

LEE LI MING
PROGRAMME IN
AGEING URBANISM

North West 911 Emergency Preparedness App

Ageing and Recreation¹

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Information and communication technologies (ICTs) offer quick access to information and are suitable for use by people of all age groups. Older adults have been adapting to the emergence and quick development of digital technologies and have been active users of digital applications (apps)² on their smartphones or other mobile devices.

Older adults use mobile devices and other ICTs for different reasons and ends. Some use it to stay in touch with family and friends or for entertainment, others use it for functional purposes such as arranging for transport or monitoring their health with the help of health apps. Whatever the reason, using a mobile device in older age can have numerous positive influences, including the improvement of health. Studies have shown that learning new skills such as using touch screen mobile devices can contribute to improving older

¹ This is an evolving database. We will be adding more examples and cases over time.

² For a case study on the virtual game app *Pokémon GO*, which gained immense popularity among older adults in Singapore, see Chang (2019).

adults' cognition (Chan, Haber, Drew and Park, 2016). Similarly, a study in Taiwan (Chiu *et al.*, 2016) found that touch screen mobile devices, especially the use of entertainment, transportation, social media, and health-related apps, have the potential to improve psychological wellbeing of older adults.

Mobile Apps and Older Adults

Older adults' use of smartphone apps has been underexplored in research. However, there is emerging research which shows that ICTs can impact their quality of life in terms of health, learning, and living. Community, financial, lifestyle, medical, and memory mobile apps can help improve older adults' health and welfare (Baldwin, Hsu, & Ching, 2015). It is therefore not surprising that in many countries, including Singapore, older adults are encouraged to learn to use smartphones and apps not only to minimise the digital divide but also to harness other benefits that the use of ICTs facilitates.

Despite the possible benefits of app usage in older age, the situation in Singapore is somewhat paradoxical. In 2018, more than 80 per cent of older Singaporeans owned a smart phone (Baharudin, 2018). Despite the widespread usage of smartphones and good familiarity with numerous mobile apps in the market, older adults in Singapore use apps relatively rarely (Visa, 2018). The government, firms and grassroots organisations therefore regularly organise workshops for older adults to learn basic digital skills and how

to use common smartphone apps such as mobile banking and social media (Aw, 2018). Teaching them about online safety and how to recognise online scams is also a big part of these workshops. Besides workshops that teach older adults how to use apps, apps are also being developed or tweaked to cater directly to older adults. For instance, in 2019, the Government Technology Agency of Singapore (GovTech) enhanced the *Moments of Life* mobile app with an Active Ageing module (GovTech, 2019). With an easy-to-use design, multiple languages offered, and bigger fonts, older adults can easily access the app and use it to stay active in their communities.

In the Smart Nation push and realisation of its vision, more Singaporeans will be tech-savvy and using mobile apps in their everyday lives, including older adults. One potentially useful and interesting app for all age groups is the North West 911 app, which is presented in this case study.

North West 911 App³

North West 911 is a new emergency preparedness mobile app that was developed by the North West Volunteers, with the support of the North West Community Development Council (CDC). The volunteers fully funded the development of the app. The aim of this initiative is to empower the community with essential knowledge to effectively respond to various emergency scenarios in Singapore and abroad. Through building their capabilities, the community would be able to respond better and even apply

³ We thank the North West Community Development Council for the materials for this case writing.

the acquired lifesaving skills in an emergency.

The app was launched on 12 February 2020 at a community event at the Bukit Panjang Community Club. The event was attended by the Singapore Minister for Education, Mr. Ong Ye Kung.

Box 1: Key features of North West 911 app

- A detailed guide to cope with 14 different emergency scenarios
- First aid guides for common conditions faced in emergencies
- An emergency bag inventory
- A location-based map to identify resources in the North West District such as polyclinics, clinics, hospitals, police stations, community centres, and civil defence shelters
- Emergency contact numbers of the 10 most visited foreign destinations
- A lightweight app
- Free to download on iOS and Android mobile devices
- The app can be used offline, except for the map and call functions



Figure 1: North West 911 app logo

Source: North West Community Development Council, Media Advisory and FAQs.

North West 911 App Objectives

The main objective of the North West 911 app is to improve the level of emergency

preparedness of residents in the North West District. This means that it can help a person to survive on their own, without the assistance of a rescuer, for a period of time after an emergency situation occurs. Furthermore, the app's objective is to provide an emergency management resource directory and to enable Singaporeans overseas to seek help when needed. In the near future, the developers' objective is to share their emergency preparedness knowledge with the wider community. The North West CDC has recently engaged teachers and students from four schools in the North West District that will embark on a "train-the-trainer" course. This course will enable them to teach lifesavers important emergency response skills.

Box 2: North West 911's concept

- 1) Accessibility to essential information
- 2) Offline resource-based app

North West 911 Content

In the app, users can access information under five separate categories: Guides, Emergency Bag, First Aid, Map, and Telephone Numbers.

Guides offer information on 14 different emergency scenarios and under each of them, users get information on how to act in the case of an emergency. For example, under *Fires*, it is explained how to act if a person is caught in a house fire. This could be useful for many older adults who stay alone and might panic during a fire outbreak.

Emergency Bag category offers practical inventories of a general emergency box

and first aid box. Photographs and descriptions of each item are available.

First Aid guides offer step-by-step instructions on how to treat 14 different injuries. Easy-to-follow instructions and photographs make it easy even for untrained people to assist in emergencies. Since a lot of accidents happen in a home environment, especially for older people (Ng, 2010), the guides are a valuable and potentially life-saving resource. For instance, falls are a leading cause of injuries among older Singaporeans (Health Promotion Board, 2015). Simple first aid guides for dislocated joints, open or closed fractures, and bleeding can help older adults or their carers tend to the injury before help arrives.

Map is an emergency resource directory for clinics, polyclinics, police stations, community centres, hospitals, and civil defense shelters. Users can see their locations via Google Maps, where locations are sorted by distance.

Finally, *Telephone Numbers* category contains contact information of emergency authorities in Singapore and 10 overseas destinations (Australia, China, Hong Kong, Indonesia, Japan, Malaysia, Philippines, South Korea, Taiwan, and Thailand).

Conclusion

Globally, older adults, carers, health professionals, and social workers have been using apps that cater to older adults' needs and help detect falls, monitor blood pressure, and reach emergency contacts. For instance, the World Health Organization released a digital app 'WHO

ICOPE Handbook App', which provides practical guidance for issues like mobility limitations, malnutrition, vision and hearing loss, cognitive decline, depressive symptoms, and social care and support (WHO, 2019). It is only a matter of time until digital apps become an essential part of older adults' everyday life.

The North West 911 app is one of such apps that can become a useful resource for Singaporeans of all ages, including older adults and their carers. Knowing how to react in emergency situations is a valuable skill, especially as the world faces crises of unprecedented scale such as the global pandemic or the bushfires in Australia in the beginning of the year. Apps like the North West 911 will play an important role in equipping citizens with knowledge and information in the future age of Singapore Smart Nation.

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