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Social media's have-nots: an era of social disenfranchisement

Social media's have-nots

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Abstract

Purpose – The purpose of this paper is to investigate the motivations, concerns, benefits and consequences associated with non-use of social media. In doing so, it extends Wyatt's commonly used taxonomy of non-use by identifying new dimensions in which to understand non-use of social media. This framework encompasses a previously unidentified category of non-use that is critical to understand in today's social media environment. Design/methodology/approach – This is an exploratory interview study with 17 self-identified social media non-users distributed across age groups and socioeconomic backgrounds. A thematic analysis is conducted based on a novel extension of Wyatt's framework and the risk-benefits framework. This is supplemented by open coding to allow for emerging themes.

Findings – This paper provides empirical insights into a formerly uninvestigated population of non-users who are prevented from using social media because of social engagement (rather than functional) barriers. It identifies how these individuals face social consequences both on and off social media, resulting in social disenfranchisement. **Research limitations/implications** – This is an initial exploration of the phenomenon using an interview study. For generalizability, future research should investigate non-use with a broader and random sample. **Practical implications** – This paper includes design recommendations and implications for social media platform designers to mitigate the consequences experienced by socially disenfranchised non-users.

Social implications – Addressing concerns of this newly identified class of non-users is of utmost importance. As others are increasingly connected, these non-users are left behind and even ostracized – showing the dark sides of social media use and non-use.

Originality/value – This work identifies types of non-use of social media previously unrecognized in the literature.

Keywords Social media, Facebook, Non-use, Technology acceptance, Social engagement, Disenfranchisement Paper type Research paper

Introduction

Social networking sites (SNSs) have experienced explosive growth over the last decade. Facebook, the most popular SNS in the USA, has been adopted by 79 percent of online Americans, while other platforms such as Instagram, Pinterest, LinkedIn and Twitter plateau at around 30 percent adoption (Greenwood *et al.*, 2016). With about two-thirds of Facebook's users logging in at least daily (Duggan and Smith, 2014), social media usage has become a norm. However, there are still many online adults who are not using social media. Most of the literature focuses on social media use and even overuse (Dong *et al.*, 2018; Yang *et al.*, 2016), but non-use is not nearly as well understood. This paper investigates the experiences of individuals who self-identify as "social media non-users," examining the barriers and motivations for use and highlighting the tensions between choosing to engage in, vs abstain from, social media. Thus, this work deeply examines the dark sides of social media use and non-use from the perspective of those who have chosen to disengage.

Information systems (IS) researchers often examine non-use transitively through the lens of technology acceptance and adoption models such as the technology acceptance model (TAM)



Internet Research Vol. 28 No. 5, 2018 pp. 1253-1274 © Emerald Publishing Limited 1066-2243 DOI 10.1108/IntR-03-2017-0123 and unified theory of acceptance and use of technology (UTAUT) (Davis *et al.*, 1989; Venkatesh *et al.*, 2003); as such, there is a wealth of research on factors that may lead to or detract from eventual adoption. While these models originate from the era before social media, they have been applied to social media adoption (Dhume *et al.*, 2012; Lee *et al.*, 2012; Rauniar *et al.*, 2014; Wu and Chen, 2015). IS researchers have since moved beyond studying social media adoption to integrating post-adoption theories, such as the IS continuance model (Limayem *et al.*, 2003), which helps explain sustained social media usage over time (Wu *et al.*, 2018). Yet, we argue that social media non-use cannot be understood simply as the antithesis of social media adoption and use. While models like TAM, UTAUT and IS continuance may be able to capture the influence of functional and hedonic factors of adoption and use, they may miss the more nuanced social dynamics that are essential to holistically understanding the complete social media experience – or more specifically, the experience of both users and non-users (Baumer *et al.*, 2013; Boyd and Ellison, 2007). In short, technology acceptance, adoption and continuation models tend to focus on the user, and we aim to investigate the experience of the non-user.

Our work is inspired by past research that highlighted the importance of studying non-use (Satchell and Dourish, 2009; Wyatt, 2003) and philosophically challenged the underlying assumption that technology acceptance and adoption should be the *de facto* standard in systems-based research. For example, Wyatt (2003) argued that when usage is considered a privilege or benefit, such as having internet access, non-use is erroneously equated to a lack of access or a state of deprivation (e.g. disenfranchisement). The idea that non-use could be voluntary is often ignored. Similarly, Satchell and Dourish (2009) pointed to an implied "utilitarian morality" where a "good" user is one that adopts the technology. Other work approaches non-use as a means to resist the temptation of overuse (e.g. addictive behaviors), regain a sense of control over technology or engage in active resistance as part of a socio-political statement (Baumer, Ames, Burrell, Brubaker and Dourish, 2015; Baumer, Guha, Quan, Mimno and Gay, 2015; Portwood-Stacer, 2013; Schoenebeck, 2014).

A commonly used taxonomy of non-users was developed by Wyatt (2003), which varies along two dimensions: temporality of adoption – whether the individual had previously been a user, and choice – whether intrinsic motivations or extrinsic constraints were the primary rationale for non-use. While many researchers have implicitly extended Wyatt's taxonomy (Baumer *et al.*, 2013; Baumer, Guha, Quan, Mimno and Gay, 2015; Portwood-Stacer, 2013; Schoenebeck, 2014), few researchers have focused on creating a deeper understanding of the social and cognitive processes of non-use.

Background literature

Non-use has been studied in the context of technology (Satchell and Dourish, 2009), the internet (Wyatt, 2003) and social media (Baumer *et al.*, 2013; Lampe *et al.*, 2013; Tufekci, 2008). We first introduce Wyatt's seminal taxonomy of internet non-use, synthesize new perspectives from subsequent non-use literature and then provide a more in-depth review of social media non-use literature relevant to our own work.

Wyatt's taxonomy of non-use

As mentioned in the introduction, Wyatt (2003) developed a taxonomy of non-users along the dimensions of temporality of adoption and choice. Individuals who never had the chance to adopt new technologies were considered excluded, while expelled non-users had their access revoked. Due to extrinsic barriers related to the digital divide, such as lack of infrastructure, digital literacy or socioeconomic status, excluded and expelled non-users have both been called "disenfranchised" users (Satchell and Dourish, 2009; Wyatt, 2003). Alternatively, resisters were characterized as those who chose not to adopt, while rejecters had previously adopted but chose to disengage of their own volition.

Empirical extensions of Wyatt's framework

Other non-use researchers reference and have implicitly extended Wyatt's taxonomy to include other types of empirically studied non-use but without explicitly returning to the theoretical underpinnings of Wyatt's framework. For the most part, these new categories of non-use fit within Wyatt's theoretical framework, such as resisters who are disenchanted or disinterested in adopting new technologies (Satchell and Dourish, 2009; Tufekci, 2008), or rejecters who abstain, leave, quit or take a break from social media (Baumer *et al.*, 2013; Baumer, Guha, Quan, Mimno and Gay, 2015; Portwood-Stacer, 2013; Schoenebeck, 2014). However, we identified four categories of non-use from the literature that were orthogonal to Wyatt's taxonomy: relapsers, limiters, displaced and laggards.

Baumer *et al.* (2013) identified relapsers and limiters as unique types of non-users. Relapsers are non-users who have stopped using a technology but ultimately return or "revert" back to being users, often due to addictive tendencies (Baumer, Guha, Quan, Mimno and Gay, 2015). In contrast, limiters may use various platforms within specific parameters or constraints. Displaced users are those who use technology indirectly as a service (Satchell and Dourish, 2009) or exhibit secondary use through others (Wyatt, 2003). The non-use category of laggards, which hail from diffusion theory, implies that non-users are simply future users who have not "yet" adopted (Satchell and Dourish, 2009). In terms of adoption, these non-users could potentially be users in the past, present and future. As such, the current consensus is that non-use should be represented along a continuum, rather than the binary adoption or non-adoption (Baumer *et al.*, 2013; Brubaker *et al.*, 2016; Wyatt, 2003). Further, non-use is not a "singular moment" but a temporal process, "involving layered social and technical acts" over time (Baumer, Guha, Quan, Mimno and Gay, 2015; Brubaker *et al.*, 2016; Rainie *et al.*, 2013). We incorporate these new categories of current and future (non-)use in our suggested extensions of Wyatt's theoretical framework shown in Figure 1.

