

Limiting, Leaving, and (re)Lapsing: An Exploration of Facebook Non-Use Practices and Experiences

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ABSTRACT

Despite the abundance of research on social networking sites, relatively little research has studied those who choose not to use such sites. This paper presents results from a questionnaire of over 400 Internet users, focusing specifically on Facebook and those users who have left the service. Results show the lack of a clear, binary distinction between use and non-use, that various practices enable diverse ways and degrees of engagement with and disengagement from Facebook. Furthermore, qualitative analysis reveals numerous complex and interrelated motivations and justifications, both for leaving and for maintaining some type of connection. These motivations include: privacy, data misuse, productivity, banality, addiction, and external pressures. These results not only contribute to our understanding of online sociality by examining this under-explored area, but they also build on previous work to help advance how we conceptually account for the sociological processes of non-use.

Author Keywords

Facebook, non-use, technology refusal.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION

As of June 2012, Facebook boasts 955 million user accounts active monthly, with an average of 552 million users active daily [7]. Significant amounts of research have explored the use of Facebook and other similar social networking sites [see 4], examining the roles such sites play in their users' social lives.

But what about those who do not use Facebook? With close to a billion users, it can be difficult to remember that some people with Internet access do not use the social networking

site. Changing privacy controls, data ownership policies, and questions about the kinds of social interaction it affords have all contributed to a growing trend of users pointedly leaving Facebook. For example, on May 31, 2010, Quit Facebook Day [19] encouraged users to leave Facebook, listing a number of grievances and providing alternative venues for online socialization. While no Facebook collapse ensued—the site claims just over 40,000 “committed Facebook quitters”—the initiative arguably drew significant attention, both the popular media's and Facebook's, to this growing contingent of Facebook quitters [18].

So why study Facebook refusal as opposed to non-use of any other social technology? Consider, for example, Google's Gmail, which provides web-based email to hundreds of millions of users [6]. Despite its popularity, leaving Gmail does not carry the same significance as leaving Facebook, largely because of the unique social role Facebook plays for so many people—for example, 63% of U.S. adults have an online social networking account and of these, 93% are on Facebook [15]. Email is a platform available from many interoperable providers; if I have a Yahoo or MSN email account, I can still email someone with a Gmail account. Facebook, on the other hand, is a service that does not provide for similar interoperability; if I have a MySpace or Friendster or Orkut account, I cannot friend someone on Facebook. In short, refusing Facebook excludes me from social interaction in a way that refusing few other technologies would, thus making Facebook non-use an important area of study.

To the authors' knowledge, no mass exodus from Facebook has yet occurred, nor is one impending. However, it is difficult to know how many people have left Facebook, as the company does not publish such data. Moreover, no extant research examines the prevalence of leaving Facebook, the commonality of the desire to leave, types of opinions about leaving, or other practices of limiting Facebook use without leaving entirely. Furthermore, little is understood about what the leaving process entails or its personal and social ramifications [see 18 for an exception].

To address this gap, we present results from a questionnaire of over 400 Internet users about their use and/or non-use of Facebook. These results begin to paint a picture about the

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Are you sure you want to deactivate your account?

Deactivating your account will disable your profile and remove your name and picture from most things you've shared on Facebook. Some information may still be visible to others, such as your name in their friends list and messages you sent.

Your 209 friends will no longer be able to keep in touch with you.

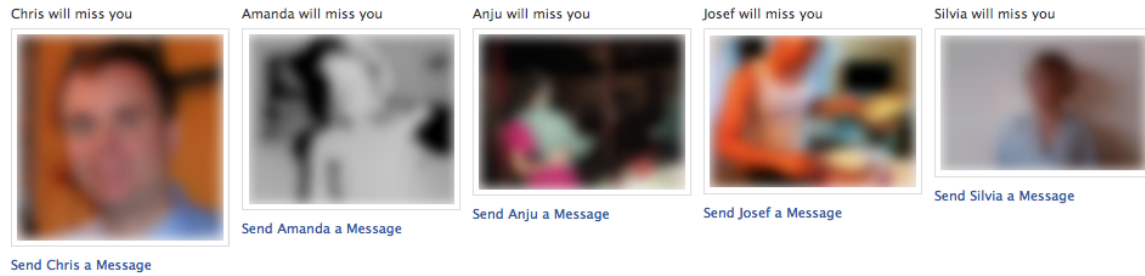


Figure 1. After choosing to deactivate, a Facebook user is shown a confirmation screen with several of their friends' profile pictures, messages saying their friends will miss them, and a survey (not pictured) asking why they want to deactivate their account.

prevalence of leaving Facebook, providing two primary contributions. First, there does not exist a strict binary distinction between use and non-use. Through qualitative analysis of stories told by respondents, we find a broad array of practices enacting varied degrees and styles of engagement with and disengagement from Facebook. Second, our analysis provides an account of the motivations and justifications that respondents provide for these varying degrees of (non)use. Thus, this paper helps deepen and add nuance to discussions in HCI about non-use, opting out, and the sociological processes by which technologies are deemed inappropriate, undesirable, or unwanted.

