FULL-LENGTH RESEARCH ARTICLE

# Why We Don't Click: Interrogating the Relationship Between Viewing and Clicking in Social Media Contexts by Exploring the "Non-Click"

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*Motivated by work that characterizes view-based social media practices as "passive use," contrasting it with more desirable, interactive "active use," this study explores how social media users understand their viewing and clicking practices and the empirical relationship between them. Employing a combination of eye tracking, survey, and interview methods, our study ($N = 42$) investigates the non-click—instances where people intentionally and thoughtfully do not click on content they spend time viewing. Counterintuitively, we find no difference in viewing duration to clicked versus non-clicked Facebook content. We find that use motivations and Facebook feed content are significant predictors of click behavior but measures of overall use, such as network size or minutes of use per day, are not. Our interview data reveal three audience-related concerns that contribute to deliberate non-clicking and illustrate how non-clicked content contributes to social connectedness when imported into other channels. We discuss implications for researchers, users, and designers.*

**Keywords:** Social Network Sites, Facebook, Clicking, Passive Use, Active Use, Viewing, Relationship Maintenance

doi:10.1093/jcmc/zmaa013

Understanding the relationship between well-being outcomes and social media use is an important goal for both scholars and the general public, but researchers are still in the process of identifying which aspects of use deserve the most attention. Scholarship on this topic mirrors a general trend in Internet-related research, which has moved beyond gross measures of time on site to approaches that focus on more granular practices (such as explicitly requesting support via social media) that better explain associations with psychological and relational outcomes. Specifically, the distinction between

Corresponding author: Nicole B. Ellison; e-mail: enicole@umich.edu
Editorial Record: First manuscript received on 20 November 2019; Revisions received on 22 May 2020; Accepted by Jeffrey Boase 19 August 2020; Final manuscript received on 26 August 2020

  

passive and active use of social media has emerged as a prominent predictor of important social and psychological outcomes (Liu, Baumeister, Yang, & Hu, 2019; Verduyn et al., 2015). "Passive use," broadly characterized as scrolling and viewing but not posting or responding, is associated with negative outcomes, whereas "active" practices, such as posting, sharing, and commenting, are associated with gains in various aspects of well-being (Verduyn, Ybarra, Résibois, Jonides, & Kross, 2017).

Given the increasing prominence of this distinction in the literature, our project seeks to complicate this dichotomous "passive versus active" framing which we believe muddles complex dynamics around use that have important implications for well-being outcomes, and thus may be obscuring our ability to discern more nuanced relationships between well-being and use. The literature describes two key buckets of social media activities: (a) viewing social media content posted by others (which under some circumstances is thought to induce detrimental social comparison dynamics), and (b) "clicking" on social media content posted by others, which includes activities like sharing, liking, and commenting that leave a visible trace for others on the platform. This study explores the empirical relationship between viewing and clicking, which may or may not operate independently of one another, and explores how users understand the relationship between these activities. Although we do not document well-being outcomes in this work, our results will inform studies investigating the consequences of social media use—above and beyond the counting of clicks.

To investigate the relationship between clicking and viewing, we used eye-tracking techniques to collect behavioral data related to these activities during a seven-minute session where participants browsed their own Facebook News Feeds. We then interviewed our participants, using their browsing activities as prompts, and surveyed them about their use of the platform and other relevant variables. Our qualitative analysis focused on why users might purposefully and intentionally refrain from clicking on content they have spent time viewing to better contextualize these "non-click" behaviors. We introduce the concept of the "non-click" into social media scholarship and explicate why some users choose this option, providing insight into behaviors that are not explicitly visible to online participants—or even the platforms themselves—but may carry important implications for social and psychological outcomes.

## Literature review

### Social comparison and social connectedness

Hundreds of studies have explored the relationship between subjective well-being and social media use. Verduyn et al. (2017) reviewed this literature, summarizing the work in a model that argues passive use, moderated by social comparison and envy, negatively affects well-being, while active use, moderated by social connectedness, positively affects well-being. We review each of these mechanisms below.

In one stream of work, research explores the *social comparison* dynamics of social media use, arguing that consumption of social media content via passive browsing behavior can trigger social comparison tendencies that lead to people feeling worse about themselves and experiencing negative affect (Bayer, Triệu, & Ellison, 2020; Vogel, Rose, Okdie, Eckles, & Franz, 2015). Several sociotechnical factors figure into these explanations. First, computer-mediated communication enables individuals to engage in selective (positive) self-presentation (Walther, 2007). Indeed, sharing negative Facebook updates was perceived to be less appropriate than sharing positive updates (Ziegele & Reinecke, 2017), evidencing a positivity bias in Facebook content. Moreover, people who spent more time using Facebook believed that other people were happier and had better lives than theirs (Chou &

Edge, 2012). Second, quantifiable network feedback (e.g., "Likes") make comparisons very salient (Burke, Cheng, & de Gant, 2020), in part because of the "Like paradox" (Scissors, Burke, & Wengrovitz, 2016). That is, due to a sampling bias which favors highly-connected users, most users will have Friends who receive more Likes then they do. Finally, because targets of social comparison tend to be those similar to oneself, users who see reports from peers may be subject to more social comparison than those viewing non-peers such as celebrities (Festinger, 1954).

Empirical evidence supports these predictions. Burke et al. (2020) found that Facebook users who saw more social content—posts "produced by friends, friends-of-friends, or people they followed rather than by news media, businesses, or other organizations"—reported more frequent social comparison. Having more Facebook Friends, seeing more posts from people closer in age, and spending more time viewing profiles were also associated with increased social comparison (Burke et al., 2020). Tandoc, Ferrucci, and Duffy (2015) found that surveillance use of Facebook—operationalized as using the platform to view others' content—was predictive of depression, but only for those with higher envy tendency. Without feelings of envy, surveillance use of Facebook was actually associated with lower depression (Tandoc et al., 2015).

A second stream of research explores *social connectedness*, generally associated with "active use" and positive outcomes. Active use can include directed interaction (Burke & Kraut, 2016), responding to requests for help and information shared via Facebook status updates (Ellison, Vitak, Gray, & Lampe, 2014), and other click-based activities that leave a visible trace for other users. "Active use" can thus foster social connectedness via mechanisms such as relationship maintenance and cultivation of social capital (see Verduyn et al., 2017 for an overview). For instance, posting status updates that ask for help from others is associated with higher perceived social capital (Ellison, Gray, Lampe, & Fiore, 2014). Similarly, in an experimental study, Deters and Mehl (2013) showed that posting more Facebook status updates resulted in reduced loneliness. In terms of interactions with Facebook Friends, Burke and Kraut (2016) found that composed communication received from strong ties—including comments, Timeline posts, and private messages—was positively associated with increases in well-being over a three month period. In predicting bridging social capital, people who engage in more relational maintenance behaviors on Facebook, such as responding to Friends' questions or wishing them happy birthday, reported higher bridging social capital, especially if they have fewer "actual" Facebook Friends (Ellison, Vitak, et al., 2014). Although these studies use different measures of social connectedness, they consistently identify benefits associated with "active" (click-based) interaction.

