



Seed Money Call 2020-2022

The power of risky play

Kristine De Martelaer (Education and Pedagogy, Faculty of Social and Behavioural Sciences)

Louk Vanderschuren (Animals in Science and Society, Faculty of Veterinary Medicine)

Position paper The power of risky play

This text is a call for research initiatives on the importance of play, and more specifically risky play, from a multidisciplinary perspective. The aim is to stimulate UU researchers to formulate testable questions on the importance of risky play, that fit within the interdisciplinary scope of the focus area Sport and Society. We welcome proposals from a broad spectrum, ranging from fundamental bioscience to policy supporting research and didactical research in action. In this position paper we describe risky play to reflect on its importance for different stakeholders, organisations and research domains, and end with a series of pertinent research questions.

Play is a form of behaviour that is widespread in humans and animals, and it is especially abundant in young individuals (Graham and Burghardt 2010; Pellis and Pellis 2009). Despite its abundance, and the fact that it is typically easy to recognize as such, it has turned out to be hard to define – i.e. provide a description that includes all things play, and excludes non-playful activities. In this regard, the five criteria for classifying a form of behaviour as 'play' provided by Burghardt have been particularly helpful. That is, the behaviour:

1. is incompletely functional in the context in which it appears;
2. is spontaneous, voluntary, and rewarding;
3. differs from serious versions of behaviour in form or timing;
4. is repeated, but not stereotyped;
5. occurs in the absence of severe stress (i.e. when the individual is safe, fed, and healthy).

These criteria bear a remarkable resemblance to Huizinga's description of play (Huizinga 1938), as 'A volitional act, within certain limits of space and time, according to voluntarily accepted, but compelling rules, being a goal in itself, accompanied by feelings of excitement and joy, and different from everyday life'. Play can take various forms. In humans (i.e., children), several types can be



distinguished, including play fighting, pretend play, language play, games with rules and construction play (Pellegrini and Smith 1998). In animals, it is typically divided into solitary (locomotor) play, object play and social play- although play often occurs as a mixture of these forms (Panksepp et al. 1984; Pellis and Pellis 2009). Remarkably, the human categorisation of play can be seen as a more complex elaboration of the three categories of animal play, as there clearly are shared elements of the different categories.

Its abundance during life – and between species, has also spurred lively theorization on the functions of play. In general terms, it is assumed that play facilitates physical, neural, social, emotional and cognitive development (Ginsburg et al. 2007; Graham and Burghardt 2010; Nijhof et al. 2018; Panksepp et al. 1984; Pellis and Pellis 2009; Vanderschuren and Trezza 2014). Of particular relevance for the present paper is the notion that behavioural exploration and experimentation during play allows for the development of a rich behavioural repertoire, whereby the individual is capable of quickly adapting his/her behaviour in a changeable world, whenever alterations in the internal or external environment demand so. In this way, play serves to develop characteristics such as flexibility, creativity, and problem-solving skills (Bateson 2015; Pellis and Pellis 2009; Špinka et al. 2001; Vanderschuren and Trezza 2014).

Importantly, regardless of its exact form, one crucial characteristic of play is its variability – which sometimes can take the form of 'self-handicapping', by which an apparently advantaged individual voluntarily and deliberately throws up barriers during play, for example to even the differences in physical or intellectual capacities between the parties engaged in a playful interaction (Špinka et al. 2001). This has led to the general idea that play allows for the exploration of and experimentation with one's own behaviour, to simulate or practice activities, situations or scenarios in a relatively safe context, i.e. one in which the consequences of inappropriate or unconstructive behaviour are less severe than during comparable adult interactions (Graham and Burghardt 2010; Nijhof et al. 2018; Pellis and Pellis 2009).

