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Mobile phone communication in social support networks of older adults in Slovenia

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ABSTRACT

Mobile phones have gained an important role in the personal communication of older adults with the members of their social support networks. Research shows that older adults increasingly use the mobile phone for maintenance and development of social interactions with their family members, peers, and caregivers as providers of emotional support and social companionship. Therefore, this study explores how retired older adults in Slovenia use mobile phones as personal devices for supportive communication as well as how the characteristics of their social support networks are related to the frequency of mobile phone communication with their network members. Using ego-centered social support network data, collected on a nationwide representative sample of retired older adults in Slovenia, this study found that the composition of emotional support and of social companionship networks scarcely predicts the frequency of mobile phone communication of older adults with their network members. Conversely, according to the results, it seems that more frequent in-person and landline phone communication with network members are positively associated with mobile phone communication, suggesting that older adults extend their communication sphere with a mobile phone in their support networks. Finally, the results indicate that sociodemographic characteristics of older adults, such as age, social-economic status, and living alone, significantly determine the frequency of mobile communication with their network members, even though their magnitude varies depending on the type of social support network.
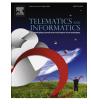
1. Introduction

Mobile phones have become the most ubiquitous information and communication technology (ICT), with an estimated 6.8 billion subscriptions for the world's population of 7.1 billion people (ITU, 2014). In contrast with personal computers, tablets, and the Internet, the adoption of mobile phones has been expansive among all population groups. For example, according to Eurobarometer statistics for 2014, the average percentage of mobile phone users in the 15 and over age group in the 28 EU member states is 92%, with 12 of the 28 EU member states having at least 95% mobile phone users in the population (European Commission, 2014a).

Thus, we have witnessed the development of insightful research in the last 15 years on various social aspects of mobile phone use and its integration in social interactions in people's everyday lives (Green and Haddon, 2009). While most of this

research has been focused on the use of mobile phones by teenagers, younger adults, and working age people—plausibly as a consequence of the fact that these user groups have represented the largest proportion of mobile phone early adopters heavily targeted by the industry (Chen et al., 2013)—noticeably less interest has been shown by scholars for other user groups and, in particular, for older adults (Hardhill and Olphert, 2012). This is somewhat surprising since official statistics show that the proportion of mobile phone users in the over-55 age group has been steadily increasing over the last decade. In fact, almost eight out of ten (79.5%) people aged 55 years and over had mobile phone access in the EU at the end of 2013, while this proportion was barely above one out of two persons (52.8%) in 2005 (European Commission, 2014b). Substantial differences, however, are still evident in mobile phone access among older adult age groups—despite the overall increase in the last decade (see Fig. 1). For example, whereas in 2013, 90.3% of people aged 55–64 owned a mobile phone, this rate falls to 81.7% for the 65–74 age group and to 55.2% for those aged over 75 in the same year.

Consequently, the limited prior literature dealing with older adults and mobile phones has been mainly focused on barriers and incentives for mobile phone use from two perspectives. On the one hand, researchers have shown interest in the predictors of the adoption of mobile devices among older adults. Accordingly, the Technology Acceptance Model (TAM) (Davis, 1989) and its variations (e.g., TAM3, UTAUT) (Venkatesh and Bala, 2008) have been applied to mobile phone adoption (e.g., Mallenius et al., 2007; Van Biljon and Renaud, 2008). Drawing on the suggestion that understanding the limitations associated with the appropriation of ICTs' specific characteristics and constraints of older adults must be considered, TAM-based models have been further extended with other variables, such as demographical, socioeconomic, and personal factors (e.g., cognitive and attitudinal) (e.g., Conci et al., 2009; Van Biljon and Renaud, 2008). Overall, the findings of this research support the suggestion that besides the core TAM variables (e.g., perceived ease of use, perceived usefulness, intention to use, and actual use), these additional characteristics of older adults may importantly condition the intensity and types of use of mobile phones and related services.

On the other hand, the second group of studies has addressed the potential usability issues of older adults with the handling of mobile devices. For example, it has been shown that potential or progressive cognitive declines, hearing and visual impairments, and a higher susceptibility for disease render the learning of mobile phone use difficult (Kurniawan, 2008). As a result, older adults are faced with usability problems related to the shape and design of a device and the complexity of mobile phone (interface) handling (Chen et al., 2013; Zajicek, 2004). Commonly, mobile phones were found to be too small and uncomfortable for holding (Nasir et al., 2008). Further, small size implies small buttons and screen size/text on the screen (Kurniawan, 2008). Consequently, usability problems with multilevel user interfaces emerge, constraining older adults to address more easily available functions in the menus (Ziefle and Bay, 2004). These issues seem to become even more pressing toward older adults' approaching smartphones, as the potential benefits associated with their use (Doughty, 2011; Joe and Demiris, 2013; Plaza et al., 2011) could be inhibited by the currently scarce possibility of adaptation of the interface to the individual needs of older users (e.g., Al-Razgan et al., 2012; Zhou et al., 2014).

In terms of needs, older adults commonly identify their mobile phone as a kind of safety device (e.g., Hardhill and Olphert, 2012; Oksman, 2006; Plaza et al., 2011), which, on one hand, fosters their independence and, on the other hand, provides inclusion with the potentially perpetual access to their social network. In fact, a consistent finding of prior research has been that older adults perceive and use the mobile phone as a personal communication device to stay in touch with family members and other persons (e.g., friends, neighbors, and caregivers) (see Section 2.1). These members of their social network provide them with emotional support and/or social companionship, which reassures older users that they have someone to rely on when dealing with everyday life occurrences and/or emergency situations.

Nonetheless, in spite of such findings, no evidence has been published until now (to our best knowledge) on how different types of social support networks and their characteristics are associated with older adults' use of mobile phones for social support exchange. It is with this limitation in mind that this study aims to theoretically and empirically examine how mobile phones are used by older adults in communication with their providers of social support and how the composition and type of support network, as well as the sociodemographic characteristics of older adults, are related to the frequency of mobile communication. In addition, drawing on previous findings that show that older adults often combine the mobile phone with landline phone communication to maintain family and social relations (Kurniawan, 2008; Fernández-Ardèvol and Arroyo Prieto, 2012; Hardhill and Olphert, 2012), this study also investigates the relation between these two technologies for communication as it relates to emotional support and social companionship networks. The data for this study was collected from a representative sample of retired older adults in Slovenia. In comparison with the EU average, Slovenia has a more accentuated trend towards aging population (Vertot, 2010) and a slightly worse accessibility and utilization of ICTs among older adults (Dolničar and Nagode, 2010). The focus on retired older adults was informed by the social gerontological approach which—in contrast with chronological age definition—argues that old age is a socially constructed category linked to the changes in people's social roles that condition their life courses, with retirement being an important turning point in old age.

The paper is structured into six sections. Section 2 presents a literature review on the uses of mobile phones by older adults for social interaction and supportive communication. The section then elaborates on the characteristics of social support networks of older adults, with the aim of understanding the possible roles of mobile communication in the exchange of different types of social support. Then, the research questions are formulated. Section 3 explains the methodology and describes the nationwide representative survey data used to empirically study the research questions. The results are presented in Section 4 and Section 5 presents the discussion of the results and the implications they suggest, including a comment on the limitations of this study and possible issues which might be addressed in future work. Finally, in Section 6, the conclusive remarks are drawn.