Dying to Divulge:

The determinants of, and relationship between, desired and actual disclosure

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Abstract

Studies suggest that sharing thoughts and information with others may be inherently pleasurable and confer health, psychological, and social benefits to the discloser. At the same time, self-disclosure exposes individuals to scrutiny and the risk of rejection and reputational damage, particularly with the advent of digital applications and social media outlets that promote public, and often permanent, disclosing. In an effort to understand the tradeoffs that underlie the decision to disclose, we introduce a distinction between the propensity to disclose and the psychological desire to disclose and present a preliminary investigation into when and why these two constructs diverge. Findings from two exploratory studies reveal the types of information that individuals are most eager to share, as well as the contextual factors and individual characteristics that moderate the desire to share and the circumstances under which this desire is most likely to translate into actual sharing. We replicate findings from prior research that the decision to disclose is a function of content emotionality and valence, but find that the propensity to withhold negative information is most pronounced when the information is about oneself than about others, and that gender differences in disclosure are largely driven by the tendency for men to withhold negative, but not positive, information. Additionally, we capture motives and traits, many of them previously unexplored in the disclosure context, to model the underlying decision-making process that leads to information sharing and distinguish between the act of sharing information and the psychological desire that differentially engender disclosing behavior.

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The desire to disclose thoughts and information with others is fundamental to the human experience, and has been facilitated by the rapidly increasing number of applications and social media outlets that enable, and indeed promote, interpersonal disclosure. As these channels are often public, or veiled in privacy claims that belie vulnerability, the desire and decision to share information with others is worthy of investigation. Recent studies (e.g., Tamir & Mitchell, 2012) suggest that information-sharing may be inherently pleasurable, particularly when the information relates to one's own thoughts and feelings. An extensive literature further documents health, psychological, and social benefits resulting from interpersonal disclosure (e.g., Collins & Miller, 1994; Lambert et al., 2013; Langston, 1994; Pennebaker, 1997; Reis et al., 2010). At the same time, self-disclosure exposes individuals to scrutiny, the possibility of criticism, and the negative consequences that accompany rejection and reputational damage (Jourard, 1971; Kelly & McKillip, 1996). This is particularly true in the Internet age, in which interpersonal communications are often both public and permanent character. A substantial body of literature has emerged to address the high stakes of disclosure from a privacy perspective – that is, to identify those factors that heighten privacy concerns and discourage disclosure (for an overview, see Acquisti, Brandimarte & Loewenstein, 2015). It is important to complement such a research program with the investigation of factors that encourage disclosure, and to enhance our understanding of how and why people make the consequential decision to disclose to others, holding privacy concerns constant.

The current paper investigates disclosure through a novel lens, focusing not only on the *decision* to disclose but on the psychological *desire* to disclose that may or may not result in

actual disclosure. We argue that these are meaningfully separate constructs and that understanding when and why the two diverge is a worthwhile endeavor. This paper begins with a review of the literature related to disclosure, from research on general self-disclosure in interpersonal communications to research on disclosure in specific contexts (e.g., whistleblowing) or of specific content (e.g., gossip). We conclude from this review that insufficient attention has been paid to the psychological drivers that precede – and differentially engender – disclosure. That is, the extant literature has explored what types of information people ultimately share and why they do so, limiting the scope of this body of research to that information which was ultimately disclosed and neglecting the information that was withheld. The latter is important, however, as an individual who withholds a piece of information in one context may succumb to the desire to disclose in different circumstances.

To address this gap in the literature, we present findings from two exploratory studies that examine the types of information people are most eager to share, the contextual factors and individual characteristics that moderate or intensify the desire to share, and the circumstances under which this desire is most likely to translate into actual sharing. The first study involves a survey of predominately open-ended questions regarding situations in which participants were “dying” to share information, with the goal of identifying the information and contexts that elicit the intense, almost visceral, desire to disclose. The second study – also a survey, but one that includes a between-subject manipulation of valence – includes mainly closed-ended questions asking about specific types of experiences that respondents may have had, and whether they wanted to, and did, share the experience with others, and if so, with whom. The first study represents an unguided probe into the universe of possible experiences that individuals want to communicate to others, and, informed by the results of Study 1, the second study quantifies the

desire to share and presents causal evidence for the role that valence and domain play in dictating both the desire and propensity to disclose.

In examining the types of information that people actually share, we replicate findings from prior research that the decision to disclose a thought, experience, or piece of information with a known other is a function of its emotionality and valence (as in Berger & Milkman, 2012; Gable, Reis, Impett, & Asher, 2004; Luminet, Bouts, Delie, Manstead, & Rimé, 2000; Rimé, 1989; Rimé, Mesquita, Boca, & Philippot, 1991). In both studies, we find that negative information or experiences are less likely to be communicated to others than positive information or experiences. Interestingly, however, Study 1 suggests that individuals do experience a comparably strong *desire* to share negative information, but are less likely to act on that desire. We further find in Study 1 that the propensity to withhold is much more common when the negative information is about oneself than about others. We also find tentative evidence that valence interacts with novelty: as the rarity of a positive experience increases, so too does the number of people in whom participants confide, whereas the same pattern does not hold for negative experiences. The results from these studies allow us to rank different topics based on individuals' desire, and ultimate likelihood, to discuss them with others.

People share different types of information for different reasons, and an additional goal of this research is to identify some of the diverse motives that drive the desire and decision to disclose. We use a series of composite measures of various motives, adapted largely from Berger (2014), and of traits, many of them heretofore unexplored in the disclosure context, to model the underlying decision-making process leading to information sharing. The results confirm findings in the existing literature related to gender differences, but reveal that the robust tendency for women to disclose more often and more widely than men depends crucially on valence: male and

female participants are equally eager and likely to share positive information, but female participants are more likely than their male counterparts to share negative information. In addition to gender differences, statistical analyses reveal that the desire to disclose and the ultimate decision to disclose are driven by different motives. Specifically, we find that the self-enhancement motive is predictive of one's *desire* to disclose information but not whether or not they act on that desire, and present bias is inversely related to the ultimate decision to disclose negative information.

Finally, we asked respondents to our survey to reflect on their own disclosure behavior, both in terms of what they believe motivates their desire to share and on the frequency with which they act on their desire. Results from the latter exercise provide further support for the value of distinguishing between the desire and decision to disclose. In Study 1, the vast majority (80%) of participants were able to recall a time when they were “dying” to tell someone something but ultimately withheld the information, and in Study 2 70 percent of respondents have experienced either a desire to disclose or to withhold information but ultimately failed to act on that desire. Along the same lines, Study 2 responses reveal that people often see themselves as “over-sharers” who share more – or “under-sharers,” who share less – than they believe that they should, normatively speaking. Given that affective factors are often responsible for deviations between actual and self-perceived normative behavior, these results reinforce an idea that is prominent in many of the other findings in the paper, namely, that affective factors play an important role in sharing.

The remainder of the paper is structured as follows. The following section outlines the relevant literature, after which we briefly describe our research goals in the context of that

literature. The first and second studies are presented in the two subsequent sections, and the final section concludes.

Prior Research on Information-sharing

Reflecting the integral role that self-expression and interpersonal communication play in our daily lives, substantial research has examined different facets of information-sharing behavior. We group this research into two broadly-defined categories: *what* people share, and *why* people share. The former category involves research on the types of information and experiences people ultimately disclose to others, both in terms of the nature and content of the information shared. The latter category explores the motives that drive people to disclose, as well as the contextual factors and individual differences that influence actual disclosure. We use these broad categories to structure an extensive review of the literature, after which we discuss an area that we believe is under-explored, namely, the *desire* to disclose, which we argue precedes, but is not perfectly predictive of, the act of disclosing. Given our interest in the psychological antecedents of disclosure, we restrict our review of the literature to those studies involving voluntary disclosure driven largely by the pursuit of psychological, as opposed to material, motives. A parallel literature in economics focuses on strategic motives for disclosure (e.g., Lundholm & Van Winkle, 2006; Masiliūnas, 2017).

A critical first step in reviewing the literature on disclosure is to identify what constitutes disclosure and identify the boundaries of this construct within the existing literature. A great deal of work in this space focuses on self-disclosure, defined as “making the self known to others” (Jourard & Lasakow, 1958, p. 91) through “any information exchange that refers to the self, including personal states, dispositions, events in the past, and plans for the future” (Derlega & Grzelak, 1979, p. 152). This definition requires that the exchange is made with the deliberate

intention to divulge something personal about oneself to at least one other person (Greene, Derlega, & Mathews, 2006), but is silent on the factors that precipitate disclosure. Thus, disclosures can include spontaneous revelations made to selected confidantes in naturalistic settings as well as information shared in response to questions posed by another party (e.g., an experimenter or confederate, a fellow study participant). Our coverage in this review is, however, broader. The disclosures we discuss need not be private, nor even about oneself. This is in line with literature suggesting that the sharing of seemingly impersonal information, such as product reviews, can in fact communicate information about oneself (Berger & Heath, 2007; Chung & Darke, 2006; Lampel & Bhalla, 2007) and serve self-enhancement goals by establishing oneself as informed (Ritson & Elliott, 1999).

What People Share

We begin with a discussion of research that explores information disclosure across domains before providing examples of research programs that focus exclusively on disclosure within a single domain. Afterward, we discuss the characteristics of the information itself (e.g., emotionality, valence) that drive disclosure.

Domains

Some of the earliest literature on self-disclosure set out to identify those informational domains most likely to be discussed with others. For instance, the Self-Disclosure Questionnaire (SDQ; Jourard & Lasakow, 1958) required respondents to indicate the degree and accuracy with which they had communicated various aspects of themselves to others, captured by 60 items ranging from attitudes and opinions (e.g., thoughts on religion, parenting), tastes and interests (e.g., favorite foods, hobbies), information about work and finances, and perceptions of their personality, physical appearance, and well-being. The authors found that respondents were least

likely to discuss aspects of themselves related to money, personality, and body/health. Although the validity of the SDQ has come into question in the intervening decades (e.g., Lubin & Harrison, 1964; Cozby, 1973), many studies have adopted a similar approach to assessing disclosure across domains. Balswick and Averett (1977) asked participants to report how often (i.e., never, seldom, often, or very often) they disclose feelings across 16 dimensions (e.g., resentment, grief, elation), while Argyle, Trimboli, and Forgas (1988) had respondents rate their likelihood of discussing each of 19 topics – such as personal problems or daily events ranging from the mundane (e.g., reading a book) to the more noteworthy (e.g., a fire or accident) – with a specific person from one of 12 possible relationship categories. More recently, Consedine, Sabag-Cohen, and Krivoshekova (2007) presented respondents with 33 topic areas (e.g., sexual activities, shameful events, relationships, beliefs) and 10 possible interpersonal targets (e.g., partner, female friend, male friend, coworker, neighbor) and had participants indicate the extent to which they had discussed each topic with each possible confidante, from 0 (“have not discussed this topic at all/would not discuss it were it relevant”) to 4 (“have discussed this topic fully and completely/would do so if it were relevant”). These designs provide a model for Study 2 of the present paper, in which we present participants with 18 different scenarios spanning the domains of identity and beliefs, work and finances, health, relationships (i.e., family, friends, romantic), and trivial daily events. The key point of differentiation is that our main focus is not on the propensity to share but rather the desire to share.

Studies such as those described above are useful for uncovering important interactions between domain, individual characteristics, and contextual factors. Alternatively, some researchers have focused on disclosures made within a single domain, with the aim of revealing some truths about the disclosure process or content that will help to improve outcomes in the

domain of interest. Below we briefly introduce some of the larger literatures that adopt this approach. We do not discuss the results from these specific domains in great detail; rather, specific results that generalize to disclosure more broadly are integrated with the findings discussed throughout the remainder of the literature review, that is, from the *Nature of Content* section onward, as appropriate.

Consumer Experience. An extensive literature stems from research in marketing and consumer behavior and investigates a specific type of disclosure, “Word of Mouth” (WOM), defined by Westbrook (1987) as “informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services or their sellers” (p. 261). Recent research suggests that such disclosures constitute a nontrivial portion of interpersonal, and particularly online, communication. For instance, in an analysis of over 150,000 Twitter posts, Jansen, Zhang, Sobel, and Chowdury (2009) found that approximately 19% of tweets included some mention of a brand or corporation. Researchers and marketers alike have sought to understand the factors that lead customers to discuss their consumption experiences, given that such communications are extremely influential: According to a recent Nielsen report, 92% of consumers trust recommendations from friends and family over all forms of advertising, and only 58% reportedly trust the messages found on company websites (Nielsen, 2012). The propensity to disclose consumption experiences was initially thought to depend on customer satisfaction, with WOM characterized by a slightly asymmetric U-shaped function of satisfaction: highest at the two extremes but slightly higher for dissatisfied than for satisfied customers (Anderson, 1998). De Matos and Rossi (2008) extended the list of WOM antecedents to include other brand-related experiences, such as quality, trust, and perceived value. More recently, however, researchers characterized WOM as reflecting the interplay between features

of the message content (De Angelis, Bonezzi, Peluso, Rucker, & Costabile, 2012), goals of the discloser (Alexandrov, Lilly, & Babakus, 2013; Berger, 2014), and contextual factors (Berger & Iyengar, 2013; Berger & Schwartz, 2011; Eisingerich, Chun, Liu, Jia, & Bell, 2014). These studies address disclosure content, motives for disclosing, and context; as such, the specific findings from these studies are discussed below under the sections entitled *Nature of Content*, *Motives for Disclosing*, and *Modality and Context*, respectively.

