Sensitivities and Challenges When Involving Deaf or Hard of Hearing Australian Children in Co-design Group Activities

Tan Ching Ying Michelle
Edith Cowan University
Perth, Australia
mtan12@our.ecu.edu.au

CCS CONCEPTS
• Human-centered computing → Participatory design

KEYWORDS
Participatory design, children, deaf and hard of hearing

ABSTRACT
As technology evolve and society is presented with a plethora of options, innovations that aim to make an impact should carefully consider the needs of its target market by involving potential users in design processes. Purposeful inclusion is especially important when individuals are faced with circumstances that socially exclude them. Additionally, amongst those who are socially excluded, differing funding opportunities, points of view, culture and beliefs can cause division and further isolate individuals. In the discipline of human-computer interaction, participatory design practices endeavour to ensure voices can be heard [1]. It is therefore imperative to intentionally include individuals who are further neglected and considered outcasts within groups who already have a limited voice. The opportunity to allow multiple voices to be heard needs to be recognised, consider and respond to sensitivities between individuals, social groups and organisations that might not share similar values and beliefs.

Hearing loss is prevalent in Australia, affecting 1 in 6 individuals, of which an estimated 12,000 are children [3]. 1300 – 1500 Australian children are fitted annually with hearing aids for the first time, which amplifies sound to assist their hearing [4]. Apart from hearing aids, children who have severe to profound hearing loss have cochlear implants that are surgically implanted to stimulate their auditory nerves. While hearing aids and cochlear implants can help individuals develop speech and language skills, some individuals reject the use of assistive hearing technology. These individuals identify with the Deaf community and do not view hearing loss as a disability. Instead, they take pride in their hearing loss as it contributes to their identity. Amongst the Deaf community in Australia, Auslan is the sign language used for communication. However, many Australians are not familiar with Auslan and the language differs from other countries. There are two major distinctions in Auslan - the northern and southern dialect. Although there are similar signs shared, some signs are distinct and region specific, which may cause further communication barriers especially for national and international collaborative research and practice. Amongst organisations and individuals who use different assistive technology, there is also discord. This discord is strongly felt by families who live in smaller Australian states or towns, and can negatively affect individuals and pose further challenges for attempts to engage multiple voices in collaborative settings that aim to capture holistic perspectives. Recognising and understanding these sensitivities are imperative for future considerations within research and practice settings which involve Deaf or hard of hearing (DHH) individuals, groups, families and organisations. Accommodations to usual participatory design methods need to be considered to empower DHH individuals [2]. In an on-going research with families of DHH children aged 6–9 from different Australian states, sensitivities that influence group dynamics have been encountered. The research is being conducted in four phases: Inquire, Discover, Execute and Appraise. In the Inquire phase, experts who have experiences working with DHH children are surveyed to explore social and emotional issues, its impact on behavior and its implications on collaboration. In the Discover phase, families are requested to document how DHH children use technology in their daily lives, either as an individual or with others. The Execute and Appraise phases occurs in group workshop settings, where each group consists of a minimum of two DHH children and their parents. Group activities are used to explore the collaboration between various individuals and preliminary observations have highlighted how different assistive technology and the use of sign language can influence communication and collaboration in group settings. In addition, challenges and opportunities for future inclusion of DHH individuals in groups have also been identified.
REFERENCES


