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Social Inclusion and Adults with Intellectual Disability: The Role of Mobile Technology

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Research Brief

What is the problem?

The present study explored the extent to which mobile technology can enhance social inclusion of people with intellectual disabilities by looking at which specific aspects of mobile device/app use are associated with social inclusion among their:

- Family
 - Friends
 - Work and Volunteering
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- Social inclusion is a major theme of the UN Convention on Rights of Persons with Disabilities, which has been ratified by 168 countries.
 - The social inclusion movement has achieved a substantial improvement in the lives of people with disability, but arguably less so for people with intellectual disabilities.
 - Mobile technology has the potential to support the social inclusion and self-determination of people with intellectual disabilities.
 - The extent to which mobile technology contributes and/or could contribute to increased social inclusion of adults with intellectual disabilities deserves more research attention.
 - Findings have significant implications for assisting adults with intellectual disabilities to be more socially connected with significant others.

Links with Family, Friends, and Work

For adults with intellectual disabilities, the major forms of social connection are:

- **Family:** The high frequency of contact with family members is unsurprising. Callus' (2017) study of friendship reciprocity among people with intellectual disabilities found that participants considered their family members as close friends. Likewise, Tipton et al. (2013) reported that young adults with intellectual disabilities identified family as friends.
- **Friends:** It is well-established that friendships are important to the social inclusion of people with intellectual disabilities (Seale & Pockney, 2002). Those with more frequent contact with friends experience a higher quality of life (Cram & Nieboer, 2012). However, many people with intellectual disabilities experience social isolation and have a limited number of friends (Louw et al., 2018).
- **Work/Volunteering:** Employment is a critical aspect of social inclusion for people with intellectual disabilities (Damianidou et al., 2019), as it provides meaningful engagement, relationships with others, and a sense of belonging (Damianidou et al., 2019; Strnadová et al., 2019). Yet statistics indicate that only 12% of young Australian adults with intellectual disabilities are employed (Australian Bureau of Statistics, 2014).

The Potential Yields of Mobile Technology

There is preliminary evidence that the use of mobile technology by people with intellectual disabilities could increase their sense of social inclusion.

Facebook as a Case in Point:

- Shpigelman and Gill (2014) found that Facebook was mostly used by adults with intellectual disabilities to communicate with family and friends whom they might not be able to often meet face-to-face.
- Social networking sites such as Facebook are used to enable people with intellectual disabilities to maintain connections with friends after work hours or to further develop relationships with people met during formal programs (Shpigelman & Gill, 2014).
- Holmes and O’Loughlin (2014) reported that using Facebook enabled people with intellectual disabilities to form and maintain relationships and afforded them the opportunity to engage with others who had similar hobbies as them. Further, the number of Facebook friends they had was positively associated with their self-esteem.
- People with intellectual disabilities also admitted that they felt “like everyone else” when they used Facebook (Shpigelman & Gill, 2014, p.1608).

Our study explored the extent to which mobile technology can enhance social inclusion of people with intellectual disabilities by looking at which specific aspects of mobile device/app use are associated with social inclusion among their family, friends, work, and volunteering.

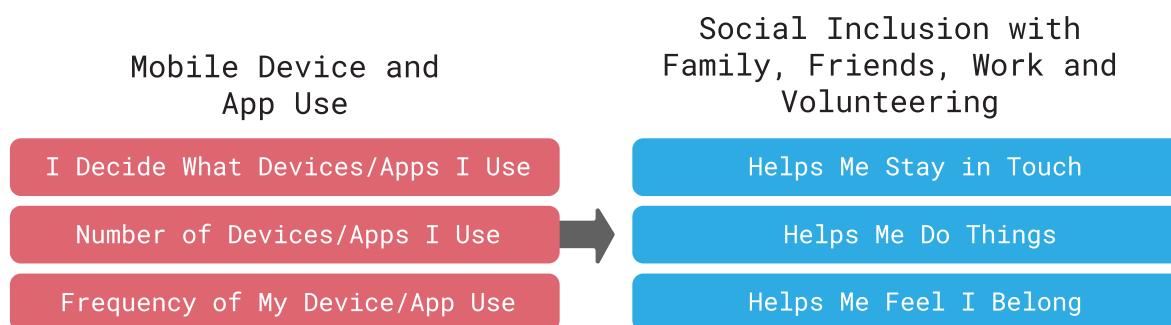


Figure 1. Mobile Device/App Use and Impact on Social Inclusion

Our Participants

Surveys:

- 114 Australian adults with intellectual disabilities
- Forty-six percent of participants were female (54% male).
- The average age of respondents was 42 years.
- Just over one-third (38%) reported living on their own; the other participants lived with one or more of: a partner, parent/s, sibling/s, friend/s, their children, or in a group home.
- A total of 58% received a disability pension.

