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Aging: The Two Faces of Janus in Digital Inclusion?

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Does aging present the two faces of Janus when it comes to digital inclusion, influencing older people's digital inclusion in some cases, but not in others? This article presents qualitative research and finds that older people—namely, men and women at least 65 years of age—are highly selective in the digital domain, and diversity marks their attitudes toward and uses and critiques of digital technologies. Thus, older people's digital inclusion is marked by intragenerational diversity, in which a complex interplay of structural/external and individual/internal factors exists and aging plays a context- and life-experience–driven role. Thus, this article supports a psychosocial approach that views age identity as formed not only by biology, but also on the basis of sociocultural and other systemic factors that are integrated and adapted and create varying differences at the level of the individual. The article closes with theoretical and empirical recommendations for future research on the role of aging in older people's digital inclusion.

Keywords: activity theory, aging, digital inclusion, disengagement theory, focus groups, intragenerational diversity

Is aging the two faces of Janus,[1] influencing digital inclusion in some cases, but not in others? This is a timely question as we are increasingly faced with rapid developments not only in the digital field, but also in the demographics and social construction of aging.

Specifically, the World Health Organization (2018) notes that the world's population is aging more quickly than ever before, and the number of people 60 years of age and over will increase from 12% to 22% of the global population by 2050. At the same time, it is suggested that *ageism*—"discrimination on the basis of a single demographic characteristic akin to sexism or racism" (Collins, 2014, p. 2)—is increasing, thus causing adverse consequences for older people's social inclusion (World Health Organization, n.d.). Increasing ageism supports social gerontologists' argument that age consists of both an ontological dimension (captured by biological age) and a socially constructed dimension (shaped by processes of social construction), leading to the elderly stereotype (Cuddy, Norton, & Fiske, 2005). Increasing ageism also reinforces voices that argue for the need to address older people's social exclusion and discrimination in contemporary societies (e.g., Clarke & Warren, 2007).

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[1] Janus "is usually a two-faced god since he looks to the future and the past" (Crystalinks, n.d., para. 1).

Social discrimination is coupled with biological aging and its associated biomedical and life needs, creating a pressing mix of challenges for older people. In this vein, research has argued that factors such as functional and cognitive impairment, chronic disease, a shrinking social network, and a low level of physical activity challenge older people's ability to live independently (Perissinotto, Stijacic Cenzer, & Covinsky, 2012). Such a complex setting has resulted in societies facing the challenge of how to address the risk of older people's social exclusion. At the same time, the pervasive presence of digital technology in all layers of the social fabric poses a question about the positive role that digital inclusion can play in the lives of older people at risk of social exclusion.

Regarding digital technology, early research on the digital divide considered aging to be a factor of digital exclusion and stressed the existence of a generation gap that separates the younger Net generation or digital natives (Prensky, 2001; Tapscott, 1998) from the digital laggers. However, social gerontologists have since revisited the generational digital divide thesis, placing greater emphasis on the psychological aspects and subjective experiences of people's age identities (Olphert & Damodaran, 2013) and assigning antithetical attributes to older people, such as eternally youthful and frail needy seniors (Carney & Gray, 2015). This has paved the way for recent digital inclusion research to acknowledge that aging needs to be seen in combination with other parameters to better understand older people's digital inclusion or exclusion and, relatedly, to question the labeling of the younger generation as digital natives (Helsper & Eynon, 2010; Robinson, 2014). From the perspective of teens, in particular, boyd (2014) has argued that the term *digital natives* offers "an inaccurate portrait of young people as uniformly prepared for the digital era and literacy . . . ignoring the assumed level of privilege required to be 'native'" (p. 179).

Nevertheless, recent scholarship acknowledges that more exploration is required into the factors that hold older adults back in a digital society (Hargittai, Piper, & Morris, 2019; Hunsaker & Hargittai, 2018; Schreurs, Quan-Haase, & Martin, 2017). In attempting to account for older people's digital inclusion or exclusion, namely, to explain their active or limited adoption of digital technologies and the consequent benefits or risks derived from it, existing research lacks a psychosocial approach. Such an approach understands age identity as not only biologically shaped, but also formed by sociocultural and other systemic factors that are integrated and adapted and that create varying differences at the level of the individual. In this article, I argue that this type of approach can enable digital inclusion research to explore the processes and experiences of aging within the context of a complex interplay of structural/external and individual/internal parameters with regard to older people's positioning in the digital realm. I develop this argument by qualitatively exploring the following research questions:

RQ1: Does aging influence older people's digital inclusion?

RQ2a: If so, how and in relation to what aspects of their digital inclusion?

RQ2b: If not, why and what other parameters affect their digital inclusion?

RQ3: What can be argued about the contribution of the psychosocial approach to a better understanding of older people's digital inclusion?

In what follows, theories of aging and existing research on aging and digital inclusion are reviewed. Then, the methodology and findings of the study are presented. Finally, the article concludes with a discussion of the findings through both theoretical and empirical lenses.

Literature Review

Theorizing Aging and Ageism

Since the 1950s, social gerontology has generated social theories of aging that primarily (although not exclusively, e.g., clinical/medical approaches) take a psychological and/or sociological viewpoint, adopting a sheer separation between individual-driven and systemic or external forces of older people's social positioning.

