Digital inequality and intergenerational solidarity: The role of social support in proxy internet use

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Abstract

The digital divide research has recently documented a set of new practices related to people's internet use that put the binary division between internet users and non-users under question. Especially, among the elderly population a considerably large group of proxy internet users has been identified who do not use the internet by themselves, but rather ask members of their personal networks to do things online for them. As proxy internet users rely mainly on their children and/or grandchildren, who play the role of warm experts, this paper suggests that the notion of intergenerational solidarity might be a sound conceptual basis to understand the under-researched relationship between social support and digital inequality. On the empirical level, this paper explores how the availability and lack of different types of social networks and their characteristics is associated with proxy use and non-use of internet. The results of multivariate analysis on survey data from a nation-wide representative sample show that between emotional and socializing support only the latter is associated with proxy internet use: internet non-users with larger socializing networks and stronger intergenerational support (e.g., a higher proportion of (grand)children) are more likely to be proxy internet users. Findings also indicate that younger internet non-users with higher education and children are more inclined to be proxy internet users.

Keywords

Proxy internet use, digital divide, social support network, intergenerational solidarity, digital inequality

Background

Over the past 20 years academic research about digital inequality has provided a comprehensively documented theoretical and empirical insight into the material and immaterial factors associated with access to and use of internet-based services. Especially, studies drawing on the digital divide perspective have elaborated various theoretical and methodological approaches that have helped us to better understand what socio-economic (e.g., age, education, income, employment, gender), psychological (e.g., lack of motivation, fear and anxiety, lack of confidence, negative attitudes) and personal characteristics (e.g., competences, skills) of individuals determine whether they are internet users or non-users.

Although several of these models and approaches have been exposed to criticism and consequently have been further developed in order to become more comprehensive and theoretically grounded (Tsatsou, 2011), this paper addresses two important aspects that have been almost completely overlooked and to our best knowledge not holistically included in the studies of digital inequalities. On the one hand, in the digital divide research *internet use* is generally defined as *personal use* of the internet, meaning that an internet user is a person, who is using the internet by him/herself. Considering the recent evidence from the UK (Dutton, Helsper, & Gerber, 2008; Dutton & Blank, 2011; Ofcom, 2011) and the United States (Horrigan, 2010) such a definition of internet use(rs) disregards different forms of indirect internet use and thus seems to be conceptually narrow. In fact, scholars have identified a considerably large group of *proxy internet users* (Reisdorf, 2011; Selwyn, Gorard, & Furlong, 2005), who do not use the internet by themselves, but due to various reasons rather ask members of their personal networks to do things online for them (e.g., send an email, get information, or make a (cheaper) purchase from the internet). Proxy internet use can refer to various online activities, ranging from merely entertaining or strictly instrumental (e.g., benefiting economically from booking holidays or paying taxes) to empowering (e.g., access to health information, social support (e.g., Zhao, 2009)). When considering the potential of proxy internet use

for overcoming the digital inequalities, the main question that should be raised is what are the implications (i.e., the (un)intended consequences and benefits) of this specific usage practice for internet non- users. If the impact of the internet is understood: "… in terms which reflect the extent to which its use enables individuals to live their day-to-day lives, experience their everyday pleasures and to *participate* and be part of society" (Selwyn, Gorard, & Furlong, 2005, p.23), proxy internet use has a potential to enable internet non-users to become engaged in various online activities and to (through mediation of an experienced user) use internet in ways that enhance their social capital. For example, proxy users can through the knowledge and skills of persons, who help them to access the information on the internet, become aware and explore the opportunities of the internet that would otherwise be out of their reach.

Therefore, proxy internet use seems to be closely associated with the notion of social support (networks). Surprisingly, the digital divide literature has rarely considered how the availability of social support as an important aspect of people's social capital might be involved into the adoption of the internet. Generally, when it comes to the investigation of individual's socio-economic conditions that determine their internet (non)use the digital divide research has been limited to a more or less inclusive set of socio-demographic characteristics and individual's economic resources. However, according to various authors (e.g., Hargittai 2003; Selwyn, 2004; van Dijk, 2006) social support networks play an important role as they provide non-users with cognitive, material and social resources in the appropriation of digital technologies (van Dijk, 2006). Generally, the availability of such resources is dependent upon the presence of *warm experts* (Bakardjieva, 2005) in support networks, who help non- and inexperienced users in the first moves toward the use of technology, which are perceived as complex and difficult to take up (Selwyn, 2005). However, the domestication literature also suggests that the support of warm experts could also lead to proxy internet use, since non-users can rely on "expert-help", not seeing the point in using the internet by themselves (Bakardjieva, 2005; Selwyn et al., 2005).