Although literature on well-being often reviews social comparison and social connectedness research, these are typically considered as independent constructs. For instance, Verduyn et al. (2017)'s model, depicted in Figure 1 of their paper, shows active use impacting subjective well-being positively via "social capital and connectedness" and passive use of SNSs negatively affecting it, via "upward social comparison and envy." However, in everyday social media experiences, clicking (the behavior necessary to activate social connectedness processes) and viewing (the behavior necessary for social comparison to take place) often co-occur, and thus studying them as independent actions may obscure important interactions and other dynamics. In short, two sets of activities—viewing and clicking—have been considered by the literature, but generally in separate studies and as discrete actions oriented towards either social comparison or social connectedness as an outcome. However, it may be the case that each of these sets of activities are more productively conceived as a spectrum, with the possibility of users being either high or low in either, or both, or neither. Below we present a conceptual model, developed before data collection, that illustrates our proposed approach and helped guide our analyses (See Figure 1).

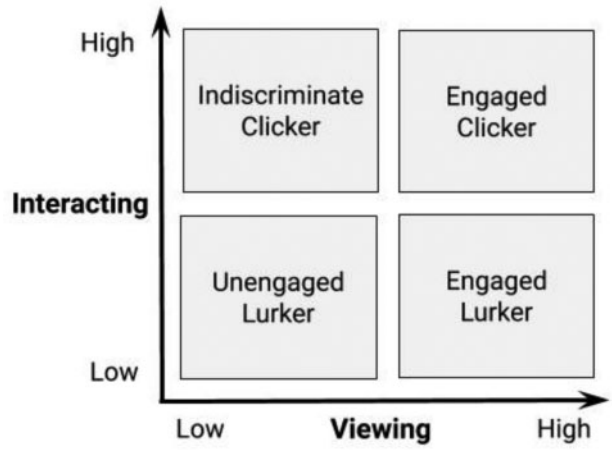


**Figure 1** Social media use conceptual categories.

## Reconceptualizing clicking and viewing

We propose a conceptual model that highlights the independent relationship between clicking and viewing, challenging the framing commonly employed by contemporary social media and well-being scholarship. For instance, a user with high levels of both viewing and clicking would presumably experience negative social comparison but also benefit from social connectedness; in this case, the overall effect of social media use on well-being might be essentially null. Below, we discuss how considering these dynamics in tandem raises key questions, some of which we address in this study while others are left for future work and methods. To frame our discussion, we display clicking and viewing within a $2 \times 2$ grid, showing Interacting (low, high) and Viewing (low, high). This results in four typologies of social media users (Engaged or Indiscriminate/Unengaged; Clicker or Lurker), each with distinctive implications for well-being. Though browsing behaviors likely exist on a spectrum, we present a grid model for conceptual and analytical clarity. We discuss each of the four genres of users below.

### *Indiscriminate Clicker*

Individuals who frequently provide visible one-click feedback on Friends' content, but do so without extended and attentive viewing, may benefit socially from the relational investment signal conveyed by these actions, at least in the short term. Clicks typically signal a post has been viewed, but are ambiguous markers of engagement or time investment. Click-based responses, such as comments, can be understood as a form of social grooming and relationship maintenance (Donath, 2007; Ellison, Vitak, et al., 2014; Tong & Walther, 2011), wherein users signal to one another that they value the relationship and are willing to invest in it. As such, it is important to consider both the clicker's motivations for clicking, as well as how the receiver may react to the click. As Ellison, Vitak, et al. (2014) note, "Given the lack of visible signals of attention, [social network site] users must respond in a manner that leaves an observable marker of attention as a way of cultivating, or grooming, their connections and thus increasing access to the resources they represent" (p. 4). Burke and Kraut (2016) explain that, "according to the theory of relational investment (Donath, 2007; Ellison, Gray et al. 2014;

Lin, 2001), the frequency and length of messages serve as signals of relationship value" (p. 267)—perhaps because composed messages are dispensed less gratuitously than one-click reactions.

Likes and other clicks ostensibly represent authentic attention to others, but is this always the case? Signaling theory, which "seeks to explain what keeps communication honest" (Donath, 2007, p. 233), is a useful framework for assessing message credibility, namely whether messages are honest or deceptive regarding the trait they claim to represent. This framework is useful for helping explain why social media users click and how these clicks are interpreted. Research on how recipients of Liking responses (sometimes called "paralinguistic digital affordances") interpret these gestures underscores the ambiguous value of Likes as signals of relational investment (Carr, Wohn, & Hayes, 2016; Hayes, Carr, & Wohn, 2016; Spottswood & Wohn, 2019) for receivers and senders. For instance, Hayes et al. (2016) showed that participants valued Likes on Facebook less than similar endorsement clicks on other platforms because of their own practice of "aimlessly" providing Likes to Friends' content. This may happen more when users are engaging in low-engagement reciprocal Liking, either in response to or in order to encourage future Liking of their own content. As such, these signals may not contribute to relational maintenance goals as intended. In response to negative posts on social media suggesting a need for support, participants were *less* likely to give a click-reaction and *more* likely to reach out beyond social media to posts shared by close ties (Spottswood & Wohn, 2019). Presumably, for strong relationships, people feel inclined to send out a stronger signal of attention (i.e., connecting through other channels) than just a click.

### *Engaged clicker*

Another typology of interest to researchers is the "engaged clicker." The extant literature suggests that individuals who pay close attention to social media content and engage in clicking feedback use social media in beneficial, prosocial ways but also are at risk for negative upwards comparison—two contradictory predictions. Indeed, the literature often considers the two competing mechanisms—social comparisons versus social connectedness—independently. Recent meta-analyses and secondary analyses, such as Hancock, Liu, French, Luo, and Mieczkowski (2019), Orben and Przybylski (2019), and Odgers and Jensen (2020), have found negligible effects when investigating the relationship between social media use and well-being in adult and adolescent populations. For some users, could these two competing mechanisms—social comparison and social connectedness—effectively cancel each other out? Notably, a meta-analysis conducted by Liu et al. (2019) found that the effect sizes of the relationships between specific SNS activities and well-being—including content consumption and interactions—were stronger than the global relationship between SNS use and well-being.

Additionally, actions such as commenting or otherwise showing support for peers expressing their accomplishments or joy on social media (versus just reading these potentially envy-evoking posts) might ameliorate the negative effects of social comparison. Research shows that prosocial behaviors, such as helping others, are associated with greater well-being than self-focused acts (e.g., self-care) or even neutral behaviors (Nelson, Layous, Cole, & Lyubomirsky, 2016). Commenting may also turn attention outwards, away from the self, and facilitate feelings of empathy. As Burke et al. (2020) note, positive empathy can ameliorate negative social comparison processes.

### *Engaged lurker*

Earlier work on lurking is helpful for understanding dynamics at play for "silent" users—those who do not click but do spend time viewing social media content. Although some associate it with problematic passivity, *lurking* can also be framed as a "strategic and idiosyncratic activity" that enables users to get their needs met while avoiding privacy violations, message overload, and other

concerns (Nonnecke & Preece, 2000; Nonnecke & Preece, 2001). Looking but not clicking is a privacy-protecting act, especially in cases where users fear that third party audiences will judge their responses or their opinions they hold (Chang, Whitlock, & Bazarova, 2018; Wu, Oeldorf-Hirsch, & Atkin, 2020). Crawford (2009) offers the metaphor of "active listening" as a way to understand lurking (attention that is divorced from activity), arguing that listeners serve a purpose—as an audience for speakers—even when not interactively engaging. And of course, lurkers may only appear to be lurkers when viewed by single-platform studies: "lurkers" may be taking action in other channels, reflecting the mixed-media nature of most relationships (Parks, 2017).

