Social media by proxy:
how older adults work within their social networks to engage with social media

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Introduction. This paper reports an exploratory qualitative study investigating the ways in which older adults are supported by social media proxies defined as 'an individual who uses a social media account for or supports the use of a social media account by another person'.

Method. Interviews, a diary study, and a focus group were conducted to explore the motivations for undertaking a proxy role; formal or informal agreements between proxies and account holders; and collaborative proxy practices that exist between the individuals providing or receiving proxy support.

Analysis. A reflective thematic analysis of all three data sources was undertaken. The coding structure was developed from the interview, diary and focus group guides as a way of categorising the data into themes.

Results. Social media proxy relationships exist, even if proxy roles are not clearly defined, and that older adults engage with their 'social networks' to identify proxy support and it is likely that without this support the older adult would be unable to fully access or engage with social media or other online accounts.

Conclusion. This research highlights the need for more in-depth investigations related to social media proxies, especially as the use of social media and other online platform is increasing steadily across all age groups.

Introduction

It is known that a growing number of older adults are using online services and social media (Chen et al., 2021; Choi and Dinitto, 2013; Chopik, 2016; Cornejo et al., 2013; Ofcom, 2019, 2020; van der Wardt et al., 2010; Wilson et al., 2021). Older adults as with any users are a heterogenous group with large variations in their abilities and digital skills (Chen et al., 2021; Cornejo et al., 2013; Hunsaker et al., 2019; Kania-Lundholm and Torres, 2017; Selwyn et al., 2003; Wilson et al., 2021; Xie et al., 2012).

This paper reports an exploratory qualitative study to investigate the intersection of knowledge related to how older adults are supported in their use of social media through 'social media proxies'. A proxy is defined in the dictionary as 'the authority that you give to someone to do something for you' and is most often thought of in terms of legal or voting contexts (Nansen et al., 2015). For this research, the term 'social media proxy' is defined as 'an individual who uses a social media account for or supports the use of a social media account by another person'. This definition is based in part on use of the term 'proxy use of the internet' (Dolničar et al., 2018; Grošelj et al., 2019; Ofcom, 2019) which is defined by Ofcom as 'people asking someone else to use the internet on their behalf'. In addition, Nansen et al. (2015) definition of a proxy user as 'forms of intermediation where peoples' engagement with digital technologies, representation on social media, or activities on the internet are mediated or undertaken by others'. There is limited research on the use of social media proxies by older adults. The changing nature of digital technology and our relationship with it means the use of proxies by older adults needs further investigation.

Whilst previous work has considered how technology can be adapted for use by older adults or people with accessibility needs (Carr and Kemmis, 1986; Righi et al., 2017), this work aims to better understand the ways in which social media users adapt their practices and behaviour to use the existing technology. This includes how social media is accessed and the extent to which social media proxies support older adults through formal or informal support networks.

There is also a large body of research in Human Computer Interaction and Computers Supporting Cooperative Work around supporting others to use technology (Braun, 2013; Helsper and Reisdorf, 2017; Hunsaker et al., 2019; Kania-Lundholm and Torres, 2017; Knowles et al., 2020; Mariano et al., 2022; Poole et al., 2009; Reisdorf et al., 2020; Righi et al., 2017), however there is little on the blurry relationships that happen with support and engagement that fall between being a 'user and non-user' or 'support and acting' on other behalf (Nansen et al., 2015).

This study explores the role of family-based, and professional social media proxies by considering how older adults access proxy support in local communities within the United Kingdom. Through this work, we will begin to establish the proxy practices undertaken in the support and management of social media accounts by both those who provide and receive proxy support. This includes three broad research questions: (1) what are the motivations for seeking and providing proxy support? (2) what, if any, formal or informal agreements exist between proxies and account holders? and (3) what are the collaborative proxy practices that exist between the individuals providing or receiving proxy support?

Related work

Older adults and social media

Social media use by adults in the United Kingdom is at an all-time high, and the adoption of online tools by older adults is set to increase. Recent figures show that 70% of adults aged 65-74 and 49% of adults aged 75+ use the internet (Ofcom, 2020). Furthermore, 2020 figures show that 39% of those aged 65-74 and 21% of those aged 75 and older maintained social media profiles (Ofcom, 2020). A large body of research in many domains including Human Computer Interaction, Computers Supporting Cooperative Work and information behaviour exists on the use of social media and online technologies by older adults. This includes publications that identify topics such as: the cognitive benefits of using online technologies and tools (Chopik, 2016; van der Wardt et al., 2010); obstacles to use of social networking sites (Braun, 2013); perceived difficulties of learning new technologies (Barnard et al., 2013; Karimi and Neustaedter, 2012); the social and psychological benefits of social media use (Chen et al., 2021; Choi and Dinitto, 2013; Cornejo et al., 2013; Riekkola et al., 2019; Wilson et al., 2021); and the ways in which older adults use social media platforms in practice to maintain their existing relationships with family and friends (Cotten et al., 2013; Nowland et al., 2018; Wilson et al., 2021; Xie et al., 2012). Studies have found older adults have concerns related to privacy (Xie et al., 2012), confidence in using social media (Hunsaker et al., 2020), security (Cotten et al., 2013; Hunsaker et al., 2019) and have reported having difficulty accessing support or concerns over negative age-related connotations when requesting support (Hunsaker et al., 2019; Wilson et al., 2021).

