E-Leisure and Older Adults
Findings from an International Exploratory Study

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Abstract

Although benefits of leisure and benefits of technology use overlap, how older adults use and perceive of technology use during their leisure time is not well understood. The purpose of this study was to explore e-leisure among older adults. This international exploratory study included 37 rural and urban-dwelling participants from Canada and the United Kingdom. Focus groups were facilitated to better understand participants' perceptions of technology in later life. Data were analyzed using open and focused coding. Participants reported accessing leisure through technology, such as keeping in touch, engaging in games and hobbies, and supplementing offline leisure. Participants reported several drawbacks, including difficulty getting assistance from other people, challenges using and updating software, concerns related to privacy and security, and lack of confidence and interest. While technology appears to facilitate engagement in leisure for older adults, educational opportunities may be required to overcome the drawbacks of technology use. Implications for therapeutic recreation are considered.

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Introduction

Leisure in later life is associated with improved health, decreased risk of falls, increased psychological well-being, and decreased negative affect (Dupuis, 2008; Nimrod, 2010). Technology use may facilitate leisure engagement among older adults, who comprise the fastest growing group of technology users (Perrin & Duggan, 2015). As technology use increases among older adults, there is a greater need to understand its influence on their leisure. However, older adults are often excluded from research exploring technology use (Ihm & Hsieh, 2015; Musselwhite, Marston, & Freeman, 2016). In particular, older adults have been excluded from technology use related to leisure (Hebblethwaite, 2017). As such, we set out to better understand technology use and non-use among older adults. In this article, we focus on findings related to e-leisure and their implications for Therapeutic Recreation (TR) practice.

E-leisure refers to the use of technology in leisure, such as online games, education, and shopping (Nimrod & Adoni, 2012). Older adults are drawing on technology for these purposes, and are using cell phones, the Internet, laptops, and desktop computers (Marston, Kroll, Fink, de Rosario, & Gschwind, 2016; Smith, 2014; Zickuhr, 2011; Zickuhr & Madden, 2012). The benefits of technology use overlap with benefits of leisure, such as development of social networks, increased social support, improved mood, reduced stress, decreased negative affect, and reductions in loneliness (Allaire et al., 2013; Hogeboom, McDermott, Perrin, Osman, & Bell-Ellison, 2010; Nimrod & Adoni, 2012).

The digital divide, which separates technology users and non-users (Mitzner et al., 2010), may limit older adults' engagement in e-leisure. This separation may be due to lack of opportunity for some older adults, whereas for others it may be due to lack of interest (Yu, Ellison, McCammon, & Langda, 2016). Older age has been found to be a predictor of lack of access to technology (Ihm & Hsieh, 2015), thus older adults may not be accessing the same benefits of e-leisure that younger people experience. Financial constraints and lack of experience, particularly among older adults who did not use computers in the workplace, can lead to digital exclusion (Barnard, Bradley, Hodgson, & Lloyd, 2013). Furthermore, little attention has been paid specifically to older adults and technology use in the leisure literature (Hebblethwaite, 2017; Leonard & Hebblethewaite, 2017; for exceptions see Kim & Preis, 2016; Nimrod, 2011). Participants engaging in TR programs may benefit from e-leisure in several ways. E-leisure may supplement current and previous leisure interests and introduce new opportunities for leisure engagement among older adults. Kunstler and Stavola Daly (2010) argue that TR professionals should be prepared to utilize technology within their practice, highlighting several benefits, such as improved memory, friendship development, and intergenerational engagement. Furthermore, technology may facilitate therapeutic activities such as journaling, reminiscing, and learning. Additionally, recent TR research suggests that older adults desire learning opportunities as well as online discussion forums (Leonard & Hebblethwaite, 2017). As such, the purpose of this article is to explore e-leisure opportunities, challenges, and behaviors among participants of the Technology in Later Life study, an international exploratory study analyzing perceptions of technology among older adults in Canada and the United Kingdom.