*Unengaged lurker*

In contrast to the other social media typologies, we define the unengaged lurker as someone who rarely views or clicks content. Given that they do not or rarely engage in behaviors that are associated with either the benefits of social connectedness (clicking) or the negative consequences of social comparison (viewing), social media use may be largely inconsequential to this group when viewed in aggregate. For example, participants who were paid to disconnect from Facebook often discussed their use of Facebook as automatic, or mindless, and described such use as a waste of time (Baym, Wagman, & Persaud, 2020).

Given the above, our first research question explores these issues using eye-tracking (RQ1a) and interview (RQ1b) data:

**RQ1a:** For Facebook users, what is the relationship between viewing and clicking?
**RQ1b:** How do users explain their own clicking and viewing practices?

## The non-click: relational and other motivations for clicking versus non-clicking

Our second motivation is to better understand why users might purposefully withhold clicks, an activity we label the "non-click." Clicking serves a variety of interpersonal and other goals. Hayes et al. (2016) explored senders' motivations for clicking, which they categorize as: literal interpretation (an evaluative signal of actually liking particular content), acknowledgement of viewing (showing that they had seen and recognized a particular post), social support and grooming (with a goal of maintaining or deepening social relationships), and utilitarian (as a personal archive of content curated for future reference) purposes. Similarly, Sumner, Ruge-Jones, and Alcorn (2018) showed that metacommunication—using the Like button to acknowledge that users have seen a post— was the most common interpersonal motivation behind its use. Sumner et al. (2018) also found that Liking can be an act of self-presentation, publicly displaying one's desire to be associated with a particular piece of content. Employing a uses and gratifications approach, Lee, Hansen, and Lee (2016) explored different motivations for one-click responses on social media, including interpersonal motivations, enjoyment, monetary incentives, pleasing others, and passing time. Interpersonal and enjoyment motivations were the two motivations most predictive of more Liking (Lee et al., 2016).

In summary, Liking decisions seem to be driven by a variety of factors, ranging from user motivations to general use patterns (Hayes et al. 2016, Lee et al. 2016, Sumner et al. 2018). However, we wanted to better understand how these factors together predict how likely people are to engage in clicking. Thus, we ask:

**RQ2a:** Which factors predict clicking activity in a browsing session?

Given the literature, we were also interested in why users might willfully withhold clicks while engaging in extended viewing of Facebook content. Two key possible explanations for non-clicking suggested by the literature include endorsement and accountability. Users may not want to encourage behaviors they see as problematic; Choi, Panek, Nardis, and Toma (2015) found that narcissistic displays on social media received fewer comment responses. Visibility and privacy concerns may also play a role, in that people frequently rely on social media to find out more about other people in their lives and, under some conditions, may wish to do so in a non-public manner, as conveyed by the colloquial term "Facebook stalking" (Lyndon, Bonds-Raacke, & Cratty, 2011). In these cases, users are highly engaged in the content they are viewing, but want their activities to go unnoticed and thus will refrain from clicking (Thompson, 2017). Even without clicking, users can accomplish relational goals: information covertly obtained from social media profiles can help people decide whether to pursue a romantic relationship (Fox, Warber, & Makstaller, 2013), avoid sensitive topics (Hampton, Shin, & Lu, 2017), or guide conversations towards more favorable topics (Hancock, Toma, & Fenner, 2008). So what drives clicking decisions—specifically, decisions not to click? Our second research question employs our interview data to understand why people purposefully and actively non-click:

**RQ2b:** How do people explain their own non-clicking decisions?

## Methods

### Current study: understanding attention and feed content with eye-tracking methods

We collected eye-tracking data from a seven-minute session of our participants browsing their own Facebook feeds, which provided: (a) a rigorous measure of viewing activity via eye-tracking, and (b) empirical data representing participants' feed content and their click-based, visible interactions with this content. We chose to have participants view their own Facebook feeds instead of artificial feeds to increase ecological validity.

Measuring viewing via eye-tracking data overcomes some of the limitations of self-report data and log file data. For example, people may overestimate how much time they spent on Facebook (Ernala, Burke, Leavitt, & Ellison, 2020; Junco, 2013), misremember the content in their feed (Vraga, Bode, & Troller-Renfree, 2016), or simply forget the content after a browsing session (Counts & Fisher, 2011). Even with log data of the time participants spend on a page, it is difficult to assess which elements people are paying attention to or whether they are actually looking at the screen.

The Tobii X2-30 eye tracker is attached unobtrusively to the bottom of a monitor and samples gazes at a frequency of 30Hz per second. For each participant, Tobii Studio software generated a video showing the content of the screen accompanied by colored dots representing the position and visual sequence of participants' eye gazes. We analyzed these videos to obtain the content of participants' feeds, their viewing patterns, and their clicks during the sessions.[1]

#### *Recruitment and demographics*

Our data collection took place from May to July 2018, at a research university in the Midwestern United States. The study was reviewed and approved by our institution's IRB. Via our university's registrar, we emailed a random sample of university staff members, inviting them to participate in a research study generically described as an "eye-tracking of social media use" project. The study lasted approximately 60 minutes, and participants received $20 in cash as incentive. We excluded staff affiliated with our departmental unit to reduce the chances of researchers seeing coworkers' content.

Our eligibility criteria included being at least 26 years old and using Facebook at least once a month. We oversampled men and people of color in our recruitment to account for the general under-representation of these groups in social media studies and chose to exclude emerging adults (ages 18–25) in our sample because this group is over-represented in the literature. Interested participants clicked on a link in the email, which opened a prescreening survey to verify age and usage frequency.

After selecting among eligible participants for a range of gender, age, and race, our sample of 42 participants included 20 women and 22 men, with 73.8% identifying as white. The age ranges were: 26–34 ($n = 10$), 35–44 ($n = 15$), 45–54 ($n = 10$), 55–64 ($n = 4$), and 65–75 ($n = 3$); most participants (60%) were 44-years-old or younger. Our participants had a wide range of occupations, including sports coach, administrative associate, event manager, custodian, nurse, construction specialist, and director. We removed some data from analysis due to technical issues with the eye-tracker and interview recording devices. Out of 42 participants, our eye tracking analysis is based on data from 38 participants, and our interview analysis is based on data from 39 participants.

*Procedure*

After calibrating each participant with the eye tracker, participants browsed our university website for two minutes to acclimate them to the eye-tracking environment. We then instructed them to log into Facebook and to "look at [their] Facebook News Feed page and interact with it as [they] normally would, including any liking or commenting." After seven minutes, we asked participants to stop browsing and then interviewed them. Interviews ranged from 17 to 35 minutes and lasted about 25 minutes on average. Our interview protocol focused on participants' experiences of how they browse content on Facebook and how they decide when to click. The interviewer also asked about cross-channel communication: instances where participants incorporate information from Facebook into interactions through another channel. Then, the interviewer reviewed the eye-tracking video, which included the content of their browsing session and their eye gaze information, together with the participant. Based on this video, the interviewer asked follow-up questions about their clicking and viewing activities. Finally, participants completed an online Qualtrics survey.

