

# **Review of Play in Early Adolescence: Key Issues**

A Key Issues Paper

for

The Commissioner for Children and Young People,  
South Australia

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July 2021



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## Acknowledgements

The Play in Early Adolescence project is being conducted by researchers at the University of South Australia (UniSA). The Commissioner of Children and Young People, South Australia has contributed funds and in-kind support to this project.

To cite this paper: Webb-Williams, J., Kennedy- Behr, A & Graham, A (2021). Review of Play in Early Adolescence: Key Issues, *Play in Early Adolescence Project Series Key Issues Paper 1*, University of South Australia.

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# Review of Play in Early Adolescence: Key Issues.

Dr Jane Webb-Williams, Dr Ann Kennedy-Behr and Dr Amy Graham

## Introduction

Research evidence with young children is abundant, rich and convincing: the more children play, the healthier, happier and better lives that follow. But is play still important as children move into adolescence? This paper provides an overview of the key issues within this field of research and presents a selection of current international and national research as an evidence base regarding play in early adolescence. This paper briefly discusses how play changes as children develop and examine some of the barriers and facilitators to play, particularly for older children.

Play is conceptually and developmentally valued and recognised as key to children's wellbeing and part of a healthy and complete childhood (Bruner, 1972; Ginsburg, 2007; Pellegrini, Blatchford, Kato, & Baines, 2004; UN Committee on the Rights of the Child (CRC), 2013). The benefits of play extend across all developmental domains to include cognitive development, social and emotional health and physical health (Ginsburg, 2007; Hyndman, Benson, & Telford, 2016; Pellegrini & Smith, 1998). Through play, children and young people can expand their observational, negotiating and problem-solving skills, refine and improve motor skills, explore interests and learn to self-regulate and control their emotions (Yogman, Garner, Hutchinson, Hirsh-Pasek, & Golinkoff, 2018).

Play has been endorsed by the United Nations,(2013) and health professionals (Ginsburg, 2007; Yogman et al., 2018), not only for physical health benefits but for *“learning 21st century skills, such as problem solving, collaboration, and creativity, which require the executive functioning skills that are critical for adult success”* (Yogman et al., 2018). Play offers opportunities for children and young people to develop these essential skills.

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## Early adolescence: A time of change

Early adolescence<sup>1</sup> is a time of significant developmental change; not only physically but also cognitively, socially and emotionally. It is a time of growing independence, strong peer identification and willingness to undertake more exploratory and experimental behaviours (Christie & Viner, 2005). These changes often manifest in the ways that children play and spend their time, with adolescents tending to become more self-conscious, less physically active and increasingly aware of the importance of their peer group (Blackmore, 2019).

For some years, research attention has been focused on cohorts either side of early adolescence. Much emphasis has been on early childhood development and the rich brain development that occurs in this time, and equally, on adolescent or teenage growth and change (Mah & Ford-Jones, 2012). Yet comparatively little literature exists on the cohort of early adolescence, despite its significant importance to growth and development in childhood.

Early adolescence tends to be the time at which mental health conditions can start to emerge (Mundy et al., 2015). The onset of puberty, and the increasing importance of peers, are factors contributing to this (Blakemore, 2019). In early adolescence, children in many countries move from being among the oldest year group in local primary schools to being the youngest in larger secondary schools. The transition to high school is a time of great change for young people and can be disruptive and unsettling as the educational environment changes. Not only are they negotiating a new learning environment and greater expectations placed on them, but they are also trying to re-adjust their friendships and social position.

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<sup>1</sup> It is worth noting from the outset that middle childhood is often defined as 7-11 years old in other literature (e.g., Mah & Ford-Jones, 2012; Zhang, 2020), however our research is particularly interested in the 11-13-year-old cohort known as 'early adolescence' because this is the time of transition between primary and high school in Australia and many countries around the world.

