



**Selected Papers of #AoIR2024:  
The 25th Annual Conference of the  
Association of Internet Researchers  
Sheffield, UK / 30 Oct - 2 Nov 2024**

## **HOW DO THE DIVERSE DRIVERS OF CHILDREN'S (6-12) DIGITAL PLAY MEDIATE THE RELATIONSHIP BETWEEN DIGITAL GAMES AND CHILDREN'S SUBJECTIVE WELL-BEING?**

Fiona Scott  
The University of Sheffield

### **Introduction**

Children's play is understood as a vital phenomenon, supportive of children's learning and development (Singer et al., 2006), social development (Broadhead, 2003), identity formation (Winther-Lindqvist, 2009) and emotional exploration (Rao & Gibson, 2019). Historically, however, the study of children's digital play has tended to focus on risks (Livingstone & Pothong, 2022). Recently, discursive shifts signal increasing mainstream enthusiasm for certain digital play practices when they are supportive of instrumental educational outcomes (Sauce et al., 2022; Marsh et al., 2021; Ellison & Evans, 2016). Though welcome, this positioning of children's subject learning, cognition and skills development as central to the value of digital play is at odds with how children's play has been valued more generally, with due acknowledgment of the diverse and vital purposes it serves. Limited attention has been paid to the possible well-being benefits of children's digital play, the reasons that children engage with it or the broader functions this play fulfils, although COVID-era scholarship has more recently drawn some attention to social (Cowan et al., 2021) and affective (Pearce et al., 2022) benefits.

The significant time that children invest in digital game play on and offline poses risks, but also presents an opportunity for stakeholders to make bold decisions that will contribute positively to children's well-being. This holds implications not only for policymakers but, importantly, for the expansive global digital games industry, a multi-billion dollar sector that has experienced consistent growth for decades. There is, however, a need for empirical research that more comprehensively examines the relationship between children's digital play and their well-being and, within this, a focus on plurality in children's digital experiences (Alper et al., 2016). Regardless of their global ubiquity, specific digital games, devices and platforms must be understood contextually, as placed resources (Prinsloo, 2005), given that myriad differences in children's lives will mediate the relationship between digital games and their design

Suggested Citation (APA): Scott, F. (2024, October). *How do the diverse drivers of children's (6-12) digital play mediate the relationship between digital games and children's subjective well-being?* Paper presented at AoIR2024: The 25th Annual Conference of the Association of Internet Researchers. Sheffield, UK: AoIR. Retrieved from <http://spir.aoir.org>.

features and any hypothetical well-being outcomes. Deep understanding of context necessitates sustained study of the specific factors that play a role in shaping children's experiences of digital play across different contexts (Scott et al., 2023). A complementary approach is to consider what drives the digital play of different children or groups of children. Media scholars have previously theorised the reasons that adults (and sometimes children) engage with media in terms of 'motivations' (Galpin, 2016; Katz et al., 1973), though little work has interrogated how the drivers of children's digital play connect with their experiences of subjective well-being. In researching the 'drivers' of children's digital play, however, we draw on Ang (1996) in understanding individuals as always implicated in webs of social, cultural and material relationships and structures, which mediate children's choices, actions and experiences in relation to digital play.

In this paper, I present empirical findings from an international research project (June 2022 to August 2023), delivered in collaboration with a children's digital play industry partner and a global children's rights organisation. The ultimate aspiration of the collaboration was to change how digital games are designed, putting children's well-being at the centre of international policy and game design processes. The study was devised to explore this topic with 50 focus children and their families across four countries, but this paper draws on a subset of the data collected in the UK (120 research visits across 20 UK families). Rather than presenting comprehensive findings of the study, which are being reported elsewhere, this paper draws on theories of children's motivations and play to address the questions: (RQ1) What drives the digital play choices and practices of a diverse cohort of children?; and (RQ2) How do these findings contribute to understanding the relationship between children's digital play and their well-being?

## **Methods and approach**

To support the overall aim of examining the relationship between children's digital play and their well-being, we deployed a multi-method qualitative study in a case study design. A range of methods were chosen to support the development of an expansive understanding of the topic. The theoretical approach was ecoculturally-informed (Weisner, 2002), meaning that children's digital play was studied in relation to the environments and cultural contexts children live within. Though detailed research tools were provided, researchers were encouraged to draw on ethnographic approaches (Baszanger & Dodier, 2004) beyond, and sometimes instead of, the tools provided, sometimes deviating from particular research activities to better reflect what was appropriate in each family context. The study was qualitative longitudinal work (Pahl, 2006), with researchers making consecutive visits to families over a period of time. Methods included: conversations and semi-structured interviews; ethnographic video observation; family-led data generation and sharing; map-making; ecocultural home tours; and iterative family feedback. Participants were selected to ensure diversity across a range of factors, including age, sex and gender, socioeconomic status, race and ethnicity and disability/ non-disability.

Data were analysed and interpreted collectively, following a deductive-inductive approach, with inductive coding following a framework designed for the project. Analysis

summaries were produced and discussed between researchers. In preparing this paper, I drew across the inductive codes and analysis summaries, focusing on the findings most relevant to the RQs outlined above.

