

Temporary Sharing, Enduring Impressions:  
Self-presentation in the Digital Age

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### Contribution Statement

It has been argued that the internet means “the end of forgetting” (Rosen, 2010). Digital disclosures can come back to haunt, making it challenging for people to manage the impressions they make upon others. Seven experiments show that paradoxically, these challenges can be exacerbated by temporary sharing technologies. Temporary sharing reduces privacy concerns, in turn increasing disclosure of potentially compromising information (in the form of uninhibited selfies). Recipients chalk these indiscretions up to the sharer’s bad judgment, failing to appreciate the strong situational influence—the temporariness of the sharing platform—on sharers’ disclosures. Sharers do not anticipate this consequence, mistakenly believing that recipients will attribute their disclosure decisions to the (temporary) platform on which they chose to send the photos.

### Abstract

With the advent of social media, the impressions people make on others are based increasingly on their digital disclosures. Yet, digital disclosures can easily come back to haunt, making it challenging for people to manage the impressions they make upon others. In a series of field and laboratory experiments in which participants take, share, and evaluate “selfies” (self-photos), we show that paradoxically, these challenges can be exacerbated by temporary sharing media—technologies that prevent disclosures from being stored permanently. Relative to permanent sharing, temporary sharing affects both whether and what people reveal. Specifically, temporary sharing increases compliance with the request to take a selfie (Experiment 1), and causes people to take greater disclosure risks (i.e., exhibit greater disinhibition in their selfies, Experiments 1–3). This increased disclosure is driven by reduced privacy concerns (Experiments 2 & 3). Yet, observers’ impressions of sharers are insensitive to permanence (i.e., whether the selfie was shared temporarily versus permanently), and are driven by the disinhibition exhibited in the selfie (Experiments 4–7). As a result, sharers of uninhibited selfies, induced by the promise of temporary sharing, come across as having worse judgment relative to those who share relatively discreet selfies (Experiments 1, 2, 5, 6 & 7)—an attributional pattern that is unanticipated by sharers (Experiments 3 & 4), persistent days after the selfie has disappeared (Experiment 6), and robust to a perspective-taking intervention (Experiment 7). Temporary sharing may bring back forgetting, but not without introducing new (self-presentational) challenges.

*Keywords:* ephemerality, interpersonal relationships, privacy, self-presentation, social media

### Temporary Sharing, Enduring Impressions: Self-presentation in the Digital Age

With the advent of social media, the impressions people make on others are based increasingly on their digital disclosures. Facebook alone has 1.86 billion active users (Facebook, 2017) who collectively post 136,000 photos, 293,000 status updates, and 510 comments every *minute* (Pring, 2012), amounting to 4.75 billion pieces of content shared daily. Usage has been ever increasing, with 2016 representing a 15% increase from the year prior. People seem enamored with sharing photos in particular; in fact an entire social media platform—Instagram—is devoted to this purpose. Its 400 million+ users post more than 80 million photos a day (Ratcliff, 2016). These media may be popular at least in part because disclosing information via social media feels less socially risky relative to traditional forms of communication (e.g., face-to-face)—especially for individuals with low self-esteem (Forest & Wood, 2012).

Yet, relative to traditional, offline forms of communication, there is an enhanced permanence to digital sharing. Disclosures are forever catalogued in the cloud, and, in the case of Tweets, also in the Library of Congress. Although individual offending posts can be deleted, it is all but impossible to expunge their every trace. Moreover, it is often the most regrettable disclosures—compromising photos posted in the heat of the moment—that are ripe for sharing, and hence, may be hardest to undo.

The effective impossibility of undoing online disclosures presents new challenges to individuals in the digital age, especially when it comes to managing the impressions they make upon others (Solove, 2008). As the media regularly highlights, disclosures can come back to haunt. In one case, flight attendants were fired for posting derogatory comments about their employer on Facebook (Conway, 2009). In fact, a recent poll indicated that 93 percent of hiring managers check candidates' social media presence (Jobvite, 2014)—activity on platforms such

as Facebook, Twitter, and LinkedIn—with the discovered information often hindering candidates' chances of landing the job. Plus, unsavory disclosures have a long “decay time,” meaning that a person's past digital indiscretions are likely to form particularly long-lasting impressions upon others (Brandimarte, Vosgerau, & Acquisti, 2012).

Given these dangers, one might wonder why people share on social media in the first place. Self-disclosure confers important benefits. For example, confiding in others is associated with better health, such as reduced blood pressure and increased blood hemoglobin (Pennebaker, Kiecolt-Glaser, & Glaser, 1988; Pennebaker & O'Heeron, 1984); and professional benefits, such as better grades and employment (Spera, Buhrfeind, & Pennebaker, 1994). And, perhaps because it serves as a means of achieving connection with others—a fundamental human motivation (Baumeister & Leary, 1995)—self-disclosure confers psychological benefits, such as intimacy (Jourard, 1959; Mikulincer & Nachshon, 1991; Reis & Shaver, 1988) and liking (Collins & Miller, 1994; Cozby, 1972). Moreover, neuroscientific research suggests that self-disclosure is intrinsically rewarding (Tamir & Mitchell, 2012). Yet, people also have a desire for privacy (Acquisti, Brandimarte, & Loewenstein, 2015; Westin & Solove, 1967) and for good reason: privacy is integral to human development (Berscheid, 1977). Because these desires—the desire for privacy and the desire to disclose—often run in opposition, honoring both simultaneously is a challenge, especially given the permanence of online disclosures.