Disclosure of Stigmatized Group Membership. Juxtaposed against the relatively impersonal and largely risk-free nature of WOM disclosures¹ is the decision to reveal a stigmatized disposition or condition, that is, to “come out of the closet.” The term “coming out” is most commonly applied to revealing one’s sexual identity or orientation to those in his or her social network, but can be understood more broadly as “deciding to no longer hide one’s discreditable stigmatized condition” (Corrigan et al., 2009, p. 366). In this way, the experience of disclosing information about one’s sexuality can extend to revelations by individuals with mental health issues (Bos, Kanner, Muris, Janssen, & Mayer, 2009; Corrigan et al., 2009), chronic illness (Kaushansky, Cox, Dodson, McNeeley, Kumar, & Iverson, 2017), particularly HIV/AIDS (Armistead, Morse, Forehand, Morse, & Clark, 1999; Marcellin et al., 2017; Serovich, 2001), or to individuals who have experienced trauma such as abuse (Yoshioka, Gilbert, El-Bassel, & Baig-Amin, 2003) or pregnancy loss (Andalibi & Forte, 2018). One strand of this literature explores the considerations that precipitate the decision to disclose one’s status to others, typically modeling this decision as a cost-benefit analysis wherein costs can include shame, damaged relationships and discrimination, and potential rewards include feelings of acceptance, community, and emotional support (Corrigan et al., 2009; Serovich, 2001). In another stand of the literature, members of the stigmatized group are interviewed about their experience coming

out (or remaining closeted) with the goal of identifying predictors of ultimate disclosure, disclosure targets, and consequences. Targets can vary as a function of the discloser's age, ethnicity, perceived social support, the strength and intimacy of family ties, and, in the case of victims of domestic violence, severity of the abuse (Armistead et al., 1999; Waldner & Magrader, 1999; Yoshioka, Gilbert, El-Bassel, & Baig-Amin, 2003). Much like the results discussed in below under *Outcomes and Consequences of Disclosure*, the ultimate outcome of disclosure is typically positive, including deeper relationships with the disclosure target (Bozett, 1980), relief and healthy sense of self (Bozett, 1980; Mosher, 2001), and higher self-esteem and self-efficacy through the reduction of self-stigma (Corrigan et al., 2010). Interestingly, however, this can vary by gender: Pachankis, Cochran, and Mays (2015) find that women who remain closeted are at high risk for depression, whereas men are at increased risk of depression and anxiety just after coming out. It is worth noting that there exists a plethora of additional work in this area that explores the decision to disclose to healthcare professionals or in a counseling environment (e.g., Baumann & Hill, 2016; Kelly & Achter, 1995; Morrison & Downey, 2000; Matthews & Peterman, 1998). While it is possible that some patients do experience a powerful desire to share, we anticipate that such disclosures to health care providers are largely guided by pragmatics and are thus beyond the purview of the present research.

Gossip. Another active area of research related to disclosure involves the transmission of gossip, defined as the “exchange of information about absent third parties” (Foster, 2004, p. 81). Despite its frequent condemnation, gossip comprises a substantial portion of disclosures, by some estimates accounting for approximately 60% of adult conversations (Emler, 1994). Some have maintained that gossip actually serves the interests of the group (Gluckman, 1963), albeit, in some cases, at the expense of the individual (Paine, 1967). According to this interpretation,

gossip provides the information necessary for social comparison processes (Wert & Salovey, 2004) and serves to teach social norms in a narrative form (i.e., how the violation of norms led to others' misfortune; Baumeister, Zhang, & Vohs, 2004). Gossip can also constrain self-serving behavior that would otherwise harm the collective interest; for example, Beersma and Van Kleef (2011) found that experimental subjects contributed more resources to a group task when they were led to believe that their decisions were identifiable and group members were able to gossip. It should not be surprising, then, that divulging gossip can have different consequences for the discloser depending on the message's alignment with social norms. For example, Wilson, Wilczynski, Wells, and Weiser (2000) found that participants exposed to vignettes wherein gossip was shared about a violation of a norm – for example, students cheating – judged the gossip (target) more favorably (harshly) than vignettes in which a lesser norm is violated, for instance, students' sycophantic behavior. One's propensity to disclose gossip, then, is likely influenced by his or her awareness of these factors and perceptions about gossip generally. To assess individual differences in the tendency toward gossip, Nevo, Nevo, and Derech-Zehavi (1993) developed the Tendency to Gossip Questionnaire (TGQ), in which participants indicate how frequently they transmit gossip and how much they enjoy doing so. The authors find that this measure correlates negatively with the need for social approval and is positively related to various other dispositional characteristics, including interpersonal curiosity and interest in people-oriented professions, such as counselors or sales managers.

Whistle-Blowing. Somewhat related to the literature on gossip is that of whistle-blowing, which also involves the disclosure to others about third-party violations of social norms or laws. Whereas a charitable interpretation of gossip is that it functions to punish past, or forestall future, transgressions, whistle-blowers act explicitly in pursuit of this goal, typically at great

professional or personal peril, and a key distinction between whistle-blowing and mere gossip is the choice of disclosure target. Whistle-blowing is defined as “the disclosure by organization members (former or current) of illegal, immoral, or illegitimate practices under the control of their employers, *to persons or organizations that may be able to effect action*” [italics added] (Near & Miceli, 1985, p. 4). This definition includes both external and internal whistle-blowing. The latter type involves “disclosure to sources within the organization (for example, members of upper management and supervisors) who can bring about effective change regarding a perceived wrongdoing,” but excludes “peer reporting,” that is, disclosure to coworkers (King, 1999, p. 316). Some of the literature on whistle-blowing explores the differential outcomes for the organization and the individual in cultures that support or suppress “speaking up” to varying degrees. Of particular relevance to the present literature review are those studies that explore the antecedents and correlates of the decision to speak out against corporate misconduct. These correlates can involve features of the organization, including organizational structure (King, 1999), ethical culture (Kaptein, 2011), and compensation structure (Rose, Brink, & Norman, 2018), as well as characteristics of the individual whistleblower. In terms of this final category, Miceli and Near (1988) model whistleblowing as a prosocial behavior more likely to occur among professional employees with a longer tenure, a more positive relationship with their work, and recent positive recognition for their performance. This is consistent with research that finds that the decision to disclose organizational misconduct is positively correlated with job satisfaction and self-efficacy (Yu, Sirsat, & Neal, 2019), as well as holding a leadership role such as union representative (Bjørkelo, Einarsen, Nielsen, & Matthiesen, 2011). Relatedly, in a test of willingness to use online reporting systems, Lowry, Moody, Galletta, and Vance (2013) presented full-time professionals with a series of hypothetical organizational failures that varied

in terms of the risk it posed to the organization and the risk that reporting the failure presented to the employee (i.e., variation in anonymity). They find that the belief that a failure should be reported, and one's sense of responsibility to do so, increased with the risk of the failure to the organization and decreased with perceived personal risk to oneself, which is in turn a function of anonymity and trust. On the whole, research on the individual determinants of whistle-blowing have produced somewhat inconsistent results (Vadera, Aguilera, & Caza, 2009), particularly in terms of demographic characteristics (Mesmer-Magnus & Viswesvaran, 2005).

Nature of Content

In the above subsection we discussed the different domains that have received attention in the extant literature. In this subsection, we explore the question of what people share; that is, the qualities of an experience or piece of information that increase its likelihood of being communicated to others, independent of the topic or domain.

Emotionality. Perhaps the most consistently identified driver of disclosure is emotionality. A large body of research centers around the social sharing of emotion, which entails openly communicating to others the circumstances of, and one's reactions to, an emotion-eliciting event (Rimé, 1989). In a series of six studies, Rimé, Mesquita, Boca, and Philippot (1991) find that 90% of study participants reportedly shared emotional experiences after they occurred, often on the same day as the occurrence, and that sharing was positively correlated with the disruptiveness of the event. The propensity to share emotional events has also been shown experimentally. For example, participants who viewed a more intense emotional film engaged in significantly more social sharing with a close friend in the waiting room, or with others in the days following the experiment, as compared to those who saw less emotionally evocative excerpts (Luminet, Bouts, Delie, Manstead, & Rimé, 2000). Participants in a study by

Berger and Milkman (2012) reported being more likely to share content that evoked high-arousal emotions, such as anger or awe, than low-arousal emotions, such as sadness. The same study additionally found that the degree to which content arouses emotion is highly predictive of whether a newspaper article will “go viral.” Indeed, even non-emotional arousal can impact sharing behavior: propensity to share a neutral article or video was elevated among study participants whose arousal was heightened by watching an amusing or anxiety-producing film clip, or merely by jogging in place (Berger, 2011). This is consistent with research by Heath, Bell, and Sternberg (2001), who find that the ideas that propagate in the social environment (i.e., “memes”) are those that have survived a selection process that depends on their ability to evoke specific emotions consistently across individuals. The authors provide evidence supporting the counterintuitive result that stories are more likely to be shared with others if they evoke greater levels of disgust, as indicated by the self-reported likelihood of passing along various urban legends, as well as the frequency with which disgusting urban legends are featured on various web sites.

In Study 1 of the present paper, we explore the emotionality of the language used to describe experiences that elicited an intense desire to share and explore whether differences in this language emerge according to whether the experience was ultimately withheld or disclosed to others. In addition, in consideration of the above described research, we ensure that the domains covered in Study 2 cover a wide range of emotions that represent the full spectrum of experiences that an individual may wish to share with others.

Valence. Another factor found to influence whether an individual ultimately decides to share information is valence. In an early study on self-disclosure, Berman, Murphy-Berman, and Pachauri (1988) asked participants how free they would feel to discuss different topics with their

best friend and varied both the valence of the information and who the information was about (i.e., oneself vs. a family member). They observed a significant preference for disclosing positive rather than negative information, and found that this effect was even more pronounced for information regarding one's family. This penchant for positive disclosures is robust across research areas. In the same study that found people to be more likely to share high-arousal content, Berger and Milkman (2012) observe an overall predilection for sharing positively-valenced content. This is consistent with a diary study by Gable, Reis, Impett, and Asher (2004) in which participants kept a record of the positive events that transpired each day. Participants reportedly "let others know about the event/issue" (i.e., selected some value above 0 on a 5-point scale from "not at all" to "very much") between 60% and 80% of the time, but this portion was lower for less positive experiences. Valence also plays an important indirect role in the decision to share information. Although people generally prefer to pass along less surprising (i.e., moderate) information, they are more likely to share unusual news when it is congruent with the emotional valence of the topic being discussed. For instance, students are more likely to share information about an exceptionally high death rate (negative information) among mugging victims in a nearby park (negative domain) than a surprisingly low acceptance rate (negative information) for graduate programs (positive domain), and vice versa (Heath, 1996).

Highly related to the present paper is work by De Angelis, Bonezzi, Peluso, Rucker, and Costabile (2012). The authors identify two distinct stages in the sharing of WOM information, generation and transmission. Generation involves conveying information about one's own personal experiences with products and services, whereas transmission is when consumers share information about the experiences of others. With this distinction, the authors can account for the dissemination of positive and negative WOM: both generation and transmission are driven by the

self-enhancement motive, but participants with low self-esteem or a threatened self-view are found to *generate* more positive WOM – that is, share information about their own positive experiences – and *transmit* more negative WOM – that is, pass along negative information that they heard about the experiences of others. This effect is moderated by how attached the consumer is to the third-party whose experience they are transmitting. In Study 1 of the present paper, we explore whether this finding extends beyond the WOM context by coding both the valence and self-relevance of open-ended responses about any experience that respondents were reportedly “dying to share” with others.

Novelty. Perhaps not surprisingly, topics that are more interesting are often more likely to be discussed with others (Heath, Bell, & Sternberg, 2001). As a result, individuals may consider the novelty of information when deciding whether or not to share it. Participants in Cooney, Gilbert, and Wilson (2017) preferred to tell their conversational partners about a video that their partner had not seen (i.e., that was novel) over one that they both had viewed during the experiment. This preference was driven by the (incorrect) expectation that novel information will be more interesting to, and thus elicit greater enjoyment from, the listener. However, the positive relationship between sharing and novelty may be moderated by the topic’s inherent controversy. Chen and Berger (2013) find that willingness to discuss a topic with others is first increasing and then decreasing in controversy, which they explain in terms of the dual impact of interest and discomfort. It should be noted, however, that both of these studies entail a slightly different paradigm from those reviewed thus far, in that the recipients of the information were strangers – fellow experimental participants in Cooney, Gilbert, and Wilson (2017) and other internet users in Chen and Berger (2013). It is an empirical question whether these factors operate in a similar

manner in the sharing of information with a self-selected audience, such as a friend or family member.

In Study 2 of the present research, we use a feature of our study design – namely, the opportunity for respondents to opt out of answering questions about experiences they have *not* had – to estimate the rarity of the different experiences that subjects *have had*, which we can then use as a proxy for the novelty of the information. We then explore whether novelty, measured in this fashion, interacts with valence in determining the desire and decision to disclose.