Despite that there has to be a safe climate or protected context for play to occur, this does not mean that all potential hazards are excluded during play itself. Thus, the search for an optimal balance during play between 'as safe as possible' and 'as safe as necessary' has recently been discussed (Cooke et al., 2019), as the approach to children's experiences can be explained from a protectionist and a pro-experience perspective. The protectionist perspective, largely fuelled by concern about physical injury and a view of children as innocent and vulnerable, resulted in the idea of the 'as safe as possible' approach. The pro-experience perspective sees risk during play in a more positive light. It adopts a construct of children as resilient and capable, suggesting that exploration of borders and boundaries, and learning to take calculated risks is important for children to grow into competent and confident adults who have a measured view of society and its risks and opportunities. Beneficial risk can be defined as engaging in experiences that take a person outside of their comfort zone and



include outcomes that may be beneficial to learning, development and life satisfaction (Brussoni et al., 2015; Cooke et al., 2019; Farmer et al., 2017). In the 'as safe as necessary' approach, risks, opportunities and potential benefits are balanced, resulting in an increasing interest to include risky play in curriculum documents. Indeed, specialists in the field of play such as Sandseter, Brussoni Little and Wyver, emphasize children's risk-taking in play and regularly use the now commonly applied term 'risky play'. Based on a qualitative study among preschool experts, Sandseter (2007) has outlined six categories of risky play: 1) play with great heights; 2) play with high speed; 3) play with harmful tools; 4) play near dangerous elements; 5) rough-and-tumble play; and 6) play where the children can 'disappear'/get lost. Of note, there is a lively international interest in risky play in early childhood, although this theme is less discussed with regard to later childhood and youth, but should be.

Risk-taking is a voluntary action aimed at engaging in an experience that may expose one to uncertainty and the possibility of either positive or negative consequences (Cooke et al., 2019). It is important to realize, however, that risk is not a universally accepted monolithic entity, but rather a socially constructed phenomenon based on individual perception, influenced by a range of factors (experience, culture, age, personality, knowledge) that can change with varying contexts and over time (Doron, 2016; Zinn, 2016). Different sectors are responsible for the support, encouragement and professional development of their staff members. Furthermore, factors that affect the professionals' practices and beliefs towards risky play include views on the individual children, personal attitudes, professional peers, parental relationships, organizational policies, external regulations and cultural influences (Van Rooijen et al., 2019, Van Rooijen and Jacobs, 2019). Spaces and places for risky play are possible in (a) free play or leisure time and (b) organized context such as day care and kindergarten, school, sports clubs and playground programs. Importantly, risk-taking is not only about taking physical risk in the open air, also social, emotional and cognitive risk-taking are key components of children's experience and should be part of their holistic learning and development (Tovey, 2007). After all, risky play relates to a wide range of possibilities: indoor - outdoor, individual - group activity, spontaneous - planned contexts, and it is relevant in multiple curricular and extracurricular domains. Given the inherent nature of risk in (human) life, it can be assumed that stakeholders in education, sport, health, leisure, ... engage in risk-taking in a variety of ways within child practice (Cooke et al., 2019).

In view of the emerging realisation that play is of great importance for child development, there is an increasing concern that reduced possibilities for free – potentially risky – play in Western societies will negatively impact on future generations (Ginsburg et al. 2007). Therefore, considering this growing interest in risky play and the awareness of its importance in our society, we have identified two important caveats in our knowledge. First is that despite the fact that theory and common sense support the idea that risky play is an important activity that promotes individual development on various levels (social, emotional, cognitive and physical), there is a paucity of empirical evidence.



The question therefore remains whether and how risky play contributes to development in ways that less risky forms of play do not, or less. Second is that during recent decades, there has been emphasis on risky play in education plans, and curricula. Relevant projects and campaigns on the promotion of (risky) play have been developed, but there is a lack of understanding of how adult care and education providers deal with this. The range of professionals to reach in different sectors is large, including (1) architects to develop the environment and public planning; (2) managers-directors to plan, support and manage opportunities for (risky) play; (3) professional and voluntary workers such as childcare practitioners, teachers, youth sports coaches and playground monitors and (4) higher and middle education (universities, university colleges and vocational education) and the volunteer training institutes. More insight into the professionals' (a) experiences / practices, (b) understanding / beliefs and (c) expectations is therefore needed. Only when there is enough policy and didactic support available, supported by solid evidence, professionals will be able to plan, support, manage and guide risky play in a more conscious and targeted way.

Research questions

We are looking for innovative ideas and perspectives from different research areas.