BACKGROUND

Motivations for use of Facebook are well studied. Joinson, for example, describes seven Facebook uses and gratifications, which were also associated with user demographics and site visit patterns [10]. Further, research has explored the way people using Facebook manage their online self-presentation, for example using separate profiles for professional and personal networks [5]. Hughes et al. demonstrate personality as a predictor of preference between Facebook and Twitter [9], while Ryan and Xenos correlate frequency of Facebook use and preference for particular Facebook features with personality traits such as loneliness, shyness, and narcissism [22]. The Facebook user population and their motivations for use, however, are moving targets that change over time.

Recent research about conflicts occurring on Facebook is both timely (as of 2011-12, 49% of adults and 88% of teens have witnessed unkind or offensive behavior on SNS [13,21]) and begins to reveal reasons for limiting Facebook usage. McLaughlin and Vitak [16] explore the fallout of Facebook norm violation among college students, finding 'unfriending' to be a common response. Gershon finds romantic relationship conflict (external to Facebook) a reported reason for quitting Facebook [8].

Non-use of Facebook is less well-explored. From a personality perspective, Facebook non-users may be more conscientious and socially lonely, and less extraverted and narcissistic, than Facebook users [22]. Some see Facebook

abstention and quitting as deliberate and often very political statements by the non-user. Portwood-Stacer posits Facebook refusal as a performative mode of resistance within the context of today's consumer culture [18]. Karppi describes Facebook quitting through the lens of digital suicide services such as seppukoo.com, which keeps a Facebook account active but disconnects it from its human owner; over time, basic information in the profile, friend lists, and browsing data, change independently of the original human account owner [11]. Rather than associate personality characteristics with non-users or highlight political statements made by quitting Facebook, this paper explores the motivations for stepping back from Facebook.

While non-use of Facebook has been less explored, researchers have studied non-use of technology more generally [e.g., 3, 12]. Perhaps the most broadly applicable typologies of non-users are Wyatt's four dimensions [27] and Satchell and Dourish' six varieties of non-use [23]. Wyatt broadly clusters non-users into four categories: *resisters*, *rejectors*, the *excluded*, and the *expelled*. These categories are clearly arranged over two dimensions: (1) those who have joined and are now non-users (rejectors and the expelled) vs. those who never used the technology (resisters and the excluded), and (2) intrinsic choice (rejectors and resisters) vs. external constraints (the excluded and the expelled). Satchell and Dourish lend more nuance to these four, describing six varieties of non-use particular to HCI: *lagging adoption*, those who have not yet adopted the technology; *active resistance*, essentially diehard laggards; *disenchantment*, a sense that the technology is in some sense inauthentic; *disenfranchisement*, barriers to entry or continued adoption; *displacement*, broadly second-hand use; and *disinterest*.

HOW TO LEAVE

At the time of this writing, Facebook makes available two ways to disengage from their service. First, a user may deactivate her or his account. Upon deactivation, all data provided or uploaded by the user becomes hidden; the user's friends no longer see that user, as if s/he has disappeared. However, all the data are still retained. A user

who has deactivated her or his account can still log in to Facebook (or use their account to log into another site via Facebook Connect) and, in so doing, will reactivate the account. A user can deactivate her or his account using an option under security settings, but before the deactivation is complete, s/he will see the confirmation screen in Figure 1.

The other option, somewhat less readily apparent, deletes a user's account. Doing so permanently removes a user's data from Facebook's servers, and Facebook provides no means for recovering these data. From friends' perspectives, the effect is the same: the user simply disappears. Deletion also has a two-week safety period; if the user logs in to Facebook (or Facebook Connect) within two weeks of deleting, the account is fully restored, much like logging in to reactivate a deactivated account. A user can delete her or his account through Facebook's help page, which fully describes what the deletion process involves.

METHODS

Our study is driven by three general research questions:

RQ1: What is the prevalence of both actual Facebook non-use and consideration of non-use?

RQ2: In what practices do Facebook non-users engage, and what is the prevalence of these various practices?

RQ3: What motivations are used to justify, and what experiences surround, Facebook non-use?

Data Collection

To explore these questions, we adapted the methods of Rader et al. [20], who used a short survey to elicit stories about issues related to computer security. Similarly, we developed a questionnaire with two types of questions.

The first type asked straightforward, factual questions about Facebook usage. These included mostly yes/no or Likert-style questions about whether the respondent currently has an account, when s/he first signed up, which features s/he uses most often, which features s/he most values, what other channels s/he uses to communicate with friends and family (email, Twitter, Skype, etc.), whether s/he had ever deactivated or deleted her or his account, whether the respondent knew anyone who had deleted her or his account, whether s/he had ever considered deleting or deactivated her or his own account, and similar questions.