Literature Review

Older Adults and Technology Use

Technology use among older adults has grown rapidly over the past several years (Wagner, Hassanein, & Head, 2010). Communication, social support, leisure, entertainment, and information seeking are the most common uses of technology among older adults (Wagner et al., 2010). Additionally, older adults use cellular phones for personal calls, voicemail, and emergencies, while computers are used most commonly for email, searching the web, and shopping (Gitlow, 2014). Furthermore, home computers are being used to enhance communication between generations as technology can serve as a common interest among family members (Cotten, Anderson, & McCullough, 2013; Lindsay, Smith, & Bellaby, 2007). For example, Ivan and Hebblethwaite (2016) explored Facebook use among grandmothers in Romania and Canada. Facebook enabled engagement in the lives of children and grandchildren through sharing of photos, especially when family members were geographically dispersed. However, differences still remain with regard to technology use between older and younger people. For younger generations, technology may play an important role in self-definition (McMillan & Morrison, 2006), but this may not be the case for older adults, who use and perceive technology differently than younger people (Rama, 2001). For example, older adults may prefer landline use over other technologies (Ivan & Hebblethwaite, 2016).

Wagner et al. (2010) found that increased age tends to be associated with negative attitudes toward technology. Some older adults perceive technology as inconvenient, particularly in terms of expense, interruptions (e.g., being interrupted by a cell phone ringing), and requiring physical and/or mental effort, such as having to carry devices, or having to learn how to use technology (Mitzner et al., 2010). Older adults may avoid engaging in technology if they believe that it is not beneficial or if there is lack of interest, knowledge, and access (Leonard & Hebblethwaite, 2017; Wagner et al., 2010). Concerns about security of data and health risks related to technology use have also been reported (Mitzner et al., 2010). Difficulty navigating programs and difficulties with vision and fine motor skills may also inhibit technology use (Gitlow, 2014). Older adults may find it difficult to manipulate devices due to changes in dexterity, and may have trouble reading instructions due to small print (Barnard et al., 2013). For example, Barnard et al. reported that older adults had difficulty turning a device on because they could not find, either visually or through touch, the power button.

Despite these barriers, technology use appears to have several benefits for older adults, such as entertainment, altruism, building relationships, and coping with stress associated with aging (Nimrod, 2013). Older adults have fun when interacting with others online through use of humour and word play (Nimrod, 2010). Technology use enables older adults to stay connected on a daily basis with their loved ones (Ivan & Hebblethwaite, 2016). Those with positive attitudes toward technology appreciate its usefulness with regard to communication, administration, and research (Mitzner et al., 2010). Frequent users find comfort and positive feelings in technology use, such as feeling calm, having a positive outlook, and satisfaction with their activities (Vroman, Arthanat, & Lysack, 2015).

E-leisure and Older Adults

As noted previously, e-leisure refers to leisure time, activity, or behaviour that occurs online (Nimrod & Adoni, 2012). Nimrod (2014) argues that e-leisure can occur in two ways—as a tool for learning and planning for leisure, and as a tool for engaging directly in leisure. Nimrod and Adoni (2012) highlighted several dimensions of this particular type of leisure engagement. The first dimension is synchronicity. Unlike offline leisure, e-leisure may include asynchronous interactions (e.g., participating in a chat room) and synchronous interactions (e.g., having a conversation on Skype). Nimrod and Adoni argue that engaging in asynchronous activities may increase control over time and space. The second dimension is interactivity, which is characterized by interactions between the user and the system and/or by interactions between two or more users. Interactivity is "associated with the freedom of choice, the sense of control that results from such freedom, and the significance attributed to an activity" (Nimrod & Adoni, 2012, p. 42). The third dimension relates to anonymity. E-leisure allows for greater anonymity than does offline leisure. The final dimension is participation or immersion in virtual online worlds. Nimrod and Adoni (2012) highlight two ways that the virtual online world can interact with offline leisure: integration and immersion. Integration occurs when users combine their online and offline activities and comprises a continuum; on one end of the continuum, individuals go online to plan and improve offline leisure. On the other end, technology use changes leisure engagement (e.g., meeting people with similar interests online and then in person). Immersion occurs when one becomes engaged in alternate reality. This can range from watching videos to creating content to share online (Nimrod & Adoni, 2012).

As older adults increasingly use technology in their daily lives, they are also engaging in e-leisure. Furthermore, older adults are using technology to support their offline leisure pursuits, such as doing research prior to going on a trip, or learning more about a particular topic of interest. Lifshitz, Nimrod, and Bachner (2016) explored the impact of technology use on well-being among older adults residing in Israel. Their findings revealed that although leisure was reported as the least common function of technology use, it had the greatest impact on psychological well-being. They argue that their findings may be due, in part, to reduced opportunities to access the Internet and limited skill (Lifshitz et al., 2016) and call for increased opportunities for older adults to develop the skills required to increase engagement in e-leisure.