Saliency. A final, highly intuitive determinant of the likelihood that a particular piece of information will be disseminated is its psychological saliency. Saliency can increase due to recent or repeated exposure, as in Berger and Schwartz (2011), who explore the impact of environmental cues on the propensity to tell others about consumer product experience. They find that a key determinant of a product’s “word-of-mouth” is its accessibility, that is, its public visibility and the frequency of related environmental cues. Other inherent qualities about the information or experience can also increase its memorability: memory is greater for things that are surprising or counterintuitive, as well as emotional (Dutton & Heath, 2011). We note this work here as it presents an important qualification to the findings from the open-ended questions in Study 1 presented below, which we take steps to overcome in the research design of Study 2.

Why People Share (or Withhold) Information

The question of what type of information people share is closely related to the question of what drives people to share, and often the former is informative about the latter. In what follows, we present research on the outcomes of information sharing, the motives that drive individuals to disclose or withhold information, and discuss how various features of the environment and individual differences can influence the propensity to disclose.

Outcomes and Consequences of Disclosure

A logical first step to understanding why people choose to disclose information is to investigate the anticipated outcomes of such disclosure. As previously stated, the present research is focused on the psychological rather than the practical consequences of disclosure. An extensive body of research from past decades, either conducted or inspired in large part by James Pennebaker, demonstrates the physical and psychological benefits that result from sharing, including improved health, long-term well-being, and positive academic and professional outcomes (Pennebaker, 1997; see Frattaroli, 2006 for a review and meta-analysis). For instance, disclosure has been found to reduce intrusive thoughts (Lepore, Ragan, & Jones, 2000) and free up cognitive resources (Klein & Boals, 2001). It is also associated with improved immune functioning (Booth, Petrie, & Pennebaker, 1997) and reduced physical symptoms associated with traumatic events (Greenberg & Stone, 1992). The sharing process is said to reactivate the affective responses associated with an emotional experience. Thus, in the case of traumatic experiences, the result is diminished immediate well-being but long-term benefit. For positive events, expressive displays such as celebrating or communicating to others are associated with positive affect above and beyond the benefits arising from the event itself (Langston, 1994; Lambert et al., 2013).

Additionally, there is substantial evidence of social benefits from the sharing of thoughts and experiences, such as building trust and prosocial orientation towards the listener (Reis et al., 2010). In social penetration research, Altman and Taylor (1973) view the act of sharing one's thoughts and feelings with another person as a type of intimacy critical to allowing relationships to progress. As with the outcomes discussed above, intimate sharing of any kind – that is, regardless of valence – can improve social relationships (Collins and Miller, 1994) and attitudes

toward out-group members (Miller, 2002; Berg & Wright-Buckley, 1988). In Ensari and Miller (2002), for example, secular Muslim participants rated out-group applicants (i.e., Islamic fundamentalists) more favorably after interacting with an out-group confederate who revealed personal rather than impersonal information. It is worth noting, however, the hazards of sharing, including the potential for negative psychological, reputational, and professional consequences (Kelly and McKillip, 1996). This qualification is echoed by researchers who stress that it is not self-disclosure, *per se*, but rather disclosure flexibility – i.e., the ability to modulate disclosure in response to situational and interpersonal demands – that is critical to positive mental health and social outcomes (Chelune, 1977).

Disclosure can thus be understood as an integral part of emotional processing, and the desire to share can be expected to persist as long as a memory elicits emotional feelings (Zech, Rimé, & Nils, 2004) or in the presence of another person with whom one hopes to build a rapport. However, recent empirical evidence suggests that individuals engage in costly sharing even when the information is not emotional and absent other plausible motives. Tamir and Mitchell (2012) find that individuals are willing to forgo money to introspect about themselves, and even more money to disclose the product of their introspection to others. Neural imaging techniques employed in this study, as well as in Baek, Scholz, O'Donnell, and Falk (2017), reveal that sharing activates the reward centers of the brain. Taken together, this suggests that sharing thoughts and information with others is inherently valuable and confers a psychological benefit on those who share, irrespective of the type of information or whether it achieves an instrumental purpose.

Motives for Disclosing

To the extent that individuals accurately anticipate the outcomes of disclosure discussed above, they may be motivated to share information and experiences in order to achieve the aforementioned outcomes. Powell, Camilleri, Dobeles, and Stavros (2017) recently developed a scale to assess the perceived social benefit of sharing, in terms of social approval, impression management, and improved relationships with others. Perhaps not surprisingly, the scores are highly predictive of likelihood to disclose across several different communication contexts. At a more theoretical level, Derlega and Grzelak (1979) identify 5 basic functions that disclosure can address: self-expression, self-clarification, social validation, relationship development, and social control. Berger (2014) provides a somewhat overlapping list of motives for sharing information that, as in Derlega and Grzelak, also fall into five broad categories: impression-management, emotion regulation, information acquisition, social bonding, and persuasion. The type of information an individual shares at any point in time will arguably depend on what goals or motives are activated in a particular situation. Consistent with this account, when asked to imagine themselves in a series of hypothetical situations, participants revealed different information depending on how integral disclosure was to achieving the goal evoked by the situation (Quattrone & Jones, 1978). Similarly, Berg and Archer (1982) found that study participants revealed different types of information when presented with different goals: for instance, instructions that highlighted the goal of accurate information exchange prompted participants to reveal more intimate information than when explicitly instructed to try to create a favorable impression.

More recently, Alexandrov, Lilly, and Babakus (2013) model WOM as driven by both social- and self-motives. In their model, the discloser is driven initially to fulfil what the authors

term self-needs (i.e., self-enhancement and self-affirmation), which leads to a social interaction that activates the motive to fulfill social-needs (i.e., social comparison and social bonding) as well as social-intentions (i.e., helping others and providing social information). The model demonstrates how different motives can drive the dissemination of WOM of different valence; for example, self-enhancement drives the desire to share positive WOM while self-affirmation drives people to share negative WOM. Study 2 in the present paper similarly explores the influence of different motives – including self-enhancement – on disclosure of positive and negative information. Unlike Alexandrov, Lilly, and Babakus (2013), however, we include more diverse domains (i.e., not exclusively WOM) and explore the role of different motives in determining the desire as well as the decision to share.

Modality and Context

Different motives can be activated by features in the environment (Omarzu, 2000), and one such feature is the channel through which communication occurs. For instance, the goal and content of Internet communication can differ dramatically from that of face-to-face interactions, due largely to differences in anonymity and audience features (Berger, 2013; Chen & Berger, 2013). Consideration of audience characteristics is important for understanding why people share information, because different motives can be activated depending on the identity, size, and salience of the audience, as well as the relationship between the discloser and the disclosee(s) (Berger, 2014). For example, while self-presentation concerns typically dominate in communication with multiple people (i.e., broadcasting), sharing with just one person (i.e., “narrowcasting”) shifts focus from the self to the other and encourages individuals to share information that may instead be useful to the recipient (Barasch & Berger, 2014). Berger and Iyengar (2013) analyze communication from a series of lab studies and a corpus of large-scale

survey responses gathered by a marketing research firm, allowing for a comparison between oral (synchronous) and written (asynchronous) communications regarding consumer products. They find that written communications tend to mention more interesting products and brands, arguing that in written communications disclosers are motivated by self-enhancement concerns to avail themselves of the extra time and refine their message to be more interesting to the intended audience.

Closely related to the communication channel is one's communication partner, that is, the availability and characteristics of a potential confidante. One's relationship with, and status relative to, one's conversational partner can influence what is shared and the underlying motivations for the disclosure (Butler, Egloff, Wilhelm, Smith, Erickson, & Gross, 2003). In their meta-analysis, James and Drakich (1993) highlight the importance of status in interpersonal disclosures, and report that beliefs about one's status relative to others can interact with the requirements of the situation, resulting in a tendency for disclosure to conform to performance expectations. A substantial body of literature has explored the impact of the potential target of information on the propensity to disclose and the content shared contingent upon disclosing. A common focus of such investigations is on the gender of both parties to the interaction. For instance, disclosure is often higher to female targets, but men may disclose more to strangers and acquaintances, and women to intimates (Stokes, Childs, & Fuehrer, 1981). Similarly, Derlega, Winstead, Wong, and Hunter (1985) find that males disclose more intimate information in new contact with a female counterpart as compared to participants of either gender in other possible dyads (i.e. female-female, male-male). These nuances can be revealing as to the underlying motives for the disclosure.

In the present paper, our studies include questions that capture the intended or ultimate target of disclosures. It should be noted, however, that we are agnostic about with regard to whom it is that an individual wishes to disclose. Our interest is instead to establish the existence of the desire to share as an important construct, independent from the ultimate decision to share and irrespective of the target of the disclosure. Actual disclosure will depend not only on the desire to share but also, as we discuss in the following subsection, an individual's motives for withholding.

Motives for Withholding

Contextual factors can also influence information sharing by changing the perceived costs and benefits of sharing. For instance, online communication (e.g., surveys, blogging) encourages more honest and extensive self-disclosure than paper-and-pencil or face-to-face interactions (Tourangeau, 2004; Harper & Harper, 2006), in large part through the greater anonymity afforded by the Internet which reduces the perceived or actual vulnerability to scrutiny and criticism (Joinson, 2001). Indeed, online platforms that are not anonymous are perceived as posing greater social risk to the discloser than similar in-person communication and are thus negatively correlated with the likelihood to disclose (Eisingerich, Chun, Liu, Jia, & Bell, 2014). Subtle features of the environment that generate disfluency, such as a difficult-to-read font (Alter & Oppenheimer, 2009), can heighten thoughts and emotions associated with risk and concern, leading to discomfort and thereby diminishing self-disclosure. A similar feature that can be influenced by contextual factors, and in turn affects the cost-benefit assessment that may precede the decision to share information, is trust. Andrade, Kaltcheva, and Weitz (2002) demonstrate that trust is a strong predictor of sharing in the context of self-disclosure to companies, which is found to be sensitive to the reputation of the company as well as the

completeness of the privacy policy. Similarly, Acquisti, John, and Loewenstein (2012) and John, Acquisti, and Loewenstein (2010) find that activating privacy concerns that are otherwise latent can diminish willingness to share information about oneself. Thus, privacy concerns can act as a powerful motivation for withholding information.

While privacy concerns may be relatively stable reflections of an individual's perceptions and values (Joinson & Paine, 2007), and while privacy-related attitudes and behaviors can be captured reliably (Buchanan, Paine, Joinson, & Reips, 2006), privacy concerns are variable across contexts. For instance, Acquisti, John, and Loewenstein (2012, 2013) find that privacy valuations are susceptible to framing and order effects. Thus, privacy preferences exhibit both trait- and state-like characteristics, and the decision to share information on any occasion is determined by a combination of stable privacy concerns and the momentary salience of privacy as an issue, an assessment that is mediated by trust (Paine, Joinson, Buchanan, & Reips, 2006). Privacy concerns and trust are particularly relevant for self-disclosure on social media and online platforms. Based on the results from focus groups, Krasnova, Spiekermann, Koroleva, and Hildebrand (2010) present a structural equation model of the decision to disclose, wherein privacy risks represent a barrier to information disclosure on online social media platforms that is mediated by their trust in the network provider and the availability of control options. Other privacy scholars have leveraged online platforms to investigate how privacy concerns influence actual self-disclosure. For example, Lowry, Cao, and Everard (2011) conduct a cross-cultural comparison of instant messaging usage in China and the United States and find that culture is a significant predictor of information privacy concerns and desire for online awareness, and that these factors in turn predict attitude toward, intention to use, and actual use of instant messaging.

A closely related literature is that of topic avoidance, which is seen as one possible mechanism for reconciling privacy concerns and the desire for protection against disclosure needs and the desire for openness and intimacy (Baxter & Wilmot, 1985; Petronio, 1991). Topic avoidance is defined as “a goal-oriented communicative behavior whereby individuals strategically try to keep a conversation away from certain foci” (Dailey & Palomares, 2004, p. 472). Individuals actively (try to) avoid topics that are “taboo” (Baxter & Wilmot, 1985), and what is off-limits or inappropriate to discuss – sometimes referred to as “conversational minefields” – varies across conversational partners and relationship types. For instance, the topics of dating and negative life experiences are actively avoided in conversations between adolescents and their parents but less so among siblings (Guerrero & Afifi, 1995), while undergraduates are more likely to avoid discussing dating and sexual experiences with friends of the opposite sex and to avoid disclosing negative life experiences and relationship problems with male friends, regardless of the gender of the discloser (Afifi & Guerrero, 1998). Topic avoidance can be motivated by privacy concerns and self-preservation, but also concern for the well-being and comfort of the conversational partner, preservation of the relationship, or the desire to conform to social norms. Just as the decision to disclose has been modeled in other literatures in the present review, the desire to withhold information is a complex function of domain, relationship to disclosure target, and motivation and represents a powerful countervailing force in the disclosure calculus.

Individual Differences

There are not only differences in the willingness to disclose information across different contexts and cultures, but also across individuals. Below we briefly discuss traits and

demographic characteristics that have been demonstrated to influence sharing behavior. We include many of these factors as control or explanatory variables in our studies.