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Some research has demonstrated that social networks are tumultuous in early adolescence and stabilise later in the teenage years. During early adolescence, time spent with friends usually increases, compared with when children are younger, and adolescents' evaluation of themselves is more than ever determined through the views of their peers (Blackmore, 2019). Strong social connections and supportive peer relationships, often developed through play, can act as a protective factor supporting this transition (Benner, Boyle, & Bakhtiari, 2017).

## Play in middle childhood

Recess and lunch breaks at school are the most consistent daily opportunities for social connections with peers to occur yet despite this, the quality of play in Australian school break times has not been deeply explored (D'Agostino & Illingworth, n. d.). Most of the literature has focussed on play in young children, because of the well-established benefits of play in early childhood and for the developing brain. Empirical evidence on play in early adolescence is scant, although there is a small, but growing, body of research on play in late childhood and the benefits of playfulness across the lifespan (Else, 2014; Farley, Kennedy-Behr, & Brown, 2021; Hess & Bundy, 2003; Pellis & Pellis, 2013; Proyer, 2014; Sicart, 2014, 2020).

The little available research on play in middle school tends to focus on the reduction of physical activity and explores ways to increase this (e.g. Andersen et al., 2015; Pagels et al., 2014; Raustorp, Pagels, Fröberg, & Boldemann, 2015). In addition to the widespread decrease in physical play, the middle school years are a time of growing disparity in the way girls and boys play (Raustorp et al., 2015), with boys tending to play sport and girls tending to sit together and socialise.

International studies all point to a decrease in physical play and physical activity at around 12 years of age (Dumith, Gigante, Domingues, & Kohl, 2011; Loebach, Sanches, Jaffe, & Elton-Marshall, 2021; Olds et al., 2009; Pagels et al., 2014; Ridgers, Carter, Stratton, & McKenzie, 2011). It is perhaps this decline in easily observable activity that has led to the widespread belief that adolescents no longer play. However, several studies which have explored young people's perspectives have suggested that play is

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still important and something that offers enjoyment, but that the environment is not always supportive of their doing so (e.g. Connolly, 2020; Stanley, Boshoff, & Dollman, 2012; Wheatley, Davies, & Dawes, 2018). Children in early adolescence still ‘hang out’, participate in sports, and benefit from social interactions but may not describe what they do as ‘play’ perhaps because they perceive it to be immature and childish (Connolly, 2020; Wheatley et al., 2018). This change in perspective of play during early adolescence has received limited attention.

In a study which looked at the lunch time play of South Australian primary school students aged between 10-13 years, Stanley and colleagues (2012) found that young people do want to play but there is not always enough room for them at school. Having friends to “hang out with” was seen by the participants as increasing enjoyment and making play more likely as was peer acceptance. The converse of this, bullying, was identified by the children as a limiting factor to their play. These findings have been supported by other studies both in South Australia (Connolly, 2020) and the United States (Massey, Neilson, & Salas, 2020). Young people view recess as an opportunity to have fun and socialise, but also potentially a place where bullying can occur.

In the UK, researchers conducted focus groups with children in middle school to discuss play and the emotions they held about this. Overall, play was valued by young people, and they associated playing with positive emotions. Conversely, the lack of opportunity to play was associated with negative emotions and anxiety in these children (Howard, Miles, Rees-Davies, & Bertenshaw, 2017).

The Wellbeing Survey (Department for Education, 2019) of South Australian students indicates there is a steady decline from Year 7 onwards in peer belonging at school (“I feel part of a group of friends that do things together; I feel I usually fit in with other kids around me”) and the quality of peer friendship. As recess and lunch are the times where students have free choice, and play is the forum where friendships develop, this may indicate a decline in play.