Enter temporary sharing. New technologies that place expiration dates on online disclosures may help to resolve the tension (Mayer-Schönberger, 2011; Rosen, 2010) in attempting to balance the desire for privacy with the desire to disclose. Examples abound. There is Snapchat, the popular photo-sharing app wherein photos and messages disappear after the recipient has viewed them; in fact, with more than 150 million active users daily, it is now the

most popular social network amongst American young adults (Statista, 2016a, 2016b). In the corporate communication realm, there is TigerText (named, tongue firmly in cheek, after Tiger Woods), which features a “Message Lifespan” tool enabling senders to stipulate a time for messages to be auto-deleted. From a narrow perspective, these technologies would seem to be a panacea, simultaneously honoring both the desire to divulge as well as the desire for privacy. After all, content that no longer exists cannot come back to haunt.

Or can it? A broader, behavioral scientific perspective suggests that temporary sharing may not be the cure-all that it at first blush may seem to be. First impressions are sticky (Ambady & Rosenthal, 1992; Carney, Colvin, & Hall, 2007; Funder, 1995) even when those impressions are incorrect. Thus the impression that the temporarily-shared duckface selfie (a self-photo with pouty lips and sucked-in cheeks) makes on others is likely to persist beyond its short life. Moreover, observers may attribute the indiscretion to the (bad) judgment of the sharer, as opposed to being warranted by the temporariness of the sharing platform. Indeed social psychologists have long documented that people tend to over-attribute others’ behavior, noble or otherwise, to enduring personality characteristics, failing to account for situational influence (Gilbert & Malone, 1995; Jones & Harris, 1967; Jones & Nisbett, 1972; Ross, 1977). Therefore, we predict that people’s impressions of sharers will be driven by the content of the photo, and not by sharers’ choice of sharing medium. This attribution pattern presents a self-presentational challenge in the use of temporary sharing media, especially if unanticipated by sharers.

Potentially compounding this issue, the promise of ephemerality may increase disclosure, and of sensitive information in particular. Indeed a wealth of previous work points to this possibility. For one, in honoring the desire for privacy, it could assuage privacy concerns, causing people to “let their guard down,” increasing disclosure (Andrade & Weitz, 2001; Culnan

& Armstrong, 1999; Hoffman, Novak, & Peralta, 1999; Joinson, Reips, Buchanan, & Schofield, 2010; Joinson, Woodley, & Reips, 2007). In this vein, increasing perceived control over the release of private information can decrease privacy concerns, in turn increasing disclosure (Brandimarte, Acquisti, & Loewenstein, 2012). Moreover, emphasizing to people that they can revise their disclosures can make people more forthcoming, even if to their later chagrin (Peer & Acquisti, 2016). We therefore theorize that temporary sharing causes people to take greater risks in their disclosures relative to more permanent forms of sharing, and that this effect will be driven by a dampening of privacy concerns.

We test this account in an experimental paradigm in which participants are asked to take and share a “selfie” (i.e., a photo of themselves, taken by themselves), with the knowledge that others will view it. The present research therefore also contributes to the emergent science of the psychology of photo-taking and sharing more generally. Recent research has looked at how these activities affect the sharer, documenting their impact on enjoyment (Diehl, Zauberma, Barasch, Diehl, & Zauberma, 2016; Zhang, Kim, Brooks, Gino, & Norton, 2014) and memory (Barasch, Diehl, Silverman, & Zauberma, 2015; Henkel, 2013). New research also suggests that when photos are taken with the intention of being shared with others, self-presentational concerns are heightened (Barasch, Zauberma, & Diehl, n.d.). We build on this research by assessing the impressions that photo-takers make on others. More centrally however, we assess whether temporary sharing helps people to manage these impressions. We focus on the sharing of visual content (selfies) because impressions of others are strongly affected by appearance. But our predictions, and the theoretical underpinnings from which they are derived, apply to text-based disclosures as well.

We test the following predictions. First, relative to permanent sharing, temporary sharing affects both whether and what people reveal. Specifically, we predict that temporary sharing increases compliance with the request to take a selfie (H1a, Experiment 1). We also predict that it causes people to take greater disclosure risks, which we operationalize by the disinhibition they exhibit in their selfies (H1b, Experiments 1–3). Second, we predict this increased disclosure to be driven by reduced privacy concerns (H2, Experiments 2 & 3). Third, we predict observers' impressions of sharers to be based on the uninhibitedness of the selfie, and to be insensitive to permanence (i.e., whether the selfie was shared temporarily versus permanently; H3, Experiments 4–6). As a result, sharers of uninhibited selfies, induced by the promise of temporary sharing, will come across as having worse judgment relative to those who share relatively discreet selfies (Experiments 1, 2, 5–7). Finally, we predict that this attributional pattern will be: a) unanticipated by sharers (H4a, Experiments 3 & 4); b) persistent after the selfie has disappeared (H4b, Experiment 6); and c) robust to a perspective-taking intervention (H4c, Experiment 7).