Social media non-use

For the most part, those who have studied social media non-use have focused on rejecters of a particular social media platform. For instance, Stieger *et al.* (2013) found that Facebook "quitters" had higher levels of privacy concern, were more addicted to the internet and were more conscientious than users. Lampe *et al.* (2013) found that older adults with higher levels

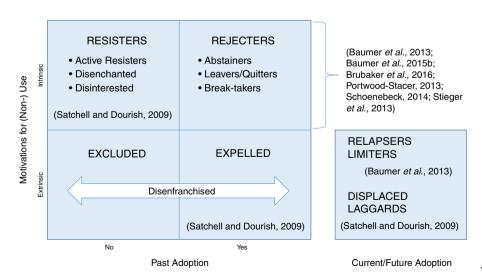


Figure 1.
Empirical extensions to Wyatt's theoretical non-use framework

of social bonding capital are less likely to be Facebook users. Other researchers have also studied non-usage patterns and motivations on Facebook from different perspectives, e.g. "break-takers" (Baumer, Guha, Quan, Mimno and Gay, 2015; Rainie *et al.*, 2013), "leavers," "relapsers," "limiters" (Baumer *et al.*, 2013) and "abstainers" (Portwood-Stacer, 2013). Fewer studies have examined non-use on social media platforms beyond Facebook, such as taking a break from Twitter (Schoenebeck, 2014), leaving Grindr (Brubaker *et al.*, 2016) or resisting adoption of location-sharing social networks (Page *et al.*, 2013). A few scholars studied SNS non-use in general almost a decade ago (Hargittai, 2007; Tufekci, 2008) when there were significantly fewer popular sites, types of services and lower adoption rates. To our knowledge, none of the current work on social media non-use has revisited the phenomena of non-use more holistically across all platforms.

The social media non-use literature also focuses on the key motivations for why users have chosen to reject various social media. Motivations have ranged from boundary regulation or privacy concerns, data misuse, concerns about the amount of time spent on social media, communication style, banality or absence of compelling content, excessive gossip or drama, feeling judged, feeling manipulated, or active resistance as a political statement, to mere disinterest (Baumer *et al.*, 2013; Baumer, Guha, Quan, Mimno and Gay, 2015; Lampe *et al.*, 2013; Page *et al.*, 2013; Portwood-Stacer, 2013; Rainie *et al.*, 2013; Schoenebeck, 2014; Stieger *et al.*, 2013). While the motivations for non-use across various platforms and contexts from prior studies have been insightful, they have moved away from Wyatt's original framework and often overlapped. As a result, they lack a clear framework in which to ground their empirically driven findings. Our work suggests an extension to Wyatt's framework to facilitate more cohesion as the body of non-use literature continues to grow.

Privacy calculus

Most of the existing research on social media non-use has undertaken initial exploration by identifying categories of non-use. Specifically, most work describes a taxonomy (Wyatt, 2003) or classifications (Baumer *et al.*, 2013; Lampe *et al.*, 2013) for different types of non-users. Our work moves beyond these descriptions by focusing on the social and cognitive processes that govern non-use transitions and practices. This leads us to map out users' motivations, benefits, risks and concerns regarding the use or non-use of social media and integrate them into Wyatt's framework. This novel contribution to non-use research is closely related to research on the privacy calculus (Laufer *et al.*, 1973, Laufer and Wolfe, 1977), which refers to the cognitive process that underlies people's decisions regarding the disclosure of personal information.

The privacy calculus can be seen as a privacy-specific instance of decision-making theories like utility maximization or expectancy-value theory (Awad and Krishnan, 2006: Li, 2012; Rust et al., 2002; Stone and Stone, 1990). These theories describe the process of evaluating and trading off positive and negative aspects of decision options (Bettman et al., 1998; Fishbein and Ajzen, 1975). When it comes to privacy decisions, these aspects are the perceived risk and perceived relevance of sharing a certain piece of information with a certain recipient (Featherman and Pavlou, 2003, p. 1,036; Li et al., 2011; Stone, 1981); whereas for use/non-use decisions, these aspects may include a broader set of motivations, benefits, risks and concerns. Furthermore, our work reveals that people's non-use calculus goes beyond the traditional individualistic notions of controlling information flow. Rather, following the notion of networked privacy (Marwick and Boyd, 2014), the trade-off tensions of the non-use calculus are related to the social dynamics around how this information is used. Moreover, looking through the lens of privacy calculus led us to uncover the "dark side" of social media use/non-use by explicitly weighing the benefits vs the risks of social media engagement for non-users. As explained in our results, a key finding of this paper is that there are inherent drawbacks from making either decision, leading to sub-optimal outcomes whether individuals used social media or not.

Building upon the existing non-use literature

Focusing on the cognitive process of non-use, our research is motivated by a desire to map out users' non-use process in terms of their motivations, benefits, risks and concerns regarding the use or non-use of social media within (and beyond) Wyatt's framework. This conceptualization is closely related to the idea of the privacy calculus (Laufer et al., 1973, Laufer and Wolfe, 1977). Our research focuses on social media non-use processes across all social media platforms. We interviewed 17 adults who self-identified as "social media non-users" and asked them to walk us through their previous use of social media (if any), their motivations for use and/or non-use and their past and current perceived and/or real benefits, risks and concerns associated with social media use vs non-use. We also investigate whether and/or why they envisioned using social media in the future. Our research was driven by the following research questions:

- RQ1. Are there aspects of social media that are unavoidable and push people to engage, even putting pressure on non-users?
- RQ2. What are negative consequences and benefits of use and non-use, i.e. what dark sides of social media do participants mention as the main motivations behind the non-use process?
- RQ3. What barriers of social media use do participants find hardest to resolve, i.e. what dark sides of social media remain unresolved, even for non-users?

As these research questions are buttressed in Wyatt's (2003) taxonomy of non-use, we initially coded our interviews on Wyatt's dimensions of the temporality of adoption (i.e. past use or no past use) and motivations for non-use (i.e. extrinsic vs intrinsic). Our analysis revealed a new dimension by which to characterize use and non-use motivations – social engagement vs functional use. This new dimension helped us frame several of our key findings in a more cohesive manner.

The first finding that motivated our social engagement/functional use distinction was our initial surprise that many of our self-proclaimed "non-users" actually used social media for work-related information-driven tasks and communications (i.e. functional purposes), while they did not adopt social media for purely social use (RQI). In their minds, social media (non-)use was exclusively determined by whether they used it for social engagement purposes.

The second finding that motivated our social engagement/functional use distinction was the fact that all 17 of our participants abandoned using social media for social engagement purposes indefinitely. Social motivations that encouraged past use (e.g. interacting with friends) were overshadowed by negative social – not functional – consequences and concerns (e.g. false sense of community) associated with being on social media. Some said they would consider using social media in the future but for functional purposes only (*RQ2*).

Given these results, we used the social engagement/functional use distinction to articulate what we call the "non-use calculus" to demonstrate how there is a dark side to both social media use and non-use. The socially motivated dark side of non-use further gives rise to a new class of social media non-users – the socially disenfranchised: individuals who would like to reap the social benefits of social media but feel like they are being prevented from doing so due to emotional and social factors, which burden them even in their current state of non-use (RQ3). We discuss how social media platforms fall short of meeting the social needs of non-users and recommend ways to mitigate these effects so that non-use can be an empowered choice, as opposed to a state of social deprivation.

In studying non-use as a process, our goal was to: extend the types of social media non-users studied beyond that of rejecters of a particular social media platform, and use (and suggest extensions to) Wyatt's theoretical framework to unify the various motivations for social media non-use (both new ones as well as those studied thus far). To do this, we recruited participants who identified as social media non-users across all social media platforms. This allowed us to cast a wider (more comprehensive) net than previous social media non-use studies in terms of our sampling method, empirical data collection, thematic analysis and theoretical development. In applying a theoretical lens to this novel population of social media non-users, we make the following unique contributions:

- Extended Wyatt's non-use framework: we interpreted our data through the lens of Wyatt's (2003) non-use framework combined with the categories that emerged in subsequent non-use research. This allowed us to make an important distinction between intrinsic motivations for non-use vs extrinsic constraints preventing and/or discouraging use. Acknowledging the temporality of non-use, we mapped participants' motivations to episodic narratives past use or non-use, current non-use, potential future use to understand non-use as a complex temporal process. Combining the driving factors behind non-use studies and acceptance studies, we asked about motivations for current non-use as well as contextual information to understand possible motivations for past or future use. In doing this, we add to the cumulative understanding of non-use.
- Articulated the non-use calculus: drawing from the privacy calculus theory (Laufer et al., 1973, Laufer and Wolfe, 1977), we further unpacked participants' motivations behind concerns regarding (potential or actual) negative consequences and (perceived or actual) benefits of use and non-use. This additional layer of analyses was not included in previous research on non-use and allowed us to discern the driving forces behind users' use/non-use decision. This analysis also articulated the link between the non-use literature and the dark side literature by showing that social media non-use, as well as use, can often lead to unintended and socio-psychologically undesirable outcomes.
- Delineated between social engagement vs functional motivations and constraints: through our analysis, we found two types of usage motivation. The first was operationally driven functional use, which often had to do with disseminating and receiving information (flow of information). The second was desire for social engagement, which places emphasis on the interactions (influence of information). Similarly, the consequences and benefits of usage can be categorized as functional or social engagement issues or benefits. Another way to look at it is that functional goals and barriers are associated with one-way consumption or sharing, while social engagement goals and barriers have to do with two-way interactions and impacts. Within our sample, we found that social media non-use was mostly driven by social engagement issues since they were much harder for our participants to resolve than functional barriers. Ironically, these individuals continue to have social engagement problems arising from non-use. Acknowledging the important distinction between these two types of drivers, we further extend Wyatt's (2003) taxonomy along this dimension to identify a new sub-class of expelled and excluded non-users, the socially disenfranchised.