Photovoice interviews and focus groups:

- 12 Australian adults with intellectual disabilities participated in Photovoice interviews.
- 19 Australian adults with intellectual disabilities participated in 2 focus groups.

Our Questions to Participants included...

- What devices and apps do you use to stay in touch with family, friends, and work/volunteering?
- How often do you use these devices and apps for this purpose?
- How helpful are they for being connected with family, friends, and work/volunteering?

What Were the Most Important Ways That Participants Stayed Socially Connected?

We found that participants who reported staying in touch with family, friends, and work/volunteering were more likely to:

- Use mobile devices more frequently
- Use mobile apps more frequently
- Make most of their own decisions about their mobile device/app use

Mobile Device/App Use as Relevant to Social Inclusion with Family

Participants reported they used the following mobile technology to communicate with family (see Figure 2).

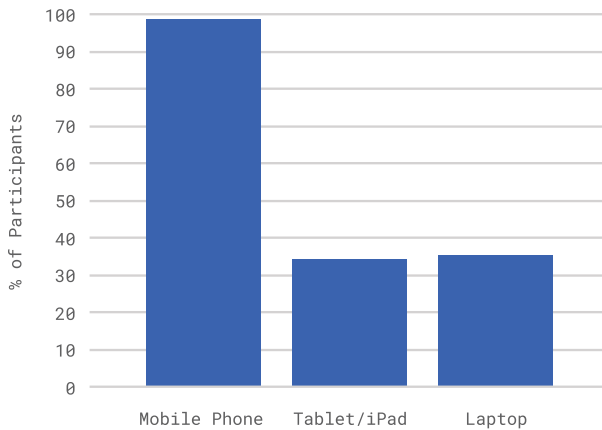
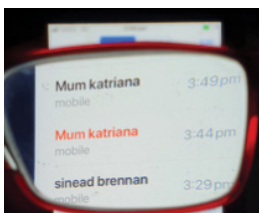


Figure 2. Mobile devices used to communicate with family



Zac, who took part in a Photovoice interview, photographed the recent calls he made on his phone to show he uses his mobile device to stay connected with his family (see Figure 3).

Figure 3: Zac's recent calls to his family.

Survey participants used an average of 3-4 mobile apps to communicate with family, with the following being used by more than 20% of participants (see Figure 4).

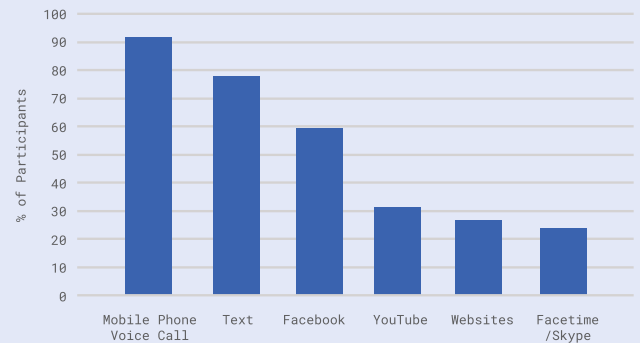


Figure 4. Mobile apps used to communicate with family

Sky, who took part in a Photovoice interview, shared that he uses different mobile apps to contact various family members who do not live in close proximity to him, "I've got a cousin in Melbourne that I keep talking to on Instagram. I use WhatsApp and Facebook to talk to my aunt in America".

Most survey participants reported using mobile technology to connect with family "a lot" (47%) or "a fair bit" (32%).

Nicole, who took part in a Photovoice interview, explained that she has weekly video calls with her niece, "My four-year-old niece video calls me. She likes to video call me. We usually have a video call one morning a week before I go to work. She rings me one morning a week, about seven o'clock".

A total of 63% survey participants agreed that mobile technology helped them do things with family and 70% reported that mobile technology helped them have a sense of belonging with family.

Mobile Device/App Use as Relevant to Social Inclusion with Friends

Participants reported they used the following mobile technology to communicate with friends (see Figure 5).

