequential theories of development (Perry, Hogan and Marlin, 2000). These theories however, are more concerned with what children in middle childhood become able to do, rather than what they actually do. For example, whilst theories of play might suggest that pretend play is predominant in the earlier years, there is evidence to suggest that this persists into middle childhood (Smith and Lillard, 2012). Alternative theories suggest that play is better defined as a psychological state that impacts on how children approach tasks (Lieberman, 1977; Howard and Miles, 2008). This however, relies on an understanding of what children regard to be play and not play.

Many studies about play in middle childhood rely on adult's recollections of childhood experiences (Sebba, 1991; Henniger, 1994; Sandberg, 2001). Adult memories of play however, are not the most reliable data source and it is difficult to establish the validity of what is recalled and reported (McAdams, Reynolds, Lewis, Patten and Bowman 2001).

When recalling childhood experiences, adults demonstrate a strong bias toward outdoor activity or play that features the natural environment (Henniger, 1994). Sebba (1991) compared adult memories of outdoor places with children's current experiences. Whilst all 194 adults in the sample recalled the outdoors as being a significant place in childhood, preferred places amongst the similar sized sample of children were more dependent on personal needs and the properties of the play space. Evidence suggests that experiences that took place in distinctive locations such as the outdoors, may gain undue prominence in

adult's autobiographical memories of childhood in comparison to memories from more familiar locations such as school or home (see Teckan, Ece, Gulgoz and Er, 2003; Talarico, 2012). A similar issue exists for research that gathers data on play in middle childhood by asking parents to report on their children's behaviour. Such studies consistently demonstrate that parents feel their own children play outdoors significantly less than they did as children and spend more time engaged in electronic play (Valentine & McKendrick, 1997; Clements, 2004) however, their own memories will arguably serve as a point of reference. Brockman, Fox and Jago (2011) found that children's own reports of their play in middle childhood did include computer gaming but also other, more traditional play activities such as role play and board games. In addition, contrary to studies based on adult perceptions, a main theme within children's descriptions of their play related to outdoor activity.

There appear to be inconsistencies between adult's recollections of their childhood play, parental reports of their children's play and children's own descriptions of their play and few studies have focused on the latter. Despite this, significant claims have been made about how changes to children's play patterns in contemporary society have impacted children's health and development. Gray (2011) argues that changes in play patterns can explain increased mental health issues in adolescence. Similarly, reduced active play has been linked to an increase in childhood obesity (Karnik and Kanekar, 2015) and anti-social behaviour (Jarvis, Newman and Swiniarski, 2014). Changes in play patterns have been attributed to increased parental concerns about road safety and strangers (Carver, Timperio

and Crawford, 2008), emphasis on academic outcomes in school and subsequently, reduced opportunity to play (Jarvis, Newman and Swiniarski, 2014) and societal adversity to risk (Gill, 2006). The relationship between patterns of play and children's development however is complex (McHale, Crouter and Tucker, 2001). For example, whilst there are concerns about the negative impact of increased electronic play, this can enhance traditional playground games (Marsh and Bishop, 2014) and have a beneficial effect on cognitive and social development, (Marsh, 2014).

Understanding children's perspectives on their play is important and can guide policy and practice to support health, care and development (Waldman-Levi and Bundy, 2016). Studies of young children's perceptions of their play (e.g. Ceglowski, 1997; Howard, 2002) have facilitated research that demonstrates its role in promoting problem solving ability and improved self regulation and metacognition (McInnes, Howard, Miles and Crowley, 2009; 2011; Bryce and Whitebread, 2012; Whitebread and O'Sullivan, 2012). Evidence also suggests that play has a powerful impact on young children's emotional wellbeing (Howard and McInnes, 2013).

Consistent with early years research, understanding patterns of play in middle childhood and the emotions children associate with their play experiences would enable us to better examine its importance and contribution to development. The aim of the current study is to explore children's descriptions of their play in middle childhood. Specifically, it seeks to establish (i) what, where and with whom children play and (ii) how play makes children feel.

Method

Four UK primary schools were recruited for the research, including large urban and small rural schools with both higher and lower socio-economic bias in their intake. All schools had yard and green spaces for play and were located in communities with parks and play areas. Eight focus group discussions were conducted in total, two within each of the four schools. An opportunity sample of 38 children participated in the discussions, 16 male and 22 female. Ages ranged from 7 through to 11 years (Mean = 9.22). In total, 341 minutes of audio data were recorded and transcribed. Focus group length ranged from 31 minutes to 63 minutes with an average discussion length of 42.6 minutes.