Much of the current research has focused on the 'digital divide' (Friemel, 2016; Neves et al., 2018; Wilson et al., 2021) and the barriers faced by older adults when accessing social media with a large focus on how to 'design for older adults' use (Brewer and Lee, 2021; Cornejo et al., 2016; Duarte and Coelho, 2019; Norval et al., 2014; Pedell et

al., 2010). This is a valid question but takes a narrow view with more research in Human Computer Interaction and Computers Supporting Cooperative Work communities focusing on older adults as digitally capable, active participants who contribute to online communities (Hunsaker et al., 2019; Poole et al., 2009; Selwyn et al., 2003). This research also takes the view that older adults are digitally capable and will seek support to access current technology rather than tools to change it. This support may take many forms from family and friends (Hunsaker et al., 2020), formal classes (Birkland and Birkland, 2019; Hunsaker et al., 2020; Kania-Lundholm and Torres, 2017) or other older adults who are technology savvy as older adults are a heterogeneousness group (Birkland and Birkland, 2019; Hunsaker et al., 2020; Kania-Lundholm and Torres, 2017).

Older adults and accessibility

Research often focuses on older adults with a discussion on loss of physical and cognitive abilities (Knowles et al., 2020; Righi et al., 2017). Older adults do not equate to accessibility and the need for 'specialist' technology for older adults is not valid as Knowles et al. (2020) states 'the assumption that the two fall under the same umbrella despite the fact that aging is neither an illness nor a disability' (Birkland and Birkland, 2019; Hunsaker et al., 2020; Kania-Lundholm and Torres, 2017; Knowles et al., 2020). This view has limited researcher design opportunities and experiences for older adults. Older adults are not a one size fits all (Brewer and Lee, 2021; Knowles et al., 2020; Righi et al., 2017) with much research around social media use often comparing older adults to younger peoples use rather than reflecting on how older adults engage with social media (Knowles et al., 2020). This research wishes to focus on how older adults use their social networks to engage with social media rather than the technology barriers presumed to affect older adults' engagement as Knowles et al. (2020) state: 'the HCI community will need to move beyond a focus on accessibility as the core design requirement for older adults and consider the myriad other factors that make learning and using digital technologies less appealing for this demographic'.

Intermediaries and other terms

The research reported here concerns the online information behaviour of a set of users who are acting on the behalf of others, therefore it is worthwhile to consider how such roles have been conceptualised in prior research. This includes the concept of 'information intermediaries' which has also been described in different disciplines using terms such as 'information stars', 'information mediaries', 'gatekeepers', and 'proxies' (Coward and Fisher, 2010). In information intermediaries

research, family members are described as 'lay information mediaries' which is defined as 'those seeking information in a non-professional or informal capacity on behalf (or because) of others without necessarily being asked to do so...this definition includes...librarian-user' (Abrahamson et al., 2008). Whilst this is an active topic of investigation in relation to librarians and information literacy (Buchanan et al., 2019; Vitak et al., 2018) and ageing populations (Dalmer, 2020; Dalmer and Campbell, 2020), the focus of such work is on information seeking and access. For example, early research on the concept of information intermediaries related to information practices and early computing (e.g., expert intermediaries and knowledge coaches) (Homan, 2010). More recent investigations have considered issues of the social divide and access to economic and social support for those unable to access government services through technology barriers (Gerunov, 2020; Król and Zdonek, 2020). There has also been some focus on the ways in which information intermediaries assist in connecting vulnerable people to information sources and how intermediary relationships rely on trust relationships that build over time (Buchanan et al., 2019; Vitak et al., 2018). However, whilst the focus of research related to information intermediaries is on information seeking practices, the focus of this investigation is on 'social media proxies' and the ways in which they support the use of a social media and similar online platforms by the individual who is receiving support.