Researchers have explored specific types of e-leisure. Nimrod's (2010) netnography of online communities for older adults revealed that these communities enabled enjoyment. Indeed, online communities appear to provide opportunities for having fun through use of humour and play (Nimrod, 2011). E-leisure allows for varying levels of engagement, ranging from frequent or regular participation in online communities to more passive entertainment derived from reading or observing what was occurring in online discussions rather than actively taking part (Nimrod, 2011). Participants appreciated opportunities to meet new people who had similar interests as well as the accessibility of online communities, which helped to decrease social isolation. Online communities allowed participants to explore their offline leisure interests as well as learn information about aging and its associated challenges (Nimrod, 2014).

In addition to online discussion groups, research suggests that older adults enjoy using technology for playing games. Interactive computer games can positively impact

physical and cognitive well-being, including increased muscle strength and balance, and reductions in depression (Bleakley et al., 2015). For example, in Marston's (2013) study of flow among older adults playing sport-based video games (e.g., golf, tennis) participants expressed positive emotions and enjoyment while playing.

While e-leisure is an emerging area of aging research, several questions remain unanswered. The purpose of this article is to explore perceptions of and engagement in e-leisure among older adults based on qualitative findings of our study. Research questions include: 1. How do older adults perceive technology and its impact on their leisure?, 2. What types of e-leisure do older adults engage in?, and 3. What challenges do older adults face in engaging in e-leisure? In the following section we describe our methods.

Methods

We adopted a mixed-methods approach for this international exploratory study, utilizing an 80-item online survey as well as focus groups. Since discussion of e-leisure emerged largely from the focus groups, for the purposes of this article, we focus specifically on the qualitative data.

Participants

Thirty-seven participants were recruited from seniors' centres, adult education centres, and public places (e.g., public library notice board, cafes). Invitations were sent through email, and posters were displayed in these locations. Interested participants contacted the researchers by telephone or email to express their interest. Once they agreed to participate, participants received a link to the survey. Following collection of survey data, focus groups were scheduled at a time and place convenient to study participants.

Six focus groups were conducted in rural and urban locations in both Canada and the UK. In Canada, 16 older adults participated. Two focus groups were conducted in a rural site and one focus group was conducted in an urban site. In the UK, we recruited 21 participants. Two focus groups were conducted in an urban location, while one was located in a rural site. Overall, 20 participants resided in rural locations and 17 participants resided in urban locations. The majority of the participants were female (67.6%) and retired (86.5%), which is typical for research involvement with older people utilizing qualitative in-depth methodology (e.g., Reichstadt, Sengupta, Depp, Palinkas, & Jeste, 2010). Participants ranged in age from 67-89, with a mean age of 77. All participants owned a mobile device, such as a cell phone, smart phone, or tablet, 89.2% reported owning a computer, and 94.3% reported having access to the Internet at home.

Data Collection and Analysis

Focus group discussions were a minimum duration of 60 minutes and were digitally audio-recorded and transcribed. Questions explored benefits and challenges of technology use, including introduction to technology, access to and use of technology (e.g., devices, software/programs), collecting and sharing of information (e.g., photographs, health information), learning how to use technology, and privacy concerns.

Drawing on Charmaz's (2014) guidelines for grounded theory data analysis, we utilized initial and focused coding and constant comparison. Initial coding refers to

the process of engaging with the data and defining it so that the data can be understood (Charmaz, 2014). In order to do this, we first read the transcripts several times to get a sense of the data. Then, we read through each manuscript and carefully considered what each statement said about technology use and older adults, identifying emergent codes, which we made note of in the margins of the manuscripts. Examples of codes included "safety," "commerce," and "crafting." The codes were vetted amongst members of the research team; we compared codes across all manuscripts and explored discrepancies and similarities amongst the codes and their definitions, arriving at an agreed upon set of codes. In focused coding, we looked at our most significant codes that emerged in initial coding and created themes and subthemes based on similarities and differences amongst the codes. For example, emergent codes such as "reading," "crafting," and "researching" were grouped together under the subtheme of "engaging in games and hobbies." Engaging in games and hobbies was then grouped under the theme of "accessing leisure through technology." While Charmaz's guidelines provided structure to the data analysis, it was not our intent to create a new theory through this exploratory project.

The study received approval from each team member's University Research Ethics Board. Participants provided informed consent before each focus group and signed confidentiality agreements in order to protect confidentiality of all focus group members.

Findings

Two major themes emerged with regard to e-leisure. Participants reported *accessing leisure through technology*. They also discussed *drawbacks of using technology*, which may have inhibited engagement in e-leisure.