Data were collected using semi-structured focus groups. A schedule of topics was generated that aimed to (1) to discover what, where and with whom children play and (2) explore how children feel during their play. The schedule began with general questions about play, including 'What kind of things do you play?', 'Who do you play with?', 'Where do you play?' and 'What kinds of things do you do that are not play?'. Then children were asked about how play made them feel. This began with a discussion of 'what emotions and feelings are', followed by asking the children to 'Think about when you play, how does that make you feel?', 'Think about when you are not playing, how do you feel then?' and 'How would you feel if you had no time to play?'. Although this provided a structure for the focus group discussion the interviewer was free to adapt the schedule when the children's narratives were best elicited by an alternative approach.

Approval for the research was granted by the Institutional Research Ethics committee. Written consent was gained from both schools and parents/guardians. Children were told in appropriate language about the research and were asked for their assent. They were told that

they did not have to take part and that they could leave the group at any point. No children chose to do so.

Analysis

Meaningful patterns in the data were identified following the principles of thematic analysis (Braun and Clarke, 2006). After transcribing and becoming familiar with the data, two researchers, guided by the research questions, independently analysed the transcripts identifying initial codes. These codes were then collapsed into themes. The codes and themes identified by each researcher were then discussed and amalgamated. A supplemental frequency analysis was performed to provide insight into the predominance of particular themes/responses. It is important to note however, that this is based on how many children talked about each theme/response during the focus groups. The numbers should not be interpreted as being 'out of 38', for example the data in Table 2 show 11 of the 38 children mentioned playing at home whilst discussing their play, but it does not follow that the 27 children who did not contribute to this discussion do not play at home.

Results and Discussion

What Children Play

As detailed in Table 1, children described a wide range of different play activities. Whilst there were a high number of comments made regarding electronic activities, which is consistent with widespread beliefs about changes in children's play behaviour, we found similar levels of reference to more traditional forms of play, notably outdoor activity (sport / yard games / rough and tumble), play with specific toys and various types of non-electronic games. Consistent with the findings of Smith and Lillard (2012), there was also evidence that pretend play, often associated with younger children, persisted into middle childhood. These findings challenge the notion that children are not experiencing the range of play experiences

necessary to support health and development (see Play Wales, 2013; All Party Parliamentary Group, 2015).

School based activities were the most common type of activity described as being ‘not play’. Children also felt that literacy activities were not like play, for example reading or writing.. This is consistent with previous research on perceptions of play conducted with younger children (e.g. Ceglowski, 1997; Howard, 2002). Some types of activity were more ambiguous, for example in the case of art activities, how much choice you had in what you were drawing or whether you were drawing at home or in school were important determinants of play versus not play. This is highlighted in the extract below, where two children discuss why drawing is sometimes play and sometimes not play.

M: becausesometimes when you're doing work at school you'll.... draw specific pictures next to it.... you've got to draw something specific, but if you're at home just drawing in your own time then you'll just be drawing anything

E: yeah and you can....draw a person and you can cut it out and the other person can do that as well and the paper people they can play together.....

M: because we have to draw something specific, we're not allowed to choose

E:we're not allowed to cut them out and play with them because its our work

Consistent with previous research, this suggests that children’s perceptions of play are shaped by their experiences (Westcott and Howard, 2007). Further, it demonstrates the importance of understanding children’s own perspectives of play, as what might look like play to an observer, may not be defined as such by children themselves.

When, Where and With Whom Children Play

Table 2 illustrates when, where and with whom children play. When asked when they played, the children in the focus groups talked about play at home and at school in equal measure. In school this included reference to break and lunch times, in class activities, wet play, 'Golden time' (a specific time for play during the school week, often used as a reward) and times when work had been completed. In addition to this the children talked about playing after school, in the holidays and at weekends. Despite the demise of outdoor play being purported within various literature reviews (Gleave and Cole-Hamilton, 2012; Munoz, 2009), in this group of children, playing outdoors was frequently described both in and out of school with reference to the school yard, the garden at home, being at the park or out in the fields. Our data does not enable us to judge how often children played outdoors or for how long, one speculative assumption may be that the types of play that were most readily discussed by the children are those that they engage in frequently and that are important to them.