*Data analysis*

We sampled a random selection of posts from participants' seven-minute browsing sessions and coded them for eye gaze duration and content. We used a stratified random sampling approach and divided the browsing session into three time bins of 140 seconds each—corresponding to the beginning, middle and end of the session. For each bin, we randomly selected seven posts for a total of 21 posts per participant. We did not code the post if the timestamp landed on a post outside of the feed or the timestamp landed on a post already coded (which meant participants saw it earlier in the browsing session). Our final sample included 598 posts across all of our participants.

*Coding of eye-tracking and feed data.* For our **viewing** measure, we captured the duration of participants' eye gaze on each post. The Tobii software overlaid red dots over regions where participants' eye gaze landed (see Figure 2). When these red dots landed on a Facebook post, we noted their duration in seconds to derive our measure of time spent looking at the post.

Second, from the video of participants' browsing, we recorded all instances of clicking to derive a **click count** for each participant. Because we focus on the relational implications of clicking, as opposed to functional purposes, we operationalized clicking as *an action on Facebook that interacts with a post and generates a visible trace to other users*. (Post creation was not considered a click because it does not constitute *interaction* with another post.) For example, commenting on a post is a click,

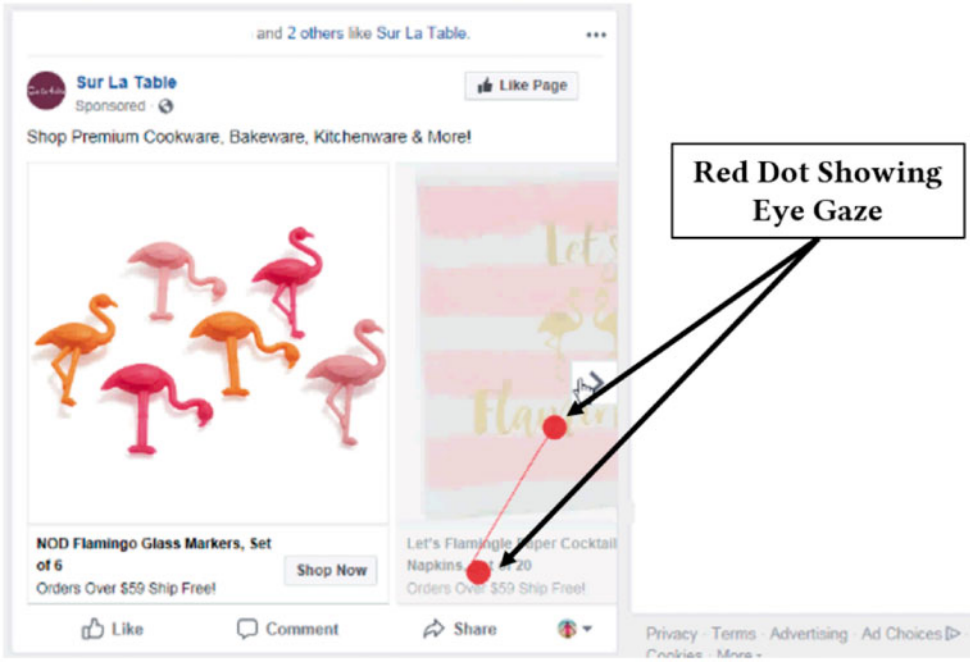


**Figure 2** Example of eye-tracking video.

but clicking through an album to view photos is not. We have three categories in our data: one-click, comment, or no click. From our data, we captured 268 post reactions (i.e., the "Like," "love," "haha," "wow," "sad," and "angry" reactions), three Shares, and one event RSVP, all of which are one-click actions. We also captured 32 composed comments including one birthday message. In total, we captured 304 clicks on 289 posts; some posts received more than one click (e.g., a comment and a Like).

From these data, we created an engagement type classification with four categories to apply to our participants: (a) high-viewing clicker (HVC) ($n = 7$), (b) high-viewing lurker (HVL) ($n = 12$), (c) low-viewing clicker (LVC) ($n = 12$), and (d) low-viewing lurker (LVL) ($n = 7$). To arrive at these four categories, we performed a median split on participants' average viewing time across posts and click count data. The median for the viewing variable was 7.65 seconds per post. Those with average viewing duration below and at the median were designated "low viewing"; those above the median as "high viewing." The median number of clicks during the session was six. Those with fewer than six clicks were designated as "lurkers" and those with six or more clicks as "clickers."

To determine the proportion of posts coming from another Facebook Friend on participants' feeds, a variable associated with social comparison in previous work (Burke et al., 2020), we coded for whether or not a post came from another Facebook Friend. We divided the number of posts by Friends over the total number of posts to generate the proportion of *social content* on participants' feeds.

*Interview analysis.* All interviews were recorded and transcribed using professional transcription services and verified for accuracy by the research team. We coded the transcripts in Atlas.TI following both inductive and deductive approaches. We developed the codebook iteratively, starting with topics we were interested in based on prior literature such as *reasons for clicking* and *network characteristics.*

As we coded, we developed new codes to reflect emerging themes from the interviews such as *channel switching* and *reasons for not clicking*, which we then applied to the corpus. Two of the authors coded the data, with frequent consultation and discussion with other authors to refine the codebook. We present quotations, which have been lightly edited for readability, along with participants' engagement type classification to provide more context for their remarks.

*Survey measurements.* After the eye-tracking session and interview, participants completed an online survey, which included a variety of Facebook use measures. First, we asked participants to report their number of Facebook Friends and how many minutes they used Facebook per day. We gauged network heterogeneity (a measure of the number of groups in a network) by asking participants whether they had each of the following groups in their Facebook network: parents, children, other family, close friends, old friends, neighbors, colleagues, and people they have never met, using wording from Pew Research Center instruments (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015).

To understand participants' practices and motivations behind clicking, we included the Facebook Relational Maintenance Behaviors (FRMB; $\alpha = .70$) scale developed by Ellison, Vitak, et al. (2014), which measures the extent to which participants respond to questions and requests from their network. We also included the virtual endorsement motives scale developed by Lee et al. (2016), which gauges different motivations for clicking Like on Facebook. From this scale, we excluded the irrelevant monetary incentive subscale, but included the clicking for enjoyment ($\alpha = .76$), pleasing others ($\alpha = .80$), passing time (2 items, Spearman-Brown = .51), and interpersonal relationships ($\alpha = .88$) subscales. Responses were on a 7-point Likert scale, from "Strongly Agree" to "Strongly Disagree." See Table 1 for descriptive statistics for key variables.

## Findings

### RQ1: Relationship between viewing and clicking

*RQ1a: No significant difference in viewing duration for clicked and non-clicked posts*

To examine the relationship between viewing and interaction, we ran a linear mixed model, accounting for the nested nature of the data (multiple data points from each participant). Viewing, operationalized as eye gaze duration, of each post served as the dependent variable, and clicking—a binary variable of clicked versus non-clicked content—served as the independent variable. Results showed no significant difference in viewing duration of clicked posts and non-clicked posts ($\beta = 1.847$, $p = .146$).