The second portion of the questionnaire explored the experience of deactivating or deleting through a set of open-ended, free text questions about these practices experiences. Inspired by Rader et al. [20], all respondents were asked to tell a story about a time when they or someone they knew either left Facebook or systematically limited their use of it in some way.

Additionally, some portions of the questionnaire were either shown or hidden depending on responses to certain questions. For example, respondents who had deleted their account were asked to describe how they made the decision

and what happened afterward. Those who had not deactivated or deleted their account but had considered doing so were asked to describe a time that made them consider leaving. Respondents who had never had a Facebook account were asked why they did not. The factual questions about use and non-use similarly adapted to respondents' answers. For example, respondents who did not currently have an account were not shown questions about their most used or favorite features. Those who had deactivated or deleted their account were asked how happy they were with that decision. Respondents who had not deactivated or deleted their account were asked if they had ever considered doing so.

The questionnaire concluded with demographic information, including age, gender, occupation, and city, state/province, and country of residence, all provided via free text responses. A full description of the questionnaire instrument and anonymized response data can be found at <http://hdl.handle.net/1813/30908>.

The questionnaire was distributed via several relevant email listservs, including air-l@listserv.aoir.org, chi-announcements@listserv.acm.org, and chi-web@acm.org, as well as via snowball sampling on Facebook, Twitter, and other channels. Recruitment text read, "*Do you use Facebook? We want to hear from you. Do you not use Facebook? We want to hear from you, too. We're interested in people limiting their Facebook usage in some way, including deactivating or deleting their account,*" followed by a brief synopsis of the study goals. In addition, respondents were asked to forward the questionnaire to or provide email addresses for anyone they thought might be interested. The data on which we report here were gathered over two and a half weeks from June 20 to July 8, 2012.

Analysis

While we provide below some statistical analysis of yes/no and Likert responses, this paper focuses primarily on analysis of the qualitative data.

Responses to the open-ended free text questions were analyzed in two stages. First, the questions were divided among the authors, such that each author read through all respondents' responses to one or more of the questions. Each author worked independently and iteratively developed a list of themes for each question using open coding [14]. The authors then met and discussed the themes and patterns that each had observed, noting both resonances and differences among responses to the different questions.

Based on this discussion, the authors also generated a list of codes and themes that might be associated with one another. Some codes pertained to thematic concerns, such as privacy, others to attributes of a respondent, such as whether the respondent was tech savvy. These codes pertained only to the respondent and her or his experience, not to stories s/he may have told about others.

This list of codes became the basis for the second stage of the analysis. In this stage, respondents were divided among the authors, such that each author read through responses to all questions for a subset of the respondents. Each respondent was then coded by the assigned author. After coding was completed, each set of respondents was rotated to a different author, who confirmed agreement with the initial author's coding. Disagreements were discussed and resolved in a pairwise fashion between the first and second coders for each respondent. This process was not intended to establish inter-rater reliability, and the coding does not play a pivotal role in the analyses. Rather, this coding process served as another iteration in developing and refining not only our understanding of the themes in the data but also the relationships among them.

RESULTS

This section presents three types of results. First, it gives a quantitative description of who our respondents are and how they use (or don't use) Facebook (RQ1). Second, it provides a descriptive summary of the stories respondents told and the accounts they gave about practices of leaving Facebook (RQ2). Third, it presents interpretive results that draw on themes from respondents' experiences to describe motivations for their varied degrees of (non)use (RQ3). The second and third portions of the results come from the iterative interpretive analysis described above. When possible, extended quotes are accompanied with gender, age, and occupation demographics.

Profile of Respondents

We received nearly 500 responses. Empty responses, nonsensical responses, and responses by people under 18 were removed (the latter for IRB compliance), leaving N=410 respondents. All but 20 of these respondents completed the entire questionnaire, although due to the addition or removal of questions based on previous responses, as described above, no respondent answered every question. Fifty respondents provided incomplete demographic data (commonly omitting gender, age, or hometown). After removing responses that lasted more than 10 hours, which we assume took place over multiple sessions, the questionnaire took on average 22 minutes (median 10, st. dev. 55).

When asked their gender, 199 respondents replied female, 160 male, 2 gender neutral, 1 transgender, 1 identified as non-male, and 47 did not share their gender. Ages spanned

19 to 76 (mean 35, median 33); 48 respondents did not share their age. While respondents reported having careers as varied as civil service, veterinary medicine, publishing, homemaking, and missionary roles, a large proportion (168/410, 41%) of respondents were academics, either graduate students, post-docs, professors, researchers, or lecturers. Furthermore, we identified 52/410 (12.7%) respondents as 'tech savvy,' based on having training, a career, or other evidence of expertise in IT. Our respondents spanned six continents, with the majority from the US and Europe. Respondents initially joined Facebook between Facebook's inception in 2004 and 2012. Three respondents indicated (apparently without jest) membership since 2003. Sizes of respondents' Facebook networks ranged from 0 to 2489 reported friends (mean 311, median 249).