Methods

Data collection

This study was part of a larger research project to understand people's attitudes toward (and usage of, if any) social media. We conducted semi-structured interviews with individuals residing in the USA who were aged 18 or older. The criterion for being included in the current study was that participants self-identified as "social media non-users." In our recruitment message, we gave examples of platforms considered social media by recent Pew Research Center studies (e.g. Facebook, Twitter, Instagram, Snapchat and LinkedIn) (Greenwood et al., 2016). Additionally, we drew on the social psychology literature that explains how

people's social and psychological needs change as they move through various developmental stages in life associated with age (Erikson, 1959; Newman and Newman, 2014). These needs influence their everyday behaviors. This has also been shown to affect social media perceptions and usage amongst social media users (Page and Marabelli, 2017). Given that our study is exploratory in nature, we wanted to capture a variety of perspectives and motivations. Thus, we took a stratified sampling approach to account for participants of different ages who might have different needs and behaviors. Participants were recruited from multiple sources: a mid-sized private university in the northeast, the local community and industry and the extended social networks of several researchers. We also relied on referrals from these sources to gain access to non-users, who proved harder-to-reach. Interviews focused on motivations for non-use, history of past usage, triggers that would lead to future usage, benefits and consequences of use or non-use, and associated attitudes, concerns and contextual factors. In summer 2016, we conducted 17 semi-structured interviews with non-users from a variety of socioeconomic backgrounds in the USA. Interviews were conducted in person, over the phone, or via Skype based on the participant's preferred communication method. One participant was interviewed over e-mail, being uncomfortable with verbal exchanges. All non-users had access to computers and/or smart phones capable of supporting social media and expressed confidence in their technical and physical ability to use it. This study was approved by the university's Internal Review Board.

Data analysis approach

We conducted a mixed methods qualitative analysis that was first theoretically grounded using Wyatt's (2003) taxonomy of non-use, combined with any extensions we identified in the literature (Baumer *et al.*, 2013; Satchell and Dourish, 2009). Specifically, we examined temporality of adoption by asking participants questions regarding past social media use, their present state of non-use and potential future use. Second, across these time periods (e.g. past, present and future), we inquired about their motivations behind their use/non-use decisions, classifying these as intrinsic needs or extrinsic constraints. This more positivist approach (Yin, 2013, 2015) ensured that our work was well-aligned with the theoretical underpinnings of past non-use literature. Yet, to develop new insights, we combined this inductive approach with a more interpretivist analysis that allowed for new themes and dimensions to deductively emerge from our empirical data. This hybrid qualitative approach strengthens our overall contributions by enabling us to identify both underlying mechanisms and causal patterns (Lin, 1998) related to the phenomenon of social media non-use.

Next, we further unpacked the motivations using the privacy calculus framework (Laufer et al., 1973, Laufer and Wolfe, 1977) that frames disclosure decisions as the result of analyzing risks vs benefits. This framework has also been used in prior work studying social media non-use (Baumer, Guha, Quan, Mimno and Gay, 2015; Lampe et al., 2013) and adoption (Xu et al., 2009), but we chose to extend it beyond exclusively privacy-related rationales toward a more inclusive "non-use calculus." Motivations and non-use calculus factors (i.e. negative consequences and benefits, both potential and actual) were open coded based on participants' responses across their states of use and non-use in the past, present and future. Two researchers independently coded the interviews and then worked together to resolve any coding conflicts.

Results

Participant characteristics

All interviewees identified as non-users prior to their interviews, but interestingly, we often discovered during the interview that a participant actually did use some social media platforms. However, their use on these platforms was functionally and operationally motivated (e.g. to share or receive work-related information, communicate within their organization, access services) rather than motivated by social engagement (e.g. to reconnect

with old friends, engage in social interactions, strengthen relationships with current friends). This helped us understand that identifying as a social media user is linked to using these platforms for social engagement motivations. After observing these different types of social engagement vs functional usage, we categorized our interviewees' past, present and anticipated usage of social media by Wyatt's (2003) dimension of intrinsic vs extrinsic motivations for (non-)use and also along our emerging dimension of social engagement vs functional use/non-use.

We also note that about half our participants were displaced non-users who gain access to social media occasionally and indirectly through family members who share information they feel would be of interest to the non-users. Half had tried using social media in the past for functional purposes, and half had tried it for social engagement purposes (this includes some overlap, since not all interviewees had used social media, and others used it for both social engagement and functional purposes). Moreover, the interviewees are spread across all four types of non-use in Wyatt's (2003) taxonomy: excluded, expelled, rejecters and resisters. However, these non-use designations were due solely to social barriers of use rather than socioeconomic or other practical constraints. For instance, our interviewees all had access to home computers and even smart phones and data plans. They also did not express technical anxiety or barriers to use and were capable of installing and using social media (in fact, most had done so in the past). Instead, there were normative social pressures to be on, and subsequently, off social media. Our interviewees expressed that largely everyone around them (including strong ties such as spouses) used social media. Some of them still use social media occasionally but for exclusively functional purposes. Therefore, a participant labeled as an excluded non-user may still use social media on occasion for functional purposes, but the label reflects exclusion due to social engagement barriers such as social anxieties or bullving.

In this section, we describe our interviewees along these four non-use dimensions from our extended version of Wyatt's taxonomy.

Resisters. Four of our non-users never used social media for intrinsically motivated reasons. They all perceived that social media generated too much useless information and they would rather keep things "simple." Three of the resisters were also concerned about data privacy. Participant J, a cancer researcher in her forties, explained, "I have sort of this underlying suspicion of putting myself out there on the web like that [...] I just really love having things simple and under my control." So she felt strongly about the benefits of staying off social media. However, we discovered that she did experience drawbacks such as missing out on seeing pictures of friends' families and being able to see their children grow up. Interviewee M, a college coach in her fifties, also expressed data privacy concerns but acknowledged having a LinkedIn account for functional purposes just so people can contact her. Individual K, a civil engineer in his 50s, further emphasized how social media information can be incomplete and misleading. He did not feel he had any business making inferences from people's information, unless the person decides to tell him directly.

Interviewee B, a youth counselor in a juvenile prison in her early 20s, differed from the others in that she did not feel concerned about data privacy. She regularly interacted with her close friends and family and explained how she just never felt a need for the information on social media. However, her recent move across the country had left her out of touch: "I found out just a couple of days ago that one of my friends from back home had a miscarriage and lost her baby and she was really, really upset about it and posted something on Facebook. And I found out later and I felt really bad because I wasn't able to console her, because I didn't know about it." Like many other intrinsically motivated non-users, she had the expectation that if something was important, she would find out somehow. This recent experience violated her long-held expectations: "She should have told me; I would have called." This suggested to us that some non-users might be missing out on more than they tend to realize.

Rejecters. We interviewed four individuals who had used social media but had intrinsic motivations to reject it, i.e. they all felt it was a waste of time. Interviewee D (a man in his 30s, working in the legal field) had hoped that Facebook would help him "connect with some people that I haven't seen for a long time." However, he had misgivings about the authenticity of information posted and general data privacy concerns, and he "eventually decided to cancel the account, because I just felt like I wasn't getting as much out of it [...] I didn't really talk to the other people that I knew very often and neither did they talk to me." D did not get the social engagement that he was hoping for and felt social media was not worth his time.

Interviewee G (a business owner in his forties, working in the finance and food industries) also considered social media a waste of time but had several functionally driven uses for it. He had a Facebook account that was once required for him to apply for a job, and he kept a LinkedIn profile, stating that: "I really don't use it as a social media site. I'm more there if people want to contact me. I really don't look at the connections. I don't contact anyone in LinkedIn." He further explained that he might utilize Facebook for his business: "We're toying with some ideas of social media from an advertising perspective," but explained that "that's a completely different use." This illustrates how social media may in fact support both functional use and social engagement goals.

Participant H (a scientist in his 40s) went so far as to question the motives of people posting on social media. He joined MySpace and Facebook long ago when they were novel, but saw no value in things such as happy birthday posts that people performed only because they were prompted by Facebook or invitations to reconnect with those he had lost touch with. After many years, he deleted his personal accounts but still maintains a Facebook page for his lab to post work-related information.