Proxies

The concept of internet by proxy or proxy internet use is concerned with how non internet users access the internet or digital services by indirect use such as asking someone else to do activities online on their behalf (Helsper and Reisdorf, 2017; Kappeler et al., 2020; Reisdorf et al., 2020; Selwyn et al., 2017). However, many individuals receiving such proxy support expressed 'negative emotions' related to embarrassment or feeling burdensome when asking for help (Dolničar et al., 2018). Indeed, Ofcom's Adults Media Use and Attitudes Report indicates that more than two in five adults who do not use the internet asked someone else to use the internet for them in the previous 12 months. This was generally to purchase something online (28%) or to access information other than 'public service' information (12%). Just over one in five non-users stated their reason for non-use is due to it 'being too complicated' (Ofcom, 2019). Proxy internet use is not a widely researched area however it has been found to be related more to socio-cultural and digital divide issues than age related (Grošelj et al., 2019). However, this is not to say that older adults are not more likely to be Proxy internet users (Helsper and Reisdorf, 2017). A longitudinal study into non internet users found that access, cost, and skills were ongoing reasons for users not engaging directly (Selwyn et al., 2017).

Selwyn et al. (2017) identified the difference between 'professional proxies' and 'family proxies' and developed recommendations for further areas of research including legal implications, liability, privacy as well as guidance on system design (Selwyn et al., 2017). However, despite these recommendations being made in 2017 there is limited evidence of these being implemented or further research on these areas. It is established that not only are older adults using social media and the internet in general, but that there is at least some level of proxy support taking place to support the use of social media and the internet by older adults.

Formal and legal considerations

As the term proxy and proxy relationships are often associated with legal procedures and needs it is important to consider the legal aspects of social media proxies. Particularly given the risks associated with sharing personal information with others. Formal agreements exist for the management of financial and legal affairs by proxy (for example through power of attorney). However, the concept of a 'digital power of attorney' for the oversight of online activity, such as that associated with social media use, does not have legal status in the UK, although it does in some other countries, such as Denmark (Agency for Digitisation, 2016). There is a growing body of research in the domains of Computers Supporting Cooperative Work and Human Computer Interaction communities regarding digital death, digital possessions, and digital legacy. However, these often focus on the post-life or supporting, whereas this research is concerned with the legal aspect of supporting others using digital tools and services (Cahn and Beyer, 2012; Sas et al., 2019). Digital power of attorney is also a concept that is under-researched in respect of older people, and the few research papers that exist on the subject are written from a North American perspective (Beyer and Cahn, 2013).

Method

This study took a qualitative descriptive approach with the aim of exploring and summarising everyday events related to the proxy practices of people who seek and provide support (Lambert and Lambert, 2012). Qualitative descriptive approach was selected as it allowed the exploration of the nature of proxy practices (Kim et al., 2017). This study included three qualitative data sources: (1) interviews with family-based proxies, (2) a diary activity with an information professional proxy, and (3) a focus group with 12 members of a computer club serving older adults. The three data sources were identified with the aim of gathering a rounded view of proxy practices from a range of viewpoints. The purpose of these data gathering activities was to

provide an understanding of the everyday practices related to providing and receiving proxy support in the use of social media, as well as more broad support related to internet use.

Sample and procedure for family-based proxy interviews

Three family-based proxies took part in semi-structured interviews for this study (see Table 1). Each proxy supports an older family member (80+ years old) to access social media. The first interview participant (Proxy 1) joined the qualitative study after completing a previous quantitative research study and indicating that they would be happy to participant in future research. The following two interviewees (Proxy 2 and Proxy 3) were recruited through a snowballing process whereby each participant recommended another participant (Baltar and Brunet, 2012; Morgan, 2008).

Participant	Age	Relationship	Description
Proxy 1	35-44	Child/Parent & Grandchild/Grandparent	Acted as a proxy for Grandparent who had dementia. In addition, discusses parent who has dementia but does not like social media.
Proxy 2	45-54	Child/Parent	Acts as proxy for parent with dementia who lives with the participant.
Proxy 3	55-64	Child/Parent	Acts as a proxy as part of a support network of siblings who all act as proxies for parent who still lives independently with support and is 90+.

Table 1: Details of interview participants

The informal semi-structured interviews were conducted using an interview guide with prompting questions. Questions were based on the literature review (see Table 2). The interviews themselves were conversational in nature using prompts from the interview guide as required. The interviews were scheduled for 1 hour but lasted approximately 20 minutes as for many of the questions participants had not considered the topic. Interviews were recorded using an encrypted smart phone. Voice recordings were then professionally transcribed into Microsoft Word documents for qualitative data analysis.