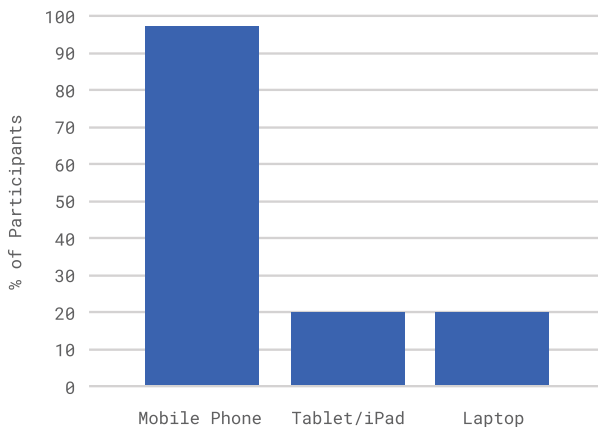


Figure 5. Mobile devices used to communicate with friends

Nicole explained that a mobile phone enabled her to stay in contact with her friends even when they were unable to meet in person: “You can ring them up, if you’re in town. You can ring them to say ‘I won’t be home’. I’m often in town and I can ring a couple of friends and say ‘Can I drop in? Or if I don’t drop in, I’ll talk to you later’”.

Survey participants used an average of 3-4 mobile apps to communicate with friends, with the following being used by more than 20% of participants (see Figure 6).

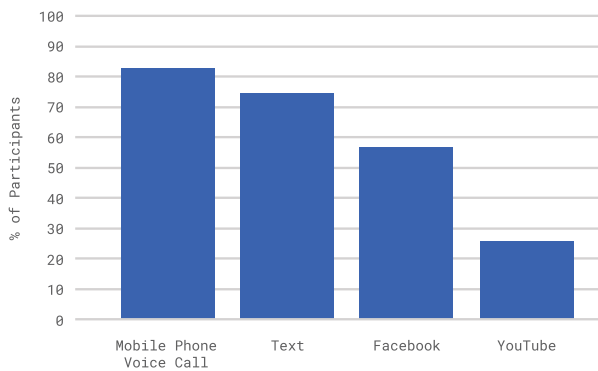


Figure 6. Mobile apps used to communicate with friends

Sky took a photo of the mobile apps he used to stay connected with friends (see Figure 7).



Figure 7: Mobile apps to stay connected with friends

Most survey participants reported using mobile technology to connect with friends “a lot” (45%) or “a fair bit” (37%). A total of 66% agreed that mobile technology helped them do things with friends, 56% agreed that mobile technology helped them make new friends, and 71% agreed that mobile technology helped them have a sense of belonging with friends.

Josef shared that mobile apps (e.g., Facebook, Instagram, Snapchat) enable people to “get out there and be able to communicate with people”.

Mobile Device/App Use as Relevant to Social Inclusion with Work/Volunteering

Survey participants reported they used the following mobile technology to communicate with work/volunteering (see Figure 8)

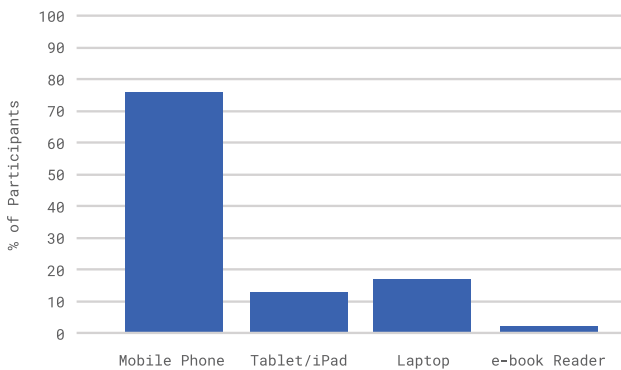


Figure 8. Mobile devices used to communicate with work/volunteering

They used an average of 2-3 mobile apps to do so, with the following being used by more than 20% of participants (see Figure 9).

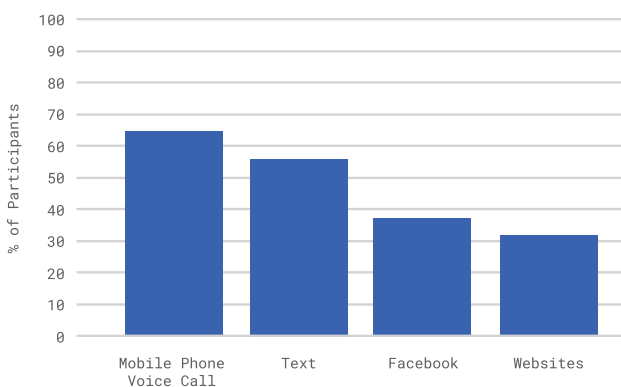


Figure 9. Mobile apps used to communicate with work/volunteering

Most participants reported using mobile technology to connect with friends “a lot” (25%) or “a fair bit” (29%) – though 46% reported “not much”. A total of 58% agreed that mobile technology helped them do things with/at work, 56% agreed that mobile technology helped them make new friends at work, and 69% agreed that mobile technology helped them have a sense of belonging at work.