**Table 1** Descriptive Statistics of Key Variables

| Variable | *M* | *SD* |
|---|---|---|
| Click count | 7.79 | 7.25 |
| Viewing time on clicked posts (seconds) | 8.33 | 7.49 |
| Viewing time on non-clicked posts (seconds) | 7.8 | 11.12 |
| Social content of feed (%) | 46.33 | 22.79 |
| Network size (number of Facebook Friends) | 422 | 419.78 |
| Network heterogeneity | 5.1 | 0.97 |
| Facebook minutes per day | 46.98 | 34.11 |

Regarding click type, participants spent more time viewing posts that they commented on compared to posts that received one-click reactions ($\beta = -5.287$, $p = .048$) or non-clicked posts ($\beta = -6.032$, $p = .015$). (Note the viewing measure does not include time spent typing comments, only time spent viewing the post *before* typing.) There was no difference between time spent viewing non-clicked posts versus posts that received one-click reactions ($\beta = 0.749$, $p = .590$). Even when we limited our analysis to only social content, where clicks may be more relationally meaningful, there were no significant differences between clicked and non-clicked posts in terms of time spent viewing.

*RQ1b: Clicking can be lightweight; channel-switching can be meaningful*

Consistent with our proposal that some users are active clickers independent of their viewing activities, some participants said that clicking—even commenting—was not necessarily associated with extended viewing: As P12 (LVC) explained:

> I don't think that I am very engaged in Facebook (. . .) I can even comment on my friend's posts while she's on her vacation [and then] see her two weeks after she gets back and forget that she had gone.

Although this sort of not "very engaged" description of Facebook use was common, one participant said she used the platform while waiting in line, explaining, "you have to constantly be stimulated it seems like nowadays" (P10 [LVL]), suggesting that browsing Facebook was for her a "stimulating" activity.

Our data include several instances where individuals spent time viewing content they did not click, preferring instead to respond in another channel. Facebook was described as a "conversation starter" that sparked more in-depth interactions in other fora, especially for participants who felt limited by the norms or technical constraints of the platform and thus intentionally chose to move their response to another channel where elaborated interactions could take place. P14 (LVL) did this in instances where:

> I usually want to follow up with, maybe not a whole discussion, but to chat with someone (. . .) more than just a comment or more than just a one line post (. . .) Like, "How are you doing?" I haven't actually seen [Jo] in a few years so it's more a chance to catch up.

Others preferred channels with richer options for immediate feedback and clarification: "Words can always be misconstrued, so I'd rather talk to the person in-person, face-to-face, or over the phone" (P35 [LVC]). In these instances, users responded in other channels, which may have appeared as non-responses to other viewers and to researchers relying on server-level data.

The transfer of these interactions into another channel, such as face-to-face, sometimes was perceived by participants as a more authentic signal of relational investment than one-click feedback. As P20 (HVL) told us, "if you're actually noticing [something on the platform] and you can bring it up later on and sit there and talk with me about it: clearly there's some level of interest." In contrast to merely "liking" a post, P20 said:

> It's so easy to Like something on Facebook (. . .) Half the time, it's like, I don't know, some sort of weird little virtue signaling of you going, "[I] support your kid playing T ball" or whatever, just to be polite about it almost.

When asked about how he thought about "liking" versus discussions in other channels, P20 explained, "I would rather you mention to me in real life (. . .) [That's] why you're posting anything. You actually want real people to interact with you; however many Likes something gets is not really super

important." In another example, P30 (HVL) described initiating conversations in other channels with fellow Alcoholics Anonymous members when they shared about relapsing on Facebook.

A variation of the "conversation-starter" is the post that is ambiguous but emotionally intense, inviting follow-up, either on platform or off. Colloquially known as "vaguebooking," participants described seeing posts that expressed a need and then following up via other channels:

> I just did that recently 'cause my friend said, "Please pray for my family." So I texted her, I'm like, "Is everything okay? What's going on?" So she told me somebody had passed away. But I didn't do that on Facebook, I just messaged her. [P46 (LVC)]

Moving to a different channel also served to redefine the audience for the content, shifting a semi-public conversation into a dyadic one. As P47 (LVL) explained, "Some things would be better, or more appropriate, between two people, as opposed to having the entire world see it." In the "pray for me" example, the participant followed up immediately, indicating investment in the relationship, but an even stronger signal was when content was brought up "later on," as the above quote from P20 suggests: it meant the person not only saw it, but remembered it.

## RQ2. Why we don't click

### *RQ2a. Feed content and motivations, not general use, predict clicking*

To identify the factors that predicted clicking behavior, we ran a series of Poisson regressions with number of clicks generated during each seven-minute browsing session as the dependent variable. We determined the best fit model by comparing the AIC values of these models. The best fit model included gender and race as controls. Facebook use variables included minutes of Facebook use per day, network heterogeneity, and average post viewing time. The Facebook motivation variables included FRMB and the interpersonal, passing time, and pleasing other subscales of the liking motivations scale from Lee et al. (2016).

As shown in our model, minutes of Facebook use per day and average viewing time did not predict clicking frequency. Having a more heterogeneous network significantly predicted more clicking: a one-point increase in network heterogeneity—a count variable ranging from 1 to 7—is predictive of a 37.44% increase in clicking. The amount of social content—another variable describing feed content—also significantly predicted clicking; each percent increase in social content is associated with 1.72% more clicking. With regard to the motivation variables, which were measured on a 7-point Likert scale, FRMB, interpersonal motivation, and pleasing others motivation were significant predictors of clicking. A one-point increase in FRMB—the extent to which participants try to respond to others in their network—is predictive of 25.99% more clicks. A one-point increase in the interpersonal motivation scale is predictive of 41.48% more clicking; meanwhile, a one-point increase in the pleasing others motivation scale is associated with 29.88% fewer clicks. Table 2 shows our model output.

### *RQ2b. Different audience concerns govern non-clicking*

Our qualitative data provide insights into motivations for non-clicking: why might people not click on content they have spent time viewing? Sometimes this was because the content was just not interesting or "worthy" enough to click on. As P20 (HVL) explained, "It just has to be somewhat 'out there' or worth doing it. Something has to really pique my attention before I'm actually interacting with it in that way." Similarly, P39 said he didn't click on posts that didn't evoke a strong reaction unless it served an interpersonal goal:

**Table 2** Regression Output for RQ2a

| Variables | $\beta$ |
|---|---|
| Gender (dummy variable: Men) | $-.739$ ($p < .001$)*** |
| Race (dummy variable: White) | $-.181$ ($p = .249$) |
| Network Heterogeneity | .318 ($p < .001$)*** |
| Social content | .017 ($p < .001$)*** |
| FB Minutes | $-.003$ ($p = .186$) |
| FRMB | .231 ($p = .008$)** |
| Liking Motivation: Interpersonal | .347 ($p < .001$)*** |
| Liking Motivation: Pass Time | .074 ($p = .196$) |
| Liking Motivation: Please Others | $-.355$ ($p < .001$)*** |
| Viewing time | $-.029$ ($p = .093$) |

> [A click means] you're sending the signal of support in some way. Like, [Sue] is on vacation, she's taking these cool pictures, she's a photographer, I love her photography. So, I'll send like "Yes, [Sue], I Like your photography. It's awesome that you're on vacation having a good time," kind of signal. Whereas other things, I don't think you would want to send that kind of signal or that it's necessary to see that kind of signal. [For example] "Hey, there's this cat video." Unless I had some sort of strong, "Wow, this is a cool video! I've never seen anything like that!" I don't even react to it.

Above and beyond instances of non-worthy content, analysis of our interview data highlight three audience-related concerns which motivated non-clicks: Do I want *this person* to see this click? Do I want *their/my/our networks* to see this click? Do I want *the platform* to see this click?