Interviews began by asking participants a broad question related to their role as a social media proxy. This was followed up with prompting questions for further information related to providing support to determine what kinds of information

practices social media proxies undertake and the motivations behind them. The prompting questions were followed by a set of four standard questions related to participants' opinions about older adults and social media use. A list of interview prompts, and questions can be found in Table 2 below.

Primary interview question to determine information practices of social media proxies
What can you tell me about how you support your family member to use social media?
Follow-up prompts
Who do you support?
Whose idea was it to provide support?
Why is the support needed?
What kind of platforms do you provide support for?
What kind of support provided?
Do you have any formal agreements for providing support?
Final interview questions (also provided to diary participant)
Have you considered how you will provide or receive support in the future, and do you have any plans in place?
Do you worry about managing social media profiles in the future due to physical limitations, age-related factors, or cognitive decline?
What do you view as the negative reasons for older adults to using social media?

Table 2: Interview schedule

Sample and procedure for information professional proxy diary

To gain insights into how professional proxies support older adults, a professional librarian (Proxy 4) who supports a range of older clients on an ad hoc basis participated in a diary study. They kept a diary of their proxy interactions over the course of one week as part of a public library initiative called 'Please Bother Me' that encourages members of the public to ask a librarian for help with their online activities. Given the professional nature of the librarian's social media proxy role, the responses were provided in the form of examples of specific (anonymised) proxy support that they had provided.

The examples provided in the diary included details about the task that was supported, who the support was for, why support was needed, and how often the specific type of support was provided. The participant was also asked to answer the same set of final questions that were asked at the interviews (see Table 2) after

completing the dairy. The diary, including responses to the final set of questions, were returned as text file attachment one week after they received the questions.

Sample and procedure for focus group

Eight focus group participants were formally recruited from a local computer club for older adults, supported by volunteers. This was done through the club's general membership with flyers available from tables when in attendance at the club and an email to the group mail list. The focus group took place directly after a computer club session, with an additional four participants joining on the day for a total of 12 focus group participants. The 12 participants were aged 65-80+ with five males and seven females. The focus group was conducted by two researchers using a variation of the interview guide with further prompting questions as the guide. Members of the focus group were also asked about how they used the computer club and the types of support they received and were also asked more broadly about their thoughts and concerns related to social media accounts and the management of those accounts – including receiving support in using the accounts. The focus group lasted approximately 40 minutes and was recorded using an encrypted smart phone. Voice recordings were then professionally transcribed into Microsoft Word documents for qualitative data analysis.

Data analysis

A reflective thematic analysis (Clarke et al., 2015) of all three data sources was undertaken. The coding structure was developed from the interview, diary and focus group guides as a way of categorising the data into themes. Further codes were added as additional themes were identified within the transcripts. The analysis was conducted by one coder as is accepted practice by Braun and Clarke (2006). The coder followed the procedure for thematic analysis as: (i) familiarisation with the data, (ii) generate initial codes, (iii) search for themes, (iv) review themes, (v) define and name themes, and (vi) produce report. The final themes and analysis were discussed by the wider research team to reduce bias. The data analysis was data led and based on the entire data set (interviews, diary and focus group). An inductive approach to reflective thematic analysis was applied as little is known on the behaviour of 'proxies' allowing the analysis to focus on the meaning from the data without relating to previous theories. See Table 3 for a list of primary themes from this analysis.

Theme	Description		
	Family member as proxy	Information professional as proxy	Recipients of proxy support
Digital skills and literacy	General lack of digital skills or understanding by older adult	The levels of digital skills or technology and equipment of the individual seeking support Uncertainty and a lack of confidence with technology Positive reactions from individuals related to learning new skills	Uncertainty and a lack of confidence with technology
Proxy practices	Keeping in touch with family and friends via messaging tools and email Sharing information, generally photographs or family updates, with the older adult as a prompt for recalling memories Information shared on social media accounts is used to keep the older adult and family and friends informed about each other's life and general health Sharing information between the older adult they support and others, generally family and friends, as an 'information middleman'	Keeping in touch with family and friends via messaging tools and email Assistance and guidance for using a range of online productivity tools Digital skills training and technology use	Keeping in touch with family and friends via messaging tools and email Digital skills training and technology use
Privacy and legal considerations	Protecting the privacy of the older adult through information censorship Sharing information with select individuals or groups Presumed legal protections or agreements for managing online information	Following organisational guidelines	Concerns about social media platforms and their safety or trustworthiness

Table 3: Primary themes from data collection

Ethics

Ethical approval for this study was obtained from Edinburgh Napier University prior to the start of the data collection process. Informed consent was also obtained from all participants in the studies. This includes individuals who completed the diary, focus group participants, and interviewees.