Traits. A large body of research has sought to explain variation in sharing behavior across people with different demographic characteristics or personality traits. Such studies typically take as the dependent variable retrospective measures of sharing, such as the Self-Disclosure Questionnaire (SDQ) (Jourard & Lasakow, 1958) or the Willingness to Communicate (WTC) scale (McCroskey, 1992). Disclosure is positively correlated with the need for social approval (Brundage, Derlega, & Cash, 1977; Cravens, 1975), perceived competence and comfort (MacIntyre, 1994), extraversion (Luminet, Zech, Rimé, & Wagner, 2000), and emotional instability (albeit only for disclosures that take place online rather than in person; Berger & Buechel, 2012). These findings suggest that certain individuals may be predisposed to share, perhaps as a means for achieving the social or psychological goals that they value.

Given our interest in the desire to share, beyond actual sharing behavior, we are not only interested in differences in actual sharing but also in people's meta-judgments about whether they themselves are more or less prone to share than would be best for themselves. In the same way that biological drives, emotions, and motivational feeling states such as pain, can all drive people to engage in behaviors that they don't believe are good for them, the desire to share can potentially lead to self-perceived over-sharing, and privacy motives can likewise lead people to under-share, whether across the board or in specific domains. Assessing such self-perceived over- or under-sharing is another goal of the research presented below.

Gender. One of the most widely researched areas in this strand of the literature relates to gender. Although it is widely believed, and some research supports, that women typically disclose more information (Dindia & Allen, 1992) to a wider array of individuals (Rimé,

Mesquita, Boca, & Philippot, 1991) than do men, the most comprehensive meta-analysis of research on the topic (Dindia & Allen, 1992) found only a modest, non-homogenous effect of gender on self-disclosure across studies (Cohen's $d = 0.18$). A significant main effect did emerge, albeit it for the *target* sex of disclosure (i.e., sex of the recipient of the disclosure), rather than for the sex of the discloser: both males and females disclosed more to female and same-sex targets as compared to opposite-sex or male partners. However, subsequent work suggests that gender is still an important factor in determining the propensity to disclose, including studies that leverage real-world data on disclosure in naturalistic settings (Bond, 2009; Sheldon, 2013), data that was unavailable at the time of Dindia and Allen's writing.

Ethnicity. Finally, a small number of studies, most focused on disclosure of medical conditions in healthcare settings, have explored differences between ethnicities in propensity to disclose (Armistead et al., 1999; Morrison & Downey, 2000). In a study that employs a wider, more representative set of domains, Consedine, Sabag-Cohen, and Krivoshekova (2007) find that ethnicity alone did not predict levels of disclosure but rather interacted with gender, domain, and interpersonal target. For example, while disclosure was generally higher among U.S.-born European Americans, there were no ethnic differences for the two domains of with the lowest levels of disclosure, namely, sexual experiences and trauma.

Research Objectives

The present study complements and extends the existing literature in several ways. Both Studies 1 and 2 explore not only the *decision* (or propensity) to share but also the *desire* to share information with others. The failure of earlier research to explore this distinction may explain the failure of some retrospective measures – particularly the SDQ (Jourard & Lasakow, 1958) – to predict actual sharing behavior. For example, in an early investigation of the predictive validity

of the SDQ, Lubin and Harrison (1964) observed a correlation of only 0.13 between the SDQ and the degree of actual self-disclosing behavior among participants in small group sessions. One plausible explanation (Cozby, 1973) is that, whereas the SDQ inquires about disclosure to close, self-selected confidantes, behavioral measures typically entail disclosure to an experimenter or relatively unknown others, such as fellow study participants (Ehrlich & Graeven, 1971; Vondracek, 1969) or classmates (Himmelstein & Kimbrough, 1963; Hurley & Hurley, 1969). We argue that, although important, the intended recipient of the information is one of many possible factors influencing actual sharing behavior, and that the effect of these factors may be mediated by their impact on the *desire* to share. Using a measure of this desire in Study 2, in combination with a consideration of individual differences, motives, and interactions between these variables, contributes to a more nuanced perspective on the motives driving disclosure.

Prior studies, as already noted, tend to focus on actual sharing behavior, whereas our main focus is on the desire to share, whether or not it leads to actual sharing. Furthermore, in prior studies participants are typically instructed to bring to mind events that meet specified criteria, or are exposed to stimuli that vary on specified dimensions hypothesized to have a specific relationship to sharing behavior. In Study 1 of the present research, in contrast, we ask open-ended questions about the desire to share, providing insight into those events that evoke the most intense desire to share across the universe of possible domains and emotions. The open-ended nature of Study 1 allows us to exploit variation in self-relevance, valence, and domain to uncover previously unexplored interactions.

Study 1: The Desire, Decision, and Motivation to Disclose in Unguided Responses

Study 1 employs a cross-sectional non-experimental design to explore the types of information that most strongly evoke the desire to disclose, as well as to elicit participants' lay

theories of what factors might drive their own desire to share. Given its exploratory nature, the results section incorporates a range of, we believe, revealing quotes from Study 1 participants that shed light on this new area of inquiry.

Methodology

Participants were recruited from a panel of university alumni and were encouraged to forward the research invitation to family and friends. The only restriction on participation was age (18 years or older). While this participant pool offers some advantage over the often-utilized university student population – specifically, in its diversity of age and accompanying demographic and experiential differences – an important feature of this sample is that it is comprised of individuals who proactively opted to be notified of research opportunities and who are both able and willing to participate in such research in the absence of monetary compensation. This suggests that our sample may be above-average in both socioeconomic status and the tendency to share information. The former would be expected to influence the types of experiences one has and, by extension, the types of information one is interested in sharing with others. The latter would likely systematically bias the frequency with which one shares, or the subjective intensity of their desire to do so. Thus, the findings discussed in this section should be treated as exploratory and expected to generalize only after replication among a more diverse group of participants. Although the non-representativeness of the sample limits the ability to generalize findings to the population at large, an advantage of the sample is that respondents were highly, and intrinsically, motivated by the desire to advance scientific research, making them especially likely to provide thoughtful and honest answers.

Participants were directed to a survey, hosted by Qualtrics, containing mostly open-ended questions. Once there, they were asked to reflect upon instances in which they experienced an

intense desire to share information with others. The entire survey flow is diagrammed in the appendix (Figure A1) and the complete survey with programming logic can be found in the supplementary Research Materials, but here we highlight only the questions of primary interest.

Specifically, participants were asked:

- To describe a time when they were “dying” to tell someone something
- What motives drove this desire
- Whether they ultimately shared, and if so, with whom
- Whether sharing could have been (and, if they shared, ultimately was) damaging

Based on their responses to these questions, participants were then asked to recall a time when they had similarly felt an intense desire to share but had made the opposite decision about whether or not to act on that desire (i.e., compared to the first instance they described). If they were able to recall such an instance, respondents answered similar follow-up questions as above and indicated what about this specific experience made them choose differently. Demographic questions were included at the end of the survey. The survey took an average of 20 minutes to complete, excluding 5 outliers whose values exceeded 1.5 times the interquartile range.

Closed-ended questions were analyzed using STATA/SE 15.1. Open-ended questions were coded by two independent coders using MAXQDA. Coders were provided with a codebook developed by the authors based on a review of the responses; the coders were, however, encouraged to modify the codebook as necessary. Intercoder reliability is reported below when relevant. Disagreements were resolved by the judgment of a third independent coder, the judgment of whom prevailed in the coded values reported herein.

Study Participants

Table 1 presents the basic demographic breakdown of the 215 study participants who completed the survey in its entirety. Approximately three-quarters ($N = 162$) of participants were between the ages of 25 and 64, and the vast majority (82.5%) identified as Caucasian.

Table 1

Sociodemographic Characteristics of Study 1 Participants

Characteristic	<i>n</i>	%
Age		
18-24	4	1.9
25-44	76	35.4
45-64	84	39.1
65 or older	51	23.7
Gender		
Female	98	45.6
Male	95	44.2
Missing/Prefer not to answer	22	10.2
Ethnicity		
Caucasian	160	74.42
Asian	13	6.05
Other	13	6.07
Missing/Prefer not to answer	29	13.49

Results

Patterns of Sharing Behavior

The left panel of Figure 1 summarizes the survey structure and illustrates general patterns in participant flow through the survey. The conditional percentages (and number of participants) who select an answer at each stage are displayed, with arrow widths proportional to number of participants making the selection (out of the total sample, $N = 215$). This enables us to observe the dominant response pattern across the entire survey. We see at the top of the figure that the

majority of study participants (79%) report having at some point experienced an intense desire to share information with another person. Participants were then asked to detail the first such instance that came to mind. Because no restrictions or guidelines accompanied this probe, salience can result from a wide range of factors, such as recency, intensity of experience, vividness of memory, etc. This allowed us to capture a broad spectrum of topics that vary in terms of memorability and significance but are nevertheless capable of eliciting an intense desire to disclose. Of these “top-of-mind” experiences, slightly more than half were relatively innocuous: 55% of respondents indicate that sharing the information would not have been damaging to them.² It is worth noting that responding to this item entailed disclosing the information to the researchers; as such, to the extent that people are relatively averse to sharing potentially damaging information, responses to this prompt may be skewed toward more innocuous experiences. While this possibility is especially true of content that participants ultimately opted not to share even with close others, it is also possible that the anonymity of an online survey – which is emphasized by instructions that asked participants to avoid using the names of involved parties to protect their identity – may assuage concerns that discouraged them from sharing in other circumstances. Indeed, this is the mechanism underlying the popularity of anonymous confession websites and anonymous online forums.

Figure 1

Participant Flow Through Survey (by Total and Gender)

	Males	Females
Dying to Share (Yes)		

<p>Notably Damaging (Yes)</p>		

** $p < 0.01$, * $p < 0.05$, based on a two-sample t-test		
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** $p < 0.01$, * $p < 0.05$, based on a two-sample t-test.

Note: As shown in Table 1, gender information is unavailable for 22 participants.
Arrow width roughly proportional to number of participants out of total sample, $N = 215$.

A large majority (79%) of all respondents acted on their desire to disclose this top-of-mind experience, including 65% ($N = 48$) of those individuals who believed it might be damaging to do so. However, in only 9% of all cases was sharing the information ultimately damaging to the discloser. Only one-quarter of those participants who acted on their desire to disclose ultimately told the information to a single person: the median number of confidantes was three, and 20% of participants shared the information with more than ten people (not shown in figure). The right panel of Figure 1 explores how gender relates to the disclosive behavior captured at each stage of the survey. A statistically significantly larger portion of males could not recall a situation in which they were “dying” to share information with someone else (25% vs. 9%), $t(191) = -2.85, p = 0.002$.³ Conditional on having had this experience, men and women in our sample were equally likely to act on their desire to share, despite the fact that a larger portion of women anticipated damage as a result (51% vs. 39%), $t(158) = -1.91, p = 0.029$.

There are two final values worth noting in this figure. The first pertains to those participants who appear particularly willing to share information. Forty-two participants (20% of the total sample) indicate that they shared their top-of-mind experience and were subsequently unable to recall any instance in which they were “dying” to share information but ultimately decided to keep it to themselves. A smaller portion exhibited the opposite pattern: 15 participants (7% of the total sample) recounted a situation in which they did not share their top-of-the-mind experiences and were unable to recall a time in which they succumbed to their intense desire to share information.

Those who could recall instances in which they opted *not* to share were subsequently asked to indicate who they would have been most likely to share the information with and why

they ultimately decided not to tell anyone. A review of these open-ended responses suggests that several participants were revealing the information for the first time in the context of this study:

“I do not want to spread gossip or hear say [sic] about a situation I know little about. I’ve known for about a year and I am still dying to tell someone.” (Female respondent, 45-64 years of age)

“Because I don’t believe my feelings are for public consumption. It actually feels more special not to have told anyone. It’s something I feel... and only I am aware of my feelings.” (Male respondent, 45-64 years of age)

“I am intensely personal and so far have decided not to tell anyone.” (Female respondent, 65+ years of age)

Others revealed a slightly different interpretation of the question of whether or not they ultimately shared the experience. In some instances, participants indicated that they ultimately decided not to disclose, but their open-ended responses suggest that they did in fact share the information with some people: what was important for them was the decision to withhold the information from a specific person, i.e., the person with whom they felt *most* compelled to share the information at the time of the experience:

“Did not have the opportunity to see this person, did tell others.” (Male respondent, 65+ years of age)

“I felt it would break her spirit & self-esteem...I also think she knows in her heart, so she doesn’t need confirmation from me...I did tell my brother.” (Female respondent, 45-64 years of age)

Because the majority of participants do not explicitly reveal their interpretation of this question, later discussion of the type of information that is not ultimately shared should be

understood more liberally; that is, the decision not to disclose information in some cases may involve withholding the information from specific, but not all, others.

Domain

An important aim of this study was to determine the type of information that evokes an intense desire to share. Unlike previous research, our study design allows participants to search freely in memory for events or experiences that they were “dying” to share with others. As discussed above, all participants were given two occasions to describe an instance when they felt this desire, one in which they did ultimately disclose the information and one in which they did not.⁴ The open-ended descriptions of these events were coded for domain in the manner as described in the Methodology section above. Specifically, a codebook was developed by the researchers upon examination of the responses, with broad topic categories (e.g., work-related information) subdivided into more specific codes (e.g., job change, news about company/coworker, etc.). This codebook was then provided to two independent coders who were instructed to assign as many codes to each response as they deemed appropriate to capture the topics discussed therein. Approximately 85% of responses fell into a single topic category, and only three responses were identified as falling into two or three categories. For example, the response of one person recalling a friend’s sexual assault while studying abroad was coded both as a “traumatic experience” and as relating to “travel.” Coders were given the flexibility to modify the codebook as they saw fit, but only three changes (by one coder) were observed upon completion of the task.⁵ Intercoder reliability, calculated using Krippendorff’s (2011) alpha, is 0.70, which falls within the range acceptable for drawing the tentative conclusions that follow, and to inform the selection of categories to be tested more rigorously in Study 2.

