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# Supporting Children to Engage in Play for Wellbeing

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**Abstract**

Engaging children in play for wellbeing is coming to prominence in HCI as the community increasingly engages with issues to do with health, care and therapy. To date, research in this area has primarily focused on engaging children with special needs or who suffer from mental health problems in organized play to improve their self-efficacy or support therapeutic treatment. However, play could be more broadly beneficial for all children and their wellbeing. This workshop aims to build an interdisciplinary community of researchers, designers, and practitioners to share and discuss their work. Additionally, it seeks to explore the interaction between play and wellbeing in the context of interaction design and children and to identify directions for future research.

**Author Keywords**

Wellbeing; play; design for children; mental health.

**ACM Classification Keywords**

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

**Introduction**

The importance of supporting children to engage in play that can enhance their wellbeing is widely recognized across HCI [11]. Initially, attempts to enhance

wellbeing through play focused on the use of play as part of therapy for mental illness (e.g. [3, 5]). In this work, play was seen as a useful way to develop the client-therapist relationship by providing a medium through which they could address the young client's mental health issues[11], while also supporting self-management between therapy sessions [12]. Play is also commonly used to support the wellbeing of children with additional needs in the HCI and interaction design research community (e.g. [8, 9]), which has focused on its potential to enhance focus, social interaction, and relaxation [9]. Despite these initial steps, much work remains to be done when designing for structured play to support wellbeing. Questions abound, including how we can provide the appropriate balance between an engaging play experience and sufficient focus on the issue being addressed through the play.

Play can be beneficial to the wellbeing of all children and young people beyond therapeutic settings. Theoretical conceptualizations of wellbeing highlight both hedonic and eudemonic facets of wellbeing [1]. These suggest that, for a person to be well, they must have, both, more positive than negative experiences and a sense of meaning and purpose in their life [10]. Supporting children to engage in unstructured, free play can facilitate both hedonic and eudemonic facets of wellbeing. Specifically, alongside being fun for children, spontaneous play allows them to create and explore a world they can master, improving their competencies, confidence, and resiliency [7]. Despite this, opportunities for unstructured play are becoming markedly reduced because of time and environmental constraints [7]. With day-to-day life becoming increasingly technologically mediated [14], HCI can

positively impact opportunities for unstructured play. However, facilitating such play provides a number of challenges for the HCI and design research community. These include identifying opportunities for free play, providing appropriate tools to facilitate play during these opportunities, and considering how to frame and measure wellbeing in less constrained settings.

This workshop builds upon a number of previous workshops that have explored wellbeing [4, 13] and games [2, 6]. While initial steps have been taken to understand how to engage children in play for wellbeing, research in this area remains in its infancy. What has been done has mostly addressed structured play, either in therapeutic or non-therapeutic contexts. In this workshop, we aim to explore the state of the art in current HCI research that seeks to engage children in play, both structured and unstructured, to enhance wellbeing. It will bring together both of these perspectives to explore the interaction between play and wellbeing.

### **Aim of the Workshop**

This workshop aims to build an interdisciplinary community of researchers, designers, and practitioners to share and discuss their work and the challenges they have encountered when engaging children in playful activities to support wellbeing. We aim to develop a richer understanding of how we can design digital technology to engage children in play for wellbeing. This includes facilitating organized, structured play activities as well as to inspire and assist in rather spontaneous, self-directed play activities; and to shape an agenda for future research.

## **Workshop Themes**

### *Examples of Play to Enhance Wellbeing*

HCI research has increasingly explored how play can support the wellbeing of children and young people. At the workshop, we will devote time to the sharing of experiences from research and practice of such playful engagements, both in therapeutic contexts and more broadly in terms of everyday play and wellbeing, to identify examples of best practice. We will ask what are the differences in characteristics of play depending on activity contexts, how might these characteristics relate to facets of wellbeing, and how do we balance the need for an engaging game or activity alongside providing benefits to wellbeing. What are the challenges faced when creating play like this and how have researchers overcome these?