Findings

The results for the interviews, diary study and focus group are discussed together by the three main themes identified in the thematic analysis (see Table 3) in the sections below with an overarching discussion in section 5.

Digital literacy and technical skills

A key motivation for providing or seeking proxy support was noted as a general lack of digital literacy and technical skills. For family-based proxies (Proxy 1, Proxy 2, and Proxy 3), it was also the case that none of the older adults they were supporting maintained their own social media accounts. Instead, family-based proxies supported older adults in sharing and accessing information via the proxies' accounts without providing them with instructions for how to access the accounts independently.

The act of providing proxy support is based on active participation by the individual being supported – even when the individual does not maintain their own accounts and there is a lack of digital skill for using social media, as was the case for the three family-based proxies. Indeed, the older adults being supported by family-based proxies generally initiate social media sessions, even when they do not have accounts. For example, the parent that Proxy 3 supports asks direct questions about Facebook and whether there are any new photographs of themselves on the platform, or if there are any updates from other family or friends. Proxy 3 explained that their parent ' they use [the account]' and that they 'know the language' and terminology related to using Facebook. Likewise, Proxy 1's grandparent was also very proactive in requests for information to be shared about them on the proxy's social media accounts. This was most often in the form of photographs. Proxy 1 stated that 'somebody told [their grandparent] about Instagram' and that they requested the proxy to 'take a picture for me for Instagram.' Proxy 1 explained that despite being in their 80s, their grandparent was 'quite pleased to be on social media'.

On the other hand, the information professional proxy (Proxy 4) only supported individuals to use their own accounts. Proxy 4 was aware that each contact with a member of the public might be their only opportunity to provide support, therefore support generally included suggestions for how to find solutions independently in the future. For example, when a community member asked for support in changing their name on Facebook, Proxy 4 showed them how to make the change via Facebook's settings panel but also explained that it is possible to 'find assistance on the internet'. Similarly, Proxy 4 supported an individual who was seeking to connect with people who shared similar crafting interests online so that they could share photographs of their work. Here, Proxy 4 helped to 'familiarise them with Pinterest', including how to upload content.

For Proxy 4, support is provided not only because someone is unsure of how to use social media accounts or other online tools, but also because that person might lack internet connectivity at home. For example, one of the individuals they supported was 'worried' because so many things are 'so technical' now and they do not know enough about technology. In this case, the individual needed to contact an organisation for a personal matter, so Proxy 4 helped to find the contact information on the organisation's website. When it was determined that the communication would be more complex, Proxy 4 helped to talk through a solution that included using their personal laptop to compose a letter, then returning to the library the following week so that the proxy could help to send it as an email attachment, as they do not have a personal internet account at home.

By providing digital skills training along with proxy support, Proxy 4 noted that the people they support provided positive feedback about receiving proxy support. For example, having been shown how to search for solutions to future problems in Google, a community member was 'quite pleased' to have been successful in performing the task on their own. Similarly, an individual who was shown how to use Pinterest said they were 'very confident' that they would be able to use the social media account on their own in the future. Another individual was 'very happy' to have managed to use Facebook Messenger without assistance after Proxy 4 provided them with initial support for the tool. Similar positive responses to professional proxy support were noted by focus group participants, as discussed below.

Members of the focus group also talked about their levels of confusion or uncertainly with a range of online tools and the internet in general. Further, they indicated that through seeking proxy support they were able to use online tools with more confidence. Participant 3 shared that 'the [computer club] is very useful, very helpful... No matter how many times you ask the same question.' This was in part because they felt able to ask proxies at the computer club for ongoing support as

needed. For example, Participant 2 stated that 'If something does go wrong when you're at home you think, 'oh I can bring the computer in and the tablet in', and it's quite familiar.' Indeed, some focus group participants noted that they felt confident enough to assist others who needed support, including family members and neighbours.

Proxy practices

The key proxy practices discussed by all participants were motivated by keeping in touch with family and friends but the ways the practice was undertaken varied for different participants. Practices discussed by the different participant types varied based on the needs of the older adults requiring support.

The primary support provided by family-based proxies is to assist older adults to stay in contact with family and friends and all subsequent support is directly related to these communications practices. This is a bi-directional activity that includes keeping the older adult informed about and engaged with others as well as keeping family and friends informed about the older adult that they support. This is often done through sharing photographs or updates about the older adult on the proxy's social media accounts. It is also the case that other family members and friends will 'tag' the proxy in photographs for the older adult to ensure that they are notified of the image which they can then share with the older adult.

