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"I like talking to people on the computer": Outcomes of a home-based intervention to develop social media skills in youth with disabilities living in rural communities

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ABSTRACT

Purpose: To investigate the effectiveness of a home-based social media use intervention to enhance the social networks of rural youth with disabilities.

Method: Participants were nine youth (mean age = 17.0 years) with disabilities from two rural Australian communities. The intervention consisted of providing appropriate assistive technology and social media training on individualised goals. Using mixed methods, quantitative (a single group pre-post) and qualitative (interviews with participants and their carers) measures were used to examine outcomes of training, individual experiences of the intervention, and changes to online social networks.

Results: Participants increased their performance and satisfaction with performance on social media problem areas post-intervention; paired *t*-tests showed statistical significance at $p < .001$. There was also a significant increase in the number of online communication partners; Wilcoxon Signed Ranks showed statistical significance at $p < .05$. The interviews highlighted increased social participation, independence and improvements to literacy. Ongoing parental concerns regarding cyber safety and inappropriate online content were noted.

Conclusions: The findings suggest that social media training is a feasible method for increasing social networks among rural-based youth with disabilities. To sustain ongoing benefits, parents need knowledge and training in integrating assistive technology and social media.

What this paper adds?

This study is one of the first of its kind to investigate the impact of social media training on the social networks of rural youth with disabilities. It also provides emerging evidence that youth living in rural areas with developmental or intellectual disabilities can learn to use social media with support and training at home. The outcomes showed that youth connected with more and different groups of people online after the intervention. However, for ongoing social media use by youth, parents need to be provided with

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knowledge and skills in integrating social media with assistive technology.

1. Introduction

Social participation in terms of developing and maintaining friendships, and being involved in family life are important for health and well-being of youth, and contribute to a sense of belonging (Erikksson, Hochwälder, Carlsund, & Sellström, 2012; Helseth & Misvær, 2010). Youth with disabilities have reduced social networks, and are more isolated and lonely than their classmates without disability (Locke, Ishijima, Kasari, & London, 2010; Nadeau & Tessier, 2006). As youth with disabilities transition to adulthood, retaining limited social contacts has been identified as a major concern (Forte, Jahoda, & Dagnan, 2011).

The last twenty years has seen a rapid increase in Internet availability globally, and many of those using the Internet are now also using social media (Australian Communications and Media Authority (ACMA), 2013; Duggan & Smith, 2014; Social Media News, 2014). Indeed, in 2013, ACMA reported that 99% of Internet users in their mid-teens (16–17 years) were using some form of social networking site (Australian Communications and Media Authority (ACMA), 2013). Youth increasingly are talking and networking with their friends using text messaging, Twitter, email, and other social media via smart phones and tablet technology (Australian Communications and Media Authority (ACMA), 2013, 2016). However, certain groups of youths continue to face barriers to Internet participation because Internet use is associated with offline inequalities, such as disability and/or their level of educational attainment, social skills, their family's socioeconomic circumstances, or residence in a rural or regional area (Australian Communications and Media Authority (ACMA), 2016; Newman, Browne-Yung, Raghavendra, Wood, & Grace, 2016). Furthermore, people with disabilities need support in accessing and using social media (Hollier, 2012).

1.1. Youth with disabilities and Internet use

Research has shown that people with disabilities are less likely to have a computer and Internet access in their home than those without disability (Australian Bureau of Statistics, 2012). Furthermore, it is estimated that only 18% of people with intellectual disabilities have a working email address (Palmer, Wehmeyer, Davies, & Stock, 2012). Given an email address is a 'digital passport' (Palmer et al., 2012) to social networking sites such as Facebook, Twitter, etc., this alone presents a significant barrier to people with disabilities engaging in online activities similar to their peers without disability.

However, the online world presents significant opportunities for people with disability to socially participate, build independence, and develop their social networks (Browder, Wakeman, Spooner, Ahlgrim-Delzell, & Algozzine, 2006). Online social networking allows synchronous communication, but also asynchronous communication, which can reduce time pressures to respond for youth with disability (Bruns & Moe, 2013). Furthermore, social media lends itself to short messages where the focus is on content or meaning rather than correct spelling and grammar (Lanchantin, Simoes-Perlant, & Largy, 2012). This can help youth with disabilities, especially those with literacy issues, participate on a more equal footing than may be possible in face-to-face communication.

Emerging research evidence highlights the benefits of using the Internet to increase the social connections of youth with disability (Barnfather, Stewart, & Magill-Evans, 2011; Grace, Raghavendra, Newman, Wood, & Connell, 2014; Hynan, Murray, & Goldbart, 2014; Raghavendra, Newman, Grace, & Wood, 2013; Raghavendra, Newman, Grace, & Wood, 2015). Hynan et al. (2014) conducted a qualitative study with 25 young adults with severe communication disabilities who use augmentative and alternative communication (AAC) living in urban areas. The authors examined self-reported use of online social networking and found that it played a significant role in reducing participants' levels of social isolation. However, youth reported being unable to use online social networking as much as they would like due to barriers such as limited literacy and lack of access to and knowledge of relevant assistive technologies. This study did not provide any intervention to youth to support their social media use. Previous research (Grace et al., 2014; Raghavendra, Newman et al., 2013; Raghavendra et al., 2015) and the current study addressed the issues identified by Hynan et al. (2014) through an intervention designed to determine whether some of these identified barriers could be overcome through training and support.

Youth with disabilities who live in regional and rural Australia are likely to experience additional barriers in accessing and using the Internet and latest social networking applications, compared to children with disabilities living in Australia's cities. In particular, there are likely to be lower levels of quality in technical infrastructure in rural communities and less Internet connectivity, which exacerbate existing social exclusion (Carson & Cleary, 2010; Park, 2016). Youth with disabilities in rural Australia are also more likely to live in families with higher levels of disadvantage than their metropolitan counterparts (May & Koh, 2011), which may pose greater or different barriers to their social participation. Improving digital participation is also essential to support future employment opportunities (Cihak, Wright, & Ayres, 2010), which may arguably be overcome more easily for regional/rural Australian youth via the Internet. Therefore, social media may provide unique opportunities for rural youth with disabilities to overcome these disadvantages, and to gain experience in social media and build and/or strengthen their social networks.

Previous research has confirmed the feasibility of providing home based intervention to support social media use in 18 youth with developmental or acquired disabilities from metropolitan areas (Grace et al., 2014; Raghavendra, Grace, Newman, Wood, & Connell, 2013, Raghavendra, Newman et al., 2013) and eight young people with communication disability from rural areas (Raghavendra et al., 2015). In both studies, participants benefitted from individualised, home-based intervention to increase their online social networking, supported by assistive technologies and hands-on training. Consistent with Hynan et al. (2014), this research also identified the importance of individualised goal setting, systematic instruction and assistive technologies to support Internet and social media engagement. As a result of the intervention, participants increased their confidence in using the online social networking and increased the number of online communication partners. The intervention was resource intensive, however, it realised wide ranging benefits in terms of depth and breadth of social connection which may not have previously been available to these youths.