Accessing Leisure Through Technology

Participants reported engaging in a variety of e-leisure activities. Technology was used to access leisure through *keeping in touch* with family and friends, *engaging in games and hobbies*, and *supplementing offline leisure*.

Keeping in touch. Technology was viewed as essential to maintaining contact with family and friends. As one participant noted:

> I have to say I could not live without a computer and a laptop, very essential tools in my life really in terms of social life and very much my involvement in voluntary organisations, which lots of reports, lots of communication. (participant living in urban UK)

Rather than the traditional phone call or handwritten letter, participants used technology to connect quickly. Email, video-conferencing, and mobile/cellular phones (for voice and text messages) were utilized for these purposes and were considered more cost effective and efficient than traditional ways of communicating. For example, one participant commented that email was vital for connection with a sibling:

> … every day we would have conversations on email, "How are you this morning?" You'd write a little while and then, "Oh, I'm going out to the pictures," . . . It was almost like being on the telephone. You would have

seven or eight emails a day and say how you were feeling and what you'd been doing and what the family was doing. Well, previous to that we used to send each other letters. Every week there would be a letter and it would be a continuation of the letter that you'd just received. It was absolutely wonderful waiting for the postman to come, but emails were even better. (participant living in urban UK)

With the inconvenience of using regular mail removed, another was more motivated to maintain contact with others:

I am much more connected. I was awful for writing letters and telephoning people like relatives back in Nova Scotia and that. And I am way more connected now with it because it is easy to zip off a quick email and get one back and then answer that and so on. (participant living in rural Canada)

In addition to email, video conferencing tools facilitated communication with family members all over the world and allowed for real-time connections with children and grandchildren. One participant explained the value of using Skype for sharing her leisure with her grandchildren.

I go on Facebook and I go on Skype with my daughter in Australia and I do research things. Last night I was talking to my grandson, who's seven. I was telling him about the exciting things that I'd done in my life, like I've been dog sledding. I Googled dog sledding and this picture of a dog sled, so he understood what I'd done, and skiing and all these things. (participant living in urban UK)

Similarly, an urban-dwelling Canadian participant used technology to keep in touch with family, stating, "I don't know what I would do without my technological things. I would be rather lonely." Her comments highlight the opportunity that e-leisure provides for maintaining contact with family members who may be far away.

Beyond keeping in touch with family and friends, technology facilitated communication for volunteer purposes. Participants sent emails to committee members and maintained records for organizations:

I am in about eight or nine different community groups and I am on the Executive of quite a few of them. So I tend to be a keeper of information and people say, "Well do you remember what we did last year?" And I can say, "Just hold I'll look it up and we'll check it." And I can go and find what we need to do. (participant living in rural Canada)

It is apparent that technology was used for *keeping in touch* with family and friends for participants in urban and rural settlements as well as those residing in the United Kingdom and Canada. In this way, technology was valued for facilitating maintenance of social networks and support. In addition to keeping in touch, participants used technology to engage in games, hobbies, and other types of leisure.

Engaging in games and hobbies. Technology was useful for a range of leisure activities that participants previously engaged in offline, such as reading, watching videos, and shopping:

> I read books in the library on my iPad and I watch videos on Netflix…I think I spend a lot of time on my iPad, a lot of time, like looking up things, just on Google and ordering things, ordering books or Lego sets… (participant living in urban Canada)

Participants played games as well, including solitaire, Scrabble, Sudoku, and jigsaw puzzles. "I play Solitaire a lot. It's my therapy before going to bed about one or two o'clock in the morning (Laughter) when I've had enough of reading papers and reports and things." (participant living in urban UK). One participant was motivated to play computer games to improve memory:

> And then on the iPad I play this stupid thing called Pearl's Peril. I keep thinking, "Why am I doing this?" But it is a repetition of remembering and they have some beautiful scenes and that so you are anxious to get to the next scene to see what it is and that. But it is a memory thing and I notice as it goes along I get remembering faster and faster and faster. (participant living in rural Canada)

Other leisure pursuits included cell phone photography and genealogy: "My family genealogy is on [my computer], and I've got to add people to it as more children are added to it" (participant living in rural Canada). Some participants also used their devices to read:

> I have got an iPad and I am using that for reading. I learned how to download books and I am really enjoying that as I go to bed at night and read I thought, "I'm not going to like this to hold instead of a book." But I find it is really, really great. (participant living in rural Canada)

An urban Canadian participant appreciated the convenience of downloading library books onto her e-reader:

> You get books on hold just like you would ordinarily in the library and when they become available then they send you an email and you download it. It's wonderful. I love it. You don't have to worry about finding a light to read on your iPad, the light is there in the machine and… They're all free from the library…

Participants in both urban and rural locations across both countries took their leisure activities into the realm of technology when choosing to engage in leisure online rather than in more traditional formats (e.g., playing solitaire online instead of with a deck of cards). In addition to this approach to e-leisure, participants used technology to supplement their offline pursuits.