Finally, interviewee O is an elementary school classroom aide in her 60s whose son thought she would enjoy keeping touch with people and so he set up her Facebook account. After the first day, she stopped using it, un-intrigued by all the "day to day stuff[...] I have a headache.' I don't want to hear that. It turns me off completely. That's a waste of my time." When her husband started using the account and interacting with their friends, she made sure that he changed the account name to reflect both of their names so others would not misattribute his comments, which would sound uncharacteristic. She also reflected on how all around her "people are just looking at [social media] and you don't talk as much because you know they're interested in what's happening on their phone." As a result, even though O felt she had been able to keep away from social media, we observed that her relationships and interactions were still affected by others' social media usage.

Excluded. We identified four individuals who were excluded from using social media but not for reasons commonly explored in the literature such as access to technology or the technical ability to use it. Rather, issues around social engagement were the main impediments. F, a government employee in her 30s, stayed away from social media to avoid the pressure to keep up with others and maintain a perfect profile: "I would want to make it the most informative, pretty page – and then I would spend more time on the computer than I already do and looking, 'oh, what is everybody else doing,' and it would suck me in." Additionally, she hated the fact that others would be able to comment on her profile and feared that this would shape her online identity. In fact, when she entered law school, students had all automatically been signed up for a Facebook account. When she started getting friend request notifications in her e-mail, she said, "I was so livid I literally called Facebook headquarters and was like, I want you to take everything down!" Similarly, she had installed Instagram thinking it was a photo editor but canceled her account as soon as she realized it was social media. This illustrates that even though some social media support functional goals, they may be avoided by non-users who are unwilling to engage in social activities.

Participant P, who was in her 60s and working in multi-level sales, similarly called it "a death sentence" to keep up with people on social media. She explained that her and her husband's success in sales made it so people constantly wanted to connect with them and talk to them about how they made it: "We have a network of about 270,000 people. We have been invited countless times to participate in Facebook and LinkedIn and different sites [...] if we only got involved with 10% of that [...] 27,000 people, there is no way that we could possibly keep up with that. It would be consuming, totally." Both F and P felt they had to engage with others if they were on social media. Hence, they avoided the platforms, despite missing out on the social benefits. Participant I, a middle school teacher, expressed concern about how using social media would diminish communication and social skills: "It's almost too much information, but it's their choice. And I feel like it's also taking away from actual face to face or even phone conversations where people don't feel a need to talk anymore [...] communication skills are just getting poorer and they don't know how to have a conversation." She further observed how students "don't know how to resolve any sort of conflicts because none of it's face to face."

Interviewee N, a postal worker in his 60s, was excluded from social media for a different reason. He explains, "I grew up in a time where there were no computers, so all the bullying I received was physical." Now, as an adult, he is civically active and once again, "I seem to be a target [...] That is one reason I haven't embraced the whole social media aspect." Despite this, N revealed that he planned to join Facebook in the future, since he felt his community organization was really pushing it to help spread their message. Participants I and F also anticipated needing to join social media in the future for functional purposes. Once their children were old enough, they foresee signing up in order to monitor those accounts.

Expelled. Some of the most compelling descriptions came from the five participants who were expelled from social media. Like the excluded individuals, it was social barriers rather than economical or technical prowess that led to their abandoning social media. Participant A, a computer programmer in his 20s who chose to be interviewed through exchanging e-mail because of "my social anxiety" around talking on the phone, describes how "I've interacted with pretty much every form of social media and had most of them at one time or another" before deciding "social media is a plague [...] A massive waste of time" that "lets people pretend to be connected to others when they aren't really." He explains how people "have 'friends' that they block (but don't actually unfriend) because they actively dislike them but feel some sort of social obligation to have them as friends. I believe this creates a sense of false community." The breaking point for him came with "the social anxiety" caused by "situations like, "This person I knew in high school sent me a friend request. I liked them then but haven't talked to them in ten years. Do I accept them or not?' [These are] ridiculously uncomfortable for me." He would "leave them in pending requests forever, instead of just accepting or denying."

As a consequence of quitting social media, interviewee A "gets a lot of flak for not being on Facebook." His "friends created [an account] to troll me for refusing to be on Facebook myself. They'll check 'me' into mildly embarrassing places and post things pretending to be me." Furthermore, he is often excluded from social events: "I get, 'What do you mean you didn't know about the party? Oh yeah, I keep forgetting you aren't on Facebook. Sorry about that.' a lot." After canceling his MySpace, Facebook, Twitter, LinkedIn and Snapchat accounts, he only has "a throw-away account under a fake name" on Facebook to test coding integrations for work, and Tumbler and Reddit accounts for functional purposes.

Participant C, a dance major in her 20s, similarly felt the pains of social exclusion:

I have a friend group that I've been friends with for about a year now, and they've recently stopped inviting me to come to stuff, because they all have a Facebook page together and they all tell each other through Facebook. And so, they just either forget to invite me or don't tell me outside of Facebook. So, I've sadly had to lose a few friends because of it too.

It was difficult for C to bring herself to use social media such as Facebook since "I was bullied a little bit in elementary school and middle school and so I decided on social media [...] I didn't want them to have an easy way to access me." She had seen on social media that "people don't have a filter anymore and they feel like they can put up whatever they want on social media. But they would never say it in real life to a person's face. And I just think there's a cowardice in that that I just find sickening." So when her university's ballroom dance company asked everyone to keep in touch through its Facebook page, "I tried to set one up for a day, and it just gave me this disgusted feeling that I just couldn't do it. I couldn't bring myself to go against everything I've said for years. I deleted it right then, because I had no desire to be a part of that." When asked about simply not accepting friend requests from the people who had hurt her, C explained:

The friend request, initially, would probably spark some anxiety within me. Like, reopening the old wounds from middle school that I've healed and don't want to necessarily remember. And even though they were unkind to me, I still have an issue being rude to somebody. I just want to put good out in the world. And I don't want to hurt their feelings, because I wouldn't want anybody to feel the way that that person made me feel. But at the same time, I just don't want to be in contact with them, or anything remotely close to contact.

For C, there was no simple solution to the complex social dynamics surrounding use or non-use. Surprisingly, C had started using Instagram a few months ago, but for functional purposes to promote her dance shows to close family and friends: "I took a picture of our posters as soon as we get them, to really start promoting it."

Participant L, who was in her 50s and had been on disability for several years, had a Facebook account that her youngest daughter created for her before moving off to college. This would allow her mom to keep in touch and reconnect with her college friends and her children, as well as those she had taught over the years through a youth program. However, reading about others proved too overwhelming for L: "They're getting married or this or that. And it feels like I need to be doing something for them or helping them, and there's just too many of them." Additionally, it was difficult seeing that others "are always doing something and I feel like I don't have a life. Like everybody's always going on vacation [...] and I don't have a job. I can't go anywhere. So, it kind of makes me feel a little more sad [...] they're all going on with their lives and I'm not part of their lives." Nonetheless, the biggest challenge proved to be bullying she received from her in-laws. Her daughter had helped her set the account so that it was only viewable by friends, but L's sisters-in-law still found out what she had posted:

My husband came home mad. "My sister's mad. You put something on there." And I'm like, "I didn't put anything on there, except for, you know, who I am and what I like, or something [...]" It's a control thing, you know? So they tell him what I can and can't do and whatever, and he goes along with it. So, my daughter said, "You're right. This is not going to be pretty for you, so let's just get you off."

Despite trying to limit who could see her posts, L was still unable to avoid the watching eyes of her in-laws.

Another expelled interviewee, E, an attorney in her thirties, had both Facebook and LinkedIn accounts. LinkedIn was only used for sharing information for work, but she had tried to use Facebook to connect socially. She described how several times she had "engaged [with Facebook] temporarily only to get overwhelmed by the amount of content and disengaged again."

Participant Q, who was retired and in her 60s, finally signed up for Facebook because a friend asked her to connect. In hindsight she reflected, "I wasn't doing it for the right reasons. I was doing it because I felt like, well, she's my friend, maybe I should do this. Not because I wanted to be on Facebook and to go see all her daily activities and all her

pictures." However, she did not make it far beyond her first sign-in before deciding to quit. Q was wary about letting social media shape her personality. She explained how people rely on their social media networks for advice and let others tell them how to feel, rather than learning to be self-reliant:

[If] I have a bad day, I can say some four-letter words, throw something down, and I start working myself out of it [...] [If] I put it in writing, people are going to continue that bad moment by having it come back at me, [reinforcing how bad it is] [...] You don't learn to rely on your own [character] [...] Where is the time where you can become yourself? [...] If you're told how to do something all the time, and for years, you're always going to look for instruction of how to do things.

Q felt that she would lose her personal character and independence if she joined social media. Ultimately, she could not bring herself to stay on it.