### *Designing Technology to Support Play for Wellbeing*

There is a tradition in HCI of designing technology to facilitate play that can enhance the wellbeing of children. We will explore how we can facilitate such play not just in the normal context of therapy sessions but beyond in everyday activities and space. Using popular play activities and games, we will explore the characteristics that make these games and activities enjoyable and consider how such characteristics may be adapted to potentially support the wellbeing of those who play. We will ask: what makes a game or activity enjoyable, how does this vary depending on the context of the game, and how might the qualities of these existing playful activities relate to wellbeing?

### *Facilitating Spontaneous Engagement in Play for Wellbeing*

While most HCI research has addressed organized play activities, engaging children in unstructured play to

support wellbeing provides a new avenue of interest. Structured play activities may not always be suitable, depending on other demands that may compete for attention. For example, a parent who attends a play session with their baby may not be able to fully devote their attention to that baby, if other life concerns arise, such as another family member needing attention, while they are there. In such situations, unstructured play that can be facilitated at opportune moments during the day may be more suitable. This theme will explore what is meant by unstructured play, what its characteristics might be, how we identify opportunities for such play, and how these qualities may be supported through existing technologies.

### *Methodological Challenges Associated with Studying Play and its Relationship to Wellbeing*

Previous research within HCI addressing the relationship between play and wellbeing has sought to improve mental health problems or improve issues associated with specific additional needs, such as social interaction, concentration, and relaxation. With increasingly broad understandings of wellbeing in use, we ask how do we articulate the relationship between play and wellbeing and what is the evidence in this area of study? Additionally, what does it mean to study play and wellbeing 'in the wild' rather than in constrained therapy settings?

## **Intended Audience**

The proposed one-day workshop intends to invite 15-18 participants from a range of fields such as social sciences, healthcare, game design, education and interaction design and HCI. Drawing on the participants' shared experiences in research and practice, it aims to support interdisciplinary discussion

around engaging children in play for wellbeing. This discussion will lead towards a richer understanding of the theory around, and practice of, engaging children in such play. This will include sharing knowledge about the challenges of designing such playful activities across settings, the strategies used to encourage engagement in these activities, and the identification of important, underexplored strands to shape an agenda for future research.

### References

- [1] Baumeister, R.F. and Vohs, K.D. The pursuit of meaningfulness in life. *Handbook of positive psychology*. C.R. Snyder and S.J. Lopez, eds. Oxford University Press (2012). 608–618.
- [2] Chatham, A. et al. Game jam. *Proc. CHI EA 2013* (2013), 3175–3178.
- [3] Coyle, D. et al. Exploratory evaluations of a computer game supporting cognitive behavioural therapy for adolescents. *Proc. CHI 2011* (2011), 2937–2946.
- [4] Coyle, D. et al. Interaction design and emotional wellbeing. *Proc. CHI EA 2012*, 2775–2778.
- [5] Coyle, D. et al. Personal investigator: A therapeutic 3D game for adolescent psychotherapy. *International Journal of Interactive Technology and Smart Education*. 2, (2005), 73–88.
- [6] Deen, M. et al. Game jam. *Proc. CHI EA 2014* (New York, New York, USA, Apr. 2014), 25–28.
- [7] Ginsburg, K.R. The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*. 119, 1 (2007), 182–91.
- [8] Keay-Bright, W. Designing interaction through sound and movement with children on the autism spectrum. *Arts and Technology*. A.L. Brooks, ed. Berlin: Springer (2011), 1–9.
- [9] Keay-Bright, W. and Gethin-Lewis, J. Co-creating tools for touch: Applying an inspire-create-play-appropriate methodology for the ideation of therapeutic technologies. *Proc. Include 2011* (2011).
- [10] Marshall, K. et al. Making Wellbeing: A Process of User-Centered Design. *Proc. DIS 2014* (2014), 755–764.
- [11] Pykhtina, O. et al. Magic land: The design and evaluation of an interactive tabletop supporting therapeutic play with children. *Proc. DIS 2012*, 136–145.
- [12] De Sa, M. and Carrico, L. Fear therapy for children - A mobile approach. *Proc. EICS 2012* (2012), 237–246.
- [13] Thieme, A. et al. Designing wellbeing. *Proc. DIS 2012* (2012), 789–790.
- [14] Wright, P. and McCarthy, J. *Experience-centered Design: Designers, Users, and Communities in Dialogue*. Morgan & Claypool Publishers (2010).