

# Unlocking Opportunities; A Q-methodology informed examination of the ways in which adults with disabilities utilise their smartphones to assist with daily living.

## 1. Introduction

Smartphones have become a fundamental part of everyday life for a majority of Irish citizens, and they are linked with enhanced quality of life (QoL). Studies highlight that adults with disabilities (AWD) experience a reduced QoL and although assistive technology is known to enhance QoL for AWD, there is limited research on how mainstream technology like smartphones can be utilised. The study aims to extend the limited research in the area of mainstream technology and examine how smartphones can enhance the QoL of AWD in Ireland. Overall, this study aims to contribute to occupational therapy and occupational science by exploring this area and aligns with the AOTI national research agenda, which supports research from the users' perspective.

## 2. Research Aims

- ❖ Examine the varied types of smartphone users among AWD.
- ❖ Investigate the ways in which smartphones are enhancing the daily life and QoL of AWD.
- ❖ Determine specific smartphone features that can be utilised to improve autonomy, engagement, & QoL for AWD.

## 3. Research Design

- ❖ **Methodology:** Mixed-methods study informed by Q-Methodology (Stephenson, 1953).
- ❖ **Recruitment:** 12 AWD recruited through purposive and snowball sampling.
- ❖ **Data Collection:** Online Q-sort via MS Teams, followed by a semi-structured interview with each participant.
- ❖ **Data Analysis:** Factor analysis, resulting in 3 factors. Factors further interpreted through qualitative data gathered.

## 4. Results

### "Pocket Networkers"



- ❖ Communication with friends and family.
- ❖ Availing of features ie. Voice Messaging.
- ❖ Confident smartphone users.

### "Digital Organisers"



- ❖ Organisation.
- ❖ Productivity.
- ❖ Availing of features and applications such as the alarm, reminder, & notes app.

### "On-the-Go Tech Users"



- ❖ Navigation.
- ❖ Independence.
- ❖ Safety and Security.
- ❖ Information on-the-go.

## 5. Discussion

- ❖ By serving as a vital communication aid for the Pocket Networkers, it is seen that smartphones have become an essential aspect of daily life for adults with disabilities, enabling them to communicate with ease and efficiency, enhance their social interactions and ultimately, improve their overall QoL.
- ❖ The Digital Organisers use their smartphones primarily for productivity and organisational purposes. They are leveraging the power of technology to simplify their daily lives and maintain habituation in daily occupations.
- ❖ The On-the-Go Tech Users utilise smartphones to overcome barriers and challenges while out in the community. They utilise features such as the internet and google maps. By decreasing reliance on external support, smartphones can promote independence and community participation, which aligns with Schalock and colleagues' (2016) theory on the importance of promoting the QoL of AWD through increased independence and participation.

## 6. Implications

- ❖ Smartphones, can support the daily living of AWD therefore, occupational therapists should use smartphones as a viable intervention to promote independence and community participation.
- ❖ Smartphones have a diverse range of functions and can be personalised to meet the individual needs and goals of AWD.
- ❖ Occupational science could further explore how smartphones could support occupational engagement, facilitate role fulfillment, promote habituation, and enhance the overall QoL for AWD.

## 7. Conclusion

- ❖ This study examines how smartphones enhance the daily lives of AWD and identifies three types of smartphone users among them.
- ❖ The study supports the notion that smartphones can improve autonomy, engagement, and QoL for AWD by utilising features like voice messaging, reminders, notes, alarm applications and navigation features.
- ❖ However, there is a need for practical implementation and research to promote the use of smartphones as assistive devices in the daily lives of AWD.

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