Figure 2 aggregates all descriptions into a high-level view of the type of information that participants were dying to share.⁶ These frequencies are then broken out by the proportion of events in each category that were ultimately shared. The types of events that elicited a strong desire to share ranged from important life events, such as pregnancy and medical diagnoses, to more trivial information, as described by one participant:

“Just little things. Like just walking home tonight, and the streets were so quiet and dark, and the park was so beautiful. I wanted to share the experience. I didn’t want it to just be mine.”
(Female respondent, 25-44 years of age)

The two most commonly cited experiences are work-related, which highlights an important feature of the elicitation method. Because we are collecting retrospective self-reports and provide no guidelines on this recall task, responses are likely to be skewed toward events that are salient due either to memorability or recency. To the extent that memorable events are also those that contemporaneously evoke the most intense desire to disclose, or that the intensity of the elicited desire to share is what renders experiences especially memorable, this is not problematic for the present research. The high prevalence of work-related experiences among this list suggests that recency is playing a role in experiential recall; participants in our sample most likely spend a substantial portion of most days employed and, thus, such experiences come readily to mind.

Figure 2

Coded Responses for Event Descriptions and Whether Information Was Ultimately Shared

Note: Only codes that appear 3 or more times appear in the figure.

The figure reveals a wide variety of experience types that vary substantially not only in terms of the frequency with which they are cited but also in terms of likelihood to act on the desire to share. Individuals are highly reluctant to share information about traumatic experiences (0% shared), whereas the propensity to share information about one's good fortune and successes

is particularly high (93% shared), as is the ultimate communication of entertainment or cultural news, such as “*a shocking news story*” or “*amazing TV show*” (88% shared).

A possible concern here is that the proportion of events shared might be a function of the participant sample, driven by an interaction between differences in experiences for people at different ages or of different genders with different sharing norms. For instance, if younger populations are more likely to share *any* experience than their older counterparts, then experiences more common among younger participants will artificially appear more sharable. Appendix Tables A1 and A2 put some of these concerns to rest by examining the frequency of different experiences by age group and gender, respectively. We find no significant differences between age groups, and only one highly significant gender difference, namely, the desire to tell others about travel plans is cited more frequently among men than women, $t(282) = 2.70, p < 0.01$. There is also a marginal gender difference in the opposite direction for information about a social tension or a negative social encounter, $t(282) = 2.10, p = 0.04$. Otherwise, the percentages are indistinguishable across age and gender categories.

Emotion and Valence

As suggested by the earlier literature review, as well as the dramatic contrast between the propensity to share traumatic events compared to good news observed in the previous section, valence and emotionality play an important role in the desire and decision to share information. Indeed, many participants cite the intense emotion elicited by an event as the root cause of their intense desire to share. According to some respondents, this emotion need not always be positive:

This information was usually emotionally charged, often contained something that had hurt my feelings or felt diminishing to me in some way. Sometimes I am eager to share some ‘juicy gossip’ but it does not carry the same urgency as a hurt. Upon reflection it strikes me that I needed someone to ‘witness’ the hurt. (Female respondent, 65+ years of age)

The open-ended nature of the present study provides an opportunity to explore this role under fewer constraints than in previous research. We first conducted a text analysis to estimate the dominant valence and emotions. The analysis discussed in this section employs the NRC Emotion Lexicon⁷, which contains 14,182 words associated with eight emotions (anger, fear, anticipation, trust, surprise, sadness, joy, and disgust) and two sentiments (negative and positive). As is common practice, our text analysis began with the removal of all “stopwords” (e.g., “a,” “for,” “but,” etc.) from the relevant open-ended responses. This streamlined text was then mapped to the NRC Emotion Lexicon. Using this dictionary, the language in open-ended event descriptions was transformed into a frequency of words with different valence and varying levels of emotional association. The emotions and sentiment associated with these frequencies were then aggregated and represented as a fraction of all written words within a given response. This analysis was replicated using the Linguistic Inquiry and Word Count (LIWC2015; Pennebaker, Booth, Boyd, & Francis, 2015). Because the LIWC software contains only negative emotions, we restrict the present discussion to the NRC results, but a similar pattern holds for results from the LIWC analysis, which are presented in Figures A2 and A3 in the Appendix.⁸

Although we do not have a baseline measure for the language used to describe *non-*evocative events, a meaningful comparison can be made between the content of events that were ultimately shared and those that were withheld. Figure 3 displays the proportion of words

associated with different sentiments across responses. These values are calculated by mapping each response onto the NRC lexicon to determine the number of words that fall into each valence and emotion category, then dividing that value by the total number of words in the response. These values are then averaged across responses for both shared and withheld experiences. We see that 7% of shared experiences are positively-valenced, whereas positive words make up only around 6% of withheld responses. This is driven largely by the high prevalence of words related to anticipation and surprise, which are significantly higher in the descriptions of shared (as compared to withheld) responses, $t(107) = 1.75, p = 0.04$ and $t(107) = 2.20, p = 0.02$, respectively. The reverse relationship holds for negatively-valenced responses, and this difference is statistically significant, $t(107) = 2.16, p = 0.02$, driven by the differences in use of words related to sadness, $t(107) = 2.46, p = 0.01$, anger, $t(107) = 1.82, p = 0.04$, and disgust, $t(107) = 2.94, p < 0.01$.⁹

These results suggest that the propensity to share is more strongly associated with experiences that are positive, rather than negative. This conclusion should be qualified, however, by the fact that such retrospective reports may be vulnerable to the fading affect bias, wherein negative emotions tend to be forgotten more quickly than positive emotions. For instance, Walker, Vogl, and Thompson, (1997) observe recall for emotional events at 3-month, 1-year, and 4.5-year intervals, and find slightly better recall for pleasant than unpleasant events. Because these responses are the result of unprompted recall, this memory bias might skew the results toward positive emotional events.

Figure 3*Valence and Sentimental Composition of Shared vs. Not Shared Events*

** $p < 0.01$, * $p < 0.05$

Our survey design also permits us to analyze responses within subjects. Recall that subjects who reportedly opted to share (withhold) their initial experience were subsequently asked to recall a different event which they opted to withhold from (share with) others. Thus, we analyzed the average lexographic composition of open-ended responses that were shared relative to those that were withheld *by the same individual*. We then generated a ratio of the proportion of words for each emotion and sentiment for experiences that were ultimately shared relative to those that were not. Finally, we averaged these ratios across all responses. This comparison is displayed in Figure 4. A value of 1 signifies that there is no difference in the emotionality of

language used to describe shared vs. not shared events. The panel at the top corresponding with valence corroborates previous research findings that individuals typically prefer to share positive than negative information. The portion of negatively-valenced words is significantly higher in the description of events that were withheld than in those that were ultimately shared, $F(1,107) = 8.80, p < 0.01$). The same is true for most negative emotions, as shown in the bottom panel: anger: $F(1,107) = 7.06, p = 0.01$; sadness: $F(1,107) = 13.43, p < 0.01$; disgust: $F(1,107) = 29.48, p < 0.01$. Contrary to the general finding that highly arousing emotions are associated with greater sharing (e.g., Berger & Milkman, 2015), we find that content high in words related to anger is significantly less associated with ultimate disclosure.

Figure 4

Ratio of Valence and Sentiment in Shared vs. Not Shared Responses

Bars represent 95% Confidence Intervals.

The above analysis represents an objective but somewhat blunt tool for assessing the valence and emotionality of events that reportedly evoke an intense desire to share. To complement these results, open-ended descriptions were also reviewed and coded for overall valence by two independent coders tasked with recording each response as either “Positive,” “Negative,” or “Unclear/Mixed Emotion.”¹⁰ We present these results after introducing an additional dimension of disclosure investigated in Study 1: self-relevance.

Self-Relevance

In addition to valence, another important characteristic of the information people are eager to disclose is self-relevance. Some participants explicitly referenced either an aversion to, or a preference for, conveying information about others, rather than themselves.

“I don’t generally spread rumors or gossip about people. I don’t really like it when others talk about people or pass judgement about other people. Most of the info I share is about me.
(Male respondent, 45-64 years of age)

“It’s much easier to share info about other people than about myself. For example, if I get some gossip that I’d really like to share, I might ultimately decide to just say something, because I figure if I know this, someone else might already too, etc. If it’s information about myself, I’m bound to feel a lot more ambivalent about it and no one else will know already, so it’s more of a risk. (Female respondent, 25-44 years of age)

To gather statistics about this dimension, each response was coded for self-relevance in addition to valence: Two independent coders determined whether the primary person involved in the event was the participant (“Self”) or someone else (“Other”). If it was someone else, his or her relationship to the participant was noted, and in half of such cases the information involved either a family member or friend (29% and 21%, respectively). The reliability scores between the

two coders (Krippendorff, 2011) for valence and self-relevance were 0.75 and 0.78, respectively. Disagreements were increasing in brevity of response, such as when one respondent “came out as gay to a friend” or when another stated that “the information was about an extramarital affair.” These were assumed by one coder to be, respectively, a positive experience and referring to the participant’s own affair, despite the absence of specific information identifying either as such.

Figure 5 explores aggregate results for self-relevance and its relationship to valence. Each bar represents the number of experiences described by participants that fall into each category. In general, the events that people describe as evoking an intense desire to share are more often about oneself (102 vs. 74). But a striking pattern emerges: The right panel confirms the earlier finding that positive experiences are more likely to evoke the intense desire to disclose and to result in disclosure, but this holds only for information about oneself. The opposite pattern emerges for information about others: experiences involving others that evoke an intense desire to share are more often negative than positive. The most dramatic comparison involves the two sets of bars labeled *Shared*: of the 69 instances in which an individual ultimately shared information about oneself with others, 89% of the time this information was positive in nature, whereas less than half (46%, or 22 out of 48 instances) of the information ultimately disclosed about others is similarly-valenced. In other words, the intense desire to share is most frequently evoked by positive information about oneself or negative information about others, and, while it is more common for individuals to act on this desire when the information involves oneself, the majority of negative information disclosed will be about others rather than oneself. These results are consistent with De Angelis et al. (2012), who find that, when prompted to discuss a product or service experience without restriction, 64% of participants talked about an experience that they directly experienced whereas 35% talked about an experience they heard about from

someone else. In that study, the information shared about others' experiences was significantly more negatively-valenced, while the information shared about one's own experiences was predominantly positive.¹¹

Figure 5

Experience and Sharing Frequencies by Valence and Self-Relevance

This difference may well be driven by an often-cited discomfort with the possibility of being judged by others, as described by some Study 1 respondents:

I tend to keep the very personal information to myself because I don't want to feel judged by others. Even when I got engaged, we shared the information with our parents, close friends but did not 'shout it from the rooftop' - we just let the communication happen indirectly. (Female respondent, 45-64 years of age)

[When] I felt a strong urge to tell someone something and I chose not to it was usually because I was concerned that the other person would not understand and that I would be judged. Maybe I was also judging myself and worried that others would judge me, also.

(Female respondent, 65+ years of age)

Motivations for Disclosing

The second subsection of the literature review highlighted the interdependence between the type of information shared and the goals people hope to accomplish by sharing it. The present study investigated the motives that underlie disclosure in two ways. The first was in an open-ended question that asked respondents what they thought made them want to share a specific piece of information. The second involved the multiple selection of all motives that might have been driving their desire to share the top-of-mind instance they described.

Approximately two-thirds of the open-ended responses can be broadly categorized according to whether the individual's primary motivation was self-interest or concern for the potential (or ultimate) recipient of the information, with the former accounting for more responses than any other motivation. Most common among this type was a self-enhancement motive, such as a desire to "show-off" or to be seen as informed or important.

"Information ultimately is power. A person wants to share information as a sign of power, as 'in the know,' or providing updates within a family situation to jockey for patriarchy."

(Male respondent, 45-64 years of age)

"Information is currency, the coin of the realm. You negotiate position with 'juicy' information or honoring someone by sharing something exclusive. It's like a newspaper 'scoop' in that way." (Female respondent, 45-64 years of age)

In some cases, participants report seeking out a specific response, such as empathy and consolation, praise (closely related to the self-enhancement motive above), or approval and validation, from a would-be confidante. Others indicated being driven by a desire to bond or connect with others and to be understood.

When I shared it with someone who wasn't already a close friend, I felt it made us closer, like we were sharing a secret [...] Now they understand better about some of the choices that I make. I think I felt understood when I explained what it meant for me and my life.
(Gender not disclosed, 25-44 years of age)

I just remember times in my life when I felt a great urgency to share with a friend something that had happened in my life. It was often something about another person with whom I was close (i.e. my mother) to another person who knew these relationships and understood where the event fit into my life. (Female respondent, 65+ years of age)

Some participants reported sharing information for the purpose of getting the other person's advice or perspective, and some reported gaining perspective simply from the act of relating the information to another person – for example, from talking through it as a means of analyzing or making sense of it, or simply relieving worry and “getting it off one's chest.”