*Audience: the poster.* One type of audience that our participants considered when non-clicking was the poster herself—the person or entity who shared the content. In some instances, participants withheld their click because they did not want to appear to condone that particular post or to encourage the poster to continue the behavior. Participants described intentionally not clicking on posts that boasted about one child's success as opposed to celebrating their team's accomplishment (P37 [LVC]) or "random, seemingly cries for help, but don't wanna do anything about it, just are looking for attention, that kind of thing" [P50, HVL]. These "vaguebooking" posts were also mentioned by P48 (LVL), who did not want to encourage posts which were "trying to fish for sympathy. Like, 'Pray for me, but I'm not going to tell you why.'"

In other cases, participants sometimes preferred to not draw attention to themselves and felt that clicking would make them too visible to the poster, opting instead to stay in the shadows of someone's Facebook Friend list. P14 (LVL) explained, "I'm perfectly happy being forgotten." P9 (HVC) described wanting to stay hidden from someone she had not interacted with in years, who presumably forgot about her: "you're like, 'If I do anything to this post, they're gonna delete me [from their Friends list].'" P31 (LVC) acknowledged being a "curious person" who used the platform to "really check out people" but was careful to not leave a trace when doing so:

> [It would be] creepy to actually let people know that you're going deep in their feed. I think that's socially unacceptable (. . .) If it was somebody I didn't know very well or even knew just a little bit (. . .) that might be perceived as very odd and potentially creepy or nosy.

Another variant of this was content-driven, where participants did not want to be accountable for viewing content or calling attention to their audience role. P15 (HVC) explained:

> As a male person (. . .) I might notice pictures, but I try not to give the impression that I'm noticing pictures. I don't want to make people uncomfortable with attention that they aren't asking for. So if it's somebody (. . .) where I feel like it would be inappropriate for me to click Like on their bathing suit picture, I'm going to scroll past it even if I noticed it, because they might be looking for that attention but not from me.

Evoking "civil inattention" (Goffman, 2008), this participant (categorized as a high-viewing clicker), selectively non-clicked when he felt he was not the intended or appropriate audience.

*Audience: the network.* In other cases, participants were less concerned about the poster but did not want to signal presence or attention to a wider network: either the poster's network, their own, or a larger collection of users (e.g., a Facebook Group). When asked whether there was "content that you pay attention to, but intentionally do not click on," P12 (LVC) answered:

> Yeah (. . .) if there's something that's like socially inappropriate to pay attention to (. . .) if I had an ex-boyfriend and he's like "I just got in a fight with my wife," I would [not click]. Or if my ex-boyfriend said, "I just got a new job," I probably would let that be. I kind of do a quick mental evaluation of the social ramifications of my online presence.

The phrasing "social ramifications of my online presence" implies that the network was the salient audience here, not necessarily the poster. Other participants echoed this, as with P7 (LVC) who, when asked about whether she interacted with political content, replied:

> No, because—I would, but I don't like everybody seeing my comments. So [I] try to retain some privacy in this whole world where everyone can see everything, and keep it to myself or yell at somebody else who's in the room with me.

In one case, a participant described being held accountable for clicks he had made on others' posts, eventually deciding not clicking at all was easier than selective clicking when Likes could be seen by others in the network:

> I think things like social media have caused a lot of anguish for people. For example, "oh, this person didn't like my post" or they're noticing all these other things that people are getting and not getting. I just choose to be neutral as much as possible on Facebook (. . .) I even remember someone telling me, "Hey, why don't you Like my stuff?" I'm like, "I don't Like stuff." They said, "Oh yeah, but you Like other people's stuff," so they've been even watching and tracking. (P18 [HAL])

In a variant of this, P32 (HVL) did not click on NPR or other news stories because the audience was "hundreds of thousands of people that I don't know across the country."

*Audience: the platform.* Finally, the third audience for non-clicks was the platform itself. In cases where the participant suspected clicking would train the Facebook News Feed algorithm to

display more of the same content, they withheld clicks. For instance, when asked about whether she interacted with a post advertising diabetes management, P48 (LVL) indicated her reluctance to click, fearing her clicks would lead to more of the same content in her feed:

> The reason I didn't [click] is because I did interact with another diabetes management site, and now I'm getting a million of them (. . .) I've tried to not, even though I was interested in this because we talked about—my husband has Type 1 diabetes (. . .) That's why I second-guessed myself on clicking on it because I didn't want to get more [ads].

Similarly, P3 (HVL) didn't Like some pages because "I'll tend to not Like those because as I understand that, it makes you get more of that stuff in the future." However, P9 (HVC) clarified that her non-clicks were selective. Although she didn't click on most baby photos because she wants them "out of my feed," she makes exceptions for close friends or special circumstances:

> Well, I feel like there's just so many and I don't have children myself. In that sense if it's someone who posts pictures all the time, I can't Like any more of the pictures. I want them out of my feed. I've seen that baby so often and I've never seen them in real life. But if it's someone, like for example my friend Suzie who had the devastation of a stillbirth then yeah, I'm going to Like her baby post for sure.

The quotes above illustrate how participants saw clicks as shaping the composition of their News Feed and thus selectively non-clicked as a strategy to influence future feed content.

## Discussion

Our study used a combination of eye-tracking, survey, and interview data to explore the relationship between clicking (actions that leave traces visible to other users) and viewing in social media environments. We investigated instances where participants viewed content yet withheld clicks. Specifically, we explored the interpersonal consequences of this refusal to make viewing practices legible in a social media environment where visible clicks, such as Likes, are commonly used to acknowledge content (Sumner et al., 2018). We introduce the concept of the *"non-click"*—instances where social media users consume social media content from Friends but purposefully refrain from legible actions—and discuss implications of this concept for social media researchers, users, and designers.

Below we summarize our findings and highlight four implications of our work. First, we revisit the "passive vs active" framing employed in much of the well-being literature (Verduyn et al., 2017) in the context of our results. Second, we consider the interpersonal implications of non-clicks, specifically those that are associated with cross-channel interactions. Third, we highlight the socio-technical consequences of a media ecosystem that assumes clicks accurately represent user engagement and articulate a call to action regarding designing for listening in social media environments. Finally, we discuss the methodological implications of the non-click, especially as it relates to "big data" scholarship.

Our data confirm that social media users do withhold clicks under some circumstances and that viewing and clicking can be understood as independent actions. Considering each piece of content in our sample, analyses associated with RQ1a show that there are no significant differences in duration of eye gaze to clicked and unclicked content at the post (content) level. Similarly, with regard to RQ2a, which considered individual participants, average viewing time of posts was not a significant predictor of clicking activity (number of clicks), nor were other behavioral factors such as minutes of Facebook use per day. Rather, clicking reflected multiple facets of social media use—gender and

network composition, as well as psychological (clicking motivations). People were more likely to click when they saw more content from other Facebook Friends on their feed and clicked more when their Friends network represented a greater number of different social circles. In addition, interpersonal motivations significantly predicted more clicks, while liking to please others significantly predicted fewer clicks. Our findings thus highlight that a variety of factors—including personality factors, influence from other social media contacts, and attitudes towards liking—can drive decisions to click or not.

Our qualitative (interview) data complement these findings, enabling us to probe for participant perceptions and understandings of clicking practices: How do users explain their own clicking and viewing practices? We also investigate the *non-click* – how users understand decisions to not click on content, and how this content might otherwise be employed to support social connection processes. Our qualitative data uncover three potential audiences that shape clicking decisions: (a) the sharer of the post, (b) the network (either the sharer's network, the clicker's network, or their shared network), and (c) the social media platform.