Children often perceived adults as constraining when or what they were able to play. Consistent with the literature, adults were seen to regulate play in the sense that they allowed or disallowed things because of safety (Tovey, 2010; Wang and Aamodt, 2012), indicated when the time for play was over (both at home and in school) or restricted the time spent on certain activities (e.g. electronic games or consoles). Time for play was also limited by daily routine such as break times in school, meals and bedtime. The children also described how often, they themselves controlled their own play whilst at other times it was regulated by peers. For example, other children might decide if you were or weren't allowed to join a game.

S: cos the person who decides the game its up to them if you can play or not

The value of play for the practice and development of self-regulatory behavior has been evidenced in the early years (e.g. Whitebread and O’Sullivan, 2012) and findings here suggest it has similar benefits in middle childhood too. In addition, contrary to widely accepted definitions of play that consider free choice to be a necessary characteristic, our findings support the proposition that the level of freedom and choice in play is not absolute, but can involve compromise and negotiation (Miller and Kuhaneck, 2008; King and Howard, 2014). This has important implications for our theoretical understanding of play and professional practice, for example where in playwork, full freedom of choice is a key principle of their work (Playboard, 2015).

Children mainly described playing with their friends and siblings but also included adults in their play at home and at school. Previous studies with younger children found that adult presence in a school environment made it considerably less likely that an activity would be perceived as play (Howard, 2002; McInnes, Howard, Miles and Crowley, 2009; Kayhaglou, 2014). The children in the current study however, seemed more readily prepared to accept teachers and other adults into their play, this could suggest that older children's perceptions of play are more complex than those of their younger counterparts.

C: [I play with] ...friends....siblings, family, sometimes even the teachers if they want to play

Feelings associated with play and not play

Positive feelings about play

An introductory discussion indicated that the children in the focus groups understood feelings well and were able to describe a wide range of emotions. For example, when asked what emotions are, children talked confidently about feelings that included happiness,

sadness, love, anger, anxiety, frustration, excitement, guilt and fear. When specifically asked to talk about how playing made them feel, children from all schools gave a range of positive responses (see Table 3). Children overwhelmingly described how play was fun and enjoyable and made them feel happy, using words such as epic, awesome, joyful, marvelous and fantastic.

E: it feels like you're really happy and you're like you don't want it to stop

A: you feel super super super super super super

S: It makes me feel joyful it do. Using your imagination is fun

Positive emotions were often associated with being able to choose what was being played. In their responses children talked about being happy because they were in control of the game or had choice over the activity. Being 'in control' was associated with other positive feelings like being 'comfortable',

M: I think you'd be happy if you were playing and a bit more comfy if you were playing something you chose but like you'd still be happy when you were playing something someone else chose but not as happy as if you chose what you were doing

or in another case 'relieved',

L: like you're playing your favourite game (but)....yesterday there was this game you really didn't like....you'd be relieved you were actually playing a game you liked

One particularly interesting category of response relating to how children described feeling when they played, focused on the way it offered escape from reality or the opportunity to 'let go'. This is reminiscent of the 'dizziness' described by Kalliala (2006) with reference to the positive impact of outdoor play. Children talked about how play made

them feel like 'screaming' or 'singing'. Children in one school discussed the potential play offered for movement between real and imagined worlds, dreamlike states and escape from reality.

E1: It feels like its actually happening

E2: cos you can pretend that you're flying or something

E3: yeah so sometimes you're playing a game and its so good and then you have to stop. Its like you're having a dream and like, someone comes into your room and they wake you up and a perfect dreams ended

E3: like sometimes you're playing and you forget your life and you just say this is my life and you go back and you're like what the heck is this cos you've forgotten

E2: and you stop and go back to reality.....and you're like I don't want to do this. I want to go back to the other life I have

This discussion offers support for the therapeutic value of deep play, where children can try on and try out alternative worlds (Paley, 2005; Howard and McInnes, 2013).

Negative feelings about play

Negative feelings associated with not playing were wide ranging (see Table 3). Most predominant were descriptions of feeling bored, sad, angry, left out and annoyed. It was clear that play supported the development and maintenance of friendships and often the reasons for sadness related to being left out or without friends.

E: if I asked and they said no, I would feel like sad and disappointed and I would just go and sit on the side. I would be waiting for someone else to ask me to play

Play was also associated with feelings of anger related to perceived competence, other children not following rules or being excluded from a game.