“Someone does something or tells me something that I didn't expect, and I need to talk it through with people who know me well in order to process it. I tend to process information by talking through it.” (Female respondent, 25-44 years of age)

The remaining third of responses are characterized by an explicit concern for those with whom information is to be disclosed. These motives typically involve knowing that the other person will be able to put the information to good use, or will be interested, entertained, or happy to hear the news. Some respondents suggested they were driven by a desire to express concern or

support for the recipient. The distinction between “pure” and “impure” altruism (e.g., Andreoni, 1990) – i.e., that ostensibly altruistic behavior may be driven not only by the concern for the recipient’s well-being but also by the positive affect one derives from helping others – provides a possible classification of such accounts. There are participants who report experiencing a psychological satisfaction with the impact they have on those with whom they share the information. These motives could be classified as “impure” altruism, with pleasure derived from making others happy by disclosing interesting or helpful information:

“I’m excited about telling someone something that will bring them joy, or make them laugh, and I love seeing people’s reactions to things like that.” (Female respondent, 25-44 years of age)

“I think perhaps there is personal gratification in being the person that can have an impact on someone else. You can make them happy or sad or shocked with the information you give them.” (Female respondent, 45-64 years of age)

At the end of the survey, participants were presented with a long list of possible motives, and were asked to select all that they believe might have driven the intense desire to share their top-of-mind experiences. The results from this exercise are presented in Figure 6 below, and reveal a moderate overlap with the open-ended question of *why* individuals were dying to share the information they reported. The most commonly selected motive revealed by this question is to achieve a sense of closeness or intimacy with others, followed by receiving validation.

Figure 6*Motives Driving the Desire to Disclose (Multiple-Selection)*

Three-quarters of respondents selected more than one option from the list of possible motives, and the mean number of selections was four. Participants thus appear to share our intuition that there are multiple motivations simultaneously driving the desire to disclose, some of which may be at odds with other drives that discourage sharing altogether. One participant captures this tension quite eloquently:

I think there are moments in life when you know something that no one else knows (or a handful of people). That moment feels special and amazing. Some truth about the universe, or about your life or the lives of people close to you. You can feel special in that moment, that it's only you. But, then you want to share it because you want others to know. Maybe you don't want it (or yourself) to be forgotten. Perhaps, the joy (or sorrow) you feel can be spread (or tempered) if you share. Or, it brings you closer to your friends. Or by discussing it, you can make sense of it. (Male respondent, 45-64 years of age)

Any discussion of self-reports of the motives and drivers that underlie behavior is incomplete without reference to the limitations of such introspection. Nisbett and Wilson (1977) document the dangers of relying on such reports as a means to understand higher-order mental processes, arguing that such cognitive processes are often inaccessible to conscious thought. They maintain that, when asked to report on *why* one exhibited a particular response, people may be unaware of the true mediators and may rely instead on implicit causal theories based on how plausible it is that a given stimulus would evoke such a response. The motivations cited by participants in this section can be expected to be accurate only to the extent that the true mediating factors are salient and resemble plausible causes for the desire to share.

Limitations

Study 1 represents exploratory work that approaches a well-studied subject area in a novel fashion, with the aim of uncovering previously unobserved behaviors and generating new hypotheses. It has been successful in this regard, but has limitations, some of which we mitigate in Study 2. Specifically, as discussed in the previous subsection, individuals are limited in their ability to introspect about the motivations that underlie their emotions and actions (Nisbett & Wilson, 1977). In Study 2 we employ more general, objective measures of motives and traits in a

model of what drives the desire and decision to disclose information. Additionally, prompting participants to think of times when they are “dying” to share information requires them to evaluate whether experiences meet a self-imposed threshold that maps onto a level of intensity of the desire to share, which is unobservable and complicates comparison across respondents. Study 2 instead asks respondents whether they have had different experiences, and, if they respond affirmatively, asks them whether they had a desire to, and ultimately did, share those experiences with another person. This approach eliminates some of the problems caused by factors that affect whether individuals recall specific types of episodes and whether they evaluate them as worth citing as instances in which they were dying to share.¹² This methodology also reduces the possibility that responses are biased towards more salacious topics at the expense of those more pedestrian topics that nonetheless elicit a strong desire to share.

We have also previously noted the possibility that, to the extent that the experience of a specific emotion (e.g., positive emotion, as in the fading affect bias) renders an event more salient in memory, its inclusion among Study 1 responses may be the result of memorability rather than its evocation of an intense desire to share. We address this issue in Study 2 by specifically prompting participants to think of both negative and positive experiences. A final potential concern in Study 1 is the possibility that, even in the context of an anonymous online survey, participants may be uncomfortable revealing certain types of experiences to the researchers, especially those that are sensitive enough to be withheld even from close family and friends. The result would be a skew toward positive experiences and to experiences that were ultimately shared, both of which conform to the results observed in Study 1. It is virtually impossible to overcome this reticence; however, in Study 2, we encourage more honest reporting by prompting participants to provide closed-ended ratings about an experience that they are not

required (but have the option) to describe. Thus, particularly sensitive experiences need not be disclosed in detail in the context of Study 2.

Study 2: Drivers of the Desire and Decision to Disclose Across Specified Valenced Domains

Study 1 revealed broad patterns in the domain and type of information that individuals are “dying” to share with others. In Study 2, we no longer fix the desire to share at a high level, but instead ask participants about their desire to disclose in different situations they have experienced. This allows us to quantify the desire and propensity to share various types of information, as well as to identify the personality traits that influence, and the motivations that underlie, the decision to share. This study aims to identify patterns in the individual and contextual factors that drive sharing behavior, allowing for a more complete understanding of who shares what, why, and with whom.

Methodology

As in the previous study, Study 2 participants were recruited from a panel of university alumni who were encouraged to forward the survey link to family and friends. Anyone 18 or older who had not participated in Study 1 was welcomed to participate.

A total of 552 participants completed the survey, hosted by Qualtrics. Each participant was asked whether or not they had ever had a series of specific experiences (henceforth, “scenarios”), which were presented in randomized order. When a participant indicated that they had experienced a particular scenario, they were asked a series of follow-up questions about that experience, namely: how much they wanted to tell someone else about the incident, who if anyone they felt able to tell about it, the extent to which disclosing the information could have been damaging to them personally, whether they ultimately shared the information, and if so, with how many others. They were also given the opportunity to describe the details of each

experience. To avoid fatigue, participants repeated this process until they had answered questions for five scenarios that they reported having experienced.

The scenarios depicted 18 different domains, informed by the findings from Study 1 and constructed so as to include situations expected to evoke a wide range of emotions. Each participant randomly saw one of two possible versions of any given scenario. For 17 of these scenarios, nothing was altered except the valence. For instance, some respondents were asked to recall their most painful childhood memory, others their fondest. In some cases, participants were asked whether their health had ever taken a turn for the better (e.g., weight loss, overcoming a health scare) and others for the worse (e.g., weight gain, unfavorable diagnosis). In the remaining scenario, we varied whether the participant had felt misunderstood by a close friend (one version) or by a significant other (another version). This scenario is excluded from all analyses reporting the effect of emotional valence.

We identified three scenarios to be universally experienced – hearing a story on the news, spending time with a romantic partner, and recalling a childhood memory – and removed the initial screening question so that all participants who were randomly assigned to see any of these three scenarios would automatically be asked to provide details on the experience (i.e., not first asked whether they had ever had the experience). This was to ensure that we collected at least some information from all participants: at the very least, we could gather information on a participant's sharing behavior for these three scenarios, even in the unlikely event that he or she reported never experiencing any of the other 15 scenarios. After answering questions about the scenarios, participants were presented with a battery of scales relating to possible motives for sharing, personality traits, and whether they feel that they under- or over-share. Finally, they

were asked a series of basic demographic questions. The median survey duration was approximately 22 minutes.

It is important to note that the study design generates missing values for a minimum of 13 sets of follow-up questions for each participant. Because participants essentially opt-out of answering questions about scenarios they did not experience, we cannot assume these values are missing at random (Rubin, 1987). However, the primary analysis utilizes maximum likelihood estimation (MLE), which is robust to missing data (Davey & Savla, 2010; Acock, 2012). In addition, we find similar results when we run Heckman's two-stage estimation method (Heckman, 1979) to correct selection bias, as described in greater detail in the final subsection under Results. All analyses have been carried out using STATA/SE 15.1.

Study Participants

Table 2 presents demographic information for the 552 participants who completed the survey in its entirety. The sample is skewed towards middle-aged, married Caucasians, most of whom hold advanced degrees and are either employed or retired (see complete demographics in Appendix Table A3). Men and women are approximately equally represented in the sample ($z = 0.23$, *ns*).

Table 2

Sociodemographic Characteristics of Study 2 Participants

Characteristic	<i>n</i>	%
Age		
18-34	115	20.8
35-50	186	33.7
51-64	136	24.6
65 or older	115	20.8
Gender		
Female	288	52.2

Male	260	47.1
Other/Prefer not to answer	4	0.7
Ethnicity		
Caucasian	439	79.5
Asian	55	10.0
Other/Prefer not to answer	58	10.5

Results

Self-Perceived Sharing

Although the general questions were positioned at the end of the survey, we begin by exploring how participants perceive their own sharing behavior in general before moving on to how much they share in any given situation, as indicated by their response to the scenarios.¹³ Participants were asked to evaluate themselves across several metrics related to sharing. They were asked to indicate the extent to which the first three statements in Table 3 described them as a person using a scale from 0 (“This statement does not describe me at all”) to 10 (“This statement describes me perfectly”). They were also asked to indicate where they fall on a scale of under- vs. over-sharing, where 0 signifies that they don’t share thoughts and feelings when they probably should and 10 means they share even when it might be better not to (item 4 in Table 3). Table 3 demonstrates that these measures are tapping into a similar sharing construct as demonstrated by the reasonably high Cronbach’s alpha of 0.71, just over the conventionally acceptable range.

Table 3

Interitem Correlations for Composite Measure of Sharing Behavior

Self-Perceived Sharing Item	Interitem Correlations		
	Item-test correlation	Item-rest correlation	Cronbach’s alpha

I sometimes catch myself sharing too much information with others.	0.65	0.37	0.72
It takes a long time for people to get to know me. [†]	0.71	0.47	0.67
People would generally describe me as a private person. [†]	0.81	0.62	0.58
Some people don't share thoughts and feelings when they probably should, and others share when it might be better not to.	0.77	0.56	0.62
[†] Items were recoded such that higher scores reflect greater levels of the trait of interest.			Test 0.71

The left panel of Figure 7 displays the distribution of responses to the question of over- vs. under-sharing, which is slightly skewed towards under-sharing, with many respondents rating themselves exactly in the middle (5, the equivalent of “I share thoughts and feelings an appropriate amount”) and an overall mean of 4.73. Many respondents did report levels of sharing that fall in the middle three categories, which could be viewed as ideal or close to ideal self-perceived levels of sharing. However, a substantial minority (28%; $N = 157$) reported under-sharing and another minority of respondents (18%; $N = 101$) reported over-sharing. What is interesting, however, is the discrepancy between the relatively normal distribution on the under- vs. over-sharing metric on the left and the bimodal distribution on the right for how well respondents feel they are described by the statement, “I sometimes catch myself sharing too much information with others.” This suggests that, while on the whole the average participant is comfortable with the degree to which he or she discloses information to others, there are circumstances that drive a subset of participants to become more reserved and others to become more forthcoming. This motivates the analyses that follow, which aim to uncover the situational factors that encourage or discourage disclosure.

Figure 7*Distribution of Self-Perceived Sharing Ratings* *Potential Confidantes*

A prerequisite for sharing a piece of information is having someone with whom the information can be shared. For each scenario, participants were asked whether they felt that there was someone they could tell about the experience, and the majority of respondents (62%; $N = 340$) answered this question in the affirmative for *all* scenarios presented to them. Responses to the question of who would be the likely recipient of this information (Figure A4 in Appendix) paint a rough picture of the breadth of participants' social networks. Across scenarios, the average person indicates feeling able to disclose their experience to people from five (out of a possible 12) different relationship categories, averaging between two and three different types of confidantes per scenario. The anticipated recipient is most often one's significant other or a close friend, followed by immediate family members (including parents, siblings, and children).

Despite the overwhelming sense of being able to share *all* scenarios with another person, only 18% of respondents actually did so. A handful of respondents (3%; $N = 14$) reported *never* confiding in another person about any of the experiences described in the scenarios presented to

them. This is consistent with the findings from Study 1, wherein only 7% ($N = 15$) of respondents were unable to think of a time when they had an intense desire to share information and ultimately acted on that desire. This variation highlights the fact that having a viable confidante is a necessary but not sufficient condition for ultimate disclosure. The following sections investigate the remaining factors that help to determine decision-making regarding information sharing.¹⁴

Overview of Information Disclosure Determinants

In this study, as in the last, we were interested not only in the binary decision of whether to share but also in the subjective experience of the desire to share. To the extent that there is not a perfect correspondence between the two, factors such as valence, domain, the potential for damage, and individual differences might offer further explanation. Here we present an overview of these factors and their interrelationships. In the final subsection, we include these factors in a model of sharing behavior.