In the 1950s, Cumming and Henry (1961) coined disengagement theory, arguing that the third age has a social contract to disengage from certain roles (e.g., employment) in return for being exempted from social responsibilities. This theory considers it both normal and inevitable for people to reduce their activity and seek more passive roles as they age, suggesting the existence of a "role-less role" for the elderly (Burgess, 1960, p. 20). Critics of this theory argue that it discourages interventions for helping the elderly, removes individual agency, and pressures people into disengagement against their will (Hillier & Barrow, 2015). In line with digital inclusion research that stresses the role of context and culture in people's digital inclusion (Tsatsou, 2011a, 2011b), critics also emphasize that disengagement theory approaches biological aging as inevitable and overlooks the role of contextual factors in the process of aging (Achenbaum & Bengtson, 1994).

As an alternative to disengagement theory, Havighurst and Albrecht (1953) proposed activity theory, stressing the importance of agency and individualism in the third age. This theory suggests that continued activity is important for older people's life satisfaction, thus valuing the continuation of activity alongside good health and social engagement of older people as markers of successful aging (Rowe & Kahn, 1987). However, the theory's value to the study of older people's digital inclusion is also quite limited because it overlooks the role that structural inequalities play in the aging experience and ignores the fact that some older people may not desire to engage in new challenges (Achenbaum, 2009). Another consideration for digital inclusion research is the critique that activity theory lacks strong evidence with regard to the causal relationship between an active lifestyle and successful aging while overlooking social and physical limitations on activity resources and opportunities that the elderly can take advantage of (Birren & Schroots, 2001).

Disengagement and activity theories—alongside critical gerontology's humanistic and interpretive dimensions of aging in the 1980s—were challenged by Baltes and Baltes' (1990) selective optimization with compensation theory. Baltes and Baltes' theory attempted to bridge the wide gap between individual-driven and systemic or external forces of the social positioning of the elderly. It did so by arguing that the elderly cope with structural constraints through a process of selection, optimization, and compensation, adjusting activities and roles when structural and individual limitations present themselves and choosing the activities and roles that are most satisfying (i.e., selective optimization). Studies adopting this theory aim to provide a balanced

psychosocial approach, in which individual factors are considered alongside structural ones, suggesting that the influence of social change on aging is intertwined with individual factors (Quick & Moen, 1998).

Critics argue that selective optimization with compensation theory proposes reactive rather than proactive coping mechanisms for successful aging (Ouwehand, de Ridder, & Bensing, 2007). However, balanced approaches of the kind that this theory proposes have increasingly been adopted in conceptualizations of successful aging, particularly concerning the study of how older adults adapt to physiological barriers to successful aging, such as disability and memory decline (Hahn & Lachman, 2014). This brings us to the key conceptualizations and analytic models of successful aging.

Conceptualizations of Successful Aging

Although there has been little agreement about what constitutes successful aging (Cosco, Prina, Perales, Stephan, & Brayne, 2014), an increasing number of scholars acknowledge that conceptualizations of successful aging need to include both objective and subjective facets that go beyond physiological health and account for psychosocial factors, such as individual resources, engagement, and self-awareness (Cosco, Prina, Perales, Stephan, & Brayne, 2013).

More than two decades ago, Rowe and Kahn (1997) argued that succe ssful aging is a combination of high cognitive and physical functioning, low disease and disability risks, and active social engagement. Despite its extensive impact, Rowe and Kahn's conceptualization has been criticized for setting unrealistically high expectations for physical fitness and against chronic illness, leading to binary outcomes and disregarding the possibility of successful aging even if high standards of physiological health are not met (Cosco et al., 2014; Whitley, Benzeval, & Popham, 2018; Young, Frick, & Phelan, 2009).

In response to Rowe and Kahn (1997), Young and associates (2009) suggest that a high self-assessed quality of life is possible during aging, even with illness and disability, when psychological and social mechanisms can be invoked and employed by the aged person. Thus, Young and colleagues developed a multidimensional model that consists of three overlapping dimensions of successful aging: (a) physiological health (e.g., absence of impairments); (b) psychological health, including cognitive functioning, emotional vitality, and absence of geriatric depression; and (c) the sociological dimension, including social engagement and spirituality (i.e., a sense of greater purpose or fitting into a bigger picture). Young and associates argue for gradations of successful aging (very successful, somewhat successful, etc.) and suggest that an older person could be a high achiever in any of the three dimensions independently, without success in one dimension necessarily leading to success in another.

Manierre's (2019) testing of Young and colleagues' (2009) multidimensional model confirms the value of not overstating the importance of physical health in successful aging at the expense of other dimensions and of providing an allowance for highly expected changes to health and physiology during aging. Other recent evaluations of multiple dimensions of successful aging (Kleineidam et al., 2019) have also confirmed the need for a well-balanced conceptualization of successful aging, challenging the previous emphasis on physiological aspects of aging.

Digital Inclusion of Older People

Moving onto successful aging in the digital domain, although existing evidence shows that the digital divide between older and younger generations is shrinking (Anderson & Perrin, 2017), those bridging the gap are unlikely to be in their mid-70s or older. The literature has also discussed a participation divide among older people, with access to digital technologies being less of an issue than the participation disparities that older people encounter in creative and beneficial digital activities, such as content creation and sharing (Hargittai & Walejko, 2008; McCosker et al., 2018).