L:this game called rush, it really annoys me because I can't drive properly

R: you feel left out.....like they're just treating you like you don't know anything about their playing and you're not as valid as them

Reasons for feeling sad during play generally related to social interaction and other children's actions. For example feeling left out, where people told tales, spoiled your game, or where children didn't want to take on the role assigned to them, for example being 'it' in a game of chase as the following exchange illustrates,

L: there's this girl in our class, if she's 'it' then she'll just cry cos she doesn't want to be [it]then the people will get told off for putting her on but she will cry because she's not playing what she wants to play

Whilst only a few children talked about the darker side of play, those that did help to illustrate that play can be a context where children can feel isolated or discriminated against by others.

Across all focus groups, children associated negative feelings with times that they were not playing or not able to play. One exception to this was feeling happy 'because there's nothing wrong with lessons'. A further interesting exception was the expression of defiance and children's powerful drive toward play (Lester and Russell, 2008), where three children said that no one could stop them playing and they'd do it anyway, for example,

S: I would feel like I do want to play. You can't stop me from playing. I would just go and play

Children's discussions of the feelings they associated with not being able to play again highlighted the importance of play for the development of social competence. Some of the children talked about the coping strategies they might use if they felt left out, for example, by sitting and waiting to be asked to play or, going to find someone else to play with instead. The children also demonstrated empathy, talking about how they would comfort another child who was upset during play,

F: when she gets tagged she always says that didn't count

L: yeah she just goes off and cries

F: yeah and then we have to go and cheer her up like

Consistent with the views of Pellegrini and Bonn-Gettler (2013), it would seem that in middle childhood, children are learning to manage feelings of rejection or isolation and play affords them a relatively safe space to achieve this. The children's discussions about feeling lonely and left out when they were not able or not allowed to play, highlight the potential emotional impact of disallowing a child from going out at break times or having time to play in class, a behaviour modification strategy often used in the school environment.

In relation to boredom, children talked about how not being able to play might contribute to their ability to concentrate and do their work. Two examples from different groups were,

R: I probably wouldn't learn anything if I didn't have time to play. I [would] probably just be really bored

J: you might not be able to concentrate in lessons because you'd be really bored

Two children (in different groups) also raised the issue of needing or having the right, to play.

M: I'd feel sad and bored cause like children play, that's what they do and like they have rights, they have rights to play

C: I would feel like I have – like I need to play. Cos kids need to play, you can't force them not to play

Not playing was also discussed in relation to feelings of anxiety. One group of children discussed their feelings after the holidays or at the end of break time when they had to transition from play to not play. They highlighted how it was difficult to move straight back into a formal learning situation and that they needed time to adjust.

D:it feels a bit weird because right after play where you've had some fun and then you're just like 'uh' because you've just been playing and its weird going back in and doing work

E1: you have to get used to it

E2: (its like).. in the summer holidays you have six weeks off and you're playing and having fun

E1: then you have to go back to school

E2: and at the end you have the last day and then you're like....what? cos you've been so used to playing and not having to do work

Transition techniques using music or visual aids are often used within classroom situations to signal tidy up time or the end of the day, particularly with children in the early years. The children's discussion here suggests that similar techniques might be usefully considered for break times too.

Conclusion

The data reported in this paper address two issues that have been somewhat neglected in the wider literature, the patterns of play reported by children in middle childhood and children's views on the emotional importance of play. As far as we are aware, this paper is the first to explore the latter topic in any stage of childhood.

Children here reported a diverse repertoire of play, involving many different types of activity taking place in the home, outdoors, and in the classroom. They were willing to sometimes cede control of their play in deference to others.. Often these others were peers, but on other occasions parents and teachers acted as play partners. Our data on the emotional importance of play is very clear. Children show a great deal of emotional attachment to play, feeling happy, sometimes elated, whilst playing and a host of negative emotions when not able to play. There is also complexity in their emotional experiences, with some examples of instances where play evoked mixed emotions. What is perhaps most clear from our data is the intensity of emotion associated with play.

Play is important within policy and practice guidelines for children's health, care and development in the UK and beyond. Whilst there are many deficiencies in the evidence base regarding play (cf. Lillard et al., 2013), one of the most notable is the lack of exploration of play beyond seven years of age. Taken together, our exploration of patterns of play and its emotional value in middle childhood, although based on a relatively small sample, provides a

clear picture of how important play remains to children's well being beyond the early years. Considering the transition to increasingly formal educational experiences in middle childhood, along with well established concerns about diminishing time for play and pressure placed on academic attainment, protecting and enhancing children's play experiences is a principal concern. As has been demonstrated for children in the early years, this is something that can be best achieved from a strong evidence base.

