

Playful Backstalking and Serious Impression Management: How Young Adults Reflect on their Past Identities on Facebook

Sarita Schoenebeck¹, Nicole B. Ellison¹, Lindsay Blackwell¹, Joseph B. Bayer², Emily B. Falk³

¹School of Information, ²Department of Communication Studies
University of Michigan

{yardi, nicole, lblackw, joebayer}@umich.edu

³School for Communication
University of Pennsylvania
falk@asc.upenn.edu

ABSTRACT

Parents, educators, and policymakers have expressed concern about the future implications of young people's sharing practices on social media sites. However, little is known about how young people themselves feel about their online behaviors being preserved and resurfaced later in adulthood. We conducted semi-structured interviews with 28 college-going, primarily female, young adults about their use of social media and their transition from adolescence into young adulthood. We find that participants recognize archival value in their own Facebook histories, despite sometimes perceiving these histories to be embarrassing. They experience tensions between meeting their current self-presentational goals and maintaining the authenticity of historical content. To reconcile these tensions, they engage in retrospective impression management practices, such as curating past content. They also engage in "backstalking" behaviors, in which they view and engage with other users' Facebook histories—openly with close ties and discreetly with weak ties. We consider this ludic engagement through the lens of emerging adulthood and discuss the theoretical implications of our findings, especially in light of emerging applications which intentionally resurface digital traces.

Author Keywords

Teenagers; adolescence; Facebook; impression management; emerging adulthood; reminiscence; archives; persistence.

ACM Classification Keywords

H.5.2 [Information Interfaces and Presentation]: User Interfaces - Interaction styles.

INTRODUCTION

Many teenagers today socialize online, actively connecting

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than the author(s) must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from Permissions@acm.org.

CSCW '16, February 27-March 02, 2016, San Francisco, CA, USA
Copyright is held by the owner/author(s). Publication rights licensed to ACM.

ACM 978-1-4503-3592-8/16/02...\$15.00 DOI:
<http://dx.doi.org/10.1145/2818048.2819923>

and communicating with peers on social media sites. Social media can offer a range of benefits for children and teens, including social capital building [16], relationship maintenance [17], information sharing [1,20,32], friendship formation [9], and social support [32,54]. Despite these benefits, teen social media use has incited concern among many parents, educators, and policymakers [9,14,19]. At the heart of these concerns is the fear that children share too much about themselves online, potentially risking their own safety, development, and future career opportunities (e.g., [2,53]). Many K-12 schools now incorporate curricula about "digital footprints" which encourage children and teenagers to be cautious about what they share online and with whom [59].

To date, research on teen social media use has focused on adults' and teens' perspectives on teens' social media use in the present [9,11,20,27,37,38]—that is, how do teens use social media and with whom, and how do they manage impressions? Little research has taken a retrospective look at teens' social media use from their perspective as young adults: that is, how do young adults feel when they reflect on their social media use from when they were teens? While adults may worry about teen social media use, teens themselves are most impacted by their own social media use, whether present or past. Further, teens' decision-making skills tend to be underdeveloped, leading them to engage in risky behaviors that they might later regret (e.g., risky driving) [35,49]. The research questions we explore in this work are:

1. How do young adults describe the ways in which their Facebook use has evolved over time?
2. How do young adults feel about their Facebook data being preserved, especially as they mature into adulthood?
3. How do young adults look back on their Facebook Friends' past content, and why do they do so?

To address these questions, we investigate teen Facebook use using a retrospective approach [43]. We chose Facebook because its Timeline feature provides a naturalistic environment that enables young adults to reflect on their own teen behavior and because it has larger penetration than other social media sites. We invited young

adults—a sample of college students at a large university in the U.S.—to tell us about how they currently use Facebook and other social media sites, as well as how their use has evolved over time. During interviews, we asked participants to log in to their Facebook profiles and to look back on their Timelines, beginning with when they first joined Facebook. We find that college-going young adults express embarrassment about their social media behaviors from their teen years, though they nonetheless find value in their past behaviors being preserved. This work contributes to a growing body of scholarly literature on reminiscence and reflection online, provides empirical evidence about young adults' retrospective assessments of their past online activities, and describes how they reconcile past and present identities through playful and nostalgic backstalking behaviors as a part of their emerging adulthood.

RELATED WORK

We describe temporality on social media sites, impression management, and changes in Facebook's affordances over time. Throughout, we highlight Facebook's persistence, which enables reflection on past experiences.

Temporality Online

Existing work on social media platforms often privileges their "newness" [24]. Content posted to social media typically depicts the current moment, resulting in "an environment in which users focus on the present" [57]. Harper et al. (2012) suggest that this present-focused identity performance inhibits users' ability to manage their identities over time [24]. However, as Zhao and Lindley (2014) note, the persistence afforded by these platforms allows an individual user to "accumulate content, including status updates, pictures and videos," which can become personally meaningful over time [57]. The persistence of personal data, in addition to its visibility, searchability, and reviewability [58], allows platforms like Facebook to become "long-term identity exhibitions," rather than ephemeral spaces [54,58].

Zhao and Lindley (2014) demonstrate that although Facebook does not function as a complete collection of personal artifacts (in the way that a folder of photos or a mobile phone's camera roll may), it nonetheless serves an important archival function for its users, who view their personal archives on Facebook as "more selective, easier to browse, and encountered more often" than photo storage alternatives [57]. Zhao et al. (2013) describe how Facebook users experience three different regions on the site: a performative region for managing impressions and recent activity, an exhibition region for long term self-presentation, and a personal region for archival purposes [58]. Social media profiles, like scrapbooks and photo albums, are "deeply personal texts" which help us to archive important personal information, document relationships, and remember meaningful events [22]. Much like scrapbooks and photo albums, sites like Facebook and

Twitter allow their users to document, review, and search for "diverse streams" of persistently available personal artifacts; thus, social media sites "could be analyzed as digital carryovers of these traditions" [22]. Kaun and Stierstedt (2014) take a historical approach in their interpretation of temporality on Facebook, arguing that media technologies have "long been considered of importance for the general structuration and experience of time" [29]. They propose the concept of "social media time" to describe how users might experience and make sense of time on social media sites [29].

Archived digital data offer a number of valuable features, such as enabling a digital baby book for young parents [31] or supporting reminiscence through memory triggers [46]. Parents value digital legacies, and are critical of the notion that content like family photos should decay or disappear over time [23]. Indeed, research suggests that people experience benefits from looking back on their past activities. A series of experiments by Zhang et al. (2014) revealed that people underestimate how much they will enjoy rediscovering their past experiences, especially the mundane (as compared with extraordinary ones) [56]. Designers, too, have explored how people might rediscover these past experiences. Odom et al. created a system called Photobox, which occasionally prints a randomly-selected photo from a Flickr user's own collection [44] to trigger memories over time. Cosley et al. created a system called Pensieve, which supports reminiscence by triggering memories via digital traces [13,46].