Specifically, research has examined aging as a possible barrier to older people's digital inclusion and has argued that the younger generation is the Net generation and that young people are digital natives (Prensky, 2001; Tapscott, 1998). On the one hand, digital inclusion research presents age as a demographic element of one's identity and a biomedical and life barrier to digital inclusion (Friemel, 2016; Matthews, Nazroo, & Marshall, 2019). On the other hand, the research has accounted for the multifaceted role of aging, referring to older people's apparent lack of benefit, motivation, knowledge, or access, as well as the barriers of cost, fear of hardware becoming outdated, and physical limitations (Wagner, Hassanein, & Head, 2010). From this perspective, digital inclusion researchers adopt critiques of broader social (and other) contexts of aging and claims of critical gerontologists about older people's deprivation of power and assets within a broader social milieu (Hillier & Barrow, 2015).

At the same time, research increasingly emphasizes psychological barriers, such as older people's lack of confidence or fear of using digital technologies (Schreurs et al., 2017; Vroman, Arthanat, & Lysack, 2015). In this context, technology adoption studies have found that older people are concerned about the dehumanizing effects of technology, such as surveillance and behavior monitoring, identity theft, hacking, and fraudulent behavior (Peek et al., 2014). The digital inclusion literature also highlights older people's concerns around technology-related security issues (Friemel, 2016), while stressing the literacy limitations that can make digital technologies complicated for older people to use (Friemel, 2016). Regarding literacy, in particular, older people are presented as facing "learner-ability" and "user-ability" issues, often committing more user errors, requiring a greater amount of assistance, or needing additional time to accomplish assigned tasks (Lee, Chen, and Hewitt, 2011, p. 1232). At the same time, it has been suggested that literacy constraints are reinforced by technosystemic factors, such as technological diversity, and thus older people face steeper learning curves that necessitate additional assistance (Schreurs et al., 2017). On this basis, it is acknowledged that, although older people tend to recognize the benefit of staying in touch with family via digital technology, the cost of digital learning and literacy enhancement outweighs such benefits (Schreurs et al., 2017). Thus, older adults are hesitant to try new technologies or consider them unsuitable for their age (Hargittai & Dobransky, 2017).

On the other hand, technology adoption research argues that older people are less motivated to use technology when trying to cope with decline and vulnerability (Peek et al., 2014). They look more favorably on technology after a loss or when technology assists them with activities that they cannot otherwise perform (Davenport, Mann, & Lutz, 2012). Such research suggests that older people will evaluate technology-based solutions more positively when stressed about unmet needs, when they have greater resilience personally, and when persuaded by outside messaging and past experiences (Golant, 2017).

Hence, it can be concluded that older people's assessment of ease of technology use is not the most important factor with regard to their digital inclusion (Kramer, 2014).

Regarding diversity within the elderly population, digital inclusion research has only recently begun to examine older people's perceptions, emotions, and attitudes (Olphert & Damodaran, 2013; Tsatsou, Youngs, & Watt, 2017). Such an examination acknowledges that older people are far from a homogeneous group, and they have different factors driving their diverse digital engagement (Tsatsou et al., 2017; van Deursen & Helsper, 2015). Also, such research suggests that age considerations in relation to digital technology are subjective and relational, viewing age as one of many aspects of a person's identity that matters for digital inclusion (Helsper & Eynon, 2010). However, existing research groups the factors of older people's digital inclusion into systemic or individual factors without examining the dynamics or demonstrating the contribution of intragenerational diversity in the digital domain. In this article, I argue that this gap can be filled by exploring older people's behaviors, attitudes, and experiences in the digital domain using a psychosocial approach that is close to selective optimization with compensation theory. Such an approach views age identity not only as biological, but also as socially constructed and variously integrated and adapted at the level of the individual.

To develop this argument, the methodology and findings of a focus group study with older people are presented in the remainder of the article.

Method

To understand older people's subjective meanings and social practices in relation to their digital inclusion and aging, this study employed qualitative methodological tools that help examine how social processes, discourses, or relationships among people work and the meanings they generate (Mason, 2002).

More specifically, the study conducted focus groups with older people, capitalizing on group dynamics, which are important for exploring how social and cultural knowledge, opinions, and meanings are produced (Tonkiss, 2018). Focus groups also provide a platform for people from marginalized groups to share views, be supportive, and learn from one another (Denzin & Lincoln, 2006). This was ensured by organizing participant recruitment and the focus group discussions themselves with the help of the University of the Third Age (u3a).[2] Specifically, the u3a enabled the study to access eligible participants and tailor the conduct of the focus group (e.g., venue, facilities, focus group moderator) to the participants' needs and characteristics.

As shown in Table 1, two focus groups were held in Leicester in the United Kingdom, with six participants in the first group and nine in the second, all of whom were members of the Leicester u3a. The sample consisted of men and women 65 years of age and older, with the oldest participant an 87-year-old man. In addition, the sample covered all gradations of digital inclusion, thus including advanced and limited users, nonusers who refused to use one or more digital technologies, and those deprived of one or more

[2] The University of the Third Age (n.d.) is "a UK-wide movement which brings together people, who are no longer in full-time employment, to develop their interests and continue their learning in a friendly and informal environment" (para. 6).

aspects of digital inclusion. Although u3a members are usually older people who support active aging, there is no evidence that they engage more with digital technologies than other older people. Nevertheless, their educational and socioeconomic status, especially in relation to their views and experiences of digital technologies, were parameters that the study considered throughout data collection and analysis, as shown in the next section where the findings are presented.