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## Barriers to free play for children and adolescents

Despite its recognised benefits across childhood, free play and break times at school remain under increasing threat in the school day (Hyndman et al., 2016; Jay & Knaus, 2018; Ridgers et al., 2011). In “*Press Play*”, a report by the South Australian Commissioner for Children and Young People (Connolly, 2020), it was found that some of the key barriers preventing adolescents from playing were not having enough time, money (to do the activities they wanted to), not knowing what activities were available, not having the confidence to try new things and needing permission from an adult. In Australia, practical barriers such as school uniform, can act as a deterrent to play, particularly for girls if they are required to wear dresses or skirts (Stanley, Ridley, Olds, & Dollman, 2014; Watson, Elliott, & Mehta, 2015). Lack of space at school has also been identified as a barrier (Massey et al., 2020).

Other studies which have included young people’s views found that bullying, conforming to gender stereotypes and fear of not fitting in impacted the amount of time spent at play (Massey et al., 2020; Stanley et al., 2012; Wheatley et al., 2018).

While teachers may see the value of play and its link with children’s educational outcomes, they feel a downward pressure put on their time as a result of prescriptive national learning outcomes, a narrowing of the curriculum and firm policy agendas that regulate how the school day must be spent (Jay & Knaus, 2018; Ridgers et al., 2011). Tensions between the increasing focus on academic outcomes and national standardised testing means that play has been in gradual decline (D’Agostino & Illingworth, n.d.).

Parents are more concerned about their children’s safety; children and young people have a relative lack of freedom, and find their independence constrained, by school commitments, crowded after school activities and a lack of freedom to play outside (Coster & Gleave, 2008).

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Risk is an increasingly common term that is introduced in the discourse around play. What this has resulted in is parents and schools being more hesitant to encourage risk, denying children the opportunities to test limits and learn how to manage risk (American Academy of Pediatrics, 2013; Coster & Gleave, 2008). Consequently, play has become highly regulated, monitored and restricted, even when the fears are not proportionate to the actual level of risk (Cowan, 2020). In a consultation with children aged 8-13 about play and risk-taking, children expressed enjoyment in taking risks and felt there were benefits to doing so, including fun, challenge, improved fitness levels, confidence and self-esteem (Coster & Gleave, 2008). Risk-taking in play is seen as beneficial for helping children learn how to manage risks, to avoid more extreme risk-taking behaviours (including in later life), as having benefits for health and development, and for nurturing character traits such as resilience and self-reliance (Lindon, 2011; American Academy of Pediatrics, 2013).

The Royal Children's Hospital Child Health Poll in Melbourne revealed that 94% of teenagers own their own screen-based device (Rhodes, 2017); many adolescents now have their own digital devices to 'play' with and the use of digital tools and resources are now commonly treated as play (Fullan & Langworthy, 2014; Graham & Sahlberg, 2021). In many cases, children see games and time spent online as an equivalent play behaviour to outdoor games (Howard et al., 2017) however parents and teachers tend to view this type of play less favourably (Gonski Institute for Education, 2020)

## Facilitators of play in adolescence.

Perhaps the most commonly identified facilitator of play in adolescence is sport (Eime, Young, Harvey, Charity, & Payne, 2013; Gardner, Magee, & Vella, 2017; Jakobsson & Lundvall, 2021; Lundvall & Thedin Jakobsson, 2021). Sport provides opportunities for young adolescents to play in a way that is socially acceptable. It is not seen as childish or immature and the word 'play' is commonly used in this context i.e. playing football. At the same time, the structure and lack of flexibility in organised sport can be what leads young people to stop playing (Gardner et al., 2017; Jakobsson & Lundvall, 2021; Lundvall & Thedin Jakobsson, 2021).

This is supported by studies which have found that enjoyment and freedom are key to engagement in play in this age group (Coster & Gleave, 2008; Hyndman et al., 2016; Stanley et al., 2012). While risk is

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frequently mentioned as a barrier (as discussed above), young people have reported that an element of risk and physical challenge is what makes play attractive (Coster & Gleave, 2008) and that removing all risk is demotivating. Engaging in activities with an element of risk such as climbing, skating, riding on a bike track, is associated with increased self-worth, confidence and pride, increased physical ability and skill as well as pleasurable physical and emotional sensations (Coster & Gleave, 2008). Challenging oneself was seen as exciting and potentially a source of self-esteem and fulfillment (Coster & Gleave, 2008). Related to this is a sense of competence: adolescents who perceive they are competent at a particular activity are more likely to engage in it (Massey et al., 2020; Watson et al., 2015).

