Landline and mobile phone communication in social companionship networks of older adults: An empirical investigation in Slovenia

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A B S T R A C T

Although the number of older adults with access to landline and mobile phones has grown in recent years, little research exists that investigates how older adults use and potentially combine the two technologies for communication with the members of their social support networks. Therefore, this study explored how the composition of older adults' social companionship networks is related to the frequency of landline and mobile phone communication with their network members. In addition, the study examined the association between landline and mobile phone communication as well as their relationship with in-person communication in such networks. The survey data were gathered using an ego-centered social support approach in a nationwide representative sample of retired older adults in Slovenia. The results of multiple regression analyses revealed that the composition of a social companionship network better predicts the frequency of landline rather than mobile phone communication of older adults with their network members. The non-significant relationship between the frequency of landline and mobile phone communication suggested that the two technologies very likely have a different role in the maintenance of social companionship networks. The study also found a difference between the importance of control variables related to the socio-demographic characteristics of older adults for the frequency of landline and mobile phone communication. While age, education, and living alone significantly predicted the frequency of mobile communication with older adults' network members, significant predictors of their landline communication included gender and health impairments.

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1. Introduction

Technologically mediated social interactions have become an increasingly important aspect of how older adults manage relationships with members of their personal networks. While in the past the landline phone was the primary communication device on which older adults could rely for remotely accessing various forms of supportive resources such as emotional support and social companionship, today, the mobile phone and internet-based communication services (e.g., email, skype, social network sites) have been adding to the personal communication environment of older adults [1].

In particular, mobile phones seem to have the social affordances that have most appropriately accommodated the needs of older adults. For example, the recent Pew Internet Report notes that 77% of older adults (defined as those aged 65 or older) in the U.S. have a mobile phone, which represents an 8 percentage-point growth in comparison with the results from 2012 [1]. A similar trend can be observed in the European Union (EU), where the percentage of older adults (defined as those aged 55 or older) who use a mobile phone has grown from 52.8% in 2005 to 79.5% in 2013 [2]. In addition, the same EU data show that the proportion of EU citizens aged 55 years and above who use only a mobile phone (and do not have a landline phone in the household) has more than doubled (from 7.3% to 16.3%) between 2005 and 2013 (see Fig. 1) [2]. Another interesting observation obtained from this longitudinal data refers to the proportion of older adults using landline and mobile phones. In fact, in eight years (from 2005 to 2013), the share increased by 17.7 percentage points (from 45.5% to 63.2%); a trend that has been also observed in the U.S. [3].

The widespread availability of landline and mobile phones among older adults raises several substantial questions as to how

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older adults use these two devices for communication with their social ties. Although we know that scholars have extensively explored the increasing embeddedness of personal communication in complex media environments [4,5], research has tended to ignore older adults and their specifics in terms of landline and mobile phone use. Notwithstanding a few important exceptions [6–9] that provide insights into the factors and practices of older adults which shape the (potential) differences in their landline and mobile phone usage, to the best of our knowledge, virtually no research exists that directly investigates the relationship between the composition of the social support networks of older adults and the frequency of landline and mobile phone contact with their network members.

This question is of some interest, as the prior literature indicates that people use landline and mobile phones for different social purposes during personal communication [5], providing mixed conclusions about the role of landline and mobile phones in communication within networks. On the one hand, research shows that both technologies serve older adults as a means of communication in emergency cases and provide a feeling of security [10–13], which could lead us to think that both technologies are associated with similar needs and practices. On the other hand, evidence suggests that they could have a different role in the management of personal networks. For example, Fernández-Ardèvol and Arroyo Prieto [7] noted a cost-control strategy of older adults where a mobile phone is used only to call another mobile phone, whereas a landline phone is used only to call another landline phone. This might imply that older adults rely on landline and mobile phones to access different personal relationships. Moreover, the observed contrast might also become even more prominent as the mobile phone comes to be used and understood not only as an emergency tool, but also as a socializing device [8,14] — a role that older adults have typically associated with in-person communication and landline phones in the past [11,15].