### **Experiment 1**

Experiment 1 was a field study in which participants were randomized to either a temporary sharing versus control condition. We tested three predictions. First, we predicted that temporary sharing would increase people's likelihood of taking and sharing a selfie (H1a). Second, we predicted that conditional on compliance, temporary sharing would cause people to appear more disinhibited in their selfies (H1b), which we assessed by content coding. Third, we predicted that sharers of uninhibited selfies would come across as having worse judgment relative to those appearing more discreet in their selfies.

### **Methods**



**Participants.** Participants ( $N = 289$ ;  $M_{age} = 25.08$ ,  $SD = 5.44$ ; 55.36% female) were recruited from a public space on a Swiss university campus

**Procedure.** Participants were approached and given the opportunity to complete a brief survey to enter a raffle for an iPad 4 mini. Participants were informed that they could increase their chances of winning the iPad by taking a photo of themselves before completing the survey. They would also receive an extra raffle for each comment or “like” that their selfie received on Facebook within the first hour of its posting. Participants were then invited to take and share the selfie using a “Moment Machine” (Elhart, Langheinrich, Memarovic, & Heikkinen, 2014; Memarovic, gen Schieck, Kostopoulou, Behrens, & Traunmueller, 2013)—a networked public display application which allows passersby to capture everyday moments by taking an image, which is then displayed on a large monitor, visible to other passersby. Before taking the selfie, participants were told, truthfully, that in addition to being visible to passersby, the photo would be posted on a publically accessible Facebook page with over 600 followers. Next, participants were told that it would be posted on the monitors and on Facebook; those in the temporary condition were further informed (truthfully) that it would be posted temporarily for one hour, at which point it would be removed from both the Moment Machine monitor as well as the Facebook page.

After the primary outcome measure had been collected (i.e., selfie sharing), participants completed a brief follow-up survey containing demographic questions, a request to use their selfie in future studies if applicable (this made observer ratings possible), and a few other exploratory measures (Supplement).

**Selfie Coding.** Two research assistants blind to the conditions and hypotheses of the study coded each selfie for uninhibitedness; selfies in which the target made a goofy face, profane or

compromising gestures were coded as uninhibited. The coders were blind to the hypotheses of the study and condition to which the selfies corresponded; their agreement rate was 90.66% ( $Kappa = .80, z = 13.71, p < .01$ ). Disagreements were resolved by a third coder.

**Observer ratings.** Four people from the same population as the participants rated the sharers and the selfies. The raters were blinded to the experimental condition to which each photo corresponded. Two of the raters assessed the extent to which they agreed that the sharer “has good judgment” (1–5 scale with endpoints labeled 1 (*strongly disagree*) to 5 (*strongly agree*); we took the average of these raters’ assessments of each sharer. Similarly, the other two raters assessed the extent to which the selfie “is likely to go viral”—i.e., whether they thought others might be inclined to disseminate the photo further; for example, by sharing the Facebook post of the given selfie (1–5 scale); again, we took the average of these raters’ assessments of each selfie.

## Results & Discussion

Of the participants who shared a selfie, five did not agree to let us use their selfie; we excluded these observations. Two additional observations were excluded because the participants took a photo that was not a selfie (e.g., took a photo containing several people). Our final sample size was therefore 289.

The promise of temporary sharing made people 1.22 times more likely to take and share a selfie relative to those in the control condition (compliance: 70.00% in temporary versus 57.55% in control),  $\chi^2(1) = 4.85, p < .05$ . As for the content of the photos, an intent-to-treat analysis which included participants who did not comply with the request to take a selfie indicated that participants in the temporary condition were 3.44 times more likely to take uninhibited selfies

relative to the control condition ( $M_{temporary} = 52.00\%$  vs.  $M_{control} = 15.11\%$ ),  $\chi^2(1) = 43.60$ ,  $p < .005$ .

Observers' ratings of the sharers (i.e., the people in the selfies) indicated that sharers in the temporary condition were perceived as having worse judgment ( $M_{temporary} = 3.00$ ) than those in the control condition ( $M_{control} = 3.88$ ),  $F(1, 184) = 34.86$ ,  $p < .005$ . Photos shared in the temporary condition were also rated as more likely to go viral ( $M_{temporary} = 2.79$  vs.  $M_{control} = 2.21$ ;  $F(1, 184) = 20.71$ ,  $p < .005$ ). To the extent that it is possible to "hack" the temporary sharing medium (e.g., on Snapchat, it is possible to save a photo by taking a screenshot), this pattern of results implies a kind of irony: the very content that makes a person come across as having bad judgment is particularly prone to being shared by others.

Experiment 1 was a field study which showed that temporary sharing affects both whether and what people disclose, increasing people's willingness to take and share a selfie (H1a), and to portray themselves as uninhibited in those selfies (H1b). In turn, these effects may leave people vulnerable to making less-than-stellar impressions upon others, for observers rated the subjects of temporarily-shared selfies as having relatively bad judgment.

## Experiment 2

Experiment 2 was a lab experiment in which we tested the mechanism hypothesized to underlie the disinhibition prompted by temporary sharing: dampened privacy concerns.

Experiment 2 also featured several procedural enhancements relative to Experiment 1: first, before taking a selfie, sharers were made explicitly aware that others would rate them based on their selfie. Second, we designed the experiment to induce equal selfie-sharing compliance across conditions, enabling us to document observers' impressions of sharers with greater

internal validity relative to Experiment 1. As a result in analyzing the selfies, we necessarily focused on the nature of the selfie shared (i.e., testing H1b, as opposed to Experiment 1, which was optimized to test H1a, *whether* people shared a selfie as a function of the manipulation). Third, we obtained perceived quality of judgment ratings from a larger sample of observers ( $N = 57$ ).