Motivations for use, non-use and potential future use

As illustrated in the previous section, many of our interviewees had engaged with social media in the past. Some had been motivated by the social engagement factors that represent the core functionality of most social media. For some, these social engagement goals were intrinsically motivated, such as wanting to interact with friends, or keeping in the loop about people's lives. Other interviewees had been extrinsically motivated, nudged by close ties such as their children's or close friends' interest in their social well-being. However, the barriers that arose led all of them to ultimately drop this type of usage.

In contrast, other interviewees had been functionally motivated: i.e. they treated social media as a tool to obtain information and to accomplish more practical, often work-related goals. This functional use could similarly be intrinsically or extrinsically motivated. Several wanted to have accounts just so people could contact them, like a "yellow pages," or to share a message for their organization. In other cases, functional use was imposed upon interviewees, e.g. as a requirement to use third-party services, or to communicate with members of vocational, religious or community organizations that played a vital role in their lives. However, extrinsically motivated functional use brought about a noticeable tension in those who had social barriers but felt obligated to use social media to accomplish functional tasks and goals. As a result, those intrinsically motivated were still using social media for functional reasons, while those extrinsically motivated had mostly stopped.

Some reasons our participants gave for disengaging from social media were similar to ones previously found in the literature when examining rejecters of social media. These were typically more functional concerns such as data privacy (from corporations, government, future employers, etc.) (Baumer, Guha, Quan, Mimno and Gay, 2015; Lampe *et al.*, 2013; Stieger *et al.*, 2013), being inundated with dramatic or inane posts (Baumer *et al.*, 2013; Rainie *et al.*, 2013) or concerns about social media being misleading (whether it is "fake news" or just that people's opinions are not researched or fact-checked) (Baumer, Guha, Quan, Mimno and Gay, 2015). These reasons were expressed by non-users across all four categories of the Wyatt taxonomy. However, we identified several additional motivations that have not all been a focus in non-use literature. These motivations for non-use, which came predominantly from socially excluded and expelled non-users, were deeply rooted in how they negatively impacted non-users' relationships and sense of identity. They arose from four different sources of anxiety that we describe here.

Being a good social media citizen. Several non-users felt that being on social media required them to keep up with everyone's posts and to present a well-crafted presence. This level of commitment overwhelmed them. As E, F and L demonstrated, the maintenance work and active engagement are so taxing for non-users that they did not feel they could be on social media at all. They believed that doing a poor job at keeping up with Facebook could hurt relationships more than not engaging altogether. This is because being on social

media sets the expectation for them to read everyone's posts and keep others up-to-date about themselves in return. For some, such as F, the drive to do a good job was also intrinsic. She felt external pressures and also recognized her own natural tendencies to do well.

Relying on a false sense of community. Several non-users hoped to connect with others on a deeper level but decided that social media relationships were too superficial. This came in different forms. D's experience was that social media is not always conducive to meaningful interaction that would make him feel more connected. On the other end of the spectrum, A experienced how interacting with others and having social media "friends" was a hollow experience. He believed that the motivations behind those friendships might be inauthentic.

Being bullied. Several of our non-users were being bullied by others offline (C, L, N), and some hoped social media would be an outlet for support. However, they found that they could not escape bullying even on social media. Privacy controls for rejecting friend requests and controlling who sees what were not enough to help these individuals, as we saw for C and L. In fact, several of our non-user interviewees expressed how information can get to the wrong person despite their best technical efforts to prevent this from happening. Moreover, personal or social convention can prevent users from using privacy features, as was the case for C, who still wanted to spare the feelings of those who had bullied her. She found that being on social media would mean being connected with past bullies and her present-day critics and would just "be another way to hurt my self-esteem."

Changing who I am. Non-users felt wary that social media would change who they are as a person. Others' posts and reactions can shape one's own personality and character (as Q worried). Another concern is that what others post about the non-user can come to represent his or her online identity (as F expressed). Likewise, some (e.g. A) felt that social media promotes gossiping, cyberstalking and other maladaptive traits. Many non-users also observed how people were less interested in engaging with those around them and expressed how they were "competing" with social media and people's phones.

Strikingly, none of our participants expressed a desire to rejoin social media for social engagement-motivated reasons. Missing out on social connections was an anticipated trade-off of avoiding more negative aspects of social media engagement. Only intrinsic, functional motivations moved some of our interviewees to anticipate joining social media in the future (but with an expectation of negative social and emotional impact). Specifically, the anxiety around keeping a child safe overrode personal anxieties and reservations for F and I, who might use social media to monitor their children's future accounts. And N's plan to join social media was driven by his desire to help his organization share their strongly held beliefs, despite anticipating "negative responses" targeted personally at him. Functionally and intrinsically motivated use was the only persisting type of usage we observed in our interviewees, so it is unsurprising that this was also the only type of future usage anticipated by others. This observation reinforces how non-users are fairly perceptive about how potential future use could work for them.

The non-use calculus

In the introduction, we described our desire to map out users' motivations, benefits, risks and concerns regarding the use or non-use of social media. To this effect, we introduce a framework that is analogous to the privacy calculus but with a focus on non-use aspects that go beyond the traditional perceived privacy risks and benefits. To signify this broadening of the privacy calculus framework, we dub ours a non-use calculus framework. We use it to understand how participants weighed the benefits and drawbacks associated with social media use and non-use, leading most to disengage from social media altogether and some to limit usage to functional purposes rather than social engagement.

Benefits of non-use outweighed those of use. Those who had previously used social media perceived no social engagement benefits and only a few functional benefits of use. Recognizing that social media is the new virtual phone book, several appreciated being contactable through their accounts. Some liked the ability to promote their organization or a cause, and others found social media valuable for being invited to events. However, the benefits of not worrying about having to continuously share information and providing persistent access to oneself were more numerous. All interviewees emphasized how much time they believed that they saved by being off social media, as the volume of information was simply too overwhelming for them to keep up. Another perceived benefit was not having to worry about the privacy of their personal data. Additionally, they felt that they did not have to worry about the authenticity of information or people — instead, they perused what they perceived as more reliable sources of opinions and news that they had found in the offline world.

The social engagement benefits of non-use were equally compelling. Many interviewees were relieved not to have the pressure of keeping their profile updated and keeping up with others' posts (a pressure that was largely self-imposed). Not being criticized or judged online (or having to use it in fear of criticism or judgment) was a major benefit for non-users who had been bullied growing up, or who were still being bullied in the offline world. A common phrase that participants used to describe these benefits was that non-use made "life simple." They claimed that they felt they could be their authentic selves and not be influenced by their social networks (at least not by the online variety).

Interestingly, it seems that most of the reported benefits of non-use were in fact avoided concerns with the use of social media. Indeed, non-users felt that all concerns and negative consequences they perceived while using social media were resolved by not using social media. Moreover, even those who never used social media voiced concerns about the prospect of using it that corresponded to actual consequences experienced by others who had. This leads us to believe that non-users who have never engaged with social media are still able to infer how using social media would affect them, since none of their concerns were unfounded.

Unresolved social consequences of non-use. Social engagement consequences of non-use, however, were more difficult to resolve. In fact, almost every interviewee who had a specific social engagement concern that drove them toward non-use had a corresponding social consequence related to being off social media. These social concerns and consequences of non-use were most often voiced by expelled and excluded non-users. They felt alienated from social media due to the social risks that outweighed the social engagement and functional benefits of use. However, they were now experiencing these negative consequences regardless — a lose-lose situation that has not been highlighted in the literature. These unresolved consequences of social media non-use include having one's online identity shaped by others, social isolation through lost social connections and offline bullying.

Others are shaping my identity. People on social media tend to post about and tag nonusers regardless of their absence. Consequently, non-users' identities are being represented by others who are on social media. Even though non-users themselves avoid having their character shaped through social media, those around them are still engaging in maladaptive behavior such as gossiping and impulsive posting as a result of social media use. Other users are thus able to shape the non-user's identity despite their abstention from social media. Worse, it is harder for non-users to detect and act upon such acts of disclosure and/or misrepresentation. Instances such as A's fake Facebook profile illustrate how social pressures may leave people no choice about having an online presence and identity.

Losing a sense of community and social connections. Although being on social media may create a false sense of community, non-users often expressed losing social ties and closeness offline as well. Many have been left behind and lost friends who are building stronger bonds with one another via social media but are no longer in touch with the non-user. C's story clearly

illustrates how building closeness through social media can come at the expense of pushing others away. Feeling left behind was particularly common amongst our expelled and excluded interviewees. The face-to-face time they hoped to gain by going off social media does not happen, as those around them are "sucked into their phones" and socializing on social media: "I have something else to compete with; not just the TV or the newspaper, but Facebook" (Interviewee O). When it comes to invitations for social events, they are often forgotten or told at the last minute. They also may not find out how others are doing, since social media has replaced other means of communicating social news (such as photo-sharing sites like Flickr).