Desire to Share. Each scenario was accompanied by a measure of the desire to share on a scale from -5 (intense, overwhelming desire to *withhold*) to 5 (intense, overwhelming desire to *share*). The average respondent felt a slight desire to share across all scenarios ($M = 1.30$), but this varied substantially between scenarios. Average ratings ranged from the strong desire to tell someone about an infuriating customer service experience ($M = 3.65$) to a relatively strong desire to *withhold* information about a painful childhood memory ($M = -0.79$; see also Figure 9).

Perceived Damage. Participants also rated each scenario on the likelihood and magnitude of possible personal damage or negative reputational impact that might result from sharing the information, using a scale from 0 (“Certainly Not at All Damaging”) to 10 (“Certainly Very Damaging”). One scenario stands out from all others as being the most

potentially damaging: feeling ashamed about a decision that was morally questionable ($M = 5.73$). A review of the optional open-ended descriptions reveal that such experiences range from the relatively minor, such as intentionally distracting competitors in a bowling league, to the more consequential, such as lying under oath or marrying someone under false pretenses. Perhaps more interesting is that nearly one-quarter of the participants who opted to write something in the optional space did not actually share details of the event and instead expressed their discomfort in sharing this information, even in the context of an anonymous online survey. This is a testament to the strength of possible reputational damage as a deterrent to sharing.

Valence Across Domains. As described above, participants randomly saw one of two possible versions of each scenario, wherein nothing was altered except whether the context was positive or negative. The preference for sharing positive information, documented in prior research, is manifest across all aggregate measures in the present study as well. Figure 8 presents the mean difference in ratings and disclosure for positively- and negatively-valenced scenarios. Positive, as compared to negative, scenarios elicit a significantly greater desire to share, $t(2678) = 5.54, p < 0.01$, and a significantly larger percentage of participants feel able to share, $t(2678) = 4.12, p < 0.01$, and are significantly more likely to ultimately share, $t(2678) = 2.17, p = 0.02$, positive scenarios, which are also seen as significantly less potentially damaging than their negative counterparts, $t(2678) = 18.98, p < 0.01$.

Figure 8*Impact of Valence on Sharing Behavior*

** $p < 0.01$, * $p < 0.05$

In Figure 9, we explore the desire to share across different domains and by valence.

Scenarios are sorted, in descending order, by the extent to which a version of that scenario (either positive or negative) evokes the desire to share. Here we see a pattern somewhat distinct from the results in Study 1, in that the desire to share is strongest for those scenarios that arguably have the least relevance to oneself, involving a customer service representative, a family member, or a story heard on the news. At the other extreme, we find that people are extremely averse to sharing information about their significant others. The same pattern appears in the one scenario (not shown in Figure 9) in which it is not the valence but rather the party involved that is manipulated: Participants were asked about a time when they felt misunderstood because something they said was misinterpreted either by a close friend or their significant other. A significantly higher desire to share rating was observed for the incident when it involved a friend compared to when it involved their significant other (friend: $M = 2.11$; significant other: $M = 0.06$; $t(113) = 4.42$, $p < 0.01$). This finding is likely driven by the fact that the most common person that participants do share information with is their significant other (see subsection on

Potential Confidantes), for whom the information would not be new if it involved them. Support for this account can be found in another scenario that proves only weakly evocative of the desire to disclose, namely, an encounter with an attractive stranger. The average desire to share rating for this scenario is among the lowest ($M = 0.92$), but this is driven by the extreme reticence of married participants to share this “pleasant (and somewhat flirtatious)” experience with others ($M = 0.13$) relative to their unmarried counterparts ($M = 0.98$), $t(112) = 1.96$, $p = 0.03$. It is again likely that the natural target for disclosure among married participants (i.e., one’s spouse) is not a viable confidante and, thus, the desire to share dissipates. This is captured in one participant’s description of the experience in the optional detail field:

“The person I would most likely tell was my husband. I did not feel comfortable telling him.” (Female respondent, 70 years of age)

Finally, the bars in Figure 9 represent the difference between mean desire to share for positive and negative versions of each scenario, with average preference for positive information represented in light gray. Positive experiences almost universally evoke a stronger desire to share than negative information, with two notable exceptions: respondents were more eager to share an *infuriating* than an *impressive* experience with a customer service agent¹⁵ and have a stronger desire tell others about a *hurtful* rather than *complimentary* comment said about them by a close friend. There is a slight skew towards sharing “juicy gossip” of a negative rather than positive valence, but this difference is not significant.

Figure 9*Mean Desire to Share and Difference Across Valence by Domain*

Novelty. Because respondents in this study were initially asked whether they had or had not experienced a given scenario, we have a somewhat crude measure of how common each experience is, in the form of the proportion of study respondents indicating that they had an experience over the total respondents presented with that particular scenario. This measure only indicates the frequency with which participants report experiencing a broad category of events and cannot account for any variation in rarity therein. However, if we assume a similar distribution of uniqueness among experiences with the various scenarios – or, at the very least, that experiences that are relatively uncommon across participants are not described as being

especially mundane, and vice versa – we can use this measure to speak tentatively to the role of novelty in the decision to share with known others.

In line with expectations based on prior research (i.e., Cooney, Gilbert, & Wilson, 2017), we observe an overall positive relationship between the rarity of an experience and measures of the desire and likelihood to share. However, taking valence into account reveals a more nuanced pattern. Figure 10 shows the relationship between how common an experience is among our participants and the portion of participants who ultimately shared the experience (top panel) as well as the average number of people with whom participants shared this scenario (bottom panel), both conditional on having had the experience.¹⁶ Negative versions are depicted in red. We observe a downward trend only for positive information; in other words, likelihood and frequency of sharing a positive experience is increasing in the rarity of that experience, but the same is not true for negative scenarios. The results are borne out in Table 4, which presents a logistic and quantile regression¹⁷ of the binary decision to share and the median number of times an experience was shared in Models 1 and 2, respectively. The coefficients for *Mean Portion Experienced* are highly significant and suggest that, for positive scenarios, increases in commonality are associated with decreases in the odds of sharing the experience and telling 11 fewer individuals, conditional upon sharing. The linear combination shows that the effect of changes in rarity on the propensity to share negative experiences is negligible (*Logit coef*: 2.07, $p = 0.12$; *QREG coef*: 0.00, $p = 1.00$).

Figure 10*Novelty and Frequency of Sharing as a Function of Valence*

Note: For three of the scenarios, we presumed that all participants had had the specified experience and did not include the question on which this novelty metric is based. These scenarios are therefore excluded from Figure 10 and the accompanying analyses.

Table 4

Commonality and Valence as Predictive of Sharing Behavior

VARIABLES	(1) Shared (Y/N) Logit	(2) Median # Shares QREG
<i>Mean Portion Experienced</i>	0.07** (0.04)	-11.26** (1.28)
<i>Negative</i>	0.07** (0.04)	-9.71** (1.15)
<i>MeanExperienced X Negative</i>	31.67** (23.87)	11.26** (1.61)
<i>Constant</i>	27.38** (12.72)	12.71** (0.97)
Observations	1,992	1,419
Pseudo R-squared	0.00971	0.0000

Logistic regression coefficients presented as odds ratios.

Robust standard errors in parentheses

** $p < 0.01$, * $p < 0.05$

Individual Characteristics. Study participants were asked to provide basic demographic characteristics and answer a battery of questions assessing various personality traits and motives¹⁸ that may drive the decision to share (see Tables A4 and A5 in Appendix for individual scale items comprising each measure). Gender differences in sharing emerge in the same direction as observed in previous research. Female participants rate themselves significantly higher than their male counterparts in terms of self-perceived sharing, and these general perceptions are corroborated by reported behavior: On average, across scenarios, female respondents express a significantly greater desire to share, and they are significantly more likely

to have someone with whom they can share, to ultimately decide to share, and even to share details of the experience in the study context (i.e., to avail themselves of the optional open-ended text box).¹⁹ This pattern holds despite there being no difference between male and female respondents in terms of the perceived potential damage that would result from sharing. The role of specific traits is explored in the next section.

Model of the Decision to Disclose

As is evident from the above discussion, there exist a number of factors that can influence the decision to share information. Here we explore the predictive value of each in terms of their relationship to the desire to share and the probability of acting on that desire. We begin this investigation by exploring the correlations between individual traits and motives and the outcome variables of interest: the desire and propensity to share. The correlations in Table 5 capture the strength and direction of the association between an individual's scaled ratings for various traits and motives and their corresponding desire to share ratings across scenarios (left) and their propensity to disclose a given scenario (right). Although modest in magnitude, these values highlight the direction of the relationship between the different measures. Taking as an example the largest correlation observed in the table, we find that increases in one's agreement with statements about rehearsal (e.g., "Experiences feel more special when I share them with someone else.") are associated with moderate increases in that person's desire to share a given positive scenario, whereas the linearity of the relationship is slightly weaker for negative scenarios. The reverse is true for emotion regulation, where the strength of one's need to "vent" is more strongly correlated with the desire to share negative than positive experiences. Those relationships that achieve significance are all in the expected direction. Appendix Table A6 presents an alternative version of this table, where the dependent variables have been averaged at

the individual level to control for the possibility that responses for the same individual are correlated across scenarios. The directional relationships in that table are consistent with what we observe in Table 5, and the magnitudes are larger, albeit at the expense of some significance to select traits and motives.

Table 5

Correlation Between Motives/Traits and the Desire/Decision to Share a Given Scenario

Motives	Mean Rating (Scale: 0 to 10)	Correlations			
		Desire to Share (Scale: -5 to 5)		Shared (Yes=1; No=0)	
		Positive	Negative	Positive	Negative
Advice Seeking	5.82	0.08**	0.11**	0.10**	0.09**
Social Bonding	5.72	0.16**	0.12**	0.11**	0.11**
Self Enhancement	5.63	0.24**	0.10**	0.15**	0.05
Desire to be Understood	5.42	0.17**	0.14**	0.10**	0.09**
Rehearsal	5.30	0.26**	0.16**	0.21**	0.10**
Emotion Regulation	4.83	0.19**	0.22**	0.16**	0.14**
Traits					
Self-Esteem	7.58	0.02	0.02	0.02	0.00
Future Bias	6.58	-0.04	-0.01	-0.01	0.02
Affiliative Tendency	6.35	0.12**	0.12**	0.13**	0.06
Trust	4.82	0.08**	0.12**	0.07*	0.11**
Fear of Negative Evaluation	4.68	0.07*	0.04	0.05	0.06*
Self-Perceived Sharing	4.63	0.19**	0.18**	0.14**	0.12**

** $p < 0.01$, * $p < 0.05$

The principal argument made throughout the present paper is that the desire to disclose is a unique construct, distinct from, but causally related to, the ultimate decision to disclose. The decision to share or withhold a piece of information may well result from the consideration of many factors in a way similar to the cost-benefit analysis in the privacy calculus theory (Laufer & Wolfe, 1977). The *desire* to share can factor into this model in several different ways. At one

extreme is the possibility that this desire is primal and primary, producing an immediate affective experience that then serves as an input into the calculation of whether or not to disclose. At the other extreme, the psychological desire may itself result from the careful consideration of factors, such as the potential for reputational damage, fully mediating the influence of such factors on the decision to disclose. To test this hypothesis, we use the responses from Study 2 participants to estimate four competing accounts of the decision to share using a series of structural equation models, shown in Figure 11 below. Each model takes the valence (*Negative*) of the scenario as given and assumes that valence influences the extent to which disclosing the information is perceived as possibly damaging (*Damage*). This represents one type of “cost” that might come under consideration in this disclosure decision calculus. In all models, scenario valence exerts only an indirect influence on the decision to share; this effect is assumed to be mediated by its role on perceived damage. Where these models differ, however, is in the role that desire to share (*DTS*) is hypothesized to play.

Figure 11*Alternative Models of the Disclosure Decision-Making Process*(1) Fully (2) Fully Exogenous (3) Partial Mediation (4) Exogenous Feedback

Model (1) depicts a situation in which the psychological desire to disclose is merely an intermediate step between the consideration of costs associated with disclosing and the ultimate decision outcome. Importantly, this model depicts the desire to disclose as being somewhat redundant: much like the ultimate decision to disclose, the desire emerges only after consideration of the pragmatics of the situation. In Model (3), we relax this assumption and allow the potential for damage to exert both an indirect influence on the disclosure decision through its impact on the desire to share, as well as a direct impact on the outcome, independent of the psychological desire. In Model (2), we allow for the alternative possibility that *DTS* is fully exogenous. While we allow *DTS* to be correlated with scenario valence (as represented by the curved line), the experience or information to be shared takes place outside of this system of equations and engenders the desire to share, which then influences the ultimate decision to disclose or not, independently of all other factors. The final model extends this exogenous account to include the possibility that *DTS* may additionally exert an indirect influence on the outcome variable via its influence on the perceived risk of disclosing. In other words, it is reasonable to suspect that experiencing an intense, perhaps visceral, desire to disclose information to others may overwhelm other more pragmatic considerations. We also allow scenario valence to exert an influence on the desire to share directly. Thus, unlike in Model (3) where *DTS* was assumed to be influenced by the assessment of possible costs, Model (4) hypothesizes that the desire to share is a function of valence and, in that way, valence influences perceptions of possible damage both directly and indirectly through its impact on the desire to disclose.

Figure 12*Path Coefficients from SEM Analysis*

Note: All coefficients are significant at the 1% confidence level except direct ef
 insignificant, $p = 0.18$.