Table 1. Sample.

Name	Age (years)	Gender	Education
		Group 1	
David	67	Male	Secondary
Nicki	72	Female	Graduate
Emma	68	Female	Postgraduate
Olivia	65	Female	Graduate
Sophia	73	Female	Secondary
William	65	Male	College
		Group 2	
Steve	68	Male	Postgraduate
Andy	70	Male	Graduate
Patricia	65	Female	Graduate
Eleanor	75	Female	Graduate
Nadia	77	Female	Postgraduate
Janet	77	Female	College
Isabella	71	Female	Diploma
Ellen	71	Female	Not available
John	87	Male	Graduate

Note. Pseudonyms are assigned to participants.

All focus group discussions were audio recorded, while a moderator assistant took notes of the body language and group dynamics not captured by the audio. The first group discussion lasted two hours 36 minutes, and the second was only slightly shorter, at two hours 12 minutes. Although the predefined broad themes proved relevant to the actual focus group discussions, the participants added their own themes and discourses concerning their perceptions and experiences of digital technologies and the related benefits, barriers, and plans.

The focus group discussions were transcribed verbatim and underwent thematic analysis using the software package NVivo 11. Thematic analysis was suitable as it allows the categorization of the features of large data sets and their in-depth analysis (Braun & Clarke, 2006). In line with the nature of this study, an inductive approach was adopted for identifying and coding key themes in the data. Thus, the first step in the analysis involved the careful reading of the transcripts to inform the development of the initial coding hierarchy (i.e., hierarchy of codes for the themes to undergo analysis). This hierarchy was revisited throughout coding, with the themes resulting from the predefined areas of focus group discussion expanded on the basis of the specific discourses in the data. The analysis tackled the predefined themes alongside the subthemes and discourses that emerged from the data.

Findings

As shown in Figure 1, the themes in the focus group discussions ranged from tackling participants' life status in general to capturing all main facets of their digital inclusion, such as their attitudes toward digital media and their experiences, benefits, and critiques of digital technologies. The discussions also touched on participants' nonuse or limited use of digital media and plans for future use. The participants put forward their discourses within a context of a series of miscellaneous discourses on digital technologies, thus making certain recommendations on digital technologies in general and for themselves in particular.

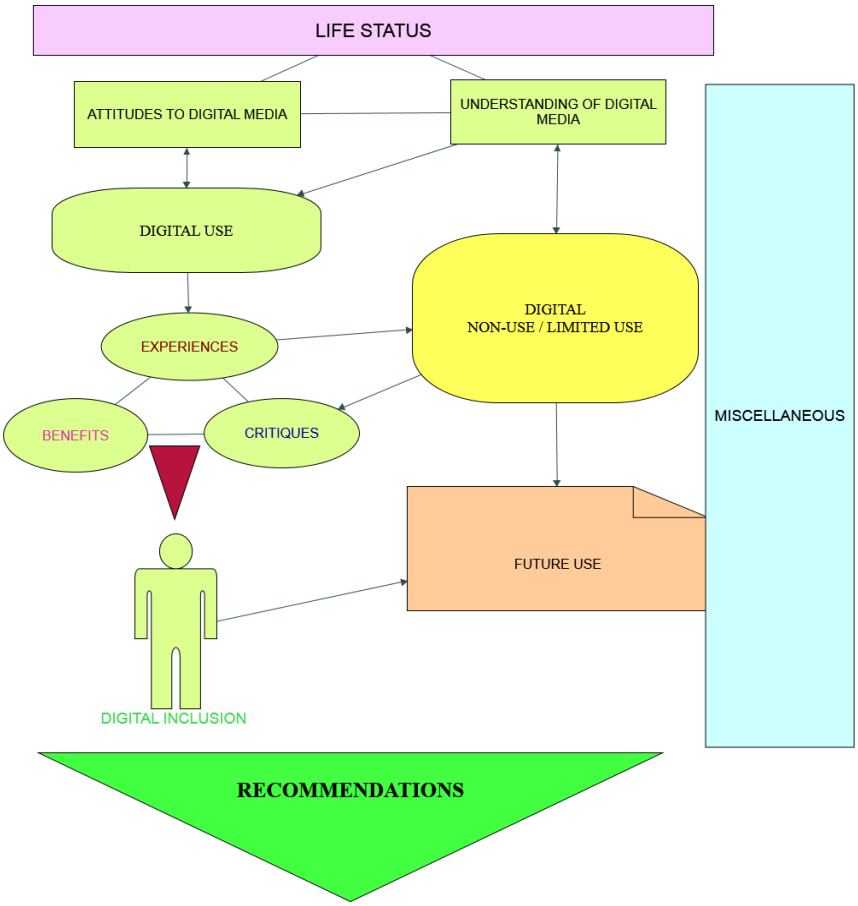

Figure 1. Thematic scope of the focus groups.