Bullying offline. Non-users, who disengage from social media because they are worried about being bullied online, are often still bullied offline. Worse, the social support that could have benefited them in social media remains unrealized. Participant L expressed how she "probably would have stayed on there if it wasn't for the harassment of my relatives [...]." However, now she does not have social media as a way to connect with others, but she still has "in-law issues on a daily basis, of them calling, harassing."

In summary, we consistently observed that functional consequences could be resolved by leaving social media. On the other hand, when it came to social engagement consequences, non-users found themselves in a lose-lose situation where they had a similar problem regardless of whether they were on or off social media.

Surviving as a social media non-user in a world of users

We identified several conditions that allowed non-users to soften the drawbacks of being off social media. Many interviewees, especially expelled and excluded individuals, relied on secondary or displaced use through a close family member such as a spouse or child. Although the literature often discusses displaced use as extrinsically driven (Satchell and Dourish, 2009), we found that in our sample it was mostly an intrinsically motivated decision. These participants did not want to be on social media, and thus, decided to get the relevant highlights through an intermediary. This allowed them to keep up with major events while protecting themselves from the negative social consequences of being on social media. However, there was still an extrinsic constraint, in that their intermediary had to be willing to facilitate. This intermediary would usually be the one to initiate the interaction, e.g. by showing the non-user posts that they believed would be of interest: "Every once in a while, he will show me some of my old students or friends or something. He will say, do you want to see them? And he'll show me once in a while." Although interviewee L's husband shared on occasion, this participant wished she knew much more about what her friends and former social connections are doing.

There were also interviewees who relied on their friends to contact them through alternative channels, such as e-mail or phone calls. Unfortunately, this approach was never 100 percent successful. Participants described being forgotten. Often they would get the invitation eventually over e-mail but too close to the event date to be able to make plans to attend. In terms of getting social updates, several interviewees had the attitude that people would call them if it was important. Yet relying on alternative forms of communication proved to be inadequate for most non-users, especially as certain alternative channels have become antiquated (e.g. birth announcements in the mail or e-mail). These individuals were left with no means of receiving social news. As a result, many expressed the feeling of being socially ostracized or isolated, which we identify as a new type of disenfranchised non-use: social disenfranchisement.

Discussion

The non-social use of social media

In this paper, we presented and analyzed several types of non-use. While many of these can be represented within Wyatt's (2003) framework, our results compel us to expand the

framework based on previous literature and our own findings. First, we extend Wyatt's framework to show that current and future adoption are necessary temporal dimensions to consider when studying non-use (Figure 1). In our study, for instance, many of our self-identified "non-users" actually used social media for functional purposes, while others met their functional needs indirectly through displaced social media use of others. We also include relapsers and limiters as types of current or future social media (non-)users in our new framework. This shows the complex interplay between use vs non-use and addictive vs restricted social media usage patterns as they relate to both intrinsic and extrinsic motivations of use. As more research addresses the dark side of social media in terms of the pathological behaviors and gratification of use (Andreassen *et al.*, 2012; Blackwell *et al.*, 2017; Chen *et al.*, 2012; Song *et al.*, 2004), as well as a wide range of less severe but nevertheless socio-psychologically undesirable phenomena (Mäntymäki and Islam, 2016), this classification will be useful for integrating non-use into these discussions. Finally, we include laggards in this new framework to illustrate that while this is a specific type of non-use, we should not assume that all social media non-users are potential future users who have just not adopted yet.

We also introduce the dimension of social engagement vs functional motivations and barriers to usage (Figure 2). Tufekci (2008) also differentiated between "social and non-social uses" of the internet. She observed that users of Facebook and Myspace were significantly more likely to use the expressive internet, "the practice and performance of technologically mediated sociality" (p. 547). This is in contrast to the instrumental internet, which involves "information seeking, knowledge gathering and commercial transactions," (p. 548) and was utilized by both users and non-users. Our study also uncovers a dichotomy between usage types, but across somewhat different boundaries. For example, modern social media like Facebook are sometimes essential for instrumental purposes (Cao *et al.*, 2016; Wu and Chen, 2015), thereby making it harder for users to disengage. Thus, we contribute to the literature by showing how usage patterns have evolved over the last decade as social media has become mainstream.

By partitioning social media non-use based on social and functional motivations and barriers, one can see that when it comes to the social side, existing literature has focused primarily on rejecters, i.e. users who chose to leave of their own volition (Baumer *et al.*, 2013; Baumer, Guha, Quan, Mimno and Gay, 2015; Brubaker *et al.*, 2016; Lampe *et al.*, 2013; Portwood-Stacer, 2013; Schoenebeck, 2014; Stieger *et al.*, 2013). Meanwhile, the general non-use literature has discussed aspects of non-use in terms of the "digital divide" and disenfranchisement due to financial or infrastructural barriers (Satchell and Dourish, 2009; Wyatt, 2003). Quite noticeably, two octants have been previously overlooked. Past research

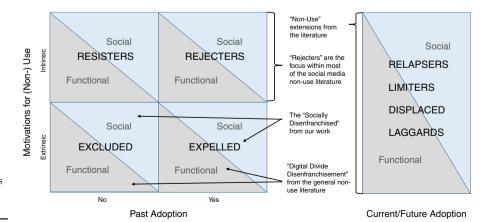


Figure 2. Empirical and theoretical extensions to Wyatt's non-use framework

tends to focus on excluded and expelled non-users based on intrinsic and extrinsic functional barriers, such as economic and technological limitations that contribute to "the digital divide" (Wyatt, 2003). Yet, individuals who do not engage with or disengage from social media due to social engagement barriers (i.e. social disenfranchisement) have not been explored in depth in the prior literature (Figure 2). Our study addresses this gap by looking at those who are barred from use by social barriers rather than technical or economic barriers. Our results show that such barriers include being bullied, worrying about one's social identity, being overwhelmed by social connections and being disappointed by a false sense of community.

We map out these barriers using a non-use calculus framework, which builds upon the privacy calculus framework (Laufer *et al.*, 1973, Laufer and Wolfe, 1977). While the privacy calculus has been used in prior work studying social media non-use (Baumer, Guha, Quan, Mimno and Gay, 2015; Lampe *et al.*, 2013) and adoption (Xu *et al.*, 2009), we chose to extend it beyond exclusively privacy-related rationales, hence the term non-use calculus.

The dark side of social media

Our non-use calculus analysis uncovers that extrinsic, social barriers are not completely avoided by disengaging from social media. Indeed, non-users are still being bullied, their online identities are still (and now exclusively) being shaped by others, and they still do not find a stronger sense of community – in fact, being off social media further erodes their social connections and perpetuates social isolation. Given this persistent social disenfranchisement, one may argue that when it comes to social media use, the social media have-nots will soon find out that they are in a lose-lose situation. This finding provides an interesting contrast to existing frameworks of technology adoption and acceptance (Davis et al., 1989; Venkatesh et al., 2003), which have traditionally assumed use and non-use to be the result of diametrically opposite motivations; a similar analysis can be made regarding the privacy calculus (Laufer et al., 1973; Laufer and Wolfe, 1977). Rather, the tension between use and non-use embodies a new paradox that (not unlike the privacy paradox (Norberg et al., 2007; Spiekermann et al., 2001) cannot be resolved through a rational trade-off between the benefits and drawbacks of engaging with others through social media. This apparent paradox reflects the findings of existing work on technology acceptance. For example, perceived ease of use – a core concept of TAMs – has been found to not have a significant influence on post-adoption discontinuance (Parthasarathy and Bhattacherjee, 1998). Moreover, the personal motivations (Turel, 2015) and system characteristics (Cenfetelli, 2004) that have been shown to influence discontinuance and non-use are distinctly different from those that have been established to influence adoption and use. Consequently, Cenfetelli (2004) argues that "inhibitors deserve independent investigation on the basis that they are fundamentally different in nature and effects from previously established positively oriented perceptions within the technology acceptance and user satisfaction literature" (p. 487).

Our work also suggests that the dark side of social media may be very different for nonusers than for users. Not only do non-users have a different set of drawbacks and social barriers, our results show that the perceived benefits may be distinct for non-users when compared with those of social media users. For example, although our results highlight how saving time was a major benefit for non-users that feel it is inappropriate to ignore information coming in through social media, many social media users actually do cope with the volume of information that way (Wisniewski *et al.*, 2012). And while several non-users were highly worried about having to provide personal data, many social media users feel no strong social pressure to post such information (Stutzman *et al.*, 2013). Even the authenticity that non-users attributed to information and people in the offline world differs from those social media users who would rather describe traditional news sources as biased (Wang and Mark, 2013). These insights point to a more nuanced calculus when considering the dark side of social media non-use. Limitations and future research

We conducted a qualitative analysis to detect nuanced trends and patterns in use and non-use across a relatively small sample of users in the USA. Had we studied a different demographic of non-users, such as those in economically or politically disenfranchised countries, we would have likely drawn much different conclusions. This warrants a larger, more generalizable study that might confirm these patterns as they relate to different demographics and motivations of social media (non-)users. As such, a web-based survey would allow us to collect a larger and more diverse sample of responses to build upon our current findings and make them more generalizable to a broader context.