Pertinent research questions can include (but are not limited to) the following:

Determinants

- What kind of infrastructure, programs/activities and guidance in risky play are offered for different age groups?
- What kind of differences in risky play can be observed in different sport cultures?
- How do different stakeholders perceive the 'beneficial risk' in play opportunities for children (sport, early childhood education & care sector, elementary & secondary school)? What are the barriers and stimuli to engage children and youngsters in developmental appropriate experiences of risky play?
- What is the link between socio-geographical aspects and risky play? What spaces stimulate risky play among which groups?
- Is there an evolution of risky play in time and culture?

Outcomes / effects

- How does risky play contribute to social, emotional, cognitive and/or physical development, health / vitality, life satisfaction? Is this contribution specific to 'risky' patterns of play, i.e. is there a difference between 'risky' and 'non-risky' play in terms of contribution to development?
- If risky play is important for development, does it also help to develop the (physical, cognitive and emotional) skills to deal with risks in later life?
- Are there differences between risks of playing and risks in playing?



Professionals / training / education

- How are professionals (sport, early childhood education & care sector, elementary & secondary school) prepared to balance safety and risky play?
- How are (grand) parents prepared to balance safety and risky play?
- What kind of training / tools for professionals and parents can be effective to think and act 'as safe as necessary'?

Research traditions / possibilities

- How can risky play be studied in a natural context (in open air, nature, informal play) versus organized settings and formal play?

Procedure

- If you are interested in participating in this research program and think you can supplement the research team, please send your motivation (max. 2 pages A4), including your ideas and suggestions and explanation how this topic relates to and integrates with your current/future research activities, and an indication of time available for participating in the research program **before December 5th 2019** to Kristine de Martelaer (k.demartelaer@uu.nl).
- The Sport & Society focus area helps to fund this project with a contribution of 140.000 euros, of which (faculties/departments of) participants should match 67 percent. Matching must come from first stream funding - in kind (research or education time) or in cash - or from third stream funding (for example contract research). It is recommended to check the matching possibilities with your department/faculty before submitting your motivation.
- The multidisciplinary team to be assembled is planning to further explore whether this budget can be increased with contributions from other stakeholders.
- The duration of the project is two years, ending on October 31st 2021. Before this date, The Sport & Society focus area requires an overview of the expenditure of all funds and a final report. The first meeting of the research team is scheduled for **December 11th 2019**, 09.00 in the Martinus Langeveld building (3rd floor, room to be confirmed), Heidelberglaan 1, 3584 CS Utrecht. The meeting might be re-scheduled depending on the availability of colleagues who want to join the team.



Sport & Society seed money calls

The focus area Sport & Society promotes innovative, interdisciplinary and transdisciplinary research that studies the meaning of sport¹ for a healthy, inclusive and secure society. In order to reach its goals (see www.uu.nl/sportandsociety), Sport & Society offers the opportunity to researchers and lecturers from UU and UMCU to apply for seed money.

Sport & Society seed money primarily serves as a 'plus' for already planned or covered activities. This 'plus' should focus on more embedding of the Sport & Society themes within education and research at Utrecht University. For example: an existing research program that adds a 'sports' component; an educational program that invites an external, sport-oriented guest lecturer; a researcher who needs time to submit an application to NWO or EU; researchers who, after a contract study, need time to turn their findings into a scientific article or conference paper; a research group that wants to organize a colloquium or symposium to present their research results.

The 2020-2022 seed money call consists of two different thematic calls, of which the topics of the intended research programs to be subsidized ('institutions as bad barrels: criminal undermining of sport clubs' and 'the power of risky play') have been selected because of their relevance for Sport & Society and their potential for generating interdisciplinary research.

¹ We realize that the meaning of sport is ambiguous and changes over time. In everyday language, sport can refer to a wide range of activities, varying from practicing elite sport to being physically active, and from equestrian sports, winter sports, mind sports to air sports. In Utrecht University's Focus area Sport & Society focus, we do not consider that ambiguity and changeability of the term sport as an obstacle to research, but rather as an object of research. This does not release us, however, from the obligation to set the goal posts of our research domain. Thus, without wanting to draw stricter boundaries than the historical changeability and cultural variation allow us, we therefore understand sport as follows: an activity that people engage in with the aim of health improvement, playtime or competition, in which the body is charged voluntarily and purposefully and barriers and rules are created that are meant to make the activity possible and to give meaning to it.