As part of supporting older adults to keep in touch with family and friends, family-based proxies act as 'information middlemen' within their families. All three of family-based proxies discussed the use of private messaging channels to share information for and about the older adult in their care with a direct group of family members. This is done when someone wants to share a message specifically with the older adult or for sharing updates about the older adult with family and close friends.

A key aspect for family-based proxies was the use of social media as a memory prompt. These 'memory prompts' help to create meaningful conversations between the proxy and the older adult they are caring for. For example, Proxy 2 explained that their parent will look at a photograph and ask who the individual is, as they cannot recall the information, leading to a conversation about the person in the photograph. Proxy 2 went on to explain that the individual is their grandchild, at which time their parent began to comment on how much the child has grown. Proxy 1 also discussed the use of memory prompts as it related to their grandparent who had dementia who wished to stay up to date with the lives of family members who live in different countries around the world. Proxy 1 would share photographs of others with their

grandparent and discuss who the person in the image was along with other relevant information about them.

In addition to providing memory prompts for their parent, Proxy 2 uses social media as a memory prompt for others in the family to ensure that they, too, are keeping in touch with the older adult. They explained that they want others to know their parent 'is still alive and is still part of the family'. Because of this, Proxy 2 includes their parent in the content they share on social media. Whilst they do not feel that their parent would be forgotten, they explain that 'it's a funny feeling that you just want other people to remember. It's almost as if they're thinking about [them] then maybe [their] memory will somehow grow…'

Whilst family-based proxies undertake a limited set of activities to support social media use by older adults, generally related to keeping in touch with others, the proxy practices discussed by Proxy 4, the information professional, were more varied. When acting as a proxy specifically for social media, Proxy 4 was asked for support in sending private communications through online messaging services, sending emails through web interfaces, uploading content to the social media site 'Pinterest', and changing settings on Facebook. Ultimately, however, the primary aim of proxy practices undertaken by Proxy 4 was that of skills-training so that the older adult can manage their online activities in future independently.

Whilst the information Proxy 4 indicated practices related to communications was only a small part of the proxy support, participants in the focus group spoke about primarily seeking proxy support to keep in touch with family and friends. Focus group participants spoke about using a variety of online tools both at the computer club and at home, especially communication tools such as WhatsApp and Facebook Messenger. These tools are often used as an alternative to mobile text messages as they provide participant 'free texting' that supports sharing photographs. Participant 3 spoke specifically about receiving proxy assistance from a club volunteer related to WhatsApp for communicating with families and friends.

The primary conversation in the focus group was about receiving proxy support, rather than providing it. However, it became clear early in the discussion that at least some of the participants were seeking to learn how to provide support to others, even if in a limited capacity. For example, Participant 4 shared that they 'try to help' their spouse 'with the little bit [he] knows.'

Most of the focus group participants seek support from multiple proxies as required, finding support from their families and friends or from similar computer support services at their local libraries. For example, Participant 8 stated that they set up their own Facebook account, but that they required 'a child's help' with Instagram,

whilst Participant 4 receives support from a friend. However, many of the participants are confident enough with technology to manage many tasks on their own. Indeed, due to the ongoing nature of the support they receive at the computer club, participants are more likely to use their internet-enabled devices at home, knowing that they can return for help if needed. Participant 2 explained that anytime they were faced with a challenge at home, they 'would just come in [to the computer club] and ask for help.'

Privacy and legal considerations

None of the participants in this study had formal agreements for providing or receiving proxy support, however two family-based proxies discussed formal powers of attorney for other matters related to their family members despite never setting up agreements – whether formal or informal – with their family for the management of online accounts and information. Proxy 2, who has a power of attorney for financial affairs, explained that 'it's enough for us to think about all this [other stuff] without thinking of all the digital stuff' whilst Proxy 3 felt that they were simply 'not tuned in' to issues related to the management of online accounts and information.

Proxy 4 the information professional was also aware of options for formal agreements such as power of attorney, although not for their use specifically for managing social media accounts. However, whilst Proxy 4 did not use such agreements for the ad hoc proxy support they provide, they do follow a general set of guidelines in their professional role.

Participants of the focus group also did not indicate a concern about legal considerations when receiving proxy support. Indeed, they were not concerned about their privacy and security when seeking proxy support at all, regardless of the source of support. However, two participants from the focus group shared that they made assumptions of a proxy's trustworthiness based on their affiliation with institutions or libraries that offer computer club support. Participant 2 stated that they believe proxies 'should be quite trustworthy' if members of the public are coming to receive support from them.