Motivations for first joining, and continuing to use, Facebook fit to a large extent within Joinson's [10] seven uses and gratifications: social connection, shared identities, photographs, content, social investigation, social network surfing, and status updating. Motivations that do not fit well into these categories come largely from effects of increased Facebook adoption since Joinson's publication in 2008 (e.g. "because everyone else has one it's often the most convenient way to communicate with groups." Professional and social pressures now sometimes suggest Facebook as the only accepted mode of communication and membership, such as enrolling as a member of a class or club, or to stay in touch with others:

"When I finished my PhD, my advisor told me that if I ever wanted to keep in touch with her, I'd have to join. So I did. I had managed to avoid it until then." - F, 35, Researcher

Lastly, following companies and 'liking' others' content only became available after 2008. Figure 2 summarizes how frequently respondents reported using various Facebook features over the preceding month. Liking and commenting on others' content, as well as general lurking behavior, were reported more frequently.

Deactivating and Deleting

Of our respondents, 110 (26.8%) reported having deactivated their account, of whom 73 (66.4%) reported being "somewhat happy" or "very happy" with their decision. A total of 46 (11.2%) reported deleting their account, with 42 (91.3%) "somewhat happy" or "very happy" with the decision and none "very unhappy" (Figure

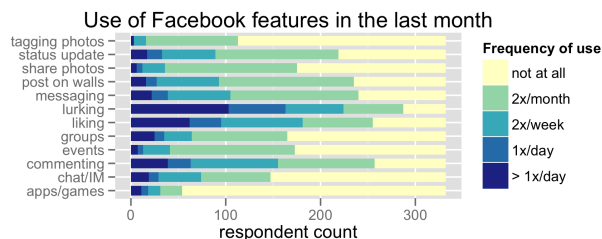


Figure 2. Respondents' reported use of Facebook features in the month preceding the questionnaire.

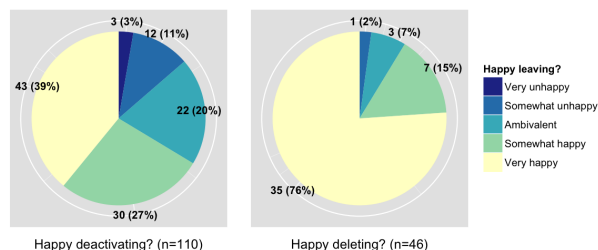


Figure 3. Respondents reported being happy with their decision to deactivate (left) or delete (right) their account.

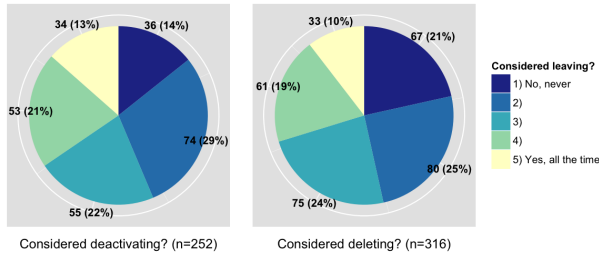


Figure 4. The extent to which users considered leaving Facebook by deactivating (left) or deleting (right) their account.

3). 28 people reported both deactivating and deleting their account. We also asked those who had never deactivated their account or never deleted their account to what extent they had considered doing so (Figure 4). Respondents considered deactivation slightly more often than deletion, but not significantly so (Mann-Whitney, $p=0.10$ two-tailed).

Knowing someone else who had left Facebook differently affected deactivation and deletion. Respondents who knew someone that had deactivated were almost three times as likely to deactivate their account ($\chi^2_1=14.3, p<0.001$), but knowing someone who had deleted had no effect on a respondent's likelihood of deleting their account (Table 1). Conversely, knowing someone who deactivated did not make a respondent more likely to consider deactivating, but knowing someone who had deleted did make them more likely to consider deleting their account (Mann-Whitney, $p=0.03$ one-tailed). These results address RQ1 by providing a sense for the prevalence of both consideration of and the actual act of leaving Facebook.

Deactivated		Deleted	
Yes	No	Yes	No
Knows	99 181	Knows	30 174
Does not	10 70	Does not	15 141

Table 1: Whether respondent does or does not know someone who has deactivated (left) or deleted (right) vs. whether respondent has deactivated or deleted their own account.

Stories and Practices

This section addresses RQ2 by describing the practices of respondents who choose not to use Facebook in the first place, to leave the site, or to limit their use of it. Figure 5 shows this variety of practices. This section draws on both first hand stories from our respondents describing their own

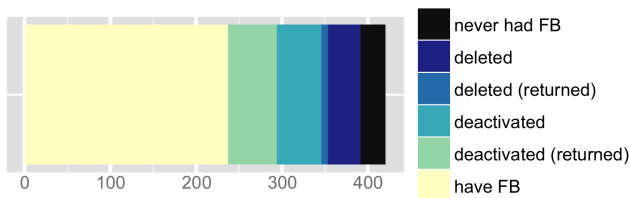


Figure 5: Proportions of our participants who currently have a Facebook account, deactivated their account then returned, deactivated and stayed away, deleted their account then returned, deleted and stayed away, and never had an account.

use and third-person accounts about their contacts, each quote or description making its source clear.