Lindley (2015) suggests that the perceived rush of digital time reflects a speeding up of everyday life and rhythms and calls for further CSCW research to explore the collective and entangled nature of time and technology [34]. As applications like Timehop (an application which resurfaces users' prior social media content to them in the present) and Facebook's more recent "On this Day" (which resurfaces a Facebook user's content from the same date in a prior year) gain popularity, understanding the relationship between time, technology, and users' social media experiences is a critical area of research. Our work contributes to this research agenda, with a particular focus on teens and young adults.

Impression Management on Social Media

The visibility and persistence of content on Facebook impacts what users decide to disclose on the site [54]. The interactive affordances of Facebook (such as "liking" and commenting) also impact sharing behaviors, especially with respect to impression management [6,32,58]. Impression management describes users' decisions about what to post about themselves in order to convey a particular impression to others. Goffman distinguishes between expressions that are purposefully "given" and identity impression information, which is unintentionally "given off" [21]—an important distinction which enables us to consider both explicit communication acts (e.g., the specific content of a

post) and the ways in which these acts may be interpreted by others. Extensive scholarship has described impression management strategies on social media sites (e.g., in online dating [18]). However, the majority of this prior work has focused on how people manage impressions in the present—that is, what should they share to their online audiences now? This paper investigates impression management as both a current consideration and a retrospective practice—that is, how should users manage impressions “given off” by content they shared in the past?

Teen Social Media Use

The perils of disclosing too much information online are widely discussed in popular media, in what some have dubbed the “oversharing age” [15]. Facebook users dislike people sharing too much about themselves [50] and employ a variety of strategies to manage self-disclosure risks [54]. Users also perceive disclosures made privately on Facebook to be more intimate than those made publicly, and perceive public Facebook disclosures about sensitive topics to be less appropriate [6]. Particular concern is expressed for children and teens, whose decision-making skills are not fully developed and who thus may overshare online in a variety of ways [40]. Indeed, several studies have surfaced different kinds of risky behaviors (e.g., revealing a home address or telephone number) teens have enacted on social media sites [33,35]. However, other research suggests that although teens behave in diverse ways, some teens are more aware of their own privacy than adults perceive them to be [10]. Teens use a number of privacy-management strategies, like changing platform privacy settings, managing audiences, and employing social steganography, or the practice of using secret messages to conceal conversations with friends when socializing in public spaces (e.g., “hiding in plain sight”) [11,42]. Research that has been conducted by talking directly with teens suggests they do in fact maintain control over a variety of their online activities [10,11]. Teens’ Facebook use is inextricably integrated with how the site’s affordances and norms have changed over time. Among teens in particular, social behavior on Facebook prompts the sharing of jokes, memes, and other content [9,11,26,35]. However, controlling the visibility of disclosures on Facebook and other social media sites requires managing not only one’s own privacy settings and content, but also the activities of one’s Friends [42], a theme we explore throughout this work.

An Overview of Facebook

To contextualize participants’ evolving Facebook use, we give a cursory overview of Facebook’s development as it relates to our research. We focused on Facebook in this work because it is the site that participants had been using the longest and most actively from their adolescence through the period of data collection.

Facebook launched in 2004 and opened to high school students in October of 2005. In September of 2006, Facebook opened to anyone aged 13 or over. Though teens and young adults have remained a core demographic, adult and older adult users have increased rapidly. Currently, over 70% of all Internet users are on Facebook, though use skews toward younger adults ages 18-49 [60]. Over 90% of teens have a Facebook profile, though some evidence suggests that their interest in Facebook is waning relative to their use of other sites like Instagram and Snapchat [36].

In September 2006, Facebook introduced the News Feed, which offered a single stream in which Friends’¹ activity could be viewed. Some users protested the new changes, which prompted Facebook to introduce privacy controls that allowed users to determine what was shared on the News Feed and with whom. The News Feed introduced a way for information to spread quickly through one’s network [4,51]. In February 2009, Facebook introduced the “Like” button, allowing users to interact with others’ posts on the site. Recent evidence suggests that users “like” and comment on their Friends’ content fairly regularly, but are less likely to post their own content as frequently [50].

Facebook Timeline, introduced in September 2011, allowed users to move quickly and chronologically through their own historical content to revisit past posts and relive memories. Timeline also enabled users to visit other users’ historical content, both to learn about new Friends and to relive memories with existing Friends. Timeline lowered the social and technical barriers to perusing past activities on the site, though some research suggests that transitioning to the Timeline format was stressful for users because of the perceived loss of control [55].

METHODS

We conducted semi-structured interviews with 28 young adults in March and April of 2014. All participants were college students at a large university in the U.S. Participants were part of a broader research study exploring the relationship between social media use and emotion among college students. As part of this study, we recruited a random sample of 154 undergraduate students via the Registrar’s Office. To be eligible, participants were required to be 18 years or older, own a smartphone, have a United States phone number, and use social media on a daily basis. We invited a sub-sample of 57 participants from the broader study to participate in the interview study. These participants were selected randomly from within buckets of self-reported social media use (very active to minimally active). 35 participants expressed interest and 28 participated in the interview. 24 participants were female and four were male (females constituted 66% of the sample in the broader study), and ages ranged from 18-22. The

¹We capitalize “friend” when referring to a friendship on Facebook.

dates that participants joined Facebook were: 2006 (n=1), 2007 (n=6), 2008 (n=9), 2009 (n=9), and 2010 (n=3); their ages at the time of joining ranged from 13-17.

The first and second authors conducted face-to-face interviews on campus. This study was approved by our institution's IRB. Participants completed paper consent forms at the time of the interview in addition to web-based consent forms at the beginning of the larger study. Participants received \$25 upon completion of the interview.

We used a retrospective interviewing technique, which asks participants to recall and reflect on past experiences [43]. Retrospective interviews have been used in a number of contexts, often health-related (e.g., [8]). The technique is subject to recall bias [28]; however, in many cases this is built into the study design (e.g., understanding how people think *now* about their past behavior). Efforts to validate the method have shown that people are able to report past experiences with some accuracy [7,39,45]. The interview protocol began with a warm-up question about what social media sites participants use and how they use them. We then asked if their use had changed over time, and if so, how. The interview protocol focused on Facebook, though we also asked about other social media platforms to understand participants' broader experiences online.

The first half of the interview protocol focused on participants' present behaviors. We asked participants to tell us about how they used Facebook at the time of the interview, what kinds of content they tended to share, and what kinds of content their Friends shared. As part of our broader study goals, we asked about the relationship between emotion and Facebook behavior, such as whether specific emotions prompted Facebook activity. The second half of the protocol asked participants about their retrospective uses of the site. We asked participants to tell us about whether they ever looked back at old Facebook content—their own or others'. We then invited participants to log in to Facebook and look through their Timelines to revisit prior content. Participants first viewed their oldest visible Facebook post, then more recent years, up until the present day. We asked participants to tell us how they felt when looking through their Timeline content, as well as how they felt about the experience of looking through it with us as a part of the interview process.