Supplementing offline leisure. Most participants used technology to support in their engagement in other types of leisure as well. In these situations, participants used the internet to garner ideas and learn more about their offline pursuits. For example, a rural Canadian technology user created a database to organize and catalogue seeds for gardening:

> I am a nut for gardening and heritage seeds, and I have a collection of 180 kinds of tomatoes which got totally out of hand so I learned to do a database and it has totally made it so much simpler for me to be able to go into my database and pick out what I need.

Participants relied on Internet searches to learn more about their leisure interests: "If I want to know anything, I just Google it. It's so easy. The simplest question you put in you get an answer to, how to prune your rosebushes or how to do the grass" (participant living in urban UK). Technology served as inspiration for engaging in art: "I am an artist, so I do a lot of drawing and painting and all that sort of thing, so I can get a lot of inspiration really from this. It's been fantastic for that." (participant living in urban UK). Another spent time on social media garnering ideas for crafting: "I'm online a lot because I research a lot of [crafting ideas] on Pinterest" (participant living in urban Canada).

Although many participants embraced the leisure opportunities that technology facilitated, others chose not to use technology for leisure. Below, we explore the drawbacks of using technology.

Drawbacks of Using Technology

All participants consistently identified disadvantages and challenges that they experienced in using technology. They reported *lack of confidence* in using technology and noted that *getting help from others* could be difficult, due in part to lack of understanding of terminology as well as attitudes of others. Other challenges included *using and updating software* and *privacy and security* of personal information. Finally, participants reported a *lack of interest* in various uses or aspects of technology, which limited engagement.

Lacking confidence. Participants reported a lack of confidence in their ability to use and understand technology. Some felt "behind the times" in terms of their knowledge level and were interested to learn more about technology.

> I'd like to know more than I know now, let's put it that way, simple things. When I read a computer, to me a lot of it's a load of old gobbledegook and I think, "What the … does that mean…" (participant living in urban UK)

Participants reported feeling pressure to keep up with the fast pace of technology:

> I think the scary part now, isn't it, everything is moving very fast in the IT world really? I do think that is an issue. Sometimes you just look in horror at the way that it's moving. In a sense, you keep thinking, "I've got to keep up." (participant living in urban UK)

This lack of confidence and perceived lack of knowledge of how to use technology could lead to frustration for some participants. A participant in rural Canada remarked about her cell phone: "When it rings, I answer it, and when I want to talk to somebody, I misdial. I could throw it in the waste basket several times…". Lack of confidence and discomfort not only limited engagement in e-leisure, but also led to challenges in seeking assistance in using technology.

Getting help from others. While many participants had family members who could help them when needed, others were unsure of where to find assistance in these situations: "One of the problems I find is…that when something goes wrong, you do need the backup and you need to know who to ask" (participant living in urban UK).

Other sources of support were not particularly helpful with regards to technology and trial and error was more effective for learning about technology:

> I am having some difficulty, I have to learn…I have to do it trial and error be-
> cause when I ask the grandchildren to show me something they go so … fast
> you can't remember or follow what instructions they give you anyway. And
> as far as instructions in books go, I can't understand the technology words so
> that is no help to me either. So it is just trial and error. (participant living in
> urban Canada)

In the urban Canadian focus group, participants discussed the difficulty of getting help in a computer store, suggesting that their age along with their uncertainty of terminology impacted the service that they received:

> First participant: I went to some store and they made you feel like you're
> stupid. They will not answer your questions and you don't really know what
> to ask but you try to ask something and they say…
> Second Participant: One of the things I think happens they look at the grey
> hair and maybe they diagnose you as an idiot.
> Third participant: They think I'm an idiot because I have grey hair and I don't
> really have the terminology to use to ask the questions. I really get frustrated
> when I go someplace to want to find out information.

Unfamiliar terminology also posed a challenge when seeking assistance for troubleshooting or setting up devices. When seeking or receiving help, those assisting often used terms that participants were unaware of, which led to challenges in communicating. One participant described getting help from her brother with setting up her computer: "My brother kept asking, "Where's your Homepage?" I'm like, "Why do you mean Homepage, what do you mean browser?" I don't know, what do you mean where all the icons are?" (participant living in urban Canada).