## **Findings and conclusions**

The study provided many examples of digital play supporting various dimensions of children's subjective well-being, including their perceptions of autonomy and competence, feelings about identities, sense of purpose, emotional awareness and regulation, awareness of others, positive affective state and relationships with others. However, this relationship looked different for different children. Children's digital play choices and practices were influenced by diverse and often intersecting factors. These included specific family dynamics, practices and cultures, neurodiversity, physical differences or disabilities, a range of emotional and learning needs and dynamics between different environments.

Most compellingly, children's digital play choices and practices were associated with different deep interests, desires and needs, understood in the present study as 'digital play drivers'. Eleven distinct 'digital play drivers' were identified, including: the drive to collect, curate and classify'; the drive to master challenges, including strategic challenges and puzzles; the drive to experience, explore and negotiate togetherness; the drive to empathise, tend and nurture; the drive to understand, and meet, one's own emotional needs and so on. Fulfilment of these drivers appeared to support children's subjective well-being. These drivers were situated within diverse and dynamic family ecologies and intersected with other influential factors. In some cases, there were clear connections between digital play drivers and life experiences and factors. However, it is ultimately not possible to fully answer why children are driven by particular deep interests, desires and needs at different points in their lives.

The findings offer an empirically grounded expansion of past 'needs' based approaches. The 11 'digital play drivers' relate specifically to the contemporary digital play choices and practices of children aged 6-12. The findings foreground the mediating role played by digital play drivers in the relationship between digital games and children's subjective well-being. An important implication that we are currently exploring in our collaboration with children's digital game industry and child's rights organisation: no single digital game or play experience can support all aspects of all children's well-being. Design features which may be supportive of well-being for one child may not for another. Rather, the production of multiple and diverse digital games and play experiences should be encouraged, with the 11 'digital play drivers' in mind.

## **References**

Alper, M., Katz, V. S. and Clark, L. S. (2016) Researching children, intersectionality, and diversity in the digital age. *Journal of Children and Media*, 10(1), 107–114.

Ang, I. (2006). *Living room wars: Rethinking media audiences*. Routledge.

Baszanger & Dodier (2004). Ethnography: relating part to whole. In: D. Silverman (Ed.) *Qualitative research: theory, method and practice* (Second Edition). SAGE, pp. 9-34.

Broadhead, P. (2003). *Early years play and learning: Developing social skills and cooperation*. Routledge.

Cowan, K., Potter, J., Olusoga, Y., Bannister, C., Bishop, J. C., Cannon, M., and Signorelli, V. (2021). Children's Digital Play during the COVID-19 Pandemic: insights from the Play Observatory. *Je-LKS: Journal of e-Learning and Knowledge Society*, 17(3), 8-17.

Ellison, T. L., and Evans, J. N. (2016). "Minecraft", Teachers, Parents and Learning: What They Need to Know and Understand. *School Community Journal*, 26(2), 25-43.

Galpin, A. (2016). Towards a theoretical framework for understanding the development of media-related needs. *Journal of children and media*, 10(3), 385-391.

Katz E., Blumler J. G., Gurevitch M. (1973). Uses and gratifications research. *The Public Opinion Quarterly*, 37(4), 509–523.

Livingstone, S., & Pothong, K. (2022). Beyond screen time: Rethinking children's play in a digital world. *Journal of Health Visiting*, 10(1), 32-38.

Marsh J., Lahmar J., Plowman L., Yamada-Rice D., Bishop J., Scott F. (2021). Under threes' play with tablets. *Journal of Early Childhood Research*, 19(3), 283–297.

Pahl, K. (2007). Timescales and ethnography: understanding a child's meaning-making across three sites, a home, a classroom and a family literacy class. *Ethnography and Education*, 2(2), 175-190.

Pearce, K. E., Yip, J. C., Lee, J. H., Martinez, J. J., Windleharth, T. W., Bhattacharya, A., and Li, Q. (2022). Families playing animal crossing together: Coping with video games during the COVID-19 pandemic. *Games and Culture*, 17(5), 773-794.

Prinsloo, M. (2005). The new literacies as placed resources: research: information and communication technologies. *Perspectives in Education*, 23(1), 87-98.

Rao, Z., and Gibson, J. (2019). The role of pretend play in supporting young children's emotional development. In: D. Whitebread, V. Grau, K. Kumpulainen, M. McClelland, N. Perry and D. Pino-Pasternak (Eds.) (2019). *The SAGE handbook of developmental psychology and early childhood education*, pp. 63-79.

Sauce, B., Liebherr, M., Judd, N., and Klingberg, T. (2022). The impact of digital media on children's intelligence while controlling for genetic differences in cognition and socioeconomic background. *Scientific reports*, 12(1), 7720.

Scott, F., Marsh, J., Murriss, K., Ng'ambi, D., Thomsen, B. S., Bannister, C., Bishop, J., Dixon, K., Giorza, T., Hetherington, A., Lawrence, C., Nutbrown, B., Parry, B., Peers, J.

and Scholey, E. (2023). An ecological perspective on children's play with digital technologies in South Africa and the United Kingdom. *International Journal of Play*, 12(3), 349-374.

Singer, D. G., Golinkoff, R. M. and Hirsh-Pasek, K. (Eds.) (2006). *Play = Learning: How play motivates and enhances children's cognitive and social-emotional growth*. Oxford University Press.

Weisner, T. S. (2002). Ecocultural understanding of children's developmental pathways. *Human development*, 45(4), 275-281.

Winther-Lindqvist, D. (2009). Game playing: negotiating rules and identities. *American Journal of Play*, 2(1), 60-84.