Aging and Life Satisfaction

The vast majority of participants expressed a high degree of life satisfaction as they were happy not to have to work anymore and were busy offering service to society in different ways (e.g., volunteering and charity work). Although they commented that they remained active and often had insufficient time, their current time limitations were strikingly more positive compared with when they were younger. Thus,

they characterized retirement as a wonderful time and compared it with their earlier life when they had jobs that they did not enjoy, a great deal of financial responsibilities, and related anxieties. Most participants claimed that retirement came as a sort of liberation, offering more time to enjoy life and the opportunity to try new activities and do things for themselves:

> When I retired, which was some years ago now, I decided that I wanted to do some things which I never had the opportunity to do in my working life. . . . This is how I ended up [now retired] dealing with young criminals and young offenders. (Emma, Group 1)

Objecting to Cumming and Henry's (1961) disengagement theory, the participants were against a social contract of withdrawal and argued that in the first couple of years of retirement, they missed the everyday structure and experienced an intense fear that they would not be necessary to society any longer. In this sense, retirement was felt as a factor of social exclusion and, challenging activity theory's (Havighurst & Albrecht, 1953) optimistic account of aging, some participants confided that retirement added elements of vulnerability and social exclusion to their lives:

> The first 18 months to two years of retirement were a bit rocky because all of a sudden, I was not. . . . I did not have a job. Having a monthly income is important, and you must have a job, and it took a little while to realize . . . not feel ashamed to be out of work . . . unemployed. (Ellen, Group 2)

These discourses demonstrate that the participants were alert about the possibility of disengagement and withdrawal during aging, but—unlike disengagement theory—they suggested that such a possibility is a risk, not a choice, imposed by society and does not constitute a social contract that could benefit them. These discourses place older people's digital inclusion patterns and experiences in broader life contexts where—as shown in the analysis later on—both individual and systemic parameters matter.

Attitudes to Digital Technology

Regarding their positioning in the digital realm, the participants acknowledged that not all older people have the same views of digital technology, and they stressed the significant role of selectiveness, painting a picture of nonstandard/fixed intragenerational diversity.

As demonstrated in the hierarchy graph (see Figure 2)[3], the participants were mostly selective of digital technologies while also being clear about why they were using some technologies, but not others. Some even talked about a minimalist approach to technology, which suggests the use of only those technologies and services important to them as individuals. From this perspective, Emma (Group 1) stated that it was "part of my conscious decision that I only use things [technologies] that are absolutely essential."

[3] Hierarchy graphs visually depict the spatial prevalence of discourses assigned to relevant codes (i.e., themes). The size of each box indicates the prevalence of each discourse in the data space. The color choice of each box is random and simply helps the reader separate one box/discourse from another.

In the same group, other participants—even those self-perceived as technologically savvy—argued that they chose technologies that suited them and rejected others:

> And the digital media that I choose to use or not use, I am basically deciding what I feel about them . . . but there are some technologies which I regard as—not as a waste of time because they are very useful in some respects—but not being suited to me, uhm . . . one of those would be Facebook, for example. (David, Group 1)

Figure 2. Older people's attitudes to digital technology. The discourses presented in the figure are the following: On the subtheme "dismissiveness versus enthusiasm": (a) selective of digital media, (b) enthused by digital media, (c) dismissive of digital media. On the subtheme "positive versus negative attitude": (a) positive traits, phenomena, and influences; (b) negative traits, phenomena, and influences; (c) a mix of positive and negative traits, phenomena, and influences. On the subtheme "degree of importance": (a) necessary for them and their lives, (b) important for them and their lives, (c) not important for them and their lives.

Such discourses stress the prominent role of individual preferences and subjective criteria, revisiting existing literature on dismissiveness or hesitation as a dominant attitude of older people toward digital technology (e.g., Hargittai & Dobransky, 2017; Tsatsou et al., 2017; Wagner et al., 2010).

On the basis of selectiveness, the participants articulated a range of views on digital technologies, demonstrating the presence of an intragenerational diversity that involved diverse individual experiences and points of view in the context of broader and diverse systems and life conditions. For instance, a vigorous debate took place in Group 2 between those who were fanatical supporters of technology and those—mostly

female members of the group[4]—who declared their annoyance that the digital tends to replace traditional ways of doing mundane tasks:

> Isabella: I like to send children cards, and I hope and know that they like getting them, and it would not be the same if I just wrote that message on an e-mail because they like the experience of actually having to read through the cards.
>
> Steve: I send cards now with music [electronically].
>
> Isabella [interrupts]: It does not have to be the only way. I am prepared to accept you . . . we are about to say what is right and what is wrong, and we shouldn't be. They're both right and wrong in some respects.

Such divergent views, and especially participants' references to traditional ways of doing things without technology, also demonstrate the underlying role of aging in the illustrated selectiveness and intragenerational diversity, with aging represented by the participants not as a biological process, but as an accumulation of life experiences and perceptions over time, dependent on past contextual conditions and life circumstances. In this regard, although the prevalent attitude of selectiveness appeared to discursively support participants' individual preferences and decisions, one should question the extent to which such preferences and decisions are dissociated from the broader sociocultural milieu(s) of different times and geographies within which individuals shape their personality affordances and constraints. The importance of past systems of living and associated life experiences, (social and other) norms, and regularities was also stressed in the words of participants who compared the role of modern technology with past habits and related expectations. For instance, Nadia (Group 2) stated, "We need to have diversity [not just technology to find information and learn] and maintain the traditional ways as well." Nicki (Group 1) also said,

> In a way, it [technology] spoils things, does it not? In the old days, with a camera, you used to take the film to the developer, and it was pretty exciting when you went to pick them up, was it not?