Lack of support from others, ranging from difficulty getting help in a store to having family members assist who take technology terminology for granted, was one drawback of technology use for older adults in this study.

Using and updating software. In addition to difficulty seeking help, participants felt uncertain about using compatible software and updating it as needed. This was particularly challenging when participants were not interested in updating software or purchasing new technology:

Now, the problem is that when people have got the upgraded versions, as you know, if they are sending documents via email they have to save them as a doc or a pdf file or something like that so that they can be read. It's so frustrating that people insist on sending documents for you to read and you can't read them…. (participant living in urban UK)

Lack of knowledge on how to use a device in the way one wanted also presented a challenge that may have limited engagement in e-leisure.

I tried to keep a travel log once on the iPad and I wasn't very successful. It's still there and I'm not finished with it. I may someday go back to it but I never could figure out how you would actually print it. So it's on the iPad but I don't know what else to do with it. (participant living in urban Canada)

Participants reported having challenges with updating software that may have limited engagement in e-leisure as well as limits with the technology itself.

Privacy and security. Participants were wary of posting personal information online, particularly in terms of using social media. While many used social media to keep in touch with family and friends, for some, face-to-face conversation was preferred:

I can't believe what people write on it (Facebook). The only time I do respond is if they put a nice new picture on and I say, "It really is nice to see you that way" or something they put. It feels such a personal thing and I suppose, in a sense for me, I wouldn't want to expose myself in that way. If I've got a problem I'm not going to tell everybody on Facebook about my problem. I'd rather ring somebody up and say, "Can we have coffee together?" And do that. (participant living in urban UK)

One participant reported feeling uncomfortable with having their photo posted on social media without prior permission or knowledge:

But with Facebook, I was absolutely appalled to find that there were photographs of me on Facebook. I had been to a family party and a barbecue and all the photographs are plastered over Facebook. And I thought, "Hang on a minute, what's my photograph doing there?" And I took offense to that. So that's one reason why I won't have anything to do with Facebook or Twitter. (participant living in urban UK)

Some participants, particularly those from the UK, reported that they were protective of their private information and were cautious in their social media engagement. This was due, in part, to media stories about privacy breeches, which were concerning to participants. However, part of this concern may also have stemmed from lack of interest, as discussed below.

Lacking interest. Finally, lack of interest in particular devices or uses of technology may have inhibited engagement in e-leisure. For example, an urban Canadian

participant reported having won an iPad, but her lack of interest in the technology meant she chose not to use it:

> I won an iPad about three years ago. I have never used it because now when I looked up iPad it did everything except what I really spend most of my time, it's just not good for word processing. So I had never even bothered.

Another participant reported lack of interest in online games, preferring to engage in cognitive activities offline: "Yes, I used to play [online solitaire] but you know what I have too many other good interests better than those… that use my mind. Those are hard on the eyes, the more you concentrate." (participant living in urban Canada)

One participant noted that while he embraced several aspects of technology such as email and information seeking, he preferred not to be reliant on it and instead wanted to engage with the world in other ways:

> I don't want to be tied to technology like that, I just don't. And especially in the cities, I go and see people in the cities that are totally oblivious to what is going on around them. Their nose is in their phone and they are texting and they have no idea what is going on around them and I think that is a shame. I don't think that is social at all. I think that is antisocial. It is like saying, "My iPhone is more important than the people around me." There again I am old fashioned. (participant living in rural Canada)

Participants embraced technology to varying degrees. While some were comfortable engaging in e-leisure through email and video conferencing and to engage in games and hobbies, they were cautious when it came to social media, preferring face-to-face contact to protect their privacy.

Discussion

The findings provide insight into the possibilities of e-leisure amongst older adults as well as the drawbacks of using technology in this way. In particular, technology was viewed as a useful and alternative way to access lifelong leisure pursuits (e.g., Scrabble, genealogy), and keeping in touch with family members, as well as a means of finding inspiration for offline activities (e.g., researching craft ideas). These findings complement existing literature. For example, Vroman et al.'s (2015) survey of older adults and technology use revealed that communicating with family via email was the most common use of technology (c.f. Ivan & Hebblethwaite, 2016). Nimrod (2014) also highlighted the use of technology as a way to engage in leisure as well as supplementing offline leisure.