A more immediate concern addressed by family-based proxies and by focus group participants was that of privacy. For the family-based proxies, those concerns related to what information should be shared or not shared online, sometimes based on what they believe the older adult's views on sharing personal or private information would be. For example, Proxy 1 did not share information about their parent because they knew '[they] never got this idea of shouting into the universe'. They also refrained from sharing photos of their grandparent when they were 'getting ill and frail' as they

did not believe their grandparent would 'want people to see [them] like that'. On the other hand, Proxy 3 has set up a private family group on Facebook so that photographs and information could be shared within the family but not with a wider audience. Proxy 3 feels that this is important because 'it's not just about being able to see photographs of [the children and grandchildren], it's about actually seeing them develop and grow and take on personalities'. However, whilst family-based proxies are aware of this need to maintain privacy in an online setting, there seems to be less or no concerns by the older adults about privacy online in general, although this could be due to the nature of the information being shared via the proxies' account.

Whilst some focus group participants indicated that they had accounts on social media sites such as Facebook and Instagram, none of them use the platforms for regular information sharing. Instead, these accounts are largely used to view content that others share online. This was in part due to concerns with privacy and safety online. Four participants discussed that they felt sharing personal information could lead to negative outcomes such as their home being broken into whilst they were away from home. Participant 6 was concerned about security in a broader sense and explained that they avoid sharing information online to avoid being 'open to attack' from 'dark forces that exist in the clouds'.

Discussion

The overarching purpose of this research was to explore how older adults are supported in their use of social media through 'social media proxies' with an aim to better understand the ways in which social media users adapt their practices and behaviour to use existing technology. The work was guided by three broad research question related to (1) what are the motivations for seeking and providing proxy support? (2) what, if any, formal or informal agreements exist between proxies and account holders? and (3) what are the collaborative proxy behaviour and practices that exist between the individuals providing or receiving proxy support?

Through this work, a range of social media proxy practices were identified for both providing and receiving proxy support. These are discussed below by research question with reference to the three main themes identified in Table 3 supported by existing literature where relevant.

RQ1: motivations for proxy support

Research question 1 'what are the motivations for seeking and providing proxy support?' was addressed in two themes identified in the findings (4.1) Digital literacy and technical skills and (4.3) Privacy and legal considerations. There are various levels of proxy activity for both receiving and providing support and family members appear to be a key source of providing support or acting as a 'proxy' for a relative. This tends to be informal support provided on an ad-hoc basis and as such there are no formal agreements in place. It has been shown that the primary motivation for family-based proxies is to ensure that older relatives are included and engaged with their families, especially if those relatives are experiencing age-related cognitive decline, other conditions such as dementia, or if they are typically passive or non-users of social media or the internet in general (Helsper and Reisdorf, 2017; Kappeler et al., 2020; Reisdorf et al., 2020; Selwyn et al., 2017). However, those who are actively seeking proxy support are more likely to seek out non-family sources such as libraries, clubs, or classes. This could be related to findings that people are embarrassed to ask family or do not want to bother them (Wilson et al., 2021) however this was not investigated in this study. In this study, it has been shown that people seeking support in more formal settings are looking for support to allow them to become independent in the future, as has been discussed in previous literature related to the 'digital divide' (Friemel, 2016; Neves et al., 2018; Wilson et al., 2021) and older adults' active participation in online communities (Hunsaker et al., 2019; Poole et al., 2009; Selwyn et al., 2003). Through seeking proxy support, older adults can take an active role in the use of social media which provides them with confidence to continue using technology (Hunsaker et al., 2020) providing a range of cognitive benefits (Chopik, 2016; van der Wardt et al., 2010).

There is also a social motivation to proxy support as evident by family-based proxies helping their older relations to stay informed about other family members by casually showing them their social media accounts on their phones during a regular visit. Through these practices, family-based proxies become 'information middlemen', not unlike the intermediaries found in more formal information seeking settings (Buchanan et al., 2019; Gerunov, 2020; Król and Zdonek, 2020; Vitak et al., 2018).

The social nature of proxy support also motivates users of computer clubs who attend organised club meetings even when they are not seeking support for a specific issue. Instead, they are interacting with other club members and volunteers for casual conversation, asking for help as and when/if it is needed. There is a greater motivation for teaching/learning from professional proxies and older adults attending classes or clubs, however most of the skills being provided or sought, relate to communicating.

RQ2: formal and informal agreements

Research question 2 'what, if any, formal or informal agreements exist between proxies and account holders?' was addressed in the themes identified in the findings (4.1) Digital literacy and technical skills and, (4.3) Privacy and legal considerations. The research indicates that there are often no agreements or discussions about the role of a proxy, despite a wide range of proxy behaviour taking place. Through the interviews, it is clear that people naturally censor information and do have concerns about privacy when using social media on behalf of an older adult, even when these concerns are not addressed directly with the adult that they are supporting. This was highlighted by a family-based proxy who used their knowledge of their parent prior to their dementia diagnosis and decided not to post anything about the diagnosis on Facebook as the relative was very private and they felt would not want that.