Peer culture appears to be a key influence in the type of activities young people choose to do in their breaks and free time (Stanley et al., 2012; Stanley et al., 2014; Watson et al., 2015). Several studies have found that whether young people were active or not, or engaged in play or not was influenced by the attitudes of dominant members of the peer group (Stanley et al., 2012; Watson et al., 2015).

In a Canadian study focusing on recess at school for children up to 13 years of age, McNamara and colleagues (McNamara, Colley, & Franklin, 2015; McNamara, Vaantaja, Dunseith, & Franklin, 2015) found that training older children to support the play of younger children resulted in more play and social connectedness at school for all age groups. However, as this study was not in a high school it is not known how this would translate to another context. Structured recess, like the Canadian example, is gaining popularity internationally (American Academy of Pediatrics, 2013; Massey et al., 2020; McLoughlin et al., 2021); whether this would work in a high school setting is unknown.

## Conclusion

Although the early years of adolescence, which includes the transition to high school, have received comparatively little attention in relation to play research, the existing evidence indicates that play is still an important activity. Freedom, choice and the opportunity to develop skill and take risks are valued but the type of activity chosen is influenced by peers and sense of competence. Play at school can

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be limited by environmental restrictions such as space and rules, while sport and challenging activities support it. Further research is needed into this cohort to support them during this transitional period.

## Play in Early Adolescence Project Overview

In reviewing international and national play research it is clear that that more research in this field is warranted. The Play in Early Adolescence Project investigates play at school for children aged 11 to 13 years. The rationale for this study is grounded in the well accepted view that play is important to children of all ages, but that it declines as children move through the years of schooling. A comparison of how children in their last year of primary school and in the first year of high school interact, socialise and spend their break times will enable clearer understandings to be developed about what children need in this transitioning year, what they struggle with, and how schools can better meet their needs for play in the day.

The study aims to investigate:

- How does the play of children in the last year of primary school compare with the first year of high school?
- What are the barriers and enablers to play for young adolescents at school?
- What is available in schools to support and facilitate opportunities for play?
- What are the implications for transition to high school?

The expected outcome of this research is to generate new insights into play for the 11 to 13 age range, an age typically neglected by research. It will provide evidence which demonstrates the contextual impact on play and how the environment limits, promotes or alters play opportunities.

For further information see: [playresearch.com.au](http://playresearch.com.au)

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## References

- American Academy of Pediatrics. (2013). The Crucial Role of Recess in School. *Pediatrics*, 131(1), 183-188. doi:10.1542/peds.2012-2993
- Andersen, H. B., Pawlowski, C. S., Scheller, H. B., Troelsen, J., Toftager, M., & Schipperijn, J. (2015). Activating schoolyards: study design of a quasi-experimental schoolyard intervention study. *BMC Public Health*, 15, 523. DOI:10.1186/s12889-015-1828-9
- Benner, A. D., Boyle, A. E., & Bakhtiari, F. (2017). Understanding students' transition to high school: Demographic variation and the role of supportive relationships. *Journal of Youth and Adolescence*, 46(10), 2129-2142. DOI: 10.1007/s10964-017-0716-2
- Blackmore, S-J. (2019). Adolescence and mental health. *The Lancet*, 393(10185), 2030-2031. Retrieved from [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(19\)31013-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)31013-X/fulltext)
- Bruner, J. S. (1972). Nature and uses of immaturity. *American Psychologist*, 27(8), 687-708. DOI:10.1037/h0033144
- Christie, D., & Viner, R. (2005). Adolescent development. *BMJ*, 330(7486), 301-304. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC548185/>
- Connolly, H. (2020). *Press play: Activating young people's health and wellbeing through play*. Commissioner for Children and Young People, South Australia. Retrieved from <https://www.ccyp.com.au/wp-content/uploads/2020/08/Screen-Press-Play-Report.pdf>
- Coster, D., & Gleave, J. (2008, July). Give us a go! Children and young people's views on play and risk-taking. Retrieved from <https://www.playday.org.uk/wp-content/uploads/2015/11/give-us-a-go-children-and-young-peoples-views-on-play-and-risk-taking.pdf>