Nimrod and Adoni (2012) identified several dimensions of e-leisure, including synchronicity, interactivity, anonymity, and integration/immersion in the online world. Participants in this study connected with others using both synchronous and asynchronous approaches. Email and social media use allowed for asynchronous engagement in e-leisure while use of videoconferencing allowed for synchronous communication with loved ones. Interactivity was a key aspect of participants' engagement with technology through both interaction with other people and interaction

with systems. Participants utilized e-leisure to interact with family and friends through video conferencing and email. Furthermore, they interacted with systems by seeking new information to support their leisure pursuits, playing games, and reading.

In terms of anonymity, participants wanted to limit information of themselves available to others through social media. However, participants did not address benefits of anonymity online (e.g., being anonymous in an online discussion forum), as noted by Nimrod and Adoni (2012). Participants in the current study were purposeful in their online actions and communications (e.g., sending emails or sharing photos) with individuals with whom they were familiar and therefore they did not appear to seek out anonymity online as a way of engaging in e-leisure.

The findings reflect Nimrod and Adoni's (2012) virtual reality dimension of e-leisure. As noted previously, Nimrod and Adoni argue that in terms of the virtual online world, e-leisure may involve integration of technology with offline leisure and may also involve immersion in alternate reality. In keeping with integration of technology with offline leisure, participants of this study used technology to enhance offline pursuits and to engage in hobbies. This approach to e-leisure supports Nimrod's (2014) assertion that e-leisure occurs as a means of planning for leisure or for directly engaging in offline leisure. In this study, participants used technology to gain inspiration for their offline pursuits, such as artwork, as well as a means of cataloguing or keeping track of some aspects of their leisure (e.g., cataloguing seeds). However, they also became immersed to some degree within the online virtual world as they engaged in reading and watching videos. Participants did not become immersed in technology to the degree that they were engaging in online discussions with anonymous people or in creating specific content to share online (e.g., writing blogs, posting videos). As such, deeper immersion in the online virtual world may have been perceived as less meaningful or relevant than its integration with offline activities.

Participants also highlighted several drawbacks of technology. They felt discomfort in seeking help from others, lacked interest in updating or learning how to use some aspects of their devices and software, and expressed a concern over their privacy and security as well as a preference for face-to-face interaction, all of which could serve to inhibit e-leisure. Nimrod (2014) noted several negative experiences of technology use among older adults, such as difficulty using a particular system and receiving spam. Members of online communities report negative experiences of anonymity online (i.e., trolls), and lack of commonalities amongst users, which makes it difficult to develop relationships (Nimrod, 2014). Furthermore, Hanson (2010) argues that technology tends to be designed with younger people in mind, which has led to lack of interest in technology amongst older adults.

Huber and Watson (2014) suggest that older adults may refrain from using technology, not because they do not understand it, but because they do not see a need for it. For example, older adults are more likely to use social networking sites if they perceive it as useful (Braun, 2013). Indeed, some participants in this study did report using social media to keep in touch with family members, however many did not perceive a need for its use, preferring face-to-face interaction and maintaining personal privacy. Thus, the challenges of using technology may not be perceived as worth overcoming amongst some older adults. Indeed, Hebblethwaite (2017) notes that older adults take a critical approach to adopting technology.

The findings provide some insight into an emerging theory of e-leisure amongst older adults. The tensions between the desire to use technology to supplement offline leisure or engage in online leisure and concern about the drawbacks and challenges of using technology suggest that older adults are being strategic about their leisure opportunities and the technology through which experiences are had. Decisions regarding engagement in e-leisure are weighed in terms of both the reward gained from participation and the effort required to participate. The behavior and interest in learning to use a new technology for leisure has to produce an outcome that is superior to that which is currently available. For example, email was embraced by some participants since it is cost effective (i.e., no postage fees), can be delivered at any time of day, and delivery is nearly immediate. However, there are also still some long-standing attitudinal barriers to technology use for some older people that will have to be challenged for older people to fully embrace technology.

Implications for Therapeutic Recreation Practice

Existing research highlights benefits of leisure for older adults in general as well as benefits of e-leisure specifically, such as fun, enjoyment, connection, and learning, yet the digital divide may prevent some older adults from experiencing these benefits. Participants' perspectives of their own technology use suggest that they experienced these benefits as well. Recreation therapists have a role to play in bridging the digital divide by facilitating opportunities for older adults to use technology to maintain their leisure interests and develop new ones. Past technology use predicts future use (Braun, 2013), thus identifying participants' previous behaviors, needs, and wants with regard to technology could be considered during assessment and planning of appropriate programs and services. The recreation therapist can then enable older adults to engage with technology in meaningful ways by clearly structuring the purpose of its use and introducing possibilities of e-leisure. This is pertinent since participants in this study indicated that they saw technology use in their future when traditional leisure became difficult. However, they were admittedly not aware of all e-leisure opportunities. Therefore, recreation therapists will need to continually learn about new e-leisure opportunities for older adults.