This is often the case in parent-child or, more generally, in intergenerational relationships (Wyatt, Henwood, Hart, & Smith, 2005). In this context, the notion of intergenerational solidarity could provide us with a suitable conceptual framework to understand the support provided for the proxy internet use. One of possible conceptual models to observe this is Bengston and Roberts' (1991) model of intergenerational solidarity. Within the model six dimensions of solidarity are distinguished, one of them being functional solidarity (i.e., exchange of resources and services). Help with the access to the information on the internet is therefore one such form of exchange, which has however not been included in research on solidarity. Additionally, if we want to observe the influences on exchange of support the theoretical model of Syzdlik (2008) is useful, as it defines the relation between giver and receiver of support within the structure of opportunities, needs, family structure and cultural-contextual arrangements. As proxy internet use typically involves informal and occasional learning processes (Reisdorf, Axelsson & Söderholm, 2012; Selwyn et al., 2005) it can be studied also within the framework of Lave's (2009) theories of situated everyday practice.

Research design

The aim of this paper is to contribute to the current debate about proxy internet use through social networks and, in particular, to understand the potential of intergenerational cooperation in overcoming digital inequalities as well as how the availability and lack of emotional support and socializing personal networks as well as their characteristics is associated with proxy use and non-use of internet. The empirical analysis is based on nation-wide survey, carried out on a representative sample of 602 Slovenians (77 of them reported to be proxy internet users) in December 2009. Proxy internet use was measured with standard survey questions (see Dutton et al., 2009; Dutton and Blank, 2011), whereas information about personal networks was collected with the egocentered network approach using adapted name generators for emotional (Burt, 1984) and socializing support (Van der Poel, 1993). The paper seeks to explore the following research questions: (1) How the size of social support networks is associated with proxy internet use? (2) How the composition of social support networks in terms of presence of (grand)children and younger people is associated with proxy internet use? (3) Is there any

difference between types of social support networks (emotional vs. socializing networks) and proxy internet use? (4) How the personal characteristics of individuals (such as gender, age, education, marital status, having children, household size) interact with the structural characteristics (e.g., size and composition) of their social support networks in terms of proxy internet use?

Results

To answer the four research questions a series of binary logistic regressions was run on a subsample of 177 respondents, who were internet non-users, with the proxy internet use as a dependent variable, measuring whether internet non-users ask members of their personal networks to do things online for them (e.g., send an email, get information, or make a purchase from the internet). The results indicate that neither size nor composition of emotional support networks is associated with the proxy internet use. Conversely, the size and the presence of (grand)children in internet non-users' socializing support networks is positively correlated with proxy internet use. Internet non-users with larger socializing networks and a higher proportion of (grand)children in them are more likely to be proxy internet users. In addition, the observed association between the composition of socializing networks and proxy internet use remains stable after controlling for the selected socio-economics characteristics of internet non-users. Nevertheless, the control for socio-demographic variables reveals some interesting patterns: age, education and having children are significantly correlated with proxy internet use, whereas gender and marital status are not.

Conclusion

The findings of this study seem to suggest that the notion of intergenerational solidarity might give us a valuable insight into the aspects of digital inequality that are related to proxy internet use. By showing that the presence of (grand)children in internet non-users' socializing support networks increases the probability of proxy internet use, it might be concluded that a form of functional solidarity exists in socializing networks between proxy internet users and their (grand)children. Such kind of solidarity, based on provision of support in accessing the resources available on the internet, could be beneficial for proxy users as it represents a stable vessel through which they can get to know and explore the opportunities of the internet. Due to the informal nature of functional solidarity, it could also become a basis for a new strategy that will mitigate the disadvantages of digital inclusion policies that turned out to be ineffective as involving only formal educational structures (Marien & Van Audenhove, 2010). Moreover, the findings confirm that as in the case of other dimensions of digital inequality and of proxy internet use in particular (e.g., Dutton et al., 2009; Dutton and Blank, 2011), proxy use is shaped by people's socio-economic characteristics: age, education, having children and household structure seem to correlate with proxy internet use. However, a different conclusion emerges in terms of intergenerational solidarity. Unlike in our case, prior literature on other types of functional solidarity (emotional, material support, etc.) has shown that gender is highly relevant, and that support is more commonly provided by women, and usually also addresses women to a larger extent (Lawton et al., 1994; Silverstein et al., 1995; Silverstein & Bengston, 1997; Szydlik, 2008). This suggests that in the context of digital inequality research the notion of international solidarity requires additional conceptual and empirical elaboration.

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