---

Cowan, K. (2020). A Panorama of play –A literature review. *Digital Futures Commission*. London: 5Rights Foundation. Retrieved from <https://digitalfuturescommission.org.uk/wp-content/uploads/2020/10/A-Panorama-of-Play-A-Literature-Review.pdf>

D'Agostino, J., & Illingworth, K. (n.d.). *The importance of recess and play*. Retrieved from [https://www.csub.edu/~lwildman/21st\\_Schools/documents/Sch14.htm](https://www.csub.edu/~lwildman/21st_Schools/documents/Sch14.htm)

Department for Education (2019). *Wellbeing engagement and collection*. Retrieved from <https://www.education.sa.gov.au/sites/default/files/wellbeing-and-engagement-collection-2019-results.pdf?v=1602813853>

Dumith, S. C., Gigante, D. P., Domingues, M. R., & Kohl, H. W., 3rd. (2011). Physical activity change during adolescence: a systematic review and a pooled analysis. *Int J Epidemiol*, 40(3), 685-698. doi:10.1093/ije/dyq272

Else, P. (2014). Teenagers and Playing: Are Pastimes Like Nekominate a Usual Response to Adolescence? *Children (Basel, Switzerland)*, 1(3), 339-354.

Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 98. doi:10.1186/1479-5868-10-98

Farley, A., Kennedy-Behr, A., & Brown, T. (2021). An investigation into the relationship between playfulness and well-being in Australian adults: An exploratory study. *OTJR: Occupation, Participation and Health*, 41(1), 56-64. DOI:10.1177/1539449220945311

Fullan, M., & Langworthy, M. (2014). A rich seam: How new pedagogies find deep learning. Retrieved from [https://www.michaelfullan.ca/wp-content/uploads/2014/01/3897.Rich\\_Seam\\_web.pdf](https://www.michaelfullan.ca/wp-content/uploads/2014/01/3897.Rich_Seam_web.pdf)

---

Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182-191.

Gonski Institute for Education (2020). *Growing Up Digital Australia: Phase 1 technical report*. Gonski Institute for Education. UNSW, Sydney.

Graham, A., & Sahlberg, P (2021). *Growing Up Digital Australia: Phase 2 technical report*. Gonski Institute for Education. UNSW, Sydney. Retrieved from [https://www.gie.unsw.edu.au/sites/default/files/documents/GONS5000%20Growing%20Up%20Digital%20Report\\_FINAL.pdf](https://www.gie.unsw.edu.au/sites/default/files/documents/GONS5000%20Growing%20Up%20Digital%20Report_FINAL.pdf)

Hess, L. M., & Bundy, A. (2003). The association between playfulness and coping in adolescents. *Physical and Occupational Therapy in Pediatrics*, 23(2), 5-17.

Howard, J., Miles, G. E., Rees-Davies, L., & Bertenshaw, E. J. (2017). Play in middle childhood: Everyday play behaviour and associated emotions. *Children & Society*, 31(5). <https://doi.org/10.1111/chso.12208>

Hyndman, B., Benson, A., & Telford, A. (2016). Active play: exploring the influences on children's school playground activities. *American Journal of Play*, 8, 325-344.

