Ethical Considerations on Positioning the Normative Stance when working with Children

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Distributed participatory design (DPD) is becoming increasing popular within the HCI community, partly due to the covid-19 era moving everything online. In this position paper, we described the potential problems arising from the choice of researchers' normative stance in design sessions, and we argue for the need to investigate and unpack how to carefully position the normative stance when working with children in distributed participatory design.

Additional Key Words and Phrases: DPD, children, ethical considerations

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1 INTRODUCTION

PD initially grew out of Scandinavian concerns to bring democracy into the work place [5], by involving users in the design stage of the software development process. However, the focus of PD has since shifted from introducing democracy into the work place to a belief that one key success factor for design is to support the direct participation of stakeholders (including end users) in system analysis and design [4]. Such participatory design is usually achieved through a series of co-design activities among the stakeholders, during which they communicate their design ideas, thereby facilitating the process of design. Ever since the start of PD, It is not uncommon for children to be positioned as stakeholders in these design activities. On the other hand, involving children as designer partners introduce its own challenges, such as adjusting the design activities with children's cognitive ability. The recent COVID-19 pandemic has given rise to further barriers to PD with such group. One key barrier is the advent of social distancing and government-imposed social restrictions due to the additional risks posed for e.g. children and families vulnerable to COVID-19. This disrupts traditional in-person PD (which involves close socio-emotional and often physical collaboration between participants and researchers).

Over the years more and more research has been made on how to effectively facilitate communication and knowledge sharing [11], especially in terms of PD processes in distributed settings [3, 7, 9, 12] and tools to support DPD [6, 8]. The rise in DPDs also introduces various kind of challenges, ranging from children limited by technology available to them, increased dependency on adults for technical support, more distractions and disruptions, and reduced non-verbal communication [2]. Apart from that, running DPDs with children also introduce a series of ethical considerations, such as the ethics related to working with participants of varying abilities, due to age or disabilities, ethical issues related

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to cultural sensitivity and more. In this position paper, we focused on the ethical considerations around power dynamics in DPDs, especially in terms of positioning the normative stance when working with children. We describe the potential influence of the normative stance of researchers could have on children, and argue for the research need in identifying a set of methodologies to measure and mitigate such potential bias on children's perceptions and design processes.

2 STATEMENT OF PROBLEM

The fundamental challenge of positioning the normative stance when working with children in DPDs is around how to introduce a design scenario to children without intervening their understanding and perceptions too much. Unlike adults, who usually already have a well-established mindset when coming to a design session, children sometimes need to be introduced to a certain concept or the design tasks before they can perform their own designs. An important ethical concern around such process is that sometimes these design tasks would inherit the normative stance that of the organisers. For example, when designing online mobile safety apps when children, researchers often positioned the online environment as full of danger and maybe disproportionately exaggerate some of the consequences. Similarly, when designing with children on online privacy issues, online data collection and processing were usually positioned as harmful and manipulative. On the other hand, it is inevitable that these descriptions need to be given to children prior to design sessions. Take the online datafication for example, children need to informed on what is datafication before they can start do co-design anything. However, unlike adults who already have some understanding on these topics, children need to be explicitly told about what are the implications of online datafication, what could happen to their data, before they can comprehend the design scenario. During which process, the normative stance of researchers on certain topics would be brought in, and could have potential impact on the way children design things.

The inherit problem of researchers' normative stance and its influence on children originates from the subtle difference between DPDs with adults and DPDs with children. In the former, participants held equal positions with researchers whereas in the latter, researchers as adults, inevitable held more powerful positions as the more knowledgeable other [1]. In fact, traditional approaches in qualitative studies date back to the positivist perceptions of the social world and its subjects, which makes the assumption that "there is a real world with verifiable patterns that can be observed and predicted" [10]. In other words, that there's a "ground truth" on everything. On the other, the digital artefacts and the digital phenomena such as online tracking or online profiling could be far more complicated issues and the validity of the ground truth stated by researchers to the children could be questionable sometimes, or have some kind of bias.

We therefore argue that there's need to explore, the first, what could be the implications of such normative stance, and to what extent such potential inherit "bias" could have influence on children's design positions, especially under a distributed settings whereas messages are even more easier to be misinterpreted. The second, how can we avoid such influence (if any) to a maximum extent while still offering children informative guidance. We hope to investigate on these problems and be able to offer a clear set of methodologies mitigating such potential bias.

REFERENCES

[1] Yasmine Abtahi, Mellony Graven, and Stephen Lerman. 2017. Conceptualising the more knowledgeable other within a multi-directional ZPD. *Educational Studies in Mathematics* 96, 3 (2017), 275–287.

[2] Aurora Constantin, Cristina Alexandru, Jessica Korte, Cara Wilson, Jerry Alan Fails, Gavin Sim, Janet C Read, and Eva Eriksson. 2021. Distributing participation in design: Addressing challenges of a global pandemic. *International Journal of Child-Computer Interaction* 28 (2021), 100255.

[3] Karin Danielsson, Amir M Naghsh, Dorina Gumm, and Andrew Warr. 2008. Distributed participatory design. In *CHI'08 extended abstracts on Human factors in computing systems*. 3953–3956.

[4] Pelle Ehn. 1993. Scandinavian design: On participation and skill. *Participatory design: Principles and practices* 41 (1993), 77.

[5] Christine Floyd, Wolf-Michael Mehl, Fanny-Michaela Resin, Gerhard Schmidt, and Gregor Wolf. 1989. Out of Scandinavia: Alternative approaches to software design and system development. *Human–computer interaction* 4, 4 (1989), 253–350.

[6] Michael Jemtrud, Philam Nguyen, Bruce Spencer, Martin Brooks, Sandy Liu, Yong Liang, Bo Xu, and Libo Zhang. 2006. Eucalyptus: intelligent infrastructure enabled participatory design studio. In *Proceedings of the 2006 Winter Simulation Conference*. IEEE, 2047–2054.

[7] Finn Kensing and Jeanette Blomberg. 1998. Participatory design: Issues and concerns. *Computer supported cooperative work (CSCW)* 7, 3 (1998), 167–185.

[8] AM Naghsh and MB Ozcan. 2004. Gabbeh-a tool for computer supported collaboration in electronic paper prototyping. *D. A and WL, editors, HCI* (2004).

[9] U Patel, MJ D'cruz, and C Holtham. 1997. Collaborative design for virtual team collaboration: a case study of jostling on the web. In *Proceedings of the 2nd conference on Designing interactive systems: processes, practices, methods, and techniques*. 289–300.

[10] Michael Quinn Patton. 2002. Qualitative research and evaluation methods. Thousand Oaks. *Cal.: Sage Publications* 4 (2002).

[11] Mark J Perry, Renate Fruchter, and Duska Rosenberg. 1999. Co-ordinating distributed knowledge: A study into the use of an organisational memory. *Cognition, Technology & Work* 1, 3 (1999), 142–152.

[12] Andrew Warr, Grace de la Flor, Marina Jirotka, and Sharon Lloyd. 2015. Usability in e- Science: The eDiaMoND Case Study. (2015).