Chapter 21
Evaluating an E-Learning Application to Protect Vulnerable Users From Cyberbullying

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ABSTRACT

This research project evaluates Let’s Be Safe, an e-learning application. This application aims to educate young adults with intellectual disability about cyberbullying—an issue prevalent among this population—and cybersafety. Twenty-two individuals with mild to moderate intellectual disability took part in the research. The study employed a mixed-methods design including observational and inquiry methods of usability evaluation as well as focus groups. The evaluation investigated the relationships between perceived aesthetics, emotional response, and usability for the application. The focus group gathered information from the participants regarding their knowledge and experience of cyberbullying and cybersafety. The analyses found no significant relationships between aesthetics, emotional response, and usability for this user group. However, the research gathered data, which will contribute to the development of Let’s Be Safe. The findings of the focus group revealed that cyberbullying is an issue among this population.

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INTRODUCTION

Overview

Despite the abundance of literature in the area of human-computer interaction (HCI), there is limited HCI research about users with intellectual disability (ID). This chapter evaluates Let’s Be Safe, an eLearning application which aims to educate young adults with intellectual disability about cyberbullying - an issue prevalent among this population - and cybersafety. Twenty-two individuals with mild to moderate intellectual disability took part in the research. The study employed a mixed-methods design including observational and inquiry methods of usability evaluation. The evaluation investigated the relationships between perceived aesthetics, emotional response and usability for the application. The analyses found no significant relationships between aesthetics, emotional response and usability for this user group. However, the research gathered data, which will contribute to the development of Let’s Be Safe. Users wanted the developers to include more games and video modelling in the future iterations of the application. More emoticons, appropriate cartoons and age appropriate photographic images will be incorporated into the next version of Let’s Be Safe. The findings also highlight the significance of further research in the area of HCI for users with ID and the importance of research into the area of cyberbullying among this same population. The research also aims to explore the lived experiences of individuals within this population, in relation to cyberbullying and cybersafety. The findings aim to contribute to the development of the Let’s Be Safe eLearning application. Additionally, this research will add to the existing literature within the area of instructional and educational technologies, as well as cybersafety and cyberbullying, for the ID population.

Intellectual Disability

Intellectual disability (ID) is a neurodevelopmental disorder involving impaired intellectual and adaptive functioning. ID is characterised by deficits in three domains; conceptual, social and practical (American Psychiatric Association, 2013). Individuals with ID experience deficits in areas of problem solving, abstract thinking, judgement and learning. Deficits in adaptive functioning result in failing to reach developmental and sociocultural standards for independence and social responsibility. This can limit a person’s ability to function in daily life (Toth, Lacy & King, 2016). At one-time, ID was referred to as a person-centred trait or deficit. Today, it is understood that ID is not an absolute trait (Schalock, Luckasson, & Shogren, 2007). Instead, ID is an ever-changing interaction between the individual’s intellectual and adaptive abilities, participation in activities, interactions with others, social roles, and health (Schalock, Luckasson, & Shogren, 2007). These factors are then considered in the context of the individual’s immediate and cultural environment in determining supports. Interventions are required to support and encourage an individual to live their life to the fullest capacity, independently. The ID construct supports and recognises what the disability identity of the individual to include “self-worth, subjective well-being, pride, common cause, policy alternatives, and engagement in political action” (Shalock, Luckasson, & Shogren, 2007, p.117).

People with ID are increasingly being recognised for their own unique strengths (Shogren, et al., as cited in American Psychological Association, 2018). An intellectual disability (ID) as defined by the American Association on Intellectual and Developmental Disabilities (AIDD), is a significant limitation