Interviews were audio-recorded and transcribed verbatim. The research team read through the interview transcripts to identify and correct errors and met to develop a preliminary codebook. We conducted an initial coding pass, in which two transcripts were coded by four members of the research team in order to further develop the codebook. After coding a sample of transcripts, the research team met to refine the codebook and to discuss and clarify any ambiguous coding instances [48]. After revising the codebook to reconcile ambiguities, we recoded the initial transcripts with the final codebook and then coded the remainder of the transcripts. We used a constant comparison method to code the data,

observing similarities and differences in the interview transcripts as we coded [12]. Each member of the research team coded half of the interviews, such that all 28 interviews were coded at least twice by two different team members. We took this approach to ensure rigor and thoroughness in the coding. Transcripts were unitized such that each question and answer pair was considered a unit. The codebook contained 50 total codes, focused on social media uses, relationships, mood and emotions, and change in use over time. The research team then analyzed select codes related to looking back at one's own profile, looking back at others' profiles, data persistence, archival value, close and weak ties, and development and changes over time. Codes were synthesized into themes and discussed among the research team. Key themes, based on our research questions above, are described in the next section. Participant quotes have been edited slightly for length and readability.

A note on terminology: we use the term "teenager" or "teen" frequently throughout the paper to indicate ages 13-17, a range used by Pew and other resources [36,37]. We occasionally employ the term "adolescent" to refer to the developmental stage related to puberty, decision-making, and maturity [40]. Participants often talked about their development stages as phases (e.g., middle school to high school to college). In cases when they did so, we use this language to reflect their stories. We use the term "young adults" to refer to ages 18-25, a period characterized as "emerging adulthood" in the literature [3].

RESULTS

Results are organized around three overarching themes: participants' perceptions of changes in their own Facebook use over time, the archival value of Facebook, and practices of looking back on Facebook histories. Throughout, we consider these themes in the context of users' transitions from adolescence to young adulthood.

Changes in Facebook Use over Time

Research question 1 asked how Facebook use evolves over time, as participants transitioned from teens to young adults. Participants reported a number of changes in how they used Facebook when they first joined as teens compared to their present day practices. Participants reported posting prolifically as teens, sharing updates about mundane topics of their daily lives, song lyrics, and large albums of photos. Other behaviors, like playing Farmville and similar Facebook games, were popular. P18 felt that teen Facebook users used to "post stuff just to post stuff," but that now, a few years later, they posted content that they anticipated would receive "likes" or would be otherwise appreciated by their Facebook networks. P4 said that her use of the site was now more passive; instead of actively posting, she preferred mostly to look at content posted by others. Many of our participants reported that they currently posted only the best or most important content:

I would, you know, post just to post on Facebook—whereas now, I only post if I actually have something to say. –P2

Participants reported changes in peer norms around the types of content perceived as appropriate to share. For example, as a teen, P24 actively shared chain-letter type posts (where a user tags Friends in a post that asks them to take a quiz, make a comment, or reveal some identity trait). P24 reported that she shared these posts because her Friends were doing so; when they stopped posting them, so did she. As teens, our participants also frequently posted song lyrics. P1 told us:

I stopped posting angsty song lyrics as my status, which is probably what everyone did when they were in high school—and uh, tried to start posting more relevant things to my life, or like clever witty things that I thought people would enjoy. –P1

Many participants looked back at these prior posts with some embarrassment; although they posted song lyrics as teens, they reported they would not do so now. Participants also shared photos extensively as teens, often indiscriminately uploading entire albums of photos:

When I was younger, that was more of a thing... people would have whole albums of “just me, here’s me” with, like, Photo Booth on a MacBook. You’d just sit there and take like 50 pictures of only yourself, but then upload all of them... which was so weird. Now, that’s totally frowned upon. If you post an entire album of, like, you sitting on your computer doing the webcam thing, then like people will be like, “wow, what a dork!” –P18

Participants no longer shared bulk photos in this indiscriminant way. Many said that although they might still *take* many pictures, as before, they would choose only the best one to post on Facebook. In some cases, changes in the platform’s functionality and increased mobile access may have shaped these behaviors. P23 noted that her adoption of a smartphone had spurred her to post just one or a few photos directly from the phone, rather than uploading photos from a camera to a computer and then curating an entire album around an event or a theme.

Participants reported that throughout their adolescence they learned what types of Facebook use were perceived to be appropriate or not, either by observing the kinds of peer behaviors described above or through feedback from adults. P2’s mother, for example, reacted negatively to a post P2 wrote as a teen which included crass language. “Getting in trouble” discouraged P2 from posting inappropriate language. These social learning influences suggest that both bottom-up peer norms, as well as top-down adult instruction (from parents and others), influenced how participants’ use evolved over time.

P5 also associated changes in his Facebook use over time with his own maturity. He told us that although he sometimes used to participate in inflammatory discussions with peers, he was now more aware of the effect of his words on others: “Now, I don’t ... because I know there’s no positive outcome.” When asked if her Facebook profile was an accurate reflection of herself, P18 felt it was and that it demonstrated the strides she had made in her personal development: “It definitely shows how [I’ve] changed.” P1 expressed discomfort with her current interactions with old friends from high school, which she said felt like moving backwards in her own development. She was trying to “become a passable adult, become a better person, learn how to interact with people better,” and felt that interacting with old acquaintances was counter-productive with regard to those efforts.

Friending Behaviors

When participants first joined the site as teens, they reported that having many Facebook Friends was “a sign of popularity” (P14). Many participants noted that they added significantly fewer new Facebook Friends now than they did in their early use of the site. Though the transition to college provided an increase in potential new Facebook Friends, participants told us they were now more purposeful in their friending behaviors, and placed greater emphasis on the quality of the relationship than on the quantity of Friends they could accumulate:

So it’s not just anyone and everyone who is on the team, but people I really think I actually interact with on a regular basis. –P11

In contrast to prior use—which P17 characterized as, “oh, I met them once, I’ll add them”—participants now preferred to limit their Facebook networks to only the individuals they wanted to interact with. For instance, P20 no longer felt obligated to add Facebook Friends she “probably would never talk to again.”

Furthermore, participants reported culling their networks over time, especially during the transition from high school to college. During this time, participants felt more comfortable unfriending people with whom they had never been close, although they were hesitant to unfriend these peers when they attended the same high school.

Everyone was kind of friends with everyone so... we would all Friend each other and everything. But like during high school I’d be like, “oh I shouldn’t really unfriend you because I see you every day, you know, so we kinda interact.” –P27

Participants asserted that having many Friends was important when they first joined Facebook; as young adults, they now prioritized friendship quality.