Addressing the digital divide may require provision of educational and technical support for engagement in e-leisure among older adults (Leonard & Hebblethwaite, 2017). In particular, care should be taken to address differences in understanding of relevant terminology and to build confidence with regards to technology use. Leisure education focusing specifically on e-leisure and its benefits and drawbacks may be useful for older adults who are interested in pursuing e-leisure. Drawing on the expertise of experienced older technology users, who understand the barriers to technology use that their peers commonly face, may inform strategies to design and instruct relevant e-leisure activities. These experienced older individuals can also be included in assisting others with technology through peer mentoring, which could remove perceptions or experiences of ageism. Additionally, educating TR professionals and students about the digital divide along with the benefits and challenges of e-leisure will prepare them to better provide support and education to older adults who experience differences in knowledge, skill, attitudes and preferences. Furthermore, recreation therapists working within assisted living and long-term care can support e-leisure by providing opportunities to keep in touch with family and friends through videoconferencing and

access to social media as desired by residents, as well as by facilitating opportunities to use technology to sustain long standing leisure interests and to try new things. By taking a strengths-based approach and focusing what participants identify as important (Hebblethwaite, 2017) professionals will be in a better position to facilitate meaningful opportunities for e-leisure.

It is also relevant to consider what aspects of technology may be of little or no interest to older adults. For example, in this study, participants did not indicate interest in game consoles. TR professionals should take care to assess the interests of their participants and facilitate opportunities to incorporate technology into leisure accordingly.

Limitations and Future Directions

The findings of this study must be considered in light of its limitations. While focus groups are a commonly used method of data collection and allow for group discussion of a topic, the use of focus groups may have led to self-censoring among some participants, who may have felt uncomfortable discussing their personal technology use with others. Despite this risk, participants actively engaged with each other through the discussion and shared their experiences, both positive and negative, with technology. Due to the nature of the sampling process and number of focus group participants, results may not be generalized.

Despite these limitations, the findings provide insight into e-leisure among adults in both rural and urban settings, and across two countries. Experiences of e-leisure did not appear to differ amongst the study sites. Previous research notes the importance of individual and sociological factors that reside outside of policy and provision; for example, education, attitudes, and personalities influence how older people engage with technology and e-leisure (see Vroman et al., 2015). However, further research is warranted to better understand the impact of geographical location on access to and engagement in e-leisure among older adults. For example, older adults living in rural areas have limited access to Internet due to service provision (e.g., only having access to dial up rather than high-speed internet). Successful local programs to encourage older people to use the Internet can also create differences between geographical areas and technology use, especially if they overcome long-term negative attitudes (see Barnard et al., 2013). In-depth exploration of Nimrod and Adoni's (2012) dimensions of e-leisure may lend additional insight into older adults' technology use. For example, exploration of synchronous and asynchronous communication may reveal more about technology use habits with regard to keeping in touch with loved ones who are dispersed. Gender differences could also be considered to develop a stronger understanding of how older men and women may utilize technology in different ways or for different purposes. Use of additional methodologies may also increase our understanding of e-leisure amongst this population group. For example, participant observation may lead to a better understanding of how technology is used and challenges encountered when using it. Netnography (Kozinets, 2015) may also provide additional insight into older adults' use of technology. Individual interviews may also allow for a more in-depth discussion of e-leisure amongst older adults. Furthermore, expanding beyond older adults living in the community to include those living in assisted living and long-term care may offer broader perspectives on technology use as well as more varied perspectives on the challenges and drawbacks of using technology as a means of engaging in leisure. These

issues are worth considering given the increase in technology use amongst older adults, who may wish to have access to technology even if they move out of their homes.

Conclusion

The findings of this international exploratory study suggest that e-leisure may play a role in overall leisure engagement. Indeed, engagement with technology provided opportunities for connecting with others, playing games, and supplementing hobbies. As such, TR professionals may find it useful to provide opportunities to educate and support technology use among older adults in order to facilitate sustained connections with family and friends and to engage in leisure interests in new ways. Furthermore, professionals must be prepared to consider drawbacks and challenges associated with technology in an effort to reduce barriers to engagement in e-leisure.

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