Literature

- Bateson P (2015) Playfulness and creativity. *Curr Biol* 25: R12-R16.
- Brussoni M., Gibbons R., Gray C, et al. (2015). What is the relationship between risky outdoor play and health in children? A systematic review. *International Journal of Environmental Research and Public Health* 12(6), 6423
- Cooke M, et al. (2019). Towards a reconceptualisation of risk in early childhood education, *Contemporary issues in early childhood*, 1-15
- Doron CO (2016) The experience of 'risk': Genealogy and transformations. In: Burges A, Alemanno A and Zinn J (eds) *Routledge Handbook of Risk Studies*: Routledge, pp.17-25.
- Farmer VL, Fitzgerald RP, Williams SM, et al. (2017) What did schools experience from participating in a randomized controlled study (PLAY) that prioritized risk and challenge in active play for children while at school? *Journal of Adventure Education and Outdoor Learning* 17(3): 239-257.
- Ginsburg KR, the Committee on Communications, the Committee on Psychosocial Aspects of Child and Family Health (2007) The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics* 119:182-191
- Graham KL, Burghardt GM (2010) Current perspectives on the biological study of play: signs of progress. *Q Rev Biol* 85: 393-418.
- Huizinga J (1938) *Homo ludens: A study of the play-element in culture*. Routledge & Kegan, London
- Little H and Wyver S (2010). Individual differences in children's risk perception and appraisals in outdoor play environments. *International Journal of early years education* 18(4): 297-313.
- Nijhof SL, Vinkers CH, van Geelen SM, Duijff SN, Achterberg EJM, van der Net J, Veltkamp RC, Grootenhuis MA, Van de Putte EM, Hillegers MHJ, van der Brug AW, Wierenga CJ, Bender MJNL, Engels RCME, van der Ent CK, Vanderschuren LJM, Lesscher HMB (2018) Healthy play, better coping: the importance of play for the development of children in health and disease. *Neurosci Biobehav Rev* 95: 421-429.
- Panksepp J, Siviy SM, Normansell L (1984) The psychobiology of play: theoretical and methodological perspectives. *Neurosci Biobehav Rev* 8: 465-492.
- Pellegrini AD, Smith PK (1998) The development of play during childhood: forms and possible functions. *Child Psychol Psychiatry Rev* 3: 51-57.
- Pellis SM, Pellis VC (2009) *The playful brain: venturing to the limits of neuroscience*. Oneworld Publications, Oxford
- Sandseter EBH (2007) Categorising risky play—How can we identify risk-taking in children's play? *European Early Childhood Education Research Journal* 15(2):237-252
- Sandseter EBH (2009) Characteristics of risky play. *Journal of Adventure Education and Outdoor Learning* 9(1): 3-21.
- Špinka M, Newberry RC, Bekoff M (2001) Mammalian play: training for the unexpected. *Q Rev Biol* 76: 141-168.
- Tovey H (2007) *Playing outdoors/ Spaces and places, risk and challenge*. New York, USA: Open University Press.
- Vanderschuren LJM, Trezza V (2014) What the laboratory rat has taught us about social play behavior: role in behavioral development and neural mechanisms. *Curr Top Behav Neurosci*. 16: 189-212.
- Van Rooijen M, Lensvelt-Mulders G, Wyver S, Duyndam J (2019) Professional Attitudes Towards Children's Risk-Taking in Play: Insights into Influencing Factors in Dutch Contexts. *Journal of Adventure Education and Outdoor Learning* 1-17.
- Van Rooijen M, Jacobs G (2019) A professionalisation programme towards children's risk-taking in play in childcare contexts: moral friction on developing attitudes and collegial expectations. *European Early Childhood Education Research Journal* 1-16.
- Zinn, JO (2016) Risk taking. In: Burgess A, Alemanno A and Zinn J (eds). *Routledge Handbook of Risk Studies*: Routledge, pp.344-353.