Participants also typically reported a different kind of transition in their Facebook Friendships with family members. Specifically, while many participants tolerated

(or sometimes rejected) Friend requests from family members as teens, for the most part young adults now celebrated connecting with family members on Facebook:

It's definitely evolved from me not wanting my mom to see my Facebook to my mom being a big part [of it]. –P2

Archival Value: A Modern-Day Time Capsule

Research question 2 asked how young adults feel about their Facebook data being archived. Participants valued Facebook's archival properties for a variety of reasons. Many participants viewed their personal Facebook histories as a more organized and curated photo storage platform than alternatives like their personal computers or mobile phones. P1 emphasized that Facebook allowed her to organize and search photos more easily than on her personal archives. Specifically, she found it easier to find specific content by navigating through her Facebook timeline than by searching for the same file on her personal computer. P8 also felt it was easier to revisit old photos on Facebook as opposed to other photo storage platforms, because she puts only "the best ones up." Because participants chose the best photos to share on Facebook among numerous outtakes, they turned to Facebook as a record of cherished photos. P20 appreciated having carefully curated artifacts from her past readily available for review: "It's nice to have a documentation of things you did in the past, so you can remember better." Because Facebook captured and saved the social context of the photo, such as naming others in the photos and the specific feedback received from Friends, participants turned to Facebook to relive and reminisce about these social experiences. P13 felt photos posted to Facebook were more meaningful than photos stored in other locations, because Facebook photos were specifically meant to be kept and shared as a memory with friends:

It's kind of almost saying, like, "I want to show that I was with these people." And I want us to have that memory somewhere, rather than just keeping it on my phone... because it's something to be shared with those people. –P13

P16 described Facebook as a "modern-day time capsule." For many participants, Facebook served as a valuable personal archive simply because of the frequency and prolificacy of its use. For example, P15 said, "I have just invested so much of my life on Facebook... all of my memories are there."

Participants considered looking back at their own personal histories to be a nostalgic activity. For P21, looking back on her personal history was "a lot easier now with the Timeline review, where I [can] just see all my posts from a specific year or specific month." Several participants noted that Facebook Timelines made it easy to simply "scroll down" to revisit their histories. P5 reported doing this during downtime: "sometimes if I'm bored, I'll look through and

kind of reminisce." However, looking back on personal Facebook histories was a source of embarrassment for some participants. For example, P18 said she was not embarrassed about her older pictures, but felt uncomfortable looking at her prior statuses because she was so "dramatic" then. Other participants felt that reviewing their own Facebook histories was a useful activity in assessing their personal development. P21 appreciated having "physical proof" of her development, which she said was "one of the things that I like about Facebook."

The act of reviewing one's own or others' historical content was not exclusive to Facebook. Although we did not ask about Myspace or other earlier social media sites, some participants did bring up their use of Myspace while they were in middle school (grades 6-8 or 6-9 in the U.S.). P2 described browsing Myspace (spelled "MySpace" at the time) in high school, where she and her peers would revisit their (now abandoned) profiles to review photos from middle school:

[The] really funny thing is we all were into Myspace in middle school. So if you can remember your Myspace password, and go on and see all the middle school photos. Oh my gosh, we did that in my junior year of high school, and it was horrific—but I couldn't delete it. –P2

Some participants used Timehop to observe past social media behaviors as well. The desire to preserve this content, despite potential embarrassment, again highlighted users' perceptions of Facebook and other social media sites as valuable personal archives.

"Backstalking" or Reviewing Others' Facebook Histories

Our third research question asked about the kinds of social practices young adults engaged in with respect to other Facebook users' histories, and how they felt about these practices. In addition to looking back on their own archives, participants also looked back on others' Facebook histories to observe how their friends had developed and changed over time. These retrospective behaviors were done in a variety of ways, including scrolling down the timeline of a new Facebook Friend, using the Timeline to search for a particular date, or clicking on a profile picture and using the left arrow key to quickly navigate to a user's oldest posted profile photo. Many participants referred to their behavior as "Facebook stalking" or "backstalking," which describes the behavior of looking back on other Facebook users' histories. Some participants also actively "liked" or commented on old content, to resurface it to the top of others' News Feeds as a form of playful embarrassment. In our sample, 25 out of the 28 participants reported that they looked back on other people's Facebook histories, though the terms they used varied from "Facebook stalking" to "backstalking" to "creeping." Reasons for doing this ranged from learning about new friends or catching up with existing ones (n=17 reported doing this), resurfacing

content for play (n=13), or resurfacing content for nostalgia (n=13). The motivation for these behaviors, and the activities themselves (e.g., whether or not they left a digital trace of their activities) differed based on whether the Facebook Friend was a weak or strong tie, which we explore further in the next sections.

Backstalking Weak Ties

Participants backstalked weak ties to learn about new Friends or acquaintances, as well as potential romantic interests. P1 suggested that backstalking allowed a Facebook user to “learn more about [a person], or just feel like you know them more... to familiarize yourself.” P2 added that if there was romantic interest in a new Facebook Friend, “you want to know what other girls were posting on his Facebook.” Because Facebook made it so easy to revisit these histories, P13 felt backstalking allows users to better understand a Friend’s past, “and then you can see a lot more into their life than perhaps they would permit you to see.”

Backstalking a weak tie carried stigma with it, and was perceived as not socially acceptable (though nearly all participants admitted to privately engaging in this behavior). This perception also influenced how participants felt about their own Facebook histories:

In terms of me having to be worried about people finding these and being like “oh my god, you were so weird”... that’s not really a thing. ‘Cause that takes a lot of time, to scroll through someone’s entire profile. *You* were so weird, for spending an hour looking through my profile. I wouldn’t say I’m worried about it. When I look at [my old content], it’s kind of like ugh, like ‘yikes!’ [But] if someone finds it I’ll just be like, ‘yeah, I had a thing with song lyrics as my status when I was 15 years old. Get over it.’ –P18

Both P13 and P14 referred to looking back on others’ histories as “creepy.” While most participants engaged in backstalking behaviors, they went to great lengths to ensure that it was not obvious to others. As P1 told us after accidentally “liking” a band member’s picture from four years prior: “I forgot you’re not supposed to “like” it when you’re Facebook stalking.” Some participants said they only backstalked on their computers, to avoid accidentally “liking” old content on their mobile phones.

Backstalking Strong Ties

Conversely, backstalking the Facebook histories of strong ties was a socially acceptable phenomenon that was very popular among participants at the time of the interviews. For example, P2 said that looking at her boyfriend’s Facebook page allowed her to feel closer to him, by revisiting what his life was like before they had even met: “Even though you weren’t there when those posts were made... you’ve seen them, so now like it’s kind of like part of you was there at those times.”

Participants also actively “liked” or commented on friends’ old content to resurface it to current Facebook Friends. This type of historic resurfacing was of two varieties: nostalgia and play. To engage in nostalgic behaviors, participants “liked” or commented on previous content as a form of reminiscence and social grooming. This nostalgic backstalking was sometimes conducted as a co-located social activity, where participants gathered around a screen and browsed historical content together.