REFERENCES

All Party Parliamentary Group (APPG), 2015. Play – A report by the all-party parliamentary group on a fit and healthy childhood. London: APPG.

Braun V, Clarke V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* **3**: 77-101.

Brockman R, Fox KR, Jago R. 2011. What is the meaning and nature of active play for today's children in the UK. *International Journal of Behavioral Nutrition and Physical Activity* **8**: 15.

Bryce D, Whitebread D. 2012. The development of metacognitive skills: evidence from observational analysis of young children's behaviour during problem-solving. *Metacognition and Learning* **7**: 197-217.

Carver A, Timperio A, Crawford D. 2008. Playing it safe: The influence of neighbourhood safety on children's physical activity - A review. *Health & Place* **14**: 217-227.

Ceglowski D. 1997. Understanding and building upon children's perceptions of play activities in early childhood programs. *Early Childhood Education Journal* **25**: 107-112.

Clements R. 2004. An investigation of the status of outdoor play. *Contemporary issues in early childhood* **5**: 68-80.

Erikson EH. 1950. *Childhood and Society*. Middlesex, Penguin Books

Gill T. 2006. Home zones in the UK: history, policy and impact on children and youth. *Children Youth and Environments* **16**: 90-103.

Gleave J, Cole-Hamilton I. 2012. A literature review on the effects of a lack of play on children's lives. England: Play England.

Gray P. 2011. The decline of play and the rise of psychopathology in children and adolescents. *American Journal of Play* **3**: 443-463.

Henniger ML. 1994. Adult perceptions of favourite childhood play experiences. *Early Child Development and Care* **99**: 23-30.

Holt NL, Lee H, Millar CA, Spence JC. 2015. 'Eyes on where children play': a retrospective study of active free play. *Children's Geographies* **13**: 73-88.

Holt NL, Spence JC, Sehn ZL, Cutumisu N. 2008. Neighborhood and developmental differences in children's perceptions of opportunities for play and physical activity. *Health & Place* **14**: 2-14.

Howard J. 2002. Eliciting children's perceptions of play using the Activity Apperception Story Procedure. *Early Child Development and Care* **172**: 489-502.

Howard J, McInnes K. 2013a. The impact of children's perception of an activity as play rather than not play on emotional well-being. *Child: Care, Health and Development* **39**: 737-742.

Howard J, McInnes K. 2013b. *The Essence of Play: A Practice Companion for Those Working with Children and Young People*. Routledge. London. Howard J, Miles G 2008. A

Behavioural Threshold and Fluency Theory of Play. In Broadhead P. Howard J, Wood E.2010. Play and Learning in the Early Years. Sage. London.

Jarvis P, Newman S, Swiniarski L. 2014. On 'becoming social': the importance of collaborative free play in childhood. *International Journal of Play* **3**: 53-68.

Kalliala M. 2006. Play culture in a changing world. Milton Keynes: OU Press

Karnik S, Kanekar A. 2015. Childhood obesity: a global public health crisis. *International Journal of Preventive Medicine* **2012**, **3**: 1-7.

Kayhaoglu H. 2014. Play as seen by teachers and children in Turkey. *Procedia – Social and Behavioural Sciences* **152**: 149–153

King P, Howard J. 2014. Children's perceptions of choice in relation to their play at home, in the school playground and at the out-of-school club. *Children & Society* **28**: 116-127.

Lester S, Russell W. 2008. Play for a change. Play policy and practice: A review of contemporary perspectives. London: NCB and Play England.

Lieberman J.N. 1977. Playfulness: Its relationship to imagination and creativity. New York: Academic Press

Lillard AS, Lerner MD, Hopkins EJ, Dore RA, Smith ED, Palmquist CM. 2013. The impact of pretend play on children's development: A review of the evidence. *Psychological Bulletin* **139**: 1-34.

Marsh J. 2014. Purposes for literacy in children's use of the online virtual world Club Penguin. *Journal of Research in Reading* **37**: 179-195.

Marsh J, Bishop J. 2014. We're playing Jeremy Kyle! Television talk shows in the playground. *Discourse: Studies in the Cultural Politics of Education* **35**: 16-30.