This context- and life-experience–driven role of aging was also one of the ideas that the participants' critiques of digital technology shed light on.

Critiques of Digital Technology

As shown in Figure 3, "Other critiques" (16 occurrences[5]) was the most popular category of criticisms mentioned by participants. This demonstrates that critiques ranged significantly in the focus group discussions, confirming the presence of intragenerational diversity in participants' positioning in the digital realm.

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[4] However, participant discourses on attitudes to technology refute the idea that gender-related differences or inequalities play a role.

[5] All categories of critique were generated from the participants' discourses. The "other critiques" category contains multiple participants' discourses that were not very specific or covered many different criticisms in one.

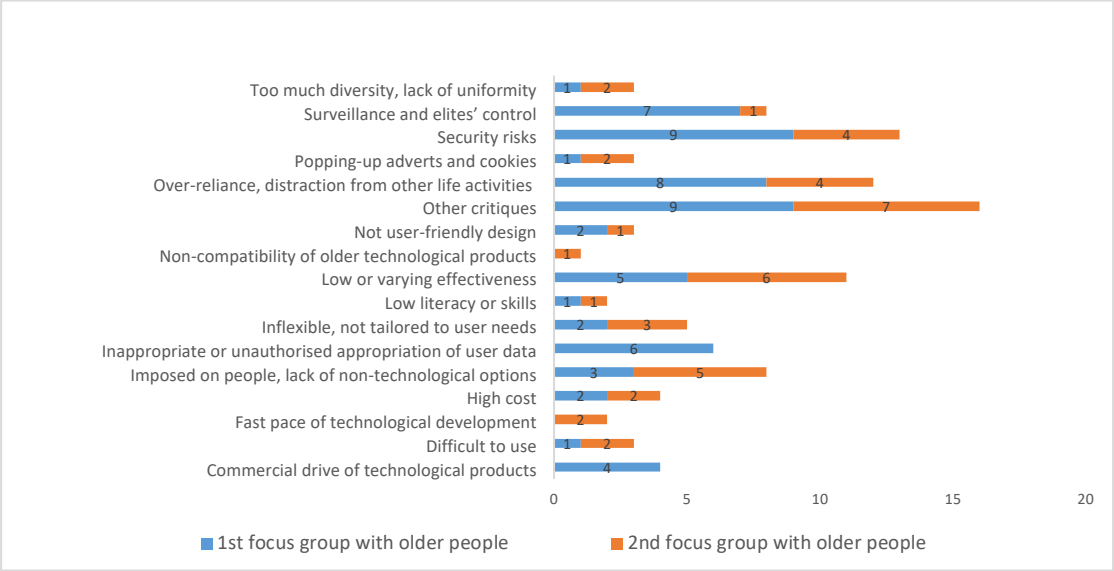

Figure 3. Older people's critiques of digital technology. The bar numbers are the occurrences of each critique in each focus group.

Regarding specific categories of critique,[6] Figure 3 shows that the participants were concerned about online security (13 occurrences), associating security risks with their concerns over the inappropriate use of online user data (six occurrences), and surveillance and elites' control (eight occurrences). For instance, in Group 1, some participants referred to data security, hacking, and surveillance, and expressed their concerns about technology creating a Big Brother society. While articulating such concerns, the context- and life-experience–driven role of aging was demonstrated in their extensive discussions of how their past experiences as children and young people within certain sociopolitical and ideological contexts fueled their concerns during aging. For example, Emma (Group 1) brought up memories from her traumatic experiences as a child in the former communist regime of Hungary to explain her suspicion about Internet surveillance:

> When I was about eight [in Hungary], 4 o'clock in the morning there was a knock on the door, and they ran through our flat and threw lots of things, and we had very little, simply because some of the neighbors said something, which was not even provable. . . . Can you imagine this with the Internet, where you can actually prove it? That is my background, and this is why I am wholeheartedly against surveillance because it is your freedom.

Such discourses support the literature on older people's concerns about technology-related security issues (Friemel, 2016), but also draw attention to their wide-ranging life experiences and related structural and external parameters. At the same time, critiques of this kind involved extensive debates among the participants, as some were dismissive of security fears, arguing that no additional security risks are invoked

[6] Although technical issues were of concern to the participants, being linked with the literacy barrier in their digital inclusion, they were not the primary determinant of their experiences in the digital domain.

by technology. For instance, in Group 1, Nicki opposed David's and Emma's concerns about the possibility of the improper political use of their online data in the future:

> David: If I say something political in one of my e-mails, or I get to visit a Labor party site—let's say—then I do not want some future fascist government to say "you did that on the Labor party site" and easily prove it.
>
> Nicki: So what? The majority of people do not worry; there is so much stuff on it [the Internet]. Supposedly, you get somebody who says "personally, my party is" . . . and if a fascist party gets in and looks what I have written up there, I am damned for it, but it is not just gonna be me, it is gonna be millions of us, is it not? They are not gonna be able to. . . .
>
> David: We are not gonna make it easy for them [laughs].
>
> Emma: You [Nicki] are far too optimistic about what is doable.

Hence, although security risks were a major concern, they did not hold the same importance for all participants. All in all, participants' critical discourses confirm a picture of intragenerational diversity and highlight that such diversity is largely caused by broader (past) sociocultural structures and associated life experiences that form different predispositions and inclinations in the course of aging.