## Methods

**Participants.** Participants ( $N = 428$ ;  $M_{age} = 32.79$ ,  $SD = 10.22$ ; 41.82% female) were US Americans recruited from Amazon's MTurk)

**Procedure.** Participants, hereafter referred to as "sharers," were asked to take and share a selfie via their webcams and told that their selfies would subsequently be shared with, and rated by, other people from the same population. Prior to doing so, sharers were randomized to one of two conditions: a temporary condition in which they were told (truthfully) that the raters would only be able to view their selfies for ten seconds and would not be able to download them, or a permanent condition, in which they were told that the raters would be able to view their selfies for as long as they wished and may download them. To increase compliance across conditions, participants were told upfront that the experiment required webcam access. Participants were also eligible to earn a bonus payment of up to \$1.00. Specifically, they were told (truthfully) that other MTurk workers would rate their photo from 1 to 5, and that 25% of sharers would be randomly selected to receive a bonus based on this rating (\$0.20 for a 1 rating, \$0.40 for a 2 rating, \$0.60 for a 3 rating, \$0.80 for a 4 rating, and \$1.00 for a 5 rating). After sharers took the selfie, they were asked to state the extent to which they agreed with the following statement: "In thinking about what kind of photo to upload, I am concerned about my privacy," from 1

(*strongly disagree*) to 7 (*strongly agree*). Finally, participants were asked to take and share the selfie.

**Selfie Coding.** As in Experiment 1, an intent-to-treat analysis assessed whether temporary sharing caused people to take greater disclosure risks, operationalized by coding of the selfies for disinhibition. Two research assistants coded each selfie for uninhibitedness (agreement rate = 94%); selfies in which the target made a goofy face, profane or compromising gestures, were coded as uninhibited. Disagreements were resolved by a third coder.

**Observer ratings.** Similar to Experiment 1, we presented a separate group of participants ( $N = 57$ , hereafter referred to as observers) drawn from the same population as the sharers to rate the extent to which they thought the sharer had good judgment, by indicating the extent to which they agreed or disagreed with the statement: “I think the person who shared the photo has good judgment,” on a 7-point response scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Each observer rated twenty randomly selected photos and as in Experiment 1, was blinded to the experimental condition to which each photo corresponded.

## Results & Discussion

Selfie sharing compliance was high and equal across conditions: 74.64% in permanent, 76.26% in temporary;  $\chi^2(2) = .15, p > .05$ . Sharers in the temporary condition were 1.52 times more likely to depict disinhibition in their selfies relative to the permanent condition ( $M_{temporary} = 45.21\%$  vs.  $M_{permanent} = 29.67\%$ ),  $\chi^2(1) = 11.01, p < .005$ . A mediation analysis revealed that the relationship between temporariness and uninhibitedness ( $\beta_{temporary} = .20, SE = .06, p < .005$ ), was reduced when privacy concerns were included in the model ( $\beta_{temporary} = .16, SE = .05, p < .005$ ;  $\beta_{privacy} = -.05, SE = .01, p < .005$ ), providing support for a mediating effect of reduction in privacy concern (Sobel test statistic = 2.41,  $p < .05$ ).

The impressions these sharers made upon others depended on the experimental condition. Specifically, temporary sharers were viewed as having significantly worse judgment ( $M_{temporary} = 3.59$ ) relative to sharers from the permanent condition ( $M_{permanent} = 3.93$ ),  $t(321) = 2.68$ ,  $p < .01$ . This effect remained significant after controlling for rater fixed effects ( $\beta_{temporary} = -.35$ , cluster robust  $SE = .12$ ,  $p < .01$ ) and standardizing ratings within raters ( $\beta_{temporary} = -.27$ , cluster robust  $SE = .08$ ,  $p < .005$ ).

Experiment 2 replicates the findings of Experiment 1, provides support for H1b, and goes further, by providing evidence of the psychological mechanism underlying the capacity for temporary sharing to induce sensitive disclosures: dampened privacy concerns (H2).

### Experiment 3

Experiment 3 provides converging evidence of the process underlying temporary sharing's capacity to induce disclosure using a method complementary to Experiment 2.

#### Methods

**Participants.** Participants ( $N = 200$ ,  $M_{age} = 36.03$ ,  $SD = 10.70$ , 52.00% female) were US Americans recruited from Amazon's MTurk.