Resisting

Of our 410 respondents, 75 reported not having a Facebook account, either active or deactivated. While some respondents reported simply not having a use for the site, others provided elaborate lists of reasons they would not join. Some did not want to be on display or live "life in a global aquarium." We also observed a sense of rebelliousness and pride among those who resisted Facebook. As one respondent explained:

"I'm a non conformist. I was never interested by it. It is a passive way of keeping making friends. Now that people can friend company's [sic], I feel my choice was right. I abhor commercialism." - M, 42, UX Designer

These reasons given by non-users are closely related to those of former users who have since decided to leave the site, as described in the next sub-section.

Leaving

Of our 410 respondents, 127 indicated that they had deleted or deactivated their Facebook accounts at some point, but only 45 of them described doing so permanently. A few mentioned leaving Facebook with the help of friends or during the 2010 Quit Facebook Day. Many other respondents described attempting to delete their accounts and having difficulty doing so. For example:

"I tried to permanently close my account but apparently I only deactivated it [...]. This survey has made me aware that there is another procedure to remove my account permanently, although I doubt whether I will be able to find it since I looked for this before! This is one of the reasons I want to quit: if you can't quit easily I don't trust the application." - F, 49, Academic Researcher

Rather than delete or deactivate their account, some respondents described more creative work-arounds:

"I set up a junk e-mail account and set Facebook to send all its crap updates and alerts to that account, which I never use and am never tempted to access. I avoided deactivating the account directly, because I believed and do, that it can pull one back psychologically. The mail shunt works better." - F, 38, Sociologist

A wide variety of reactions followed deactivation or deletion. A few respondents, particularly those who had not previously been heavy users, indicated little had changed:

"I was not really using it after a couple years and just decided to close my account. Nothing happened afterward other than it was one less thing to worry about." - M, 30, Engineer

One respondent described accidentally locking himself out of his account, coming to terms with life without Facebook, and ultimately permanently deleting his account:

“One night I got really drunk and changed my Facebook password to something I thought would be easier to remember. When I woke up and realised I had no idea what I had changed it to, [...] I realised I was locked out. I was surprised that it made me a bit anxious for a couple of hours. After that I realised I felt great, that actually I'd been thinking and talking about how stupid, pointless, and time-wasting the damn thing was for ages, let alone the fact that I was giving a corporation all of my personal details and habits for free.

“I left it like that for a year, then spent a couple of days going through the process of regaining my password from them so I could permanently delete it. [...] These days I have no regrets at all - I much prefer twitter[...].” - M, 29, Admin Manager

While in some ways this case is exceptional, a few respondents mentioned switching to other SNS, including Twitter, Google+, and LinkedIn.

(re)Lapsing

An additional 59 respondents described leaving Facebook but subsequently returning. A number of these respondents never intended to leave permanently and some even described periodically deactivating their accounts with intentions of returning. For example, one respondent wrote:

“I deactivated 2 or 3 times during my finals. I used to get distracted during the final week. I was happy to get back afterward.” F, 25, Student

Other respondents left Facebook without any intention of returning but later found themselves back on the site. Some of these respondents were happy to return, either because they took specific steps, such as ‘unfriending’ hundreds of their friends, or, as one put it, they *“somehow [...] got a more positive experience the second time around”*. In other cases, respondents described returning for a specific purpose and limiting use of their reactivated accounts to accomplish those tasks while avoiding the aspects of the site that initially drove them away. For example:

“I deleted my account permanently in May 2010. However, when I went to India to do fieldwork, I found that I couldn't avoid facebook and do my participation so I have a research-contacts only account.” - F, 31, PhD Candidate

Limiting

We also heard from respondents who had not left Facebook but had systematically limited their use of the site, such as the email shunt described above. A few respondents asked someone else to change their password so they would temporarily be unable to access their accounts:

“I was writing my dissertation and found FB to be my number one distraction. I had my husband change my password and he'd log me on once a week or so as a treat.” - F, 39, Postdoctoral Fellow

Others used technical means of blocking or limiting their access such as browser add-ons or changing settings:

“I also set up my browser to forward me to a more productive URL (Github, a social code website where I keep software

code) whenever I typed in Facebook. This reminded me of what I should be doing, and kept facebook off of my mind.” - F, 23, Graduate Student

The Left Behind

When people leave or limit their use of Facebook, they impact not only themselves but also those who connect with them on Facebook. One respondents highlighted this issue:

“There's this very annoying social problem when one limits their Facebook use, which I recently did. Do you announce it? Publicly? Or to those you just want to keep around? How long do you keep the announcement up? [...]” - F, 34, PhD Student

A few respondents explicitly stated that their limiting or leaving elicited questions, concerns, and pressures from their online friends.