### Refinements to the passive versus active behaviors paradigm

This research was initially inspired by the passive versus active use paradigm increasingly employed in research on the implications of social media use (Verduyn et al., 2017), in which social media use is dichotomously split into passive use (a trigger for social comparison mechanisms and thus associated with negative implications for well-being) and active use (online interactions that contribute to social connectedness and its subsequent benefits). Our findings suggest that social media scholarship should consider other approaches to categorizing user activity above and beyond the dichotomous—and limiting—"active versus passive" distinction. First, our behavioral data reveal that there was no significant difference in viewing time expended on clicked and non-clicked content. In addition, we show clicks—or lack thereof—arise from a diverse range of motivations, including interpersonal motivation but also to please others. In turn, these motivations may interact further with other personality traits.

Our interview data demonstrate that, contrary to the passive versus active framing employed in much of this literature, sometimes non-clicking can be an intentional act resulting from conscious and thoughtful engagement. We also highlight one important use case: instances in which individuals import information from social media into other communicative contexts, such as a face-to-face interaction, in lieu of lightweight and arguably unreliable signals such as Likes. Considering these findings, clicking and viewing should be considered as independent (not yoked) activities which occur on a spectrum and would benefit from consideration of content, not just channel. We identify opportunities for researchers to refine their conceptualization of both "active" and "passive" behaviors, adding nuance and specificity.

"Active" uses of Facebook require clearer operationalization and theoretical refinement given contemporary user practices and platform affordances. For instance, for their experiment where participants engaged in passive or active behaviors, Verduyn et al. (2015) operationalized active behaviors as engaging in "direct communication" on Facebook, stating that "by direct communication, we mean posting status updates, sharing links (. . .)" However, while posting status updates is typically considered an "active" practice, given the idiosyncratic visibility produced by the News Feed algorithm, "direct communication" may not actually result, either because the posts are hidden by the algorithm or receive no feedback. The relationship between "active" behaviors and well-being is unlikely to be linear: for instance, posting too many updates or photos may result in being "snoozed" or ignored. As our work shows, a complex set of factors influence whether a post is clicked, and it may be the case

that some posts receive no clicks and thus contribute to *lower* well-being on the part of the poster. Considering the complex mechanisms likely at play, some forms of "active" use on the platform can be theorized to produce more positive well-being outcomes than others. For instance, users who shared "mobilization requests" via the status update, such as questions or requests for information or advice, reported higher perceptions of social capital than those who posted status updates that did not contain a request (Ellison et al., 2014). Future research could focus on these posting behaviors and untangle the precise mechanisms that determine how the content of a post and its reception by the network—as well as other social media practices more broadly—affect well-being, which our methods do not enable us to do.

Commenting on others' posts is also typically considered "active" use (e.g., Verduyn et al., 2015) and would benefit from more elaborated scholarly attention, in that posting and commenting function quite differently and may affect well-being via very different theoretical mechanisms. Providing support to others is beneficial (Inagaki & Orehek, 2017), suggesting that users who provide supportive comments may experience psychological benefits. Users may also learn about their own values via their commenting or clicking responses. For instance, our data highlight three potential audiences that govern clicking decisions. A fourth category, which our data do not speak to but might be fruitful for future research to explore, is the audience of self. Are there instances where users feel compelled to click on content that aligns with other identity claims they hold dear (or not click on those that challenge their self-image), in order to reduce cognitive dissonance (e.g., "Because I consider myself a feminist, I should not Like this funny but slightly sexist video")? Future scholarship could also investigate how persistence and visibility affordances (Treem, Leonardi, & van den Hooff, 2020) affect the dynamics we describe: would non-clicks diminish when presented with ephemeral click traces or narrower audiences, for instance? Finally, there are structural differences between commenting and posting; commenting exposes commenters to a new network, versus just posting to their own network (Ellison, Vitak, et al., 2014), with attendant social capital benefits.

In addition, our data show that sometimes withholding clicks is a conscious action that results in activities off the platform that are more productive from a relational maintenance perspective. As such, applying the "passive behavior" label to non-clicks may be obscuring important insights for social media researchers. We show that participants spent the same amount of time viewing content they clicked and did not click on, suggesting that in some of these cases, users may be authentically engaged in the content but choose not to click. This behavior aligns with literature suggesting users' valuation of clicks evolves over time (e.g., Hayes et al., 2016). Our work shows how people may now be more aware of algorithmic approaches to content curation and thus modify their commenting and liking behavior to curate the content that appears in their News Feed, no longer just viewing clicks as signals of social support or other interpersonal functions. Beyond social grooming, our findings show that non-clicking is also a way for users to influence the visibility of their social media behaviors to their networks, specifically by hiding their reactions to certain social media content. As visibility is a key "root" affordance in computer-mediated communication (Treem et al., 2020), the non-click thus provides a useful concept for scholars wishing to explicate visibility management practices on social media.

Our findings also surface limitations of data science approaches that rely on log file data (e.g., clicks and comments) for assessing user engagement. Users may be clicking indiscriminately and generating a large amount of data that is not particularly meaningful. Conversely, they may be highly engaged with content and having meaningful interactions prompted by social media content outside of these platforms, communication acts that are "invisible" to other users and the platform (Metzger,

Wilson, Pure, & Zhao, 2012; Triệu, 2020). These non-clicks may have meaningful interpersonal implications, as we outline in the next section.

### Interpersonal implications of the non-click and channel switching

Our participants discussed importing social media content into other communication channels to convey relational investment and social interest to other audiences, in lieu of lightweight clicks. Although these cross-channel interactions were not legible on the platform itself, our participants valued instances where others referenced information from Facebook in other channels more than one-click responses such as Likes. They understood that—similar to the distinction made by Clifford Geertz (1973) regarding winks and twitches—some Likes were conscious, deliberative communicative acts signaling authentic attention to others, but other clicks were gratuitous and automatic, dispensed without reading or attention. Indeed, some of our participants admitted engaging in gratuitous liking and even commenting. When we consider how these click infrastructures have evolved historically, it makes sense that the social signals they convey have become murky over time. Consider the "happy birthday" post, often described as the canonical example of social grooming on the platform (Ellison, Vitak, et al., 2014). In Facebook's early days, writing happy birthday on someone's Wall required navigating to the page and typing out a comment, making it a credible signal of social attention (Donath, 2007). Over time, as the effort involved in doing this was lowered—via design changes like aggregating birthday comment boxes on one page, explicit nudges, and even apps that completely automated the process—the value of the "happy birthday" post as a signal of relational investment became less reliable. Today, we might imagine that the most reliable signal of relational investment on one's birthday would be something far more effortful than even a composed comment, such as an uploaded photo of a past shared experience.