McAdams DP, Reynolds J, Lewis M, Patten AH, Bowman PJ. 2001. When bad things turn good and good things turn bad: Sequences of redemption and contamination in life narrative and their relation to psychosocial adaptation in midlife adults and in students. *Personality and Social Psychology Bulletin* **27**: 474-485.

McHale SM, Crouter AC, Tucker CJ. 2001. Free - time activities in middle childhood: Links with adjustment in early adolescence. *Child Development* **72**: 1764-1778.

McInnes K, Howard J, Miles GE, Crowley K. 2009. Behavioural differences exhibited by children when practising a task under formal and playful conditions. *Educational and Child Psychology* **26**: 31-39.

McInnes K, Howard J, Miles GE, Crowley K. 2011. Differences in practitioners' understanding of play and how this influences pedagogy and children's perceptions of play. *Early Years* **31**: 121-133.

Miller E, Kuhaneck H. 2008. Children's perceptions of play experiences and the development of play preferences: A qualitative study. *American Journal of Occupational Therapy* **62**: 407-415.

Muñoz SA. 2009. *Children in the outdoors*. London: Sustainable Development Research Centre.

Nicholson S. (1972). *The Theory of Loose Parts*. *Studies in Design Education Craft and Technology*. Vol 4 (2), 5-14.

Paley V. 2005. *A child's work: The importance of fantasy play*. Chicago: University of Chicago Press.

Parten MB. 1932. Social participation among pre-school children. *The Journal of Abnormal and Social Psychology* **27**: 243.

- Pellegrini AD, Bohn-Gettler CM. 2013. The benefits of recess in primary school. *Scholarpedia* **8**: 30448.
- Perry B, Hogan L, Marlin S. 2000. Curiosity, pleasure, and play: A neurodevelopmental perspective. *Haeeyc Advocate* **20**: 9-12.
- Piaget J. 1952. Play, dreams and imitation in childhood. *Journal of Consulting Psychology* **16**: 413-414.
- Playboard (2015) Statement by the Playwork Principles Scutiny Group. Cardiff, UK..
- Play Wales 2013. Play deprivation: Impact, consequence and the potential of playwork. Cardiff, UK: Play Wales.
- Roberts H. (2015) Playtime: an evidence-informed scopying review on children's play with a focus on older children and play in middle childhood. Centre for Science and Policy. Cambridge University Press.
- Sandberg A. 2001. Play memories from childhood to adulthood. *Early Child Development and Care* **167**: 13-25.
- Sebba R. 1991. The landscapes of childhood the reflection of childhood's environment in adult memories and in children's attitudes. *Environment and Behavior* **23**: 395-422.
- Smith ED, Lillard AS. 2012. Play on: Retrospective reports of the persistence of pretend play into middle childhood. *Journal of Cognition and Development* **13**: 524-549.
- Talarico JM. 2012. Autobiographical memory for spatial location is unaffected by delay. *Journal of Applied Research in Memory and Cognition* **1**: 104-109.
- Teckan AI, Ece B, Gülgöz S, Er N. 2003. Autobiographical and event memory for 9/11: Changes across one year. *Applied Cognitive Psychology* **17**: 1057-1066.

Tovey H. 2010. Playing on the edge: Perceptions of risk and danger in outdoor play. In *Play and Learning in the Early Years* Broadhead P, Howard J, Wood E (eds) London: Sage; 79-94

Valentine G, McKendrick J. 1997. Children's outdoor play: Exploring parental concerns about children's safety and the changing nature of childhood. *Geoforum* **28**: 219-235.

Vlachou M, Andreou E, Botsoglou K. 2013. Bully/victim problems among preschool children: Naturalistic observations in the classroom and on the playground. *International Journal of Learning: Annual Review* **20**.

Wang S, Aamodt S. 2012, September. Play, stress, and the learning brain. In *Cerebrum: the Dana forum on brain science* (Vol. 2012). Dana Foundation.

Waldman-Levi A, Bundy A. 2016. A Glimpse into Co-Occupations: Parent/Caregiver's Support of Young Children's Playfulness Scale. *Occupational Therapy in Mental Health*, **32**: 217-227.

Westcott M., Howard J. 2007. Creating a playful environment; evaluating young children's perceptions of their daily classroom activities using the Activity Apperception Story Procedure. *Psychology of Education Review* **31**: 27.

Whitebread D, O'Sullivan L. 2012. Pre-school children's pretend play: supporting the development of metacognition, metacommunication and self regulation. *International Journal of Play* **1**: 197-213.