“The people I actually cared about asked me if something was wrong in my life. I hard [sic] through the grapevine that other people I cared less about had suspected I had defriended or blocked them, and were asking around (but never came directly to me).” - F, 25, Engineer

Conversely, some respondents talked about how a friend leaving Facebook made them feel or how it impacted their relationship with the person. In some instances, Facebook was the sole mode of contact between friends, and the friend leaving resulted in less or no communication.

“One acquaintance deactivated his account without warning anyone first, and the fact that he was suddenly not contactable through Facebook dismayed a lot of people. [...] a lot of his friends were not in the same country as him and used Facebook as a primary mode of communication; although they could email him, this was not the norm and many said they didn't want to do that.” - F, 23, Postgraduate Student

Even when friends have other ways of communicating outside Facebook, the departure can negatively impact certain types of communication.

“Recently a good friend of mine deactivated her FB account [...] But now I feel somehow disconnected or distanced to her, which is very strange because we see each other a few times a week and exchange e-mails almost everyday [...]; but I still feel like I know less about her now.” - F, 23, Grad Student

Motivations

This subsection shifts to more interpretive analysis, addressing RQ3 by identifying thematic motivations and justifications for respondents' varied styles and degrees of non-use. Due to the nature of our methods, we provide rough estimates rather than exact numbers for how often each theme was mentioned.

Privacy

Privacy emerged as a resounding theme, with over a quarter of respondents citing privacy concerns as an impetus for leaving, limiting, resisting, or considering leaving Facebook. “Privacy,” however, was not an isolated, atomic

concern, and manifested in various ways. In a general sense, users objected to the idea of being on display: “*living my life in a ‘global aquarium’*” felt uncomfortable. The idea of someone “*being able to flip back through to several years ago with just a few clicks*” and “*knowing the most intimate details about friends as well as strangers*” affected the perceived “*authenticity*” of the users’ relationships.

Users also cited concerns about privacy violations in professional relationships, with Facebook “*sharing information with potential employers.*” In cases of interpersonal conflict, Facebook provided content for harassment and blackmail in various relationships, as discussed later. Many users felt that the violations they experienced on Facebook happened because, as an entity, Facebook “*disrespected and devalued*” the idea of privacy.

Data Use and Misuse

In addition to privacy, a separate set of concerns highlighted data ownership, control, and misuse, cited by about a fifth of respondents. In contrast to privacy concerns, which dealt with other users seeing personal information, many respondents expressed concerns about the (mis)use of personal information by Facebook itself. They described concerns with Facebook’s data policies and practices and did not “*trust Facebook to adequately protect [their] information and keep it private.*”

Respondents perceived Facebook’s policies as an inconstant and even “*insidious*” document. One user described the rationale of his friend quitting:

“He used [Facebook] too infrequently to keep up with the constant changes to the default privacy settings...better to erase any chance of misuse of the information on his account by deleting it.” - M, 25, Graduate Student

Distrustful of Facebook, respondents were wary of new default privacy settings that come with each policy change, settings they must manually alter.

“Every time they screw with the privacy settings. Every time I learn something more about how they collect data and use it.” - demographics not provided

These are seen as “*unannounced changes in privacy settings*” that happen under the table with a lack of “*transparency*” in the data-usage agreements. Respondents also recounted rumors about Facebook’s practices—“*Heard that you can never really delete your account*”—and the difficulty they experienced in trying to change their privacy settings or to delete their accounts. They also speculated on what their mined data points were being used for:

“I want to limit the amount of information I disclose about myself and ‘hand over’ to corporations who profit from this at the expense of my privacy.” - F, 31, Graduate Student

Banality

About a sixth of respondents perceived Facebook as banal: trivial, uninteresting, and a waste of time. One user said:

“I was tired of using Facebook without getting much in return—the majority of the discussions going on (as status updates) are very shallow and trivial. Basically, I thought FB was a big waste of my time.” - M, 32, PhD Student

Others specifically highlighted discussions occurring on Facebook that were not of interest to them. For some it was political or religious discussions that were banal, for others it was seeing photos of other people’s babies. Such content was either not what they expected or not sufficiently interesting. These respondents did not mention whether they had tried to use Facebook’s built-in filtering features to limit the amount of, or whose, content they see.

Respondents also spoke to the banality of Facebook relationships. Many of these respondents described these interactions as inauthentic and did not “*appreciate the types of interactions it [Facebook] encourages[...].*” One respondent tied this inauthenticity to a sense of lurking in others’ lives without rich contact:

“I had realized that I mostly just looked at what people posted and considered myself up to date on their lives without any contact. I didn’t like the feeling of being included in someones [sic] life without actually being in it.” - M, 28, Post-doc

Productivity

On the opposite end of the spectrum from those who found it uninteresting, about a fifth of respondents found Facebook too interesting and felt they had to take the step of deleting or deactivating their accounts during times where they needed to concentrate on work. Here’s one user:

“I do it [deactivate] during exam periods, mostly. When I know I’ll be easily distracted, I deactivate the account, and reactivate it after the exams.” - M, 21, Student

While a variety of respondents reported deactivating during high stress periods, our coding showed a strong correlation between academics and productivity concerns. Productivity may not be as salient for others, such as office workers whose IT infrastructure blocks access to Facebook. However, we suspect Facebook may impact productivity for others whose work environments are less strictly controlled, such as consultants or freelancers.