In today's social media landscape, we see that user practices, the platforms themselves, and a chaotic ecosystem of apps, browser extensions, plug-ins, and other platform accoutrements often strive to minimize click-related friction. From a design perspective, our work suggests that designers need to more explicitly consider how clicks and other social signals are interpreted by users, especially when they are almost effortless. It may be that the move towards "frictionless" engagement has actually encouraged users to dismiss click feedback as inauthentic, with counterproductive interpersonal implications. For some kinds of messages, designers may wish to purposefully introduce friction by making it harder to share or produce them. For instance, viewing a contact's Stories post on Snapchat requires clicking on that specific entry, rendering the gesture of viewing someone's Snapchat Stories post a potentially meaningful signal of relational investment (Triệu & Baym, 2020). Similarly, Kelly, Gooch, and Watts (2018) built a messaging system that encouraged users to send increasingly longer messages, which fostered meaningful conversations despite some users' resistance to this tool. Consider how users might interpret a birthday post from a friend that included a photo found in an old shoe box, scanned, and uploaded, versus a generic comment. Could platform designers introduce friction (Thompson, 2018) into relational investment gestures on social media to increase the strength of the signal?

In contrast to visible clicks, our work highlights the significance of off-platform interactions—social media content viewing that results in meaningful interactions in other channels. As our data show, posts that are unclicked but are imported into other media (such as face-to-face interactions or phone calls) were perceived as more meaningful by some of our participants. As one participant told us, "I would rather you mention [it] to me in real life." In this case, a behavior that appears to be "passive" is preferred and seen as a stronger signal than "active" behaviors such as a Like.

Importantly, these off-platform exchanges are not captured in server-level data and thus have been largely invisible to users, researchers, and even the platforms themselves (Trieu & Ellison, 2018). Those who do not click but reach out via other platforms might be benefitting socially from these exchanges, yet look like an unengaged lurker in the social media server logs or to researchers employing a single-platform study approach, suggesting a need for multi-method approaches that go beyond single-platform studies. Future research could investigate how individuals interpret different kinds of signals on and off the platform with regard to their signaling value, and the various strategies individuals engage in to try to express authentic attention in systems that allow for unengaged one-click feedback.

## Design implications of the non-click

The concept of the "non click" is relevant to platforms because the idea that not all content has a corresponding "click" reaction challenges the assumption that powers many feed-sorting algorithms. In addition to relational signaling and social grooming, Likes also serve as signals to the platform itself (as highlighted by our participants who non-clicked on particular content to avoid seeing more of it) about what users do and will find interesting. Facebook's News Feed algorithm attempts to prioritize content users will find relevant based on previous click-based activity, with a focus on promoting "meaningful interactions,"[2] whereby clicks (e.g., reactions, comments) are considered signals; other platforms similarly privilege clicked content in feeds. These algorithms can introduce biases in the kinds of content that is amplified, potentially in problematic ways. Content that does not normatively encourage one-click feedback, such as stories about complex and difficult social phenomena, may fade out of social media feeds because users do not have the time to post a comment or do not know what to say, but are reluctant to just post a potentially inappropriate "reaction." Non-clicks on more complex content may inadvertently train the algorithms to highlight content that is easy to respond to, but not necessarily meaningful. Some communities benefit when some participants remain silent (Antin & Cheshire, 2010), and many rhetorical situations demand this, at least for some topics (see Harmon [2019] for a discussion of one of these spaces). However, on many social media platforms, this kind of authentic "listening" may signal to the algorithm that the post is not worth distributing. While it is challenging to research the effects of algorithms that are constantly in flux and often opaque to users, researchers, and even their designers, we believe more scholarly attention should be paid to the social and political implications of the algorithmic logics that assume clicking alone can identify worthy content. In other words, platforms could design for "listening," allowing users to mark content as worthy of distribution in ways that don't force them to become speakers in discussions they wish to just listen to and learn from.

## Methodological implications of the non-click

Our findings have implications for scholarship that relies solely on click data (also called trace, social, or behavioral data). Although biases in "big data" are well-established (boyd & Crawford, 2012; Olteanu, Castillo, Diaz, & Kiciman, 2019), many researchers still treat click data as if they represent the totality of all platform-related user behaviors and social interactions. Although our data show that social media content can initiate social interactions that occur outside the realm of clicks on social media platforms, techniques for studying these dynamics are still evolving. By its very nature the non-click is, of course, difficult to interrogate—because it does not generate the digital traces that researchers typically use in analysis. Methods for exploring non-clicks have included asking users what they regret posting (Wang et al., 2011) or using server-level data to explore posts that were typed but never

posted (Das & Kramer, 2013). As our findings suggest, researchers should consider what is missing with trace data and strive to adopt a multichannel perspective in their study designs, which would make visible otherwise invisible cross-channel interactions. This is especially true for those who are interested in social dynamics, echoing other work on channel-switching (Tandoc, Lou, & Min, 2018).



### Limitations

In this article, we focus on clicks that are responses to others' content. Our data set included only two posted status updates, both from the same person, and thus we were unable to explore posting behaviors in any depth.[3] Although we gain ecological validity by having participants view their own Facebook feed (as opposed to one fabricated by researchers), participants may have altered their behaviors because they knew their activities were being observed and recorded. Our survey was presented after participants' Facebook browsing, which may have influenced survey responses (although the opposite ordering might have increased the likelihood of bias in eye tracking data). Our study focused on Facebook; other social media platforms have different norms, affordances, and practices. Finally, although we believe this work has implications for well-being scholarship, our methods do not allow us to quantify the well-being implications of non-clicking or the other practices we document; we look forward to future studies on this topic.

Our use of eye tracking methods also has limitations. For example, participants' eye gazes landing on a post does not indicate the level of cognitive processing of post content. Eye-tracking is also subject to small measurement errors; we calibrated before each participant and reviewed their browsing videos afterwards to try to detect any anomalies that might impact our data.

### Conclusion

In closing, today's social media landscape—and scholarship—focuses on clicking as a key form of social attention and relational investment currency. This work complicates these assumptions, shedding light on the "non-click" as an important component of contemporary online communication environments and the critical social and psychological processes that they support. Like economic capital, the social and relational capital garnered by click activities can be framed as symbolic, where value is a subjective assessment. Unlike economic capital, there are no systems such as currency valuations or stock market indices to track the value of a click as understood by more than one party. Nor would it be possible to build one. Nevertheless, we attempt to surface some of the complexities obscured by current scholarly approaches and to introduce the "non-click" as an object of study, highlighting some of the implications of this framework for researchers, users, and platforms.

## Acknowledgments

The authors would like to thank Günce Su Yılmaz for her help with coding browsing data. Earlier versions of this paper received valuable feedback at the Center for Advanced Study in the Behavioral Sciences (CASBS) and the annual meeting of the International Communication Association.

## Funding

This material is based upon work supported by the National Science Foundation under Grant Nos. 1763297 and 1552503.

## Data Availability

The data analyzed for this article cannot be shared publicly in order to protect the privacy of individuals that participated in the study and those whose Facebook behavior were captured in our eye-tracking data. Some data might be shared on reasonable request to the corresponding author.

## Notes

1. Because we were capturing sensitive data (participants' Facebook feeds), we emailed participants the consent form prior to the study, then reviewed the consent form with them at the start of the lab session. While data such as survey and interview transcripts will be kept longer-term, as is typical, Facebook News Feed recordings will be destroyed after data analysis is complete.
2. See https://about.fb.com/news/2018/01/news-feed-fyi-bringing-people-closer-together/
3. This is similar to other studies of posting versus clicking: For instance, empirical work using server-level data from the Renren online community shows that social media content consumption is far higher than production (clicking): Metzger, Wilson, and Zhao (2018) show that 93% of users consumed profiles, but that a much smaller number contributed content such that almost all visible content was produced by 28% of the users.

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