**Procedure.** Participants indicated how uninhibited of a selfie they would choose to share, as a function of the temporariness of the sharing medium. Specifically, participants imagined that they were about to share a selfie online using social media. Participants were randomized based on the permanence of the sharing medium on which they imagined sending it: Snapchat (temporary condition) versus iMessage (permanent condition). Next, participants were asked: "Given that you will be sharing the photo on Snapchat [iMessage], what type of selfie would you choose to share? Specifically, how uninhibited of a selfie would you be inclined to share?," using

a 5-point scale labeled: 1 (*not uninhibited*), 2 (*slightly uninhibited*), 3 (*moderately uninhibited*), 4 (*very uninhibited*) and 5 (*extremely uninhibited*). Prior to asking this question, participants were told: “By ‘uninhibited’ we mean things like: making a goofy face, making a profane gesture, showing nudity, etc.” Next, we measured privacy concerns. Participants indicated their agreement with the item: “I would be concerned with my privacy when sharing a [level of disinhibition participant previously indicated] photo on Snapchat [iMessage]” on a 7-point scale with endpoints labeled 1(*strongly disagree*) and 7(*strongly agree*). Finally, participants predicted recipients’ attributions of their disclosure behavior on a 7-point scale by completing the sentence: “I think that recipients of my photo will think I chose to share a [level of disinhibition participant previously indicated] photo because...” on a slider scale with endpoints labeled “...of my personal desire to send the photo” and “...the app—Snapchat [iMessage] —warranted it.”

To confirm that participants had processed the condition-relevant information (i.e., whether the platform was a temporary versus permanent sharing medium), we asked participants at the end of the experiment: “This survey was about a specific mobile application. A core feature of this application was that: A (any photo shared would be available to whom I share it with only temporarily), B (any photo shared would be available to whom I share it with permanently), C (none of the above)” Overall, >92% of participants passed this check (*NS* between conditions).

## Results & Discussion

Participants indicated that they would be more likely to share uninhibited selfies in the temporary condition ( $M_{temporary} = 2.50, SD = 1.20$ ; i.e., slightly to moderately uninhibited) relative to the permanent condition ( $M_{permanent} = 2.07, SD = 1.15$ ; i.e., slightly uninhibited),  $t(198) = 2.49, p < .05$ . Again, mediation analysis showed that the relationship between temporariness

and uninhibitedness ( $\beta_{temporary} = .41, SE = .17, p < .05$ ) was reduced when privacy concerns were included in the model ( $\beta_{temporary} = .30, SE = .16, p > .05$ ;  $\beta_{privacy} = -.19, SE = .04, p < .005$ ), providing support for a mediating effect of reduction in privacy concerns (Sobel test statistic = 2.03,  $p < .05$ ). Finally, participants were more likely to think that recipients would attribute their disclosure choices to the platform warranting it in the temporary condition ( $M_{temporary} = 2.97, SD = 1.75$ ) relative to the permanent condition ( $M_{permanent} = 2.48, SD = 1.48$ ),  $t(198) = 2.14, p < .05$ .

Experiment 3 provides converging evidence of the basic finding that temporary sharing induces greater disclosure risks (H1) using methods complementary to Experiments 1 and 2. Specifically, Experiment 3 provides support for H1 using a different, more ecologically valid operationalization of the independent variable (i.e., invoking Snapchat versus iMessage platforms) as well as a different operationalization of the outcome measure (sharers state for themselves the degree of disinhibition they would exhibit, as opposed to uploading selfies and having those selfies coded by research assistants, as in Experiments 1 and 2). Experiment 3 also provides converging evidence for the psychological mechanism underlying the capacity for temporary sharing to induce disclosure: reduced privacy concerns (H2). Finally, Experiment 3 suggests that sharers may believe others will attribute their disinhibition to situational factors (i.e., the temporariness of the medium) as opposed to their disposition (H4a). In Experiment 4, we directly pit sharers' intuitions of the impact of temporary sharing on impression formation against those of observers.

## Experiment 4

### Methods

**Participants.** Participants ( $N = 200, M_{age} = 36.98, SD = 12.54, 61.00\%$  female) were US Americans recruited from Amazon's MTurk.



**Procedure.** Participants were randomized to either imagine that they were sending a selfie to someone (sharers), or to imagine that they were viewing a selfie that someone had sent them (observers). Participants were further told that the selfie was risqué; it had a bit of nudity in it. Next, we described two possible platforms on which the selfie could be shared—Snapchat versus iMessage—and that they differed in permanence (see Supplement for exact wording used).

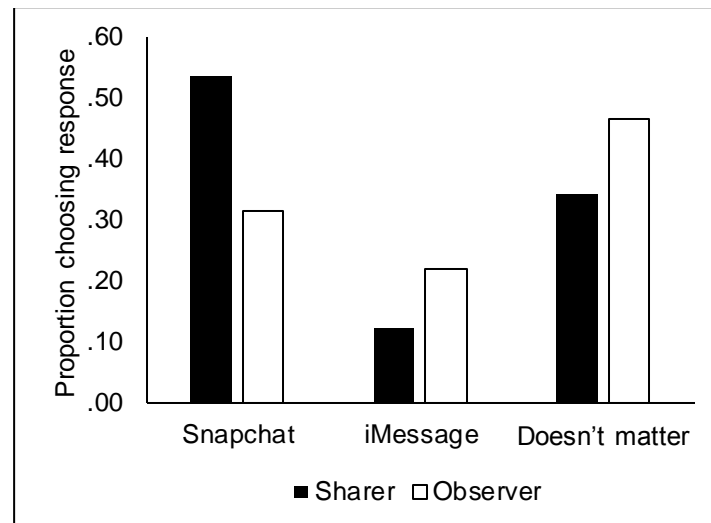
Sharers were then asked: “Do you think the application on which you chose to send the selfie would matter, in terms of the impression you would make on the recipient? In other words, do you think you would make a better impression on the person you’re sending your risqué selfie to if you sent the selfie via Snapchat? Via iMessage? Or would it not matter?,” choosing from three response options: “I think I’d make a better impression if I sent the risqué selfie using **Snapchat**,” “I think I’d make a better impression if I sent the risqué selfie using **iMessage**,” and “It doesn’t matter which application I chose (i.e., the application I chose to send the risqué selfie on wouldn’t affect the impression I make).” Observers were asked the same question, except from the vantage point of observers as opposed to actors.