We’ll be like, “When did that happen?” And we’ll try and go back. In 2012, I went to this concert with my best friend. This past November was the anniversary of when we went, and we were like, “Oh, my gosh, we should go back.” And we clicked and found the day and looked at our posts because we were excited. –P13

The second type of backstalking—play—involved finding old, potentially embarrassing, photos in a close friend’s history and then intentionally “liking” or commenting on it to resurface the photo to the News Feed. P5 said:

I don’t know, [we] just look at them [and] if I found one that’s particularly funny, the big trend now is to comment on it, which bumps it up to the top of the News Feed so that everybody can see it. This is you in eighth grade. Like, this really funny picture will bump up to the top. –P5

These resurfacing behaviors typically occurred among close friends, as well as team members, fraternity or sorority members, or other peer groups. For example, P11 said:

One of the dance team members actually reposted something on my wall, an older picture when I was in a show, and it was very amusing to see the response of my new friends looking at an older thing of me. –P11

However, participants only engaged in these kinds of ludic resurfacing behaviors with close friends. In addition, only content that would not be legitimately harmful or distressing was resurfaced, though this activity was sometimes intended to “get a rise” out of a friend:

Like there is kind of a thing where if you want to just get a rise out of your friends, you can go and backstalk them and look through all their super old stuff from when they were awkward and in middle school—and just like sort of “like” it so that it shows up in your community. I’ll do that to my friends sometimes. –P18

Resurfacing potentially embarrassing content was typically intended as a playful act between two individuals. This act surfaced archival content to a new (and broader) audience, in a ludic reinforcement of existing social bonds.

Impression management over time

Because of the popularity of revisiting or resurfacing old content, some participants engaged in active impression management strategies to protect their historical content. Proactive measures, like deletion and restrictions on post visibility, helped users hide potentially embarrassing content. P25 described untagging herself in photos posted by other users; for example, she might untag unflattering photos or photos with “awful lighting.” P6 had changed her privacy settings so that other users could not see her old photos: “I don’t really feel like my friends need to go back and see these.” By making photos private instead of deleting them the site, P6 ensured that her Facebook profile retained its value as a personal archive. Users who did delete some early posts did so because they felt content posted during the earlier years of their Facebook use was no longer an accurate representation:

If it [isn’t a] reflection on who I am today, I sometimes go back and delete different posts, and stuff that just [doesn’t] seem consistent with my personality anymore. –P21

In general, however, participants did not do extensive hiding or deleting of content, reporting that these earlier posts were simply part of who they were. P18 said: “Yeah, it’s embarrassing, but that’s also who I was.” Most participants felt that even if their older content was embarrassing, they were adolescents at the time it was posted and it was therefore unlikely that anyone would judge them for that content now. Some users intentionally choose not to delete potentially embarrassing content because doing so would seem insincere:

I don’t go through and delete stuff that I’ve written, ‘cause then, like, people have seen it for how many years? Going back and deleting it now is not gonna—it would be pointless. I’ll open up to the fact that whatever stupid thing I said, I did say. –P17

Thus, while participants generally accepted their past content as part of who they were, they nonetheless engaged in some behaviors to curate past and present content to ensure that their Facebook profiles were accurate representations of how they perceived themselves in the present. Most participants felt their overall Facebook profiles were generally accurate representations, albeit selective and subject to social pressures:

I guess to a certain extent the identity you have on Facebook is always a little bit constructed. So like, you only—people only see what you want them to see. But in terms of me tracking, like, what I wanted people to see, that’s pretty accurate. –P18

Participants reported that a downside to this constructed nature of posts, especially as they transitioned into young adulthood, is that they did not feel that Facebook provided them with a completely accurate, holistic representation of their identities:

[On Facebook] I want to always seem like I’m happy and everything is great and things are going great and I’m healthy and yeah everything’s perfect. But it’s actually not like that but that’s what I like to present, which is sad ‘cause like back when I was younger, Facebook was just like *me* and now... I think because I’m also Friends with professional friends, or like I need them to still think I’m a good professional person, so I started becoming more careful with things that I posted and stuff. –P1

Because Facebook use had shifted away from everyday documentation of daily life, participants felt they no longer had access to their friends’ “real” lives, as a number of them reported, but instead carefully-constructed self-representations of one another.

DISCUSSION

A key affordance of Facebook is persistence [25,52]—the fact that content can continue to be viewed for many years after it is initially shared. The introduction of Facebook’s Timeline in 2011 renders users’ past content more accessible, both to themselves and to others; many participants saw their Facebook profiles as a personal archive, echoing prior work [57,58]. Rather than having to click the “Show Older Posts” link at the bottom of each loaded page—an action that served as both a technical and social barrier—Facebook users can now easily revisit years of past experiences with just one click. This provides researchers with the unique opportunity to investigate young adults’ impressions of their digitally-archived adolescence, as well as changes in their social media use which occur in tandem with their social development.

Tensions between Current Self-Presentational Goals and Maintaining the Authenticity of Past Content

Most impression management studies have treated the theory of impression management as a present-focused practice; that is, people present themselves in ways that will be well-received by their current audience. Goffman’s own examples of impression management focus on facial expressions in the present—in a performance on stage or a teacher speaking in front of his students. These behaviors may involve selective self-disclosure practices, managing appearances, conforming to norms, or presenting an idealized version of the self [18,30]. However, few studies of impression management, especially in online spaces, have focused on what we call *retrospective impression management*. That is, in what ways do people try to retroactively manage their online identity information, even after those identities have already been performed to an audience who was present at the time of the performance?

We argue that features like Facebook’s Timeline shift and often expand the audience for self-presentational messages, thus introducing new tensions around retrospective impression management. Social media users make decisions about what to share based on their understanding

of their audience at a particular time and life stage; for instance, teenagers posting to a primarily high school network. However, when that content is resurfaced later to a new audience of primarily college peers, as well as extended family and other networks, users must balance maintaining the authenticity of past behaviors with current self-presentational goals. In prior work, scholars have drawn on the idea of context collapse to describe the challenges associated with managing multiple audiences online; here we see evidence of *temporal context collapse*, in which social media users must not only navigate multiple audiences in the present, but also multiple audiences across time periods. This is particularly challenging for our participants because expectations about appropriate Facebook use have evolved over time, in parallel with their transition through major developmental life stages. Below we discuss how these tensions are reconciled through playful backstalking behaviors in emerging adulthood.

Reconciling Impression Management Tensions through Play in Emerging Adulthood

We observed two strategies for managing these self-presentational tensions: first, a small number of participants chose to delete old content or, in the case of one participant, to set old content as visible to “Only Me.” The majority of our participants, however, did not remove or hide past content, instead choosing to intentionally preserve their prior activity—even if it was embarrassing—to maintain the historical integrity of their online presence. For our participants, maintaining authenticity required that they not edit past content, because doing so would be a misrepresentation of who they once were. However, they did not describe doing the opposite: deleting past content to maintain authenticity to *current* self-presentational goals.

Many of the central properties of adolescence—such as identity play and exploration [41]—require that teens be able to try on a given identity, then shed it and leave it behind them. We observe here that while young adults describe significant changes in how they behave from adolescence to young adulthood, they do not necessarily wish to discard or obscure those former identities. Indeed, some online communities maintain norms against deleting content that is negatively received by others, an activity that is colloquially known as a “dirty delete” [61]. Our results suggest that young adults consider their adolescent Facebook histories to be valuable archives, and use Facebook as a platform for playful reminiscence with close friends. In this way, Facebook may also provide a mechanism for childlike play while still allowing users to put forth a mature self-presentation.