Jay, J. A., & Knaus, M. (2018). Embedding play-based learning into junior primary (year 1 and 2) curriculum in WA. *Australian Journal of Teacher Education*, 43(1), 112-126. Retrieved from <https://ro.ecu.edu.au/cgi/viewcontent.cgi?article=3692&context=ajte>

Jakobsson, B. T., & Lundvall, S. (2021). Learn, have fun and be healthy! an interview study of swedish teenagers' views of participation in club sport. *International Journal of Environmental Research and Public Health*, 18(13). doi:10.3390/ijerph18136852

Lindon, J. (2011). *Too safe for their own good: Helping children learn about risk and lifeskills* (2nd ed). National Children's Bureau.

Loebach, J., Sanches, M., Jaffe, J., & Elton-Marshall, T. (2021). Paving the Way for Outdoor Play: Examining Socio-Environmental Barriers to Community-Based Outdoor Play. *International Journal of*

---

*Environmental Research and Public Health*, 18(7), 3617. Retrieved from  
<https://www.mdpi.com/1660-4601/18/7/3617>

Lundvall, S., & Thedin Jakobsson, B. (2021). To move on...-a comparative study of Swedish adolescents in a changing sport and leisure-time landscape. *European Journal for Sport and Society*, 18(1), 82-97. doi:10.1080/16138171.2020.1823692

Mah, V. K., & Ford-Jones, E. L. (2012). Spotlight on middle childhood: Rejuvenating the 'forgotten years'. *Pediatrics & Child Health*, 17(2), 81-83. Retrieved from  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3299351/>

McNamara, L., Colley, P., & Franklin, N. (2015). School recess, social connectedness and health: a Canadian perspective. *Health Promotion International*, 32(2), 392-402. doi:10.1093/heapro/dav102

McNamara, L., Vaantaja, E., Dunseith, A., & Franklin, N. (2015). Tales from the playground: transforming the context of recess through collaborative action research. *International Journal of Play*, 4(1), 49-68. doi:10.1080/21594937.2014.932504

Massey, W., Neilson, L., & Salas, J. (2020). A critical examination of school-based recess: what do the children think? *Qualitative Research in Sport, Exercise and Health*, 12(5), 749-763. DOI:10.1080/2159676X.2019.1683062

McNamara, L., Colley, P., & Franklin, N. (2015). School recess, social connectedness and health: a Canadian perspective. *Health Promotion International*, 32(2), 392-402. doi:10.1093/heapro/dav102

McNamara, L., Vaantaja, E., Dunseith, A., & Franklin, N. (2015). Tales from the playground: transforming the context of recess through collaborative action research. *International Journal of Play*, 4(1), 49-68. doi:10.1080/21594937.2014.932504

Mundy, L. K., Romaniuk, H., Canterford, L., Hearps, S., Viner, R. M., Bayer, J. K., . . . Patton, G. C. (2015). Adrenarche and the emotional and behavioral problems of late childhood. *Journal of Adolescent Health*, 57(6), 608-616. DOI:10.1016/j.jadohealth.2015.09.001

Olds, T., Wake, M., Patton, G., Ridley, K., Waters, E., Williams, J., & Hesketh, K. (2009). How do school-day activity patterns differ with age and gender across adolescence?. *Journal of Adolescent Health*, 44(1), 64-72. DOI:<https://doi.org/10.1016/j.jadohealth.2008.05.003>

---

Pagels, P., Raustorp, A., De Leon, A. P., Mårtensson, F., Kylin, M., & Boldemann, C. (2014). A repeated measurement study investigating the impact of school outdoor environment upon physical activity across ages and seasons in Swedish second, fifth and eighth graders. *BMC Public Health*, *14*(1), 803. DOI:10.1186/1471-2458-14-803

Pellegrini, A. D., Blatchford, P., Kato, K., & Baines, E. (2004). A short-term longitudinal study of children's playground games in primary school: Implications for adjustment to school and social adjustment in the USA and the UK. *Social Development*, *13*(1), 107-123.