Digital Use, Barriers to Use, and Reasons for Nonuse

Regarding practices with digital technologies, the participants presented digital use as outfacing and mostly serving the development of new hobbies and activities alongside easing everyday tasks. They also articulated diverse accounts of activities during digital use, confirming existing research on the variety of older people's digital engagement (e.g., van Deursen & Helsper, 2015). Thus, they engaged in an extensive debate on whether certain activities, such as customer services, reading activities, and social networking, should be technologically mediated or not, with the wide range of their preferences and activities suggesting the considerable and complex role of past life contexts and individual experiences in their digital practices:

> I am not interested in fake friends. I like to meet my friends face to face, out of chance, no phones on. To me, it is an unreal world. The young people see it as part of their world; I see it as an add-on to my real world. My real world is my friends, my family . . . the computer place . . . I absolutely loathe and detest it, and so do most of the people I know, older people; the younger ones love it. (Nicki, Group 1)
>
> I can go to the library, and do occasionally, if I want to look something up on the Internet, but I am more likely to go to the library and find a book that would tell me the piece of information that I want. . . . You go to do online banking, you go to do online shopping, you go to do online everything. . . . We do away with local banks and local post offices if people buy everything on Amazon. All the bookshops are closing, and I think all these things are worth preserving. (Nadia, Group 2)

Regarding barriers to their digital use, the participants suggested skills and knowledge gaps as the main barriers. Whereas biological aging per se was not presented as a prominent barrier, some participants debated whether past experiences and living contexts—that shape the ongoing conditions of aging—play a role in literacy barriers to older people's digital inclusion: Nadia (Group 2) said, "Do not forget that not everybody retired has become familiar with computers, Internet, and the protocols around it." Steve (Group 2) countered, "Five years ago, I would have agreed with you . . . even the people approaching retirement have been using computers for probably 10 years and the Internet for at least the same time."

Participant discourses also confirmed existing literature (e.g., Friemel, 2016; Schreurs et al., 2017) on the continuing role of aging-associated, structural/external barriers to older people's literacy and the skills necessary for their digital inclusion:

> My father-in-law says to me that he cannot get through passwords. And he has this computer, he is 84. . . . I mean, I am just saying his age is perhaps from a different time and makes it harder to accept new technology. Besides that, he often cannot get through the password stage for getting into things. (William, Group 1)

> To me, the main barrier is that of support and information. If you want to go into something new . . . and I know it is not the same thing, but I wanted to find out about Twitter, and I couldn't find anybody who was on Twitter, not anybody. So, I just went on it and just had a go and followed a few people, and they were interesting. (Patricia, Group 2)

At the same time, in departing from the discussion of barriers, the participants reflected on the reasons they do not use one or more digital technologies and related services. They specifically emphasized their lack of desire or need and their negative attitudes toward specific features of technology, amid other reasons for nonuse, confirming existing research on the range of factors that influence older people's digital nonuse (e.g., van Deursen & Helsper, 2015). Indicative, here, were William's discourses on his lack of desire to use Facebook, David's decision not to use Google because of the risk of surveillance, and Ellen's discourse on features of technological development and her decision not to use Windows 10.

Such discourses not only confirm participants' selectiveness toward technology, but also echo some of their critiques of digital technology. As noted above, their critiques mostly derived from structural/external parameters (e.g., security risks and surveillance, fast technological change for the sake of change) and were associated with past life experiences and contexts of living that coshape frameworks and conditions of aging. As a result, the participants' discourses demonstrate that individual preferences and choices are in a complex interplay with external factors in driving critiques of technology and associated needs, expectations, and predispositions during aging.

In this respect, the participants contributed a nuanced picture that enriches how aging and its role in digital inclusion are traditionally understood by both social theories of aging (e.g., disengagement and activity theories) and digital inclusion research. This is examined further in the following discussion.

Discussion

On the whole, the participant discourses challenge disengagement and activity theories of aging and are more supportive of selective optimization with compensation theory.

The participants presented retirement as a positive life choice that relieves them of non-enjoyable lifestyles and jobs of the past and adds to their life satisfaction. Although such points of view are in stark contrast with disengagement theory's view of aging as a time of nonactivity and low life satisfaction (Cumming & Henry, 1961), the participants also challenged activity theory (Havighurst & Albrecht, 1953). They did so by not losing sight of the risks of social disengagement and withdrawal, arguing that such risks are imposed by society and are not their own choice. Furthermore, they demonstrated activity theory's lack of insight into the role of social context, suggesting that societal affordances of aging (e.g., retirement) and its related provisions pave the way to a lifestyle tailored to the individual. Tailored lifestyle is essential to successful aging and supports Young and colleagues' (2009) multidimensional model of successful aging.