We draw on Arnett’s notion of “emerging adulthood” to interpret and explain these activities [3]. He describes the period between 18 and 25 as one in which individuals are in a liminal space between childhood and adulthood. During this time, emerging adults play with and explore different worldviews, careers, and relationships in a space that is

somewhat protected from adult concerns, yet with more freedom than teenage years spent living at home. Arnett stresses the importance of experimenting with different roles during this period of emerging adulthood, a process that is enabled by the postponement of major life changes like marriage [3]. We believe some of the Facebook practices our participants report support this development process by allowing them to present current, “adult” identities while still engaging with and collectively re-living moments of unfiltered, playful, and candid adolescent identity expressions.

Facebook offers a potential playground for self-expression and peer feedback—yet our participants seemed reluctant to post playful content on Facebook in the present day, instead gravitating toward posting only important events or polished photos rather than all of their day-to-day moments. Revisiting digital traces which reflected their adolescence through backstalking may provide young adults with a socially appropriate opportunity to engage in play with their own histories, while still protecting their present-day impression management goals. In this sense, Facebook offers users a way to engage with their past—and less filtered—online selves, while also crafting personae that reflect present and sometimes aspirational future selves. Backstalking behaviors also differed based on whether a tie was close or not; these distinct behaviors on Facebook may have allowed emerging adults to rekindle strong bonds with close friends through collective reminiscing online.

Zhao and Lindley (2014) describe how social network sites act as archives by enabling users to curate content, store data, and provide frequent access, [52], results that are echoed in our findings. Many of our participants managed the transition from adolescence to young adulthood (and, simultaneously, from high school to college) by cultivating a smaller and more deliberate Facebook network and by actively presenting what they perceived to be a more polished online self-representation. Over time, participants reported becoming more selective about their Facebook activities, with regard to both the content they share and the Friends they add. For them, Facebook has evolved from a platform for indiscriminately sharing everyday moments and quotidian content to a carefully selected assemblage of important announcements and best photographs. Expectations of putting forth a polished self might help explain why today’s teenagers turn to other sites. Recent research supports this hypothesis, suggesting that young adults turn to ephemeral sites like Snapchat to overcome self-presentation concerns they experience on Facebook [5].

Technological Literacy and Digital Traces

Changes in technological affordances subtly impacted participants’ perceptions of their own and others’ Facebook histories. We argue that Facebook’s evolving affordances require new kinds of literacy which enable users to discern the temporal nuances of digital traces. For example, participants who reviewed old statuses, such as song lyrics

from 2007, could see they had received no “likes” on those posts. However, this was not necessarily because their posts were not well-received; it was simply because the “like” functionality was not introduced until February 2009. Without detailed knowledge of Facebook’s technical history, Facebook users may reflect on their Timelines and see a series of posts that did not receive attention from Friends. These posts may have been socially appropriate at the time of posting (e.g., music lyrics, large photo albums), but now seem inappropriate. Specifically, they may violate current users’ expectations that people only share the most important content, and that any shared content will receive attention in the form of likes and comments.

Thus, an important technical affordance for Facebook is to maintain the temporal integrity of user posts. A post which was written in 2007 is stamped with the date of its authorship, providing important context for how the post should be interpreted in the present day. However, some Facebook literacy is required to appropriately leverage this affordance—for instance, novice users may simply not notice the time stamp associated with a post which shows up in their feed. Increased Facebook literacy can also mitigate tensions around temporal context collapse (multiple audiences across life stages) and retrospective impression management (ensuring that past digital traces are aligned with present-day self-presentational goals). As prior digital traces are increasingly resurfaced on social media sites via applications like Timehop, social media users will need to develop a new kind of literacy: the ability to discern the temporality of content they consume. Social media site designers should also forefront temporality as a design constraint to support social media users’ online experiences.

Practices around management of historical personal content take on increased importance when we consider how these digital traces impact impression formation processes. Ramirez et al. [47] consider various strategies for reducing uncertainty about others using online information. They note that “extractive strategies”—such as searching for content produced in the past either about or by the target—can be especially powerful, because “these postings reflect statements enacted in social settings, in many cases without the suspicion that they would in fact be stored for years for public consumption outside of the group for which they were originally intended” and thus “may offer particularly valuable insights to information seekers” [47]. This framing suggests that historical Facebook content may hold more weight than present proclamations with regard to the veracity of users’ identity claims. Third-party confirmation (via comments by Friends, for instance) has important implications for impression formation processes, given that third-party information is largely immune to manipulation and thus given more weight by information-seekers [47]. Although our data do not speak to this topic in depth, future research could explore the extent to which historical social media content is perceived to be more or less accurate than

present-day utterances, and the ways in which users manage the visibility of this content to achieve current self-presentational goals while also maintaining the archival value of this content. These processes are likely to be of particular importance during times of identity shift, such as adolescence and emerging adulthood.

Limitations

This research was conducted with a subsample of young adults who are not likely to represent the broader population in the U.S. Our study oversampled females; this was a result of response bias (we recruited both males and females for the study). In future work, we would oversample males in the recruitment. Focusing on students at a four-year university also limits our ability to describe the experiences of young adults who do not go to college or who take non-traditional paths through college. For instance, these populations may experience different risks than those described by our participants. A college-going population may have been better educated about appropriate online behavior. Future work could extend these results with a large-scale survey study of young adults to more closely reflect the demographics and family structures of the U.S.

CONCLUSION

Drawing on interview data with 28 young adults, this study investigates how young adults reflect on their historical Facebook use. Young adults describe a number of changes in their Facebook use over time, including having fewer Friends, posting fewer statuses (e.g., music lyrics), posting fewer photos, and generally being more careful about what they post. They perceive archival value in their Facebook histories, and often choose not to delete content—even if it is embarrassing—in order to preserve authenticity. Many of our participants “backstalked” the Timelines of other Facebook users, though they only did this openly with close friends. We discuss the concept of retrospective impression management, which describes how young adults manage past content to better align with their present-day self-presentational goals. This research becomes especially crucial with the rise of applications like Timehop and On This Day, which intentionally resurface historical digital content in the present day. Future work should explore how social media users can be better supported in curating their online identities and archived data.

ACKNOWLEDGEMENTS

We thank the University of Michigan MCubed Program for support. We also thank the National Science Foundation (HCC #1318143) for support. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation. We thank Tsubasa Morioka for her assistance in data analysis.