Addiction, Withdrawal, and Envy of the Disconnected

In these discussions of banality and productivity, Facebook was often described as superficial yet addictive. After deleting his account, one respondent said:

“Afterward I went through facebook withdrawal. I would be sitting at my computer and feel the need to login to facebook [...]” - M, 28, Post-doc

Another respondent described working with a friend to “*limit each other [sic] use of FB and the internet more generally through shaming techniques.*” Many of the respondents who had not left or had left and then returned looked up to those who had successfully quit or who never signed up for Facebook as paragons of virtue. Those who had successfully left often referred to a palpable sense of

relief once they no longer felt bound to the site. While only a few respondents explicitly mentioned being addicted to Facebook, about a tenth of respondents described other experiences—withdrawal, shaming, admiration and envy of those who stopped using—consistent with addiction.

Social, Professional, and Institutional Pressures

Not everyone who left did so out of self-directed action. About a seventh of our respondents limited use of or left the site due to varied types of pressures from other people, both on and off Facebook, or from institutions such as work. In these cases, the network begins to represent a realized space that has to be bounded and avoided in a manner similar to physical locations. In some cases these pressures resulted from the need to maintain professional boundaries:

“One of my friends is a TA and closed her account when her students started trying to add her.” - M, 26, Statistician

Other Facebook users found themselves “stalked” or “tracked down” by certain individuals, and they limited their use of or left Facebook to prevent these behaviors. Such limiting or leaving often occurred following the dissolution of a romantic relationship when the Facebook user no longer wanted to be in contact with their ex-partner:

“One [friend left or limited use of Facebook] when they got divorced so their ex-partner could no longer follow them on [Facebook].” - F, 45, Postgrad Student

Sometimes use of the site itself creates pressures within a romantic relationship, and the user changes Facebook habits to help ease the tension.

“A friend deactivated her facebook account due to a conflict with a partner over some of her online communications (spending too much time online, contact with individuals that brought stress to the relationship).” - F, 36, Administrator

While previous work found that romantic relationships led to changes in use, e.g. posting different types of pictures, that work found less evidence for leaving or limiting [28].

Respondents also recounted stories about users who were required to alter their use of Facebook because of their occupation or legal troubles:

“My brother in law deleted his facebook account. He is a military officer, and I think taht [sic] the institution made him do this.” - M, 29, Doctorate Student

“My friend deleted his facebook account because he was convicted of a crime and the victim threatened to report that he had breached his parole by being on facebook[...] He deleted his account before it became a problem because he wanted to avoid repercussions [...]” - F, 24, Masters Student

While deleting an account to avoid going to jail was not typical, these accounts demonstrate the variety in the types of pressures participants felt. This non-volitional leaving of Facebook resembles to some extent Wyatt’s [27] description of the *excluded* or the *expelled*, as discussed below.

DISCUSSION

The results above describe not only the varying degrees and types of dis/engagement with/from Facebook, but also the motivations and justifications respondents gave therefor. This section considers relationships between these findings and previous work on the negation of technology.

Use and Non-use

We see here many resonances with previous work on non-use. Respondents who did not have an account could be described as actively resisting [23] Facebook. These include not only those who resisted using in the first place but also those who used Facebook once but do not any longer, i.e., resistors and rejectors [27]. Disenchantment [23] aligns with descriptions of the banality and inauthenticity of social interaction on Facebook, particularly in contrast to face-to-face communication, though we did not observe a nostalgic longing for “the way things were” or for a time gone by. The section above on pressures clearly aligns with Wyatt’s [27] expelled category. While these pressures also resemble disenfranchisement [23], these cases were not due to geographic or socioeconomic configurations as much as to socio-institutional pressures, such as the case of the parolee described above. Also, while cases of respondents accessing Facebook via others after deactivation or deletion occurred, these were more often post-hoc coping strategies rather than arrangements of one person offering technology use as a service to others [23].

While Satchell and Dourish [23] note lagging adoption as the most common form of non-use in HCI, we found little evidence of it in our data. Those who did not use Facebook reported no intention of joining and provided well-reasoned explanations for their non-use, in contrast with lagging adopters who simply have not *yet* adopted the technology.

Instead, we saw something we term *lagging resistance*, a sense of wanting to quit but not doing so just yet. Large numbers of respondents who had so far neither deactivated nor deleted reported having considered doing so (see Figure 4). We see a variety of justifications for this lagging resistance throughout the results: simple external constraints, such as a PhD advisor insisting on Facebook-based communication until dissertation defense; network scale effects leading to the fear that non-use will result in isolation, missed events, etc.; and idolization of active resisters and quitters making their level of non-use seem unattainable. This point draws attention to the social role of Facebook limiters and leavers.