Pellegrini, A. D., & Smith, P. K. (1998). Physical activity play: The nature and function of a neglected aspect of play. *Child Development*, *69*(3), 577-598.

Pellis, S. M., & Pellis, V. (2013). *The playful brain : venturing to the limits of neuroscience / Sergio Pellis and Vivien Pellis*. Oxford: Oxford : Oneworld Publication.

Proyer, R. T. (2014). Perceived functions of playfulness in adults: Does it mobilize you at work, rest, and when being with others? *European Review of Applied Psychology*, *64*(5), 241-250. DOI:<https://doi.org/10.1016/j.erap.2014.06.001>

Raustorp, A., Pagels, P., Fröberg, A., & Boldemann, C. (2015). Physical activity decreased by a quarter in the 11- to 12-year-old Swedish boys between 2000 and 2013 but was stable in girls: a smartphone effect? *Acta Paediatrica*, *104*(8), 808-814. doi:<https://doi.org/10.1111/apa.13027>

Rhodes, A. (2017). Screen time and kids: What's happening in our homes. Detailed report. Melbourne (VIC): The Royal Children's Hospital Melbourne. Retrieved from [https://rchpoll.org.au/wp-content/uploads/2017/06/ACHP-Poll7\\_Detailed-Report-June21.pdf](https://rchpoll.org.au/wp-content/uploads/2017/06/ACHP-Poll7_Detailed-Report-June21.pdf)

Ridgers, N. D., Carter, L. M., Stratton, G., & McKenzie, T. L. (2011). Examining children's physical activity and play behaviors during school playtime over time. *Health education research*, *26*(4), 586-595. DOI:10.1093/her/cyr014

---

Sicart, M. (2014). *Play matters*. Cambridge, Massachusetts: MIT Press.

Sicart, M. (2020). Playing software: the role of the ludic in the software society. *Information, Communication & Society*, 1-15. DOI:10.1080/1369118X.2020.1764078

Stanley, R. M., Boshoff, K., & Dollman, J. (2012). Voices in the playground: A qualitative exploration of the barriers and facilitators of lunchtime play. *Journal of Science and Medicine in Sport*, 15(1), 44-51. doi:<https://doi.org/10.1016/j.jsams.2011.08.002>

Stanley, R. M., Ridley, K., Olds, T. S., & Dollman, J. (2014). Increasing Specificity of Correlate Research: Exploring Correlates of Children's Lunchtime and After-School Physical Activity. *PLoS One*, 9(5), e96460. doi:10.1371/journal.pone.0096460

UN Committee on the Rights of the Child (CRC). (2013). *General comment No. 17 on the right of the child to rest, leisure, play, recreational activities, cultural life and the arts (art. 31)*. (CRC/C/GC/17).

Watson, A., Elliott, J., & Mehta, K. (2015). Perceived barriers and facilitators to participation in physical activity during the school lunch break for girls aged 12–13 years. *European Physical Education Review*, 21(2), 257-271. doi:10.1177/1356336x14567545

Wheatley, C. M., Davies, E. L., & Dawes, H. (2018). Unspoken Playground Rules Discourage Adolescent Physical Activity in School: A Focus Group Study of Constructs in the Prototype Willingness Model. *Qualitative Health Research*, 28(4), 624-632. doi:10.1177/1049732317744534

Yogman, M., Garner, A., Hutchinson, J., Hirsh-Pasek, K., & Golinkoff, R. M. (2018). The power of play: A pediatric role in enhancing development in young children. *Pediatrics*, 142(3), 1-17.

Zhang, H. (2020). Play in childhood: Introduction to the special issue. *Beijing International Review of Education*, 2(2), 176-181. Retrieved from [https://brill.com/view/journals/bire/2/2/article-p176\\_176.xml?language=en](https://brill.com/view/journals/bire/2/2/article-p176_176.xml?language=en)