Proxy relationships vary based on support networks and people are comfortable seeking support from, which can affect consent and agreements related to providing support. The professional proxy in this study had no formal agreements with anyone they supported, however they followed guidelines from their workplace to ensure they maintained privacy. On the other hand, participants in the focus group did not consider formal or informal agreements but they did express trust in volunteers at the group under the presumption that they were vetted by the organisation. This highlights that trust is presumed in formal settings, aligning with work by Vitak et. al. (2018) related to the perceived trust in public libraries and librarians.

RQ3: collaborative proxy practices and behaviour

Research question 3 'what are the collaborative proxy behaviour and practices that exist between the individuals providing or receiving proxy support?' was addressed in the theme (4.2) proxy practices. It is clear from this work that the nature of the relationship between the people providing or receiving support affects the proxy support that is provided. This is evident in that the professional proxy aims to provide people with tools so that they require less support in the future whereas family-based proxies are not concerned about providing digital skills and expect that they will provide the same support again. Family-based and professional proxies both change roles within the proxy relationship depending on the needs of the person they are supporting. In the case of the professional librarian, it is also apparent that the role between intermediary and proxy is blurred, confirming prior work (Kim and Noh, 2014; Noh, 2017; Vitak et al., 2018) related to the changing nature of a librarian's role in a professional setting. Further, this work also shows that, like professional librarians, family-based proxies undertake both proxy and intermediary roles.

Proxy roles do change over time; however, the change is not necessarily a conscious one, but rather it is more gradual and natural. There are various levels of proxy activity for both receiving and providing support. Support is not an all-or-nothing activity, and the levels of support can vary from setting up an account to tagging a photo. It appears that some people received greater or lesser levels of support depending on their confidence and ability completing tasks whereas others are receiving greater levels of support as time goes on. For example, a participant in the focus group discussed removing the Facebook app from their spouse's phone as they had been unwell, and they deemed their spouse no longer able to be aware that what they were posting was publicly visible whilst Proxy 1 discussed no longer sharing photos of their relative as they were starting to look frail, and they did not think the relative would want people to see them like that. This confirms the need for further investigation into the changing nature of the levels of support.

Limitations and future work

This study was an exploratory investigation in nature and although the findings indicate that proxies are supporting or accessing social media on behalf of older adults, these findings are limited due to the sample size. Two of the interviewees older adults, who they acted as a proxy for, also had dementia and this is not a normal part of the aging process which will have affected how the proxy approached some of the decisions regarding their level of proxy support. Future research around the use of proxy support by carers of older adults with dementia and other forms of cognitive decline, as well as younger adults diagnosed with early-onset dementia and their carers would open an interesting contrast between the types and nature of proxy relationships and how these change over time in contrast to the normal ageing process.

Further investigation into the different forms of proxy relationships is also warranted, including how different relationships affect the proxy support provided. For example, how family members act as proxy may contrast to the proxy practices of volunteers at a computing club or class. It is also important to further explore the role of information professionals to fully understand when they are acting as a proxy versus an information intermediary.

Older adults in the focus group discussed a range of other technology and online services that they seek support with, and this would provide an interesting investigation into the nature of proxies with other online services. Further, consideration should be given to how and if companies and organisations support or limit the role of proxies and what legal protections are available for such proxy roles.

This is especially vital in considering the safety and legal protections of both the proxy and older adults who are receiving either formal or informal proxy support.

Implications of this study

It is clear that social media proxy relationships exist, even if proxy roles are not well-defined. This study indicated that people will actively seek out help from sources to continue to access social media platforms. It is also apparent that there are different dimensions to social media proxy relationships. These include the motivation of both parties; the relationship between the proxy and the supported individual; the level of engagement; legal considerations; the type of proxy support provided; and any other relationship dynamics between the proxy and the supported individual. Any of these dimensions might affect the changing nature of the proxy relationships over time.

Conclusions

This research applied a qualitative approach to investigate the ways in which older adults are supported in their use of social media by proxies. We explored the role formal, volunteer and family member proxies undertake as 'social media proxies' and older adults' views on receiving support. The results demonstrated that social media proxies exist, although the role is not clearly defined, and the nature of the proxy relationship changes over time.

This research highlights the need for more in-depth investigations related to social media proxies, especially as the use of social media and other online platform is increasing steadily across all age groups. This includes further research that considers the wider issues related to formal or informal proxy roles and how the role of social media proxies fit within current guidelines and laws.

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