We also suggest that those who want to confirm our results using either of these methods should consider the apparent fluidity of a person's self-assessed status as a "non-user." In our case, our participants did not self-identify as social media users, while there are others who likely have similar usage patterns (e.g. functional purposes only) that would. Therefore, inclusion and exclusion criteria for future work on social media use and non-use should be carefully considered. In our study, we found that self-proclaimed non-users were likely to still use social media for functional purposes. Thus, our inclusion of these participants was beneficial: had we limited participation to those who conformed to a stricter definition of non-use, then our uncovered functional use/social engagement distinction would have been less pronounced and our description of it less nuanced. Social non-users who are functional users may similarly provide important insights into the topic of non-use in future investigations. For example, a "netnography" of such users may demonstrate how these functional-only users avoid "getting sucked into" Facebook's endless opportunities for social engagement.

In terms of future research directions, we found that the concerns of social media non-users often conflict with the very core of what constitutes "value" in a social network. However, non-use rarely mitigates those concerns. In fact, as social life increasingly expands online, the side effect is that non-users are increasingly left out. Therefore, rather than improving social networks as a means to engage non-users (undesirable given certain social constraints), we argue that social network developers also have a responsibility to design and develop the non-user experience. Use and non-use are intertwined, and designers must start focusing beyond the user experience. In line with this argument, we provide several suggestions based on our analysis that we believe may mitigate some of the consequences of non-use:

- Provide a consume-only way to interact with social media: some non-users are mostly
 concerned with the production side of social media but would like to consume the
 content posted by others. Public, non-reciprocal forms of social media, such as
 Twitter, make this type of usage much easier. A "follow only" version of more closed
 networks like Facebook could allow similar consumption-only interactions.
- Provide mechanisms for redress: non-users are sometimes mentioned, or even
 misrepresented, by social media users. While users can monitor such events, and even
 set privacy settings for such mentions, it is particularly difficult for non-users to find out
 about and mitigate such events. In addition to a "consume-only" interaction paradigm,
 the social network could alert non-users (via another channel, such as e-mail) when they
 are mentioned in others' conversations (similar to Google Search's "Alerts" feature) and
 give them a means to communicate with the author in case of a transgression.
- Integrate non-use channels within social media platforms: social media interactions, such as Facebook events, are rapidly replacing more traditional, non-social media communication channels, such as e-mail invitations or even personal phone calls. Participants in our study complained about not receiving invitations, notifications and announcements or receiving them later than others. By allowing social media users to engage with non-users directly through their preferred channels

(e.g. e-mail, text messages), non-users could stay informed about upcoming events or important announcements without having to use social media. One excluded interviewee expressed disappointment when this type of feature disappeared from Facebook – it became much more difficult to be in the loop on social events.

At this point, these suggestions are based solely on the non-user experience, and future work needs to be done to validate if they would, indeed, mitigate some of the problems faced by non-users. Most of these suggestions would be quite feasible to implement, but it is up to designers and/or stakeholders of social media platforms whether they would be willing to tangibly address the needs of non-users. This further highlights the tension of how social media non-users may be marginalized as "deviants" if they do not eventually ascribe to be social media users.

Conclusion

As systems researchers, we may sometimes forget that non-use should be a viable option for individuals who choose not to partake in a certain technology. In the case of social media, however, we found that the pervasive socialization that occurs via social media has left some non-users socially disenfranchised and at a loss for solutions. This creates a new phenomenon that we consider the dark side of social media non-use. On the one hand, we could try to address these concerns through improved designs that mitigate some of the potential and real dark sides of social media. On the other hand, we could instead empower non-users in their decision to disengage from social media by helping them mitigate the social consequences of non-use. Our research highlights this paradigmatic shift – of not trying to "solve" non-use as an inherent problem – which is often overlooked in traditional systems-based research that has a vantage point of trying to increase acceptance and adoption. Lest we leave behind the social media non-user, non-use should be considered an integral part of design. Because designing for the user experience alters the experience of the non-user, we call on designers and developers to take on the responsibility of designing for the non-user experience.

References

- Andreassen, C.S., Torsheim, T., Brunborg, G.S. and Pallesen, S. (2012), "Development of a Facebook addiction scale", *Psychological Reports*, Vol. 110 No. 2, pp. 501-517.
- Awad, N.F. and Krishnan, M.S. (2006), "The personalization privacy paradox: an empirical evaluation of information transparency and the willingness to be profiled online for personalization", MIS Quarterly, Vol. 30 No. 1, pp. 13-28.
- Baumer, E.P.S., Ames, M.G., Burrell, J., Brubaker, J.R. and Dourish, P. (2015), "Why study technology non-use?", First Monday, Vol. 20 No. 11, pp. 1-2, available at: https://doi.org/10.5210/fm.v20i11.6310
- Baumer, E.P.S., Guha, S., Quan, E., Mimno, D. and Gay, G.K. (2015), "Missing photos, suffering withdrawal, or finding freedom? How experiences of social media non-use influence the likelihood of reversion", Social Media & Society, Vol. 1 No. 2, pp. 1-2, available at: https://doi.org/ 10.1177/2056305115614851
- Baumer, E.P.S., Adams, P., Khovanskaya, V.D., Liao, T.C., Smith, M.E., Schwanda Sosik, V. and Williams, K. (2013), "Limiting, leaving, and (Re)lapsing: an exploration of Facebook non-use practices and experiences", Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, ACM, Paris, pp. 3257-3266.
- Bettman, J.R., Luce, M.F. and Payne, J.W. (1998), "Constructive consumer choice processes", Journal of Consumer Research, Vol. 25 No. 3, pp. 187-217.
- Blackwell, D., Leaman, C., Tramposch, R., Osborne, C. and Liss, M. (2017), "Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use and addiction", Personality and Individual Differences, Vol. 116 No. 4, pp. 69-72.

- Boyd, D.M. and Ellison, N.B. (2007), "Social network sites: definition, history, and scholarship", Journal of Computer-Mediated Communication, Vol. 13 No. 1, pp. 210-230.
- Brubaker, J.R., Ananny, M. and Crawford, K. (2016), "Departing glances: a sociotechnical account of 'leaving' grindr", *New Media & Society*, Vol. 18 No. 3, pp. 373-390.
- Cao, X., Guo, X., Vogel, D. and Zhang, X. (2016), "Exploring the influence of social media on employee work performance", *Internet Research*, Vol. 26 No. 2, pp. 529-545.
- Cenfetelli, R.T. (2004), "Inhibitors and enablers as dual factor concepts in technology usage", *Journal of the Association for Information Systems*, Vol. 5 No. 11, pp. 474-485, available at: http://aisel.aisnet.org/jais/vol5/iss11/16 (accessed September 27, 2017).
- Chen, K.-H., Shen, K.-S. and Ma, M.-Y. (2012), "The functional and usable appeal of Facebook SNS games", *Internet Research*, Vol. 22 No. 4, pp. 467-481.
- Davis, F.D., Bagozzi, R.P. and Warshaw, P.R. (1989), "User acceptance of computer technology: a comparison of two theoretical models", *Management Science*, Vol. 35 No. 8, pp. 982-1003.
- Dhume, S.M., Pattanshetti, M.Y., Kamble, S.S. and Prasad, T. (2012), "Adoption of social media by business education students: application of technology acceptance model (TAM)", 2012 IEEE International Conference on Technology Enhanced Education, Amritapuri, January 3-5, pp. 1-10, available at: https://doi.org/10.1109/ICTEE.2012.6208609
- Dong, Y., Xue, Y., Luo, M., Mo, D., Dong, W., Zhang, Z. and Liang, H. (2018), "Investigating the impact of mobile SNS addiction on individual's self-rated health", *Internet Research*, Vol. 28 No. 2, pp. 278-292.
- Duggan, M. and Smith, A. (2014), "Social media update 2013, pew research center", available at: www. pewinternet.org/2013/12/30/social-media-update-2013/ (accessed April 25, 2014).
- Erikson, E.H. (1959), "Identity and the life cycle: selected papers", Psychological Issues, Vol. 1 Nos 1-4, pp. 1-171.
- Featherman, M.S. and Pavlou, P.A. (2003), "Predicting e-services adoption: a perceived risk facets perspective", *International Journal of Human-Computer Studies*, Vol. 59 No. 4, pp. 451-474.
- Fishbein, M. and Ajzen, I. (1975), Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research, Addison-Wesley, Reading, MA.
- Greenwood, S., Perrin, A. and Duggan, M. (2016), "Social media update 2016, pew research center", available at: www.pewinternet.org/2016/11/11/social-media-update-2016/ (accessed March 8, 2017).
- Hargittai, E. (2007), "Whose space? Differences among users and non-users of social network sites", Journal of Computer-Mediated Communication, Vol. 13 No. 1, pp. 276-297.
- Lampe, C., Vitak, J. and Ellison, N. (2013), "Users and nonusers: interactions between levels of adoption and social capital", Proceedings of the 2013 Conference on Computer Supported Cooperative Work, ACM, San Antonio, TX, pp. 809-820.
- Laufer, R.S. and Wolfe, M. (1977), "Privacy as a concept and a social issue: a multidimensional developmental theory", *Journal of Social Issues*, Vol. 33 No. 3, pp. 22-42.
- Laufer, R.S., Proshansky, H.M. and Wolfe, M. (1973), "Some analytic dimensions of privacy", in Küller, R. (Ed.), Proceedings of the Lund Conference on Architectural Psychology, Dowden, Hutchinson & Ross, Lund, pp. 353-372.
- Lee, W., Xiong, L. and Hu, C. (2012), "The effect of Facebook users' arousal and valence on intention to go to the festival: applying an extension of the technology acceptance model", *International Journal of Hospitality Management*, Vol. 31 No. 3, pp. 819-827.
- Li, H., Sarathy, R. and Xu, H. (2011), "The role of affect and cognition on online consumers' decision to disclose personal information to unfamiliar online vendors", *Decision Support Systems*, Vol. 51 No. 3, pp. 434-445.
- Li, Y. (2012), "Theories in online information privacy research: a critical review and an integrated framework", Decision Support Systems, Vol. 54 No. 1, pp. 471-481.
- Limayem, M., Cheung, C. and Chan, G. (2003), "Explaining information systems adoption and post-adoption: toward an integrative model", ICIS 2003 Proceedings, Milan, pp. 720-731.