To confirm that participants had processed the key difference between the two platforms on which the selfie could be shared—i.e., permanence—we asked participants at the end of the experiment: “On iMessage, data is stored: A (permanently), B (temporarily), C (I do not know)” and “On Snapchat, data is stored: A (permanently), B (temporarily), C (I do not know).” Overall, >88% of the participants passed this check (*NS* between conditions).

## Results & Discussion

Whereas most (53.5% of) sharers believed that sending the selfie via Snapchat would make the better impression, only 31.4% of observers agreed ( $\chi^2(1) = 9.73, p < .005$ ). In contrast

to the most common intuition of the sharers, observers most commonly indicated that the application on which the selfie was sent would not affect their impression of the sharer (Fig. 1).



*Figure 1.* Intuitions of whether the sharing platform matters in terms of the impression a risqué selfie makes upon its recipient. Sharers most commonly say that sending the selfie on a temporary platform (i.e., Snapchat) will make the best impression, whereas observers most commonly say that the platform would not impact their impression of the sharer (Experiment 4).

Bars sum to 1 within color.

Experiment 4 suggests an actor versus observer asymmetry: sharers believe that temporary sharing will improve the impression they make on others (H4a), whereas observers believe that their impression of sharers will be unaffected by the sharing platform. In Experiment 5, we assess the validity of these beliefs by testing whether observers temper their judgments of sharers based on the medium on which the selfies are shared. Although we obtained observers' impressions of sharers in Experiments 1 and 2, unlike these experiments, in Experiment 5, observers were made aware of the platform—temporary versus permanent—on which the selfie had been shared.

## Experiment 5

### Methods

**Participants.** Participants ( $N = 428$ ,  $M_{age} = 34.13$ ,  $SD = 10.63$ ; 58.88% female) were US Americans recruited from Amazon's MTurk.

**Procedure.** Each participant was shown either an uninhibited versus control selfie (in which case the person simply smiled) and told that the person in the selfie had sent it on either a temporary medium (Snapchat) or a permanent medium (iMessage; described below). We therefore manipulated whether the selfie: (1) depicted a target who appeared uninhibited or not, and (2) was shared via a temporary versus permanent medium. As our outcome measure, participants rated the extent to which the subject (i.e., target) had good judgment as in Experiment 2.

To reduce the chance that observed effects are driven by idiosyncratic features of the specific selfies we chose, each participant was randomly presented with one selfie out of a pool of twenty possible selfies, ten of which had been coded as uninhibited and ten as not uninhibited. The selfies were of individuals in a previous experiment who had agreed to let us use them. Thus in the uninhibited selfie condition, each participant was randomly presented with one of the ten uninhibited selfies; similarly, in the control selfie condition, each participant was randomly presented with one of the ten not uninhibited selfies.

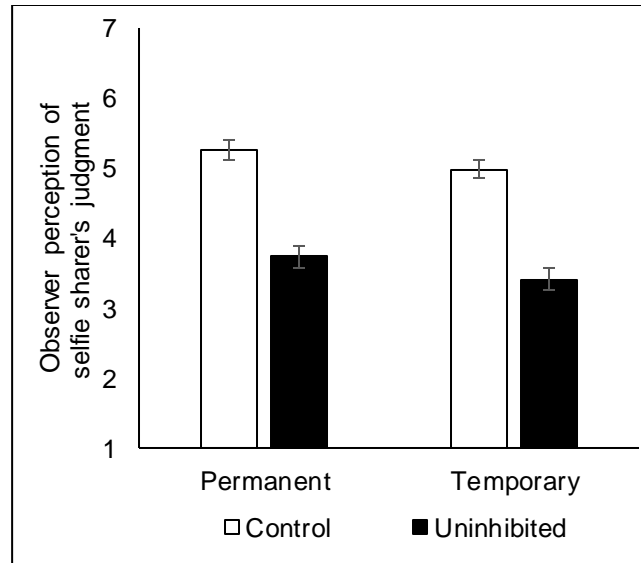
For the manipulation of sharing medium, in the temporary condition, participants were asked to "Imagine someone sends you a snap (e.g., via Snapchat). When stating your evaluation of the photo in a few moments, please imagine that the person in the photo sent it to you via ephemeral social media (e.g., Snapchat). Ephemeral means that after having received the photo, you can only view it temporarily and it self-destructs after a few moments." In the permanent

condition, participants were asked to “Imagine someone sends you a photo (e.g., via iMessage). When stating your evaluation of the photo in a few moments, please imagine that the person in the photo sent it to you via a regular text messaging app (e.g., iMessage).”

To confirm that participants had processed the condition-relevant information (i.e., whether they had been asked to imagine that the selfie had been shared on a temporary versus permanent sharing platform), at the end of the experiment, participants were asked to correctly identify that they had been asked to imagine that a person had sent them “a snap via ephemeral social media (e.g. Snapchat)” versus “a photo via a regular text-messaging app (e.g., iMessage).” Overall, >70% of participants passed this check (*NS* between conditions).