Nicole shared how texting using her mobile device helps her with volunteering, “...because I’m involved in the Salvation Army emergency services... if we had a fire and we needed to evacuate, I would be on call to go and organise that”.

While mobile apps were deemed useful for social inclusion by the participants, the risks in using them were also acknowledged by several. George explained, “These apps gather data, and data can be good and bad. And there are security issues with certain apps as well. Like, you know, people hijacking your profile on the phone...”. Angelo suggested several ways to mitigate the risks, “What I do to keep safe is, I limit what information I put out there... And also, I’m very careful with the friends that I choose on Facebook ... Because you’ve got to be careful. You can’t just add anybody to it”.

The bottom line

The findings of this study suggested that use of mobile technology by adults with intellectual disability is positively associated with social inclusion among their family, friends, and work/volunteering.

This critical finding highlights the need to support and increase access to mobile technology, which still remains a problem for this population. Similarly, the availability of support for adults with intellectual disabilities to learn to use mobile technology devices and apps is critically important. Findings also revealed the importance of self-determined use of mobile technology by people with intellectual disabilities and the need to provide quality support in their self-determination.

Taken together, these findings shed light on the role of mobile technology in the social inclusion of adults with intellectual disability and provide practical direction for enhancing their connections among family, friends, and their work/volunteering colleagues.

About the Researchers



Andrew Martin

Andrew J. Martin, PhD, is Scientia Professor, Professor of Educational Psychology, and Chair of the Educational Psychology Research Group in the School of Education at the University of New South Wales, Australia. He specialises in motivation, engagement, achievement, and quantitative research methods.

Further details of his work can be found at <https://www.researchgate.net/profile/Andrew-Martin-22>



Iva Strnadová

Iva Strnadová, PhD, is a Professor in Special Education and Disability Studies at the University of New South Wales in Sydney, Australia. She is also Academic Lead Research at the Disability Innovation Institute at UNSW. Her research aims to contribute to better understanding and the improvement of the life experiences of people with disabilities, especially people with intellectual disabilities. Combining research with advocacy is essential in her research program, which builds on supporting the self-determination (including self-advocacy) of people with intellectual disabilities, and is grounded in an innovative inclusive research approach, in which people with intellectual disabilities are included in the role of researcher. Further details of her work can be found at [Disability and me blog](#), [Disability and me Facebook page](#), and you can connect with her on Twitter [@IvaStrnadova](#).



Julie Loblinzk

Julie Loblinzk, is a Self-advocacy Coordinator at Self Advocacy Sydney, Inc. She is also an Adjunct Lecturer at the University of New South Wales in Sydney, Australia. Further details of her work can be found at [Disability and me blog](#) and [Disability and me Facebook page](#).



Joanne Danker

Joanne Danker, PhD, is lecturer in Special Education in the School of Education at the University of New South Wales. She specialises in the well-being of students with developmental disabilities (i.e., autism spectrum and intellectual disabilities), inclusive and special education, and enabling the voices of individuals with disabilities in research.

Further details of her work can be found at <https://research.unsw.edu.au/people/dr-joanne-cherie-danker>



Therese M. Cumming

Therese M. Cumming, PhD, is Professor of Special Education, Academic Lead Education at the Disability Innovation Institute, and a Scientia Education Academy Fellow, at UNSW Sydney. She is Co-Chair of the Special and Inclusive Education Research Group in the School of Education at UNSW. She specialises in the use of evidence-based practices to support the learning and behaviour of students with disabilities and the use of technology to create inclusive, accessible, and engaging learning environments.

Further details of her work can be found at

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Michelle Tso

Michelle Tso, is a PhD student at the University of New South Wales. Her PhD thesis is on the peer interactions of female high school students on the autism spectrum. She is supervised by Professor Iva Strnadová, Dr Sue O'Neill and Dr Joanne Danker. Her research interests are in inclusive and special education, and especially in supporting students on the autism spectrum to have increased well-being in the school environment and beyond. She is a research assistant on projects at the University of New South Wales (School of Education, and the Disability Innovation Institute).

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For more information

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Special and Inclusive Education Research Group

Research into special and inclusive education aims to understand and respond to the needs of students with a lived experience of disability. An associated research team at UNSW – the Special and Inclusive Education Research Group (SIERG) – seeks to engage with the wider community of schools, people with disability, and service providers with the goal of improving the outcomes of people with disability at all stages of education.

SIERG membership is comprised of prominent researchers, higher degree research students, educators, and people with lived experience of disability. Much of this research is accomplished through participatory and inclusive research, action research, and community consultation.