- Lin, A.C. (1998), "Bridging positivist and interpretivist approaches to qualitative methods", Policy Studies Journal, Vol. 26 No. 1, pp. 162-180.
- Mäntymäki, M. and Islam, A.K.M.N. (2016), "The Janus face of Facebook: positive and negative sides of social networking site use", *Computers in Human Behavior*, Vol. 61, pp. 14-26.
- Marwick, A.E. and Boyd, D. (2014), "Networked privacy: how teenagers negotiate context in social media", New Media & Society, Thousand Oaks, CA, available at: https://doi.org/10.1177/ 1461444814543995 (accessed March 03, 2017).
- Newman, B.M. and Newman, P.R. (2014), Development Through Life: A Psychosocial Approach, Cengage Learning, Boston, MA.
- Norberg, P.A., Horne, D.R. and Horne, D.A. (2007), "The privacy paradox: personal information disclosure intentions versus behaviors", *Journal of Consumer Affairs*, Vol. 41 No. 1, pp. 100-126.
- Page, X. and Marabelli, M. (2017), "Changes in social media behavior during life periods of uncertainty", Eleventh International AAAI Conference on Web and Social Media, Montreal, pp. 648-651.
- Page, X., Knijnenburg, B.P. and Kobsa, A. (2013), "FYI: communication style preferences underlie differences in location-sharing adoption and usage", Proceedings of the 2013 ACM International Joint Conference on Pervasive and Ubiquitous Computing, Zurich, pp. 153-162.
- Parthasarathy, M. and Bhattacherjee, A. (1998), "Understanding post-adoption behavior in the context of online services", *Information Systems Research*, Vol. 9 No. 4, pp. 362-379.
- Portwood-Stacer, L. (2013), "Media refusal and conspicuous non-consumption: the performative and political dimensions of Facebook abstention", New Media & Society, Vol. 15 No. 7, pp. 1041-1057.
- Rainie, L., Smith, A. and Duggan, M. (2013), "Coming and going on Facebook", Pew Research Center: Internet, Science & Tech, pp. 2-5, available at: www.pewinternet.org/2013/02/05/coming-and-going-on-facebook/ (accessed February 12, 2017).
- Rauniar, R., Rawski, G., Yang, J. and Johnson, B. (2014), "Technology acceptance model (TAM) and social media usage: an empirical study on Facebook", *Journal of Enterprise Information Management*, Vol. 27 No. 1, pp. 6-30.
- Rust, R.T., Kannan, P.K. and Peng, N. (2002), "The customer economics of internet privacy", Journal of the Academy of Marketing Science, Vol. 30 No. 4, pp. 455-464.
- Satchell, C. and Dourish, P. (2009), "Beyond the user: use and non-use in HCI", Proceedings of the 21st Annual Conference of the Australian Computer-Human Interaction Special Interest Group, ACM, Melbourne, pp. 9-16.
- Schoenebeck, S.Y. (2014), "Giving up twitter for lent: how and why we take breaks from social media", Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, ACM, Toronto, pp. 773-782.
- Song, I., Larose, R., Eastin, M.S. and Lin, C.A. (2004), "Internet gratifications and internet addiction: on the uses and abuses of new media", Cyberpsychology & Behavior, Vol. 7 No. 4, pp. 384-394.
- Spiekermann, S., Grossklags, J. and Berendt, B. (2001), "E-privacy in 2nd generation E-commerce: privacy preferences versus actual behavior", Proceedings of the 3rd ACM Conference on Electronic Commerce, Tampa, FL, pp. 38-47.
- Stieger, S., Burger, C., Bohn, M. and Voracek, M. (2013), "Who commits virtual identity suicide? Differences in privacy concerns, internet addiction, and personality between Facebook users and quitters", Cyberpsychology, Behavior and Social Networking, Vol. 16 No. 9, pp. 629-634.
- Stone, D.L. (1981), "The effects of the valence of outcomes for providing data and the perceived relevance of the data requested on privacy-related behaviors, beliefs, and attitudes", PhD thesis, Purdue University, West Lafayette, IN.
- Stone, E.F. and Stone, D.L. (1990), "Privacy in organizations: theoretical issues, research findings, and protection mechanisms", Research in Personnel and Human Resources Management, Vol. 8, pp. 349-411.

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- Stutzman, F., Gross, R. and Acquisti, A. (2013), "Silent listeners: the evolution of privacy and disclosure on Facebook", *Journal of Privacy and Confidentiality*, Vol. 4 No. 2, pp. 7-41.
- Tufekci, Z. (2008), "Grooming, gossip, Facebook and MySpace", Information, Communication & Society, Vol. 11 No. 4, pp. 544-564.
- Turel, O. (2015), "Quitting the use of a habituated hedonic information system: a theoretical model and empirical examination of Facebook users", *European Journal of Information Systems*, Vol. 24 No. 4, pp. 431-446.
- Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D. (2003), "User acceptance of information technology: toward a unified view", MIS Quarterly, Vol. 27 No. 3, pp. 425-478.
- Wang, Y. and Mark, G. (2013), "Trust in online news: comparing social media and official media use by Chinese citizens", Proceedings of the 2013 Conference on Computer Supported Cooperative Work, ACM, San Antonio, TX, pp. 599-610.
- Wisniewski, P., Lipford, H. and Wilson, D. (2012), "Fighting for my space: coping mechanisms for SNS boundary regulation", Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, ACM, Austin, TX, pp. 609-618.
- Wu, C.-H. and Chen, S.-C. (2015), "Understanding the relationships of critical factors to Facebook educational usage intention", *Internet Research*, Vol. 25 No. 2, pp. 262-278.
- Wu, Y., Cui, T., Liu, N., Deng, Y. and Guo, J. (2018), "Demystifying continuous participation in game applications at social networking sites: a social playfulness design perspective", *Internet Research*, Vol. 28 No. 2, pp 374-392, available at: https://doi.org/10.1108/IntR-11-2016-0347
- Wyatt, S.M.E. (2003), "Non-users also matter: the construction of users and non-users of the internet", in Oudshoorn, N. and Pinch, T. (Eds), Non-Users Also Matter: The Construction of Users and Non-Users of the Internet, MIT Press, Cambridge, MA, pp. 67-79.
- Xu, H., Teo, H.-H., Tan, B.C.Y. and Agarwal, R. (2009), "The role of push-pull technology in privacy calculus: the case of location-based services", *Journal of Management Information Systems*, Vol. 26 No. 3, pp. 135-174.
- Yang, S., Liu, Y. and Wei, J. (2016), "Social capital on mobile SNS addiction: a perspective from online and offline channel integrations", *Internet Research*, Vol. 26 No. 4, pp. 982-1000.
- Yin, R.K. (2013), Case Study Research: Design and Methods, SAGE Publications, Thousand Oaks, CA.
- Yin, R.K. (2015), Qualitative Research from Start to Finish, 2nd ed., Guilford Publications, New York City, NY.

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