Symbolic Functions and Deproblematizing the Non-user

Typologies of technology non-use and non-users often problematized them, for example, highlighting barriers to entry [e.g., 25] and developing policy initiatives to stimulate use [e.g., 26]. Other research has found that network structure can also increase likelihood of adoption [24]. Commentators, particularly those in science and technology studies, have called instead for the role and perspective of the non-user to be recognized and valued

[e.g., 23,27]. For example, resistance to early telephone and electrical technology, particularly among rural populations, led producers to develop new designs and infrastructures better suited to rural life [12]. Thus, these non-users became important agents of sociotechnical change.

Our results suggest that social pressures can similarly stigmatize non-use as a deviant behavior; one would leave Facebook only “if something was wrong.” Just as various pressures can lead to non-volitional non-use [27], such pressures can also lead to non-volitional use.

The above results also show how limiting or leaving Facebook not only has important utilitarian consequences, e.g., impacting productivity, but also plays an important symbolic role. It can demonstrate commitment to a romantic partner [8,28] or serve as means of rejecting a consumption-driven identity [18]. On one hand, the performative nature of such active resistance can frame refusal as something for an elite and therefore not emulable. On the other hand, the performative nature of such refusal may help account for the network effect where knowing someone else who had deactivated increased a respondent’s likelihood of doing so. We suspect a similar effect does not occur for deletion because deletion is more permanent, while deactivation allows the curious user to experiment with non-use. At a higher level, just as network effects can help explain the diffusion and adoption of new technologies [24], they may also help explain non-use or rejection.

Collectively, these points emphasize the importance of non-users. Seeing non-use only as problematic or deviant risks missing important insights that may be gained by treating non-use as a legitimate phenomenon of inquiry.

(un)Design Implications

Although somewhat tempting, we do not interpret the above results as an implication not to design [1], that there should not be a Facebook or that certain features should be eliminated. However, while respondents’ leaving or limiting was not precipitated by the researchers, this work could be seen as what Baumer and Silberman call “technological extravention” [1], i.e., studying the removal of a technology. Similarly, we would not necessarily suggest that someone should “undesign” Facebook by displacing it, erasing it, or using other strategies that Pierce [17] describes. However, there may be possibilities for Facebook to include more varied self-inhibiting options [17] beyond simple deactivation or deletion. Whether Facebook’s owners and designers are interested in facilitating more nuanced varieties of non-use, though, is another question entirely, one that is beyond the scope of this paper.

LIMITATIONS

While our questionnaire elicited interesting and provocative stories, it did not allow for follow-up questions, as interviews would, and sometimes generated terse responses.

Also, recruitment may have impacted our sample in at least two ways. First, despite the open recruitment text, people

strongly opposed to Facebook may have been more likely to respond, creating a self-selection bias. While such a bias may be problematic for questions of representativeness (RQ1), it may have helped for understanding practices of and motivations for non-use (RQ2 and RQ3), since those questions require a more purposive sample. Second, the prevalence of academics may have impacted the importance of some motivations, such as productivity concerns, as noted above, or data (mis)use and privacy, since these are popular topics of academic research on SNS. However, privacy issues also feature prominently in popular media [18], suggesting this theme may occur more broadly.

Finally, since this exploratory study sought to be as open-ended as possible, we simply collected stories rather than ask about specific motivations or experiences. Thus, the proportions for each theme may not be representative; a respondent not mentioning, say, addiction does not mean s/he has not experienced it. Future work should examine each theme and motivation more closely.

FUTURE WORK

While questionnaire responses gave us many rich personal narratives, the medium of pre-made questions yielded responses that were often ambiguous and hinted at more insights “under the surface.” Future work should use such techniques interviews, focus groups, diaries, and others to explore deeper. Our sample was also heavily biased towards academics and excluded minors; future work should examine non-use among particular populations, such as teens or certain socio-economic groups.

Also, as noted above, better theoretical understandings are needed of the interplay between technology design and non-use. Significant effort has helped theorize the roles that technology can play in society [e.g., 2]. We suggest there is space for developing equally important theoretical accounts for the roles that non-use or refusal of technology play. As described above, previous work on non-use [23,27] does not fully account for use followed by non-use (potentially followed by re-use), nor for the lagging resistance we observed. We see this area as ripe for theorization.

Finally, respondents hinted at a dynamic between Facebook users and non-users: users regarded non-users with both non-understanding and reverence. Future work should examine further such perceptions.

CONCLUSION

Just as HCI research attends to motivations for technology use [10], we should similarly attend to motivations for not using technology [23] as well as understanding social ramifications of non-use. This paper does so through a questionnaire of over 400 Facebook users and non-users. Results show that non-use is not an atomic category but encompasses a broad array of practices. This paper provides an understanding of both the variety of those practices and the motivations and justifications given therefor. Thus, we contribute to developing an understanding of the

sociological processes of determining what technologies are (in)appropriate and in which contexts.

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