REFERENCES

1. Alessandro Acquisti and Ralph Gross. 2006. Imagined Communities: Awareness, Information Sharing, and Privacy on the Facebook. In *Privacy Enhancing Technologies*, George Danezis and Philippe Golle (eds.). Springer Berlin Heidelberg, 36–58.
2. Ben Agger. 2015. *Oversharing: Presentations of Self in the Internet Age*. Routledge, New York.
3. Jeffrey Jensen Arnett. 2000. Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist* 55, 5, 469–480. <http://doi.org/10.1037/0003-066X.55.5.469>
4. Eytan Bakshy, Itamar Rosenn, Cameron Marlow, and Lada Adamic. 2012. The Role of Social Networks in Information Diffusion. *Proceedings of the 21st International Conference on World Wide Web, ACM*, 519–528. <http://doi.org/10.1145/2187836.2187907>
5. Joseph Bayer, Nicole Ellison, Sarita Schoenebeck, and Emily Falk. 2015. Sharing “Moments” on Snapchat for Short-Term Well-Being. Presented at the *Annual Conference for the International Communication Association*.
6. Natalya N. Bazarova. 2012. Public Intimacy: Disclosure Interpretation and Social Judgments on Facebook. *Journal of Communication* 62, 5, 815–832. <http://doi.org/10.1111/j.1460-2466.2012.01664.x>
7. L. R. Berney and D. B. Blane. 1997. Collecting retrospective data: Accuracy of recall after 50 years judged against historical records. *Social Science & Medicine* 45, 10, 1519–1525. [http://doi.org/10.1016/S0277-9536\(97\)00088-9](http://doi.org/10.1016/S0277-9536(97)00088-9)
8. A. Bifulco, G. W. Brown, and T. O. Harris. 1994. Childhood Experience of Care and Abuse (CECA): A Retrospective Interview Measure. *Journal of Child Psychology and Psychiatry* 35, 8, 1419–1435. <http://doi.org/10.1111/j.1469-7610.1994.tb01284.x>
9. danah boyd. 2014. *It's Complicated: The Social Lives of Networked Teens*. Yale University Press, New Haven, CT, USA.
10. danah boyd, Eszter Hargittai, Jason Schultz, and John Palfrey. 2011. Why parents help their children lie to Facebook about age: Unintended consequences of the “Children’s Online Privacy Protection Act”. *First Monday* 16, 11.
11. danah boyd and Alice Marwick. 2011. Social Steganography: Privacy in Networked Publics. *Annual Conference for the International Communication Association*.
12. Juliet Corbin and Anselm Strauss. 2008. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. SAGE.
13. Dan Cosley, Victoria Schwanda Sosik, Johnathon Schultz, Soyoung Lee, and Tejaswi Peesapatic. 2012. Experiences With Designing Tools for Everyday Reminiscing. *HCI* 27, 1-2, 175–198.
14. Caitlin Dewey. 2015. Inside Tumblr’s teen suicide epidemic. *The Washington Post*. Retrieved March 3, 2015 from <http://www.washingtonpost.com/news/the-intersect/wp/2015/02/24/inside-tumblrs-teen-suicide-epidemic/>
15. Caitlin Dewey. Growing up in the oversharing age - IOL SciTech. *Independent Online*. Retrieved February 16, 2015 from http://www.iol.co.za/scitech/technology/internet/growing-up-in-the-oversharing-age-1.1816192#.VOH-F_nF98E
16. Nicole B Ellison. 2006. The Benefits of Facebook “Friends”: Social Capital and College Students’ Use of Online Social Network Sites Literature Review Social Capital : Online and Offline. *Media*.
17. Nicole B. Ellison, Jessica Vitak, Rebecca Gray, and Cliff Lampe. 2014. Cultivating Social Resources on Social Network Sites: Facebook Relationship Maintenance Behaviors and Their Role in Social Capital Processes. *Journal of Computer-Mediated Communication* 19, 4, 855–870. <http://doi.org/10.1111/jcc4.12078>
18. Nicole Ellison, Rebecca Heino, and Jennifer Gibbs. 2006. Managing Impressions Online: Self-Presentation Processes in the Online Dating Environment. *Journal of Computer-Mediated Communication* 11, 2, 415–441. <http://doi.org/10.1111/j.1083-6101.2006.00020.x>
19. Sam Fiorella. Cyber-Bullying, Social Media, and Parental Responsibility. *The Huffington Post*. Retrieved March 3, 2015 from http://www.huffingtonpost.com/sam-fiorella/cyber-bullying-social-media-and-parental-responsibility_b_4112802.html
20. Andrea Forte, Michael Dickard, Rachel Magee, and Denise E. Agosto. 2014. What Do Teens Ask Their Online Social Networks?: Social Search Practices Among High School Students. *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing, ACM*, 28–37. <http://doi.org/10.1145/2531602.2531723>
21. E Goffman. 1956. *The Presentation of Self in Everyday Life*. Doubleday, New York, NY.
22. Katie Day Good. 2013. From scrapbook to Facebook: A history of personal media assemblage and archives. *New Media & Society* 15, 4, 557–573. <http://doi.org/10.1177/1461444812458432>
23. Rebecca Gulotta, William Odom, Jodi Forlizzi, and Haakon Faste. 2013. Digital Artifacts As Legacy: Exploring the Lifespan and Value of Digital Data. *Proceedings of the SIGCHI Conference on Human*