## Results & Discussion

Participants deemed targets who appeared uninhibited in their selfies as having significantly worse judgment ( $M_{uninhibited} = 3.58, SD = 1.71$ ) relative to those not appearing uninhibited ( $M_{control} = 5.11, SD = 1.41$ ),  $F(1, 424) = 104.13, p < .005$ . These judgments were not tempered by sharing medium; targets appearing uninhibited were deemed as having just as bad judgment regardless of whether the medium was temporary or permanent,  $F(1, 424) = .03, p > .05$ . In fact, if anything, participants rated targets of selfies sent on a temporary medium ( $M_{temporary} = 4.26, SD = 1.74$ ), arguably a savvy, privacy-preserving choice, as having *worse* judgment than those sharing via a permanent medium ( $M_{permanent} = 4.48, SD = 1.74$ ),  $F(1, 424) = 3.81, p < .10$  (Fig. 2).



*Figure 2.* Perceived quality of judgment was based solely on whether the sharer appeared uninhibited in their selfie (Experiment 5). Error bars represent standard errors of the mean.

Experiment 5 shows that observers' impressions of sharers are based on the uninhibitedness of the selfie, and are insensitive to the medium on which those selfies are sent (H3), pointing to the inaccuracy in sharers' belief that others will view their disinhibition as appropriate for the ephemerality of the medium (Experiments 3 & 4). As such, it suggests that temporary sharing is, paradoxically, prone to exacerbating the very challenges it is intended to address: self-presentation in the digital age. In Experiment 6, we test whether the impression that an uninhibited, though temporarily-shared, selfie makes on others lasts beyond its (temporary) life (H4b).

## Experiment 6

### Methods

**Participants.** Participants ( $N = 213$ ,  $M_{\text{age}} = 35.80$ ,  $SD = 11.82$ , 55.40% female) were US Americans recruited from Amazon's MTurk.

**Procedure.** Experiment 6 was a two-part study. First, participants were presented with either an uninhibited selfie or a control (i.e., not uninhibited) selfie and told that it had been shared over Snapchat and that they would rate the person in the selfie. Specifically, participants were told: “when stating your evaluation of the person in the photo, we would like you to imagine that the person shared the selfie only temporarily, by using Snapchat. This means that the recipient of the photo can only view it temporarily; the photo self-destructs after the recipient has seen it. This means that the recipient cannot save the photo.” Next, participants rated the target’s judgment using the same item as in Experiments 2 and 5. As in Experiment 5, to ensure the robustness of the results across selfie, we used a pool of ten uninhibited and ten not uninhibited selfies from individuals in a previous experiment who had agreed to let us use them.

Two days later, participants were asked to complete a follow-up survey in which we told them: “In part 1 of this study, we showed you a photo of a person and then asked you to evaluate this person’s quality of judgment” and asked them to “indicate the person’s quality of judgment.” Participants were further told: “We will not show you the photo again, simply respond based on your memory of the person you saw.” Participants then rated the target’s quality of judgment using the same item as in part one.

## Results & Discussion

The response rate was high: 83.1% of those who had completed part one also completed part two (*NS* between conditions,  $\chi^2(1) = .27, p > .05$ ).

Upon viewing the selfie (i.e., part one), participants deemed targets of uninhibited selfies as having worse judgment than those of control selfies (T1:  $M_{uninhibited} = 3.74, SD = 1.54$ ;  $M_{control} = 5.38, SD = 1.20$ ),  $t(211) = 8.64, p < .005$ —an effect that held two days later, when participants simply recalled their impression of the target, without being shown the photos again (T2:

$M_{uninhibited} = 4.13, SD = 1.65; M_{control} = 5.18, SD = 1.18$ ,  $t(175) = 4.82, p < .005$ ). Thus, although the uninhibited photos were no longer available to observers, the impressions that they made persisted beyond their short life (H4b).

### Experiment 7

Experiment 7 tested whether observers' assessments of sharers' quality of judgment may be tempered by personal experience with temporary sharing media.

#### Methods

**Participants.** Participants ( $N = 396, M_{age} = 32.81, SD = 9.24$ ; 33.84 % female) were US Americans recruited from Amazon's MTurk.

**Procedure.** Participants were randomly assigned to view a selfie in which the target either appeared uninhibited, or to a control condition in which the target did not appear uninhibited (i.e., simply smiled or had a neutral facial expression). All participants were told that the selfie had been shared on a temporary medium and rated the extent to which they thought the target had good judgment. As in Experiments 5 and 6, to ensure the robustness of the results across selfie, we used a pool of, in this case, ten selfies—five uninhibited and five control—from individuals in a previous experiment who had agreed to let us use them. Thus in the uninhibited condition, participants were randomly presented with one of the five uninhibited selfies; and in the control condition, participants were randomly presented with one of five control selfies.

Prior to the selfie-rating task, half of participants were asked to upload and temporarily share a selfie of their own. Most (82.90%) complied, though our results are intent-to-treat (i.e., all participants were included in the analyses regardless of compliance). To summarize the design of Experiment 7: between-subjects, we manipulated the appearance of the target in their

selfie (control versus uninhibited) and whether the participant temporarily shared a selfie themselves before rating the target.