Thus, the participants appear to cope with the risk of social disengagement and withdrawal through selecting activities and roles that help them form a tailored lifestyle and offer them satisfying life experiences. This approach to aging accords with Baltes and Baltes' (1990) selective optimization with compensation theory, and it is also reflected in the participants' attitudes toward and experiences in the digital domain. Specifically, in addressing the first research question ("Does aging influence older people's digital inclusion?"), the participants' differences in attitudes, critiques, and practices in the digital realm highlight the existence of diversity within this age group. At the same time, although the participants did not make extensive references to the role of aging as a biological process—when they explained and narrated their attitudes to and critiques of digital technologies, their experienced literacy barrier, and their reasons for nonuse of digital technology—they provided a series of discourses on past life experiences and contexts of living that have collectively shaped aging frameworks and conditions. As such, their discourses challenge the existing literature that views age as a demographic element of one's identity and thus a biomedical barrier to older people's digital inclusion (Friemel, 2016; Matthews et al., 2019). The participant discourses also question accounts that emphasize the adverse role of age-related factors in older people's digital use, such as the age suitability of technology and physical limitations (Hargittai & Dobransky, 2017; Wagner et al., 2010, p. 874). On the contrary, such discourses add to arguments that older people are far from a homogeneous group and that age considerations in relation to digital technology are subjective and relational (Helsper & Eynon, 2010; Olphert & Damodaran, 2013; Tsatsou et al., 2017; van Deursen & Helsper, 2015), illustrating the need to view age identity not only as biological, but also as socially constructed and variously integrated and adapted at the level of the individual.

In this regard, the study found evidence on intragenerational diversity in the digital domain in answering Research Questions 2a ("If so, how, and in relation to what aspects of their digital inclusion?") and 2b ("If not, why, and what other parameters affect their digital inclusion?"). Specifically, the focus group discourses demonstrate the existence of intragenerational diversity in older people's digital inclusion, formed by the interplay of internal/individual and structural/external parameters and suggesting the context- and life-experience–driven role of aging. As for the role of internal/individual parameters, selectiveness at the individual level appears to be at the core of the participants' attitudes to digital technologies, influencing

their decisions about and practices with digital technologies and largely explaining intragenerational diversity. This emphasis on selectiveness challenges the existing literature (Hargittai & Dobransky, 2017; van Deursen & Helsper, 2015; Wagner et al., 2010), which argues that dismissiveness is the main attitude of older people toward digital technology and thus the major cause of their digital exclusion. Selectiveness also challenges literature referring to digital technology as a single monolithic category that older people either accept or dismiss in its entirety (e.g., Vroman et al., 2015).

The prominent role of selectiveness was also showcased in the participants' patterns of digital use, which varied significantly because they are driven by individual criteria, preferences, and decision making. Equally, the participants confirmed the usefulness of activity-enhancing approaches to older people's digital inclusion as they suggested that their use of digital technology is activity-oriented and enables them to develop new hobbies and ease everyday tasks. Such discourses go beyond the biomedical approach that views the usefulness of digital technology for older people solely as assistive technologies and for alleviating the burden of care associated with aging (Turner, 2012).

However, selectiveness at the individual level cannot be dissociated from the sociocultural and political milieus, which form one's life affordances and constraints. In particular, the participants pointed to broader sociocultural and political environments and past experiences in such environments as driving their critiques of digital technology in relation to their predispositions, inclinations, and desires during aging—hence their critiques of security risks, user data exploitation, and surveillance in the digital domain. Moreover, in explaining the primary reasons for not using one or more pieces of digital technology, participants referred extensively not only to an obvious lack of desire at the individual level, but also to externally imposed technology traits and related security and other risks (which were noted in their critiques). In this regard, the participants portrayed a complex picture of the role of both individual and systemic forces in what the literature calls the participation divide and the associated disparities that older people encounter in creative digital activities, such as content creation and sharing (Hargittai & Walejko, 2008; McCosker et al., 2018).

Hence, in addressing the third research question ("What can be argued about the contribution of the psychosocial approach to a better understanding of older people's digital inclusion?"), the focus group discourses demonstrate that the psychosocial approach can shed light on the existence of non-fixated and highly fluid intragenerational (not just cross-generational) diversity in the digital domain, where the complex and varying interplay of individual and sociostructural parameters drives older people's decisions on whether or not to use digital technologies and services. Thus, the focus group discourses add to existing research on the factors influencing older people's digital nonuse, which has not shed enough light on the nature of such factors and their related dynamics (e.g., van Deursen & Helsper, 2015). Moreover, the focus group discourses challenge the way aging and its role in digital inclusion are traditionally understood by social theories of aging (e.g., disengagement and activity theories) on the one hand and by digital inclusion research on the other (e.g., Friemel, 2016; Matthews et al., 2019; Schreurs et al., 2017; Vroman et al., 2015; Wagner et al., 2010, p. 874). For these reasons, the present study argues for a more systematic exploration of the sole and joint dynamics among sociocultural, biological, and psychological/individual-level parameters to develop an understanding of the agency–structure relationship within and across age categories and in relation to older people's digital inclusion. Similarly, from a theoretical perspective, the

conduct of conceptually rich and informed research on older people's digital inclusion requires a theoretical model that places the concept of intragenerational diversity at its core. This will further develop understanding of the interplay of psychosocial factors and how age identity is formed based not only on biology, but also on sociocultural and other systemic factors that are integrated and adapted and have various degrees of influence at the level of the individual.

In terms of limitations, this study was a small-scale one, and its findings do not exhaustively address the research questions. Nevertheless, the sample of 15 participants openly and dialectically identified key areas of focus within the context of rather lengthy focus group discussions, went deeper into the drivers of older people's discourses, and identified older people's insights that require further research. In this sense, the findings of this study can inform future research that will explore further, and in more depth, the role of aging and associated psychosocial complexities in older people's digital inclusion.

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