- Factors in Computing Systems*, ACM, 1813–1822. <http://doi.org/10.1145/2470654.2466240>
24. Richard Harper, Eryn Whitworth, and Ruth Page. 2012. Fixity: Identity, time and durée on Facebook. *Association of Internet Researchers* (2012).
25. Bernie Hogan and Anabel Quan-Haase. 2010. Persistence and Change in Social Media. *Bulletin of Science, Technology & Society* 30, 5, 309–315. <http://doi.org/10.1177/0270467610380012>
26. Grace C. Huang, Daniel Soto, Kayo Fujimoto, and Thomas W. Valente. 2014. The Interplay of Friendship Networks and Social Networking Sites: Longitudinal Analysis of Selection and Influence Effects on Adolescent Smoking and Alcohol Use. *American Journal of Public Health* 104, 8: e51–e59. <http://doi.org/10.2105/AJPH.2014.302038>
27. Mizuko Ito, Heather A. Horst, Judd Antin, et al. 2013. *Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning with New Media*. The MIT Press, Cambridge, Mass.
28. Jean Côté, K. Anders Ericsson, and Madelyn P. Law. 2005. Tracing the Development of Athletes Using Retrospective Interview Methods: A Proposed Interview and Validation Procedure for Reported Information. *Journal of Applied Sport Psychology* 17, 1, 1–19. <http://doi.org/10.1080/10413200590907531>
29. Anne Kaun and Fredrik Stierstedt. 2014. Facebook time: Technological and institutional affordances for media memories. *New Media & Society* 16, 7, 1154–1168. <http://doi.org/10.1177/1461444814544001>
30. Nicole C. Krämer and Stephan Winter. 2008. Impression management 2.0: The relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites. *Journal of Media Psychology: Theories, Methods, and Applications* 20, 3, 106–116. <http://doi.org/10.1027/1864-1105.20.3.106>
31. Priya Kumar and Sarita Schoenebeck. 2015. The Modern Day Baby Book: Enacting “Good Mothering” through Sharing Baby Photos on Facebook. *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*, ACM, 1302–1312. <http://doi.acm.org/10.1145/2675133.2675149>
32. Cliff Lampe, Rebecca Gray, Andrew T. Fiore, and Nicole Ellison. 2014. Help is on the Way: Patterns of Responses to Resource Requests on Facebook. *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing*, ACM, 3–15. <http://doi.org/10.1145/2531602.2531720>
33. Albert Kienfie Liao, Angeline Khoo, and Peng Hwaang. 2005. Factors Influencing Adolescents Engagement in Risky Internet Behavior. *CyberPsychology & Behavior* 8, 6, 513–520. <http://doi.org/10.1089/cpb.2005.8.513>
34. Siân E. Lindley. 2015. Making Time. *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*, ACM, 1442–1452. <http://doi.org/10.1145/2675133.2675157>
35. Sonia Livingstone and Ellen Helsper. 2010. Balancing opportunities and risks in teenagers’ use of the internet: the role of online skills and internet self-efficacy. *New Media & Society* 12, 2, 309–329. <http://doi.org/10.1177/1461444809342697>
36. Mary Madden. Teens Haven’t Abandoned Facebook (Yet). *Pew Research Center’s Internet & American Life Project*. Retrieved January 2, 2015 from <http://www.pewinternet.org/2013/08/15/teens-havent-abandoned-facebook-yet/>
37. Mary Madden, Amanda Lenhart, Maeve Duggan, Sandra Cortesi, and Urs Gasser. Teens and Technology 2013. *Pew Research Center’s Internet & American Life Project*. <http://www.pewinternet.org/2013/03/13/teens-and-technology-2013/>
38. Mary Madden, Sandra Cortesi, Urs Gasser, Amanda Lenhart, and Maeve Duggan. 2012. *Parents, Teens, and Online Privacy*. Pew Internet & American Life Project. <http://www.pewinternet.org/2012/11/20/parents-teens-and-online-privacy/>
39. Stephen A. Maisto, Linda C. Sobell, A. Mitch Cooper, and Mark B. Sobell. 1982. Comparison of two techniques to obtain retrospective reports of drinking behavior from alcohol abusers. *Addictive Behaviors* 7, 1, 33–38. [http://doi.org/10.1016/0306-4603\(82\)90022-3](http://doi.org/10.1016/0306-4603(82)90022-3)
40. Leon Mann, Ros Harmoni, and Colin Power. 1989. Adolescent decision-making: the development of competence. *Journal of Adolescence* 12, 3, 265–278. [http://doi.org/10.1016/0140-1971\(89\)90077-8](http://doi.org/10.1016/0140-1971(89)90077-8)
41. James Marcia. 1980. Identity in adolescence. *Handbook of adolescent psychology* 9, 159–187.
42. Alice E. Marwick and danah boyd. 2014. Networked privacy: How teenagers negotiate context in social media. *New Media & Society*, 1461444814543995. <http://doi.org/10.1177/1461444814543995>
43. Sandra Metts, Susan Sprecher, and William Cupach. 1993. Retrospective Self-Reports. In *Studying Interpersonal Interaction*. Guilford Press.
44. William Odom, Mark Selby, Abigail Sellen, David Kirk, Richard Banks, and Tim Regan. 2012. Photobox: On the Design of a Slow Technology. *Proceedings of the Designing Interactive Systems Conference*, ACM, 665–668. <http://doi.org/10.1145/2317956.2318055>
45. Helen Orvaschel, Joaquim Puig-Antich, William Chambers, Mary Ann Tabrizi, and Robert Johnson. 1982. Retrospective Assessment of Prepubertal Major Depression with the Kiddie-SADS-E. *Journal of the American Academy of Child Psychiatry* 21, 4, 392–397. [http://doi.org/10.1016/S0002-7138\(09\)60944-4](http://doi.org/10.1016/S0002-7138(09)60944-4)

46. S. Tejaswi Peesapati, Victoria Schwanda, Johnathon Schultz, Matt Lepage, So-yae Jeong, and Dan Cosley. 2010. Pensieve: Supporting Everyday Reminiscence. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, ACM, 2027–2036. <http://doi.org/10.1145/1753326.1753635>
47. Artemio Ramirez, Joseph B. Walther, Judee K. Burgoon, and Michael Sunnafrank. 2002. Information-Seeking Strategies, Uncertainty, and Computer-Mediated Communication. *Human Communication Research* 28, 2: 213–228. <http://doi.org/10.1111/j.1468-2958.2002.tb00804.x>
48. Irving Seidman. 2005. *Interviewing As Qualitative Research*. Teachers College Press.
49. Yuichi Shoda, Walter Mischel, and Philip K. Peake. 1990. Predicting adolescent cognitive and self-regulatory competencies from preschool delay of gratification: Identifying diagnostic conditions. *Developmental Psychology* 26, 6, 978–986. <http://doi.org/10.1037/0012-1649.26.6.978>
50. Aaron Smith. 6 new facts about Facebook. *Pew Research Center*. Retrieved January 5, 2015 from <http://www.pewresearch.org/fact-tank/2014/02/03/6-new-facts-about-facebook/>
51. Eric Sun, Itamar Rosenn, Cameron A. Marlow, and Thomas M. Lento. 2009. Gesundheit! Modeling Contagion through Facebook News Feed. *Third International AAAI Conference on Weblogs and Social Media*. Retrieved from <https://www.aaai.org/ocs/index.php/ICWSM/09/paper/view/185>
52. Jeffrey W. Treem and Paul M. Leonardi. 2012. Social Media Use in Organizations: Exploring the Affordances of Visibility, Editability, Persistence, and Association. *Communication Yearbook* 36, 143–189.
53. Sherry Turkle. 2011. *Alone Together: Why We Expect More from Technology and Less from Each Other*. Basic Books.
54. Jessica Vitak and Jinyoung Kim. 2014. “You Can’t Block People Offline”: Examining How Facebook’s Affordances Shape the Disclosure Process. *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing*, ACM, 461–474. <http://doi.org/10.1145/2531602.2531672>
55. Pamela Wisniewski, Heng Xu, and Yunan Chen. 2014. Understanding User Adaptation Strategies for the Launching of Facebook Timeline. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, ACM, 2421–2430. <http://doi.org/10.1145/2556288.2557363>
56. Ting Zhang, Tami Kim, Alison Wood Brooks, Francesca Gino, and Michael I. Norton. 2014. A “Present” for the Future The Unexpected Value of Rediscovery. *Psychological Science*, 0956797614542274. <http://doi.org/10.1177/0956797614542274>
57. Xuan Zhao and Siân E. Lindley. 2014. Curation through use: understanding the personal value of social media. *ACM Press*, 2431–2440. <http://doi.org/10.1145/2556288.2557291>
58. Xuan Zhao, Niloufar Salehi, Sasha Naranjit, Sara Alwaan, Stephen Volda, and Dan Cosley. 2013. The Many Faces of Facebook: Experiencing Social Media As Performance, Exhibition, and Personal Archive. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, ACM, 1–10. <http://doi.org/10.1145/2470654.2470656>
59. *Digital Citizenship*. Common Sense Media. Retrieved March 3, 2015 from <https://www.commonsensemedia.org/educators/scope-and-sequence>
60. Social Networking Fact Sheet. *Pew Research Center’s Internet & American Life Project*. Retrieved March 4, 2015 from <http://www.pewinternet.org/fact-sheets/social-networking-fact-sheet/>
61. Dirty Delete. *Urban Dictionary*. Retrieved April 17, 2015 from <http://www.urbandictionary.com/define.php?term=Dirty+Delete>