### Results & Discussion

Replicating Experiments 5 and 6, participants deemed sharers who appeared uninhibited as having significantly worse judgment ( $M_{uninhibited} = 4.00, SD = 1.72$ ) relative to those not appearing uninhibited ( $M_{control} = 5.35, SD = 1.29$ ),  $F(1, 392) = 79.00, p < .005$ . These judgments were not tempered by experience with temporary sharing,  $F(1, 392) = .80, p > .05$ . Specifically, the tendency to deem those appearing uninhibited in (temporarily-shared) photos as having bad judgment held even when participants were first asked to take and temporarily share a selfie ( $M_{rate\ only} = 4.67, SD = 1.66$  vs.  $M_{share\ then\ rate} = 4.76, SD = 1.65$ ;  $F(1, 392) = .02, p > .05$  (Fig. 3).

In sum, Experiment 7 suggests that personal experience with temporary sharing does not lead observers to factor situational influence—the ephemerality of the medium—into their impressions of those who depict themselves as uninhibited in selfies shared through these media (H4c).

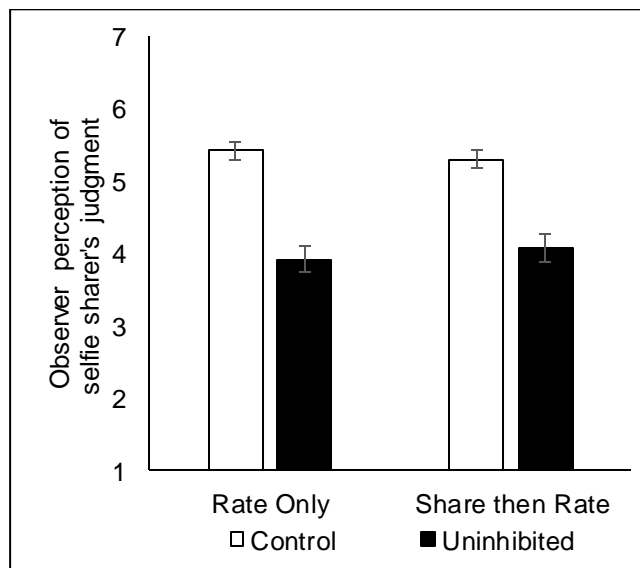


Figure 3. The tendency to perceive sharers of uninhibited selfies as having relatively bad



judgment was robust to a perspective-taking intervention (Experiment 7). Error bars represent standard errors of the mean.

### **General Discussion**

People increasingly share personal information over social media platforms such as Snapchat, Periscope, and Telegram, whereby disclosed information is only temporarily available. On the surface at least, such technologies would seem to be a panacea, simultaneously honoring two often-conflicting desires: the desire to disclose and the desire to protect one's privacy. This investigation points to a different conclusion: temporary sharing exacerbates the challenge of self-presentation in the digital age. Specifically, temporary sharing both increases people's propensity to share, as well as the sensitivity of the content that is shared (Experiments 1–3)—a phenomenon driven by dampened privacy concerns (Experiments 2 and 3). Sharers mistakenly believe that observers will factor the ephemerality of the medium into their judgments (Experiments 3 and 4). The increased disinhibition induced by temporary sharing leads sharers to be perceived by others as having bad judgment (Experiments 4–7). In fact, observers' impressions of sharers' judgment are dictated by the disinhibition portrayed in the selfie; they are insensitive to whether the selfie was shared temporarily versus permanently (Experiments 4 and 5)—a pattern that persists beyond the temporary life of the selfie (Experiment 6) and is not attenuated by a perspective-taking treatment in which observers first take and temporarily share selfies (Experiment 7).

In this research we document a psychological driver behind the capacity for temporary sharing to induce disclosure: the dampening of privacy concerns. Future research could explore additional, complementary mechanisms underlying this phenomenon. For example, there is work

showing that when people are insured (or at least perceive themselves to be insured) against some problem, they can be more reckless than they might otherwise be (Bellezza, Ackerman, & Gino, 2016). In a related vein, acting virtuously can make a person feel licensed to subsequently “misbehave” by acting self-indulgently (Effron, Cameron, & Monin, 2009; Fishbach & Dhar, 2005; Monin & Miller, 2001). Finally, there is the human tendency to honor sunk costs (Arkes & Blumer, 1985; Bazerman, Giuliano, & Appelman, 1984; Staw, 1981), which could make a person who has decided to use a temporary sharing medium feel compelled to “make good” on that choice by sharing precisely the kind of photo that they would not otherwise dare to share on a permanent medium.

In this research, we explore one important facet of the self-presentation consequences of temporary sharing: perceived quality of judgment. In addition to exploring how temporary sharing affects different dimensions on which a person is perceived (e.g., how likeable, warm, or competent they are), future work might also explore how temporary, as opposed to permanent, platforms affect the sharer’s enjoyment of that experience.

In sum, the use of temporary sharing technologies does not, in and of itself, make a person come across as having bad judgment. Instead, it is the tendency for temporary sharing to induce risky disclosure (via assuaged privacy concerns), combined with the fact that observers’ impressions of sharers are based on the way those sharers look in the photos, and insensitive to sharing platform choice, that produces this pattern. Temporary sharing may bring back forgetting, but not without introducing new (self-presentational) challenges.

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