When considering different purposes of communication through landline and mobile phones, the distinction between the feelings of being connected through frequent interpersonal communication and the feelings of being safe is relevant also in the context of different modes of e-care delivery, being an important source of social support offered by informal and formal carers to older adults. Since mobile phones and landline phones are essential components of many assistive technologies that enable care and health services [16], it is important to (re)consider the distinctive role of each of them in terms of the frequency and purposes of contacting different network members. While several ICT-supported services for practical support to care delivery have been recently developed, less attention has been given to the development of smart solutions for enhancing social interaction among older adults and family members as their informal carers. However, prior literature indicates that the most common expectations and needs older adults might pursue from assistive technologies are not just supporting independence and improving security and safety but also (or in particular) enhancing socializing and reducing social isolation [17]. In order to develop assistive technologies, focused on the implementation of communication channels between older adults and their social companions, which could work as an alternative to standard communication devices like landline and mobile phones, understanding how landline and mobile phones are supporting social interaction within older adults' social companionship networks seems to be a needed step [18].

Bearing such considerations in mind, the first research question this study aims to address is to what extent retired older adults use landline and mobile phones in combination with in-person communication to connect with the members of their social companionship networks. Afterwards, the relationship between the composition of social companionship networks and the frequency of landline and mobile phone conversations with network members is investigated with the second research question. In addition, the implications of an intense appropriation of mobile phone communication for landline and in-person communication are examined. In other words, with the third research question this study aims to examine whether in-person communication, landline and mobile phones are accommodating each other in older adults' personal communication or whether a "compensatory pattern", as Quadrello et al. [9] refer to it, can be observed.

In what follows, we first provide an informative overview of the fairly limited literature, dealing with the role of landline and mobile phones in the social support communication of older adults (Section 2.1), which leads to the formulation of the research questions (Section 2.2). Next, we present the procedure and methods used to collect the survey data on a nationwide representative sample of retired older adults in Slovenia (Section 3). In the Section 4, the results of the empirical analysis are presented. The Section 5 examines the results and potential implications of our findings with a brief assessment of their limitations. Finally, in the Section 6, a short summary of the central findings is provided.

2. Literature review

2.1. Older adults and the supportive role of landline and mobile phones

Even though landline phones represent the most diffused technology for personal communication in households in the past century [19], and landline phone communication has been shown to be an important component of interactional possibilities for all age groups [20], past research on landline phones and older adults is scarce [21]. Among the few investigations that focus on older adults is the study by Haddon and Silverstone [22], which explored the historical and socio-cultural aspects of domestication of the landline phone by older adults in the UK. In particular, their qualitative research unveiled the central role of landline phone conversations in older adults' contact with their personal networks. For example, for older adults who lived alone and/or had recently lost their partner, the landline phone represented a convenient and practical vessel through which they access emotional support from loved ones, alleviating the potential sense of loneliness and social isolation. In addition, for older adults, the supportive aspect of landline phone communication becomes vital when they are facing health and mobility impairments [11] or in cases of family and labor status changes, such as family (geographical) dispersal and retirement [22].

According to Haddon and Silverstone [22], such circumstances can generate new patterns of use for landline phones that are not necessarily limited to emotional support, but can also include socializing, and the coordination of everyday activities. Specifically, young older adults and those in the stage of active retirement who use landline phones more frequently than old older adults do [11], rely on landline phones to coordinate social meetings with friends, activities related to hobbies, and/or simply to stay in contact with ex-work colleagues. In fact, while studying the interpersonal communication motives of older adults using landline phones, Holladay et al. [15] showed that those older adults who were more socially active, more frequently communicated on the phone to fulfill the inclusion motive. This partly explains why more socially active older adults—depending on the characteristics of their social companions (e.g., geographical proximity, health conditions, and living status)—might even report a higher number of landline phone calls after than before retirement. In addition, the socializing role of the landline phone