Figure 12 presents the results from the structural equation modeling exercise. In the interest of expediency, we do not include significance in this diagram, as virtually all effects are significant at the 1% confidence level. The only exception is the structural coefficient between *Damage* and *Shared* in Models (2) through (4), which is statistically insignificant, $p = 0.18$. We see that all effects in all models operate in the expected direction. For instance, negatively-valenced scenarios increase the perceived damage that may result from disclosing, which in turn is associated with a decreasing desire to share (in Models 1, 3, and 4) or decrease in the propensity to disclose directly (Model 2). Similarly, we see that increases in the desire to share have a positive impact on the ultimate decision to do so.

In order to evaluate which of these models best represents the decision-making process that leads to ultimate disclosure, we rely on several goodness of fit measures presented in Table 6. The likelihood ratio chi-square associated with all of these models are relatively small, but only Model (4) achieves substantial insignificance, with a chi-square of 2.71 and a p -value of 0.10. This value suggests that any difference between Model (4) and a saturated model is likely to have resulted from chance error; in other words, this model appears to be consistent with the data. This finding is confirmed by other goodness of fit measures as well: The CFI (or Comparative Fit Index) presents the proportional improvement of the above model over the baseline in terms of reduction in the chi-square statistic, while the Tucker-Lewis Index (TLI) corrects the above measure to penalize near-saturated models. Larger values indicate a better model, and the value must exceed 0.90 to be acceptable. To this end, Model (4) outperforms all other models in terms of CFI, and exceeds all but Model (1) in terms of the TLI. The same pattern merges for SRMR, which takes the square root of the total squared deviations between the observed and predicted covariances. According to this measure, lower values are better and

values should not exceed 0.05. By this measure, all of the models are acceptable, but Model (4) is the best. The root mean squared error of approximation (RMSEA) uses the same information as the chi-square statistic but corrects for the fact that large sample sizes are penalized. Here Model (4) outperforms Model (2), is on par with Model (3), but is exceeded by Model (1); it is worth noting, however, that any RMSEA value exceeding 0.10 means that the model needs to be improved, so all but Model (2) are acceptable. Taken together, the model which treats the desire to share as exogenous to, but exerting an influence on, the consideration of situational pragmatics is a closer approximation of how these factors influence the ultimate decision to disclose or withhold information.

Table 6*SEM Model Comparison*

Fit Statistic	Description	Model (1)	Model (2)	Model (3)	Model (4)
Likelihood ratio					
chi2_ms(3)	model vs. saturated	7.00	116.85	5.17	2.71
p > chi2		0.07	0.00	0.08	0.10
chi2_bs(6)	baseline vs. saturated	1184.06	1155.63	1318.244	1184.06
p > chi2		0.00	0.00	0.00	0.00
Population error					
RMSEA	Root mean squared error of approximation	0.02	0.16	0.03	0.03
Information criteria					
AIC	Akaike's information criterion	26851.78	26967.64	26851.95	26851.49
Baseline comparison					
CFI	Comparative fit index	0.997	0.900	0.997	0.999
TLI	Tucker-Lewis index	0.993	0.750	0.992	0.991
Size of residuals					
SRMR	Standardized root mean squared residual	0.012	0.074	0.010	0.009

We now complement this perspective on the decision-making process with more standard regression analyses that explore the role of various traits and motives in determining the desire and propensity to share information. Given that participants answer questions about multiple scenarios, we analyze the data using a multilevel modeling approach – specifically, a two-way error-component model – to account for the (imperfectly) hierarchical structure of the data. This approach simultaneously allows for random main effects of scenario and participant. The intensity of individual i 's desire to share (DTS) scenario, j , is given by:

$$DTS_{ij} = \beta_0 + \beta_1 Negative_j + \beta_2 Damage_{ij} + \beta_3 EmotionReg_i + \beta_4 Rehearsal_i + \beta_5 SelfEnhance_i + \beta_6 Trust_i + \beta_7 FutureBiased_i + \beta_8 Male_i + \beta_9 Age_i + \zeta_{1i} + \zeta_{2j} + \epsilon_{ij}$$

where ζ_{1i} and ζ_{2j} are random intercepts for individual i and scenario j , respectively, and ϵ_{ij} is a residual error term. ζ_{1i} is shared across all scenarios for a given individual, i , and ζ_{2j} is shared by all individuals for a given scenario, j . ϵ_{ij} comprises both the interaction between individual and scenario as well as any other effects specific to individual i for scenario j .

Following Goldstein (1987), the entire dataset is modeled as an artificial level-3 unit, with participant nested at level-2 in the interest of computational efficiency. Level-3 intercepts, therefore, are specified for each scenario, resulting in 17 random coefficients associated with scenario dummy variables, each with variance equal to ψ_2 . Similarly, ψ_1 , the variance term associated with ζ_{1i} , represents the covariance between responses for the same individual i across different scenarios. Gender, age, motives, and traits are modeled as participant-level variables, as they are collected at only one occasion for each participant and are constant across observations.

The variable *Negative*, on the other hand, is a scenario-level variable that assumes a value of 1 if the scenario version is negative and 0 otherwise.

The logistic form of this model specification is subsequently applied to the outcome variable *Shared* – that is, whether an individual ultimately shared their experience with others. Desire to share is included as a regressor in this model, which assumes the following form:

$$\begin{aligned} Shared_{ij} = & \beta_0 + \beta_1 DTS_{ij} + \beta_2 Negative_j + \beta_3 Damage_{ij} + \beta_4 EmotionReg_i + \\ & \beta_5 Rehearsal_i + \beta_6 SelfEnhance_i + \beta_7 Trust_i + \beta_8 FutureBiased_i + \beta_9 Male_i + \\ & \beta_{10} Age_i + \zeta_{1i} + \zeta_{2j} + \epsilon_{ij} \end{aligned}$$

The interpretation of the fixed and random components of the results is the same in both models. We allow for a common impact on the desire and propensity to share of different regressor levels, presented in the fixed effects portion of Table 7, while allowing for individuals and scenarios to have unique intercepts. The variance of these participant- and scenario-level intercepts are captured in the random effects portion of Table 7, and the relationship between these estimates and their respective standard errors suggest that there is substantial variation both within participants and scenarios. Additionally, each model in Table 7 is accompanied by a likelihood-ratio test, which compares the mixed model to a standard regression with no group-level random effects; in other words, it assesses whether all random-effects parameters in the mixed model are simultaneously zero. The high χ^2 statistic (and low p -value) for each model suggests scenario- and participant-level factors must be taken into account. With this specification, we can be more confident that our parameter estimates account for the covariance of responses given by the same individual for different scenarios as well as the covariance of responses for a given scenario across different individuals. An alternative model specification employing an ordinary least squares (OLS) regression with no pooling at the scenario-level and

standard errors clustered at the participant-level is presented in the Appendix (Table A7) for comparison, as is a correlation table for the relationship between the mean outcome variables and all traits and motives (Table A6). We now proceed to the results.

Table 7*Multilevel Model Results*

VARIABLES	DTS (1)	Positive	Negative	Shared (4)	Shared (5)	Shared (6)	Positive	Negative
		DTS (2)	DTS (3)				Shared (7)	Shared (8)
Fixed Effects								
<i>Desire to Share (DTS)</i>				1.91** (0.07)		1.86** (0.07)	2.35** (0.23)	1.68** (0.08)
<i>Negative</i>	-0.33** (0.09)				0.84 (0.11)	1.18 (0.18)		
<i>Perceived Damage</i>	-0.16** (0.02)	-0.14** (0.03)	-0.15** (0.03)		0.91** (0.02)	0.99 (0.03)	0.97 (0.05)	1.01 (0.04)
<i>Emotion Regulation</i>	0.14** (0.03)	0.05 (0.04)	0.21** (0.04)		1.13** (0.05)	1.07 (0.05)	1.16 (0.09)	1.03 (0.06)
<i>Rehearsal</i>	0.11** (0.03)	0.15** (0.03)	0.08* (0.04)		1.10** (0.04)	1.03 (0.04)	1.12 (0.08)	0.99 (0.05)
<i>Self Enhancement</i>	0.14** (0.04)	0.24** (0.04)	0.06 (0.05)		1.06 (0.05)	1.02 (0.06)	1.03 (0.12)	1.00 (0.07)
<i>Trust</i>	0.04 (0.03)	-0.00 (0.03)	0.09* (0.04)		1.06 (0.04)	1.05 (0.04)	1.01 (0.07)	1.07 (0.05)
<i>Future-Biased</i>	-0.01 (0.02)	-0.00 (0.02)	-0.02 (0.03)		1.03 (0.03)	1.07* (0.03)	1.01 (0.06)	1.09* (0.04)
<i>Male</i>	-0.23* (0.10)	-0.13 (0.12)	-0.34* (0.15)	0.69* (0.11)	0.76* (0.10)	0.78 (0.12)	1.13 (0.28)	0.63* (0.12)
<i>Age</i>	0.00 (0.00)	-0.00 (0.00)	0.00 (0.01)	0.98** (0.01)	0.98** (0.00)	0.98** (0.01)	1.00 (0.01)	0.96** (0.01)
<i>Intercept</i>	-0.19 (0.37)	-0.38 (0.41)	-0.55 (0.53)	8.66** (3.37)	2.03 (1.01)	2.21 (1.27)	0.41 (0.71)	7.25* (5.84)
Random Effects: Scenario								
<i>Intercept (ψ_2)</i>	0.75 (0.14)	0.48 (0.18)	0.92 (0.34)	1.04 (0.38)	1.16 (0.42)	1.07 (0.40)	1.48 (0.66)	0.90 (0.37)
Random Effects: Participant								
<i>Intercept (ψ_1)</i>	0.59 (0.07)	0.29 (0.12)	0.71 (0.17)	0.84 (0.25)	0.39 (0.14)	0.67 (0.23)	0.59 (0.52)	0.47 (0.32)
<i>Residual (ϵ_{ij})</i>	2.09 (0.03)	3.16 (0.17)	4.79 (0.23)					
Observations	2,545	1,170	1,375	2,384	2,283	2,283	1,026	1,257
Participants	548	517	535	545	544	544	498	519
Scenarios	17	17	17	18	17	17	17	17
Wald chi2(9/8/8; 3/9/10/9/9)	276.41	158.67	125.56	290.60	99.52	279.39	85.74	152.21
chi2(2) (vs. linear/logit)	237.36	115.30	163.34	223.88	326.64	217.73	92.65	93.17

** $p < 0.01$, * $p < 0.05$

Coefficients for Models 4-8 presented as odds ratios.

Note: z-scores for odds ratio values (OR) are calculated as follows: $\ln(\text{OR})/\text{OR}/\text{SE}$.

The top left panel of Table 7 presents the fixed effects, taking desire to share ratings as the dependent variable. In Model 1, ratings for all scenarios are pooled, whereas Models 2 and 3 separately analyze positive and negative scenarios, respectively. In Model 1 we observe the detrimental impact of negative valence on desire to share as the highly negative coefficient on the dummy variable *Negative*. Here, a negatively-valenced scenario is associated with a decrease in *Desire to Share* rating of 0.33 (on a 10-point scale), all else equal. As in the SEM models above, *Negative* and *Damage* are highly correlated (see Tables A5 and A6) but not perfectly so, and each has an effect on *Desire to Share* independent of the other, as is demonstrated by the highly significant negative coefficients for both regressors across all three models. This captures the fact that, for instance, sharing positive information can at times be damaging if seen as bragging, and sharing negative information that is self-*ir*relevant need not entail damaging reputational consequences.

The next three variables in these models explore the extent to which agreement with different motives is correlated with the desire to share. Note that measures of the strength of these motives were collected in a different, later, part of the survey than the scenario responses from which the dependent measure derives. These variables correspond to three motives described in Berger (2014): self-enhancement, rehearsal, and emotion regulation. Each measure was developed by asking participants to indicate their level of agreement with various statements on a 10-point scale and then calculating an individual's average rating across statements related to each construct. Items under self-enhancement deal with the weight one assigns to being held in high regard by others and one's perceptions on his or her tendency to brag. Rehearsal is akin to reliving an event through sharing, and is measured as the belief that an event feels more "real"

or more special after it is told to another person. Finally, emotion regulation concerns the emotional relief that is obtained through the process of sharing information. (See Appendix Tables A4 and A5 for the specific items for these composite measures). Although all three achieve significance in Model 1, we see that the *Rehearsal* and *Self Enhancement* motives are highly associated with the desire to share *positively*-valenced information (Model 2). Put another way, those individuals who score higher on these motives report a stronger desire to share a given positive scenario than those who score lower on these motives. We similarly see that *Emotion Regulation* is a significant driver of the desire to share negative but not positive scenarios, and *Rehearsal* continues to exert influence for the desire to disclose negative scenarios, albeit it to a weaker and less significant effect (Model 3).

The models also include two measures of personality traits. Trust is measured by how much a participant feels they are aptly characterized as trusting in the good intentions of others, using a 10-point scale. Future bias is measured by responses (on the same 10-point scale) for the following statement, taken from Falk et al. (2016): “In comparison to others, I am a person who is generally willing to give up something today in order to benefit from it in the future.” We see in Model 3 that *Trust* operates exclusively on the desire to share negative information; those who exhibit higher levels of trust experience greater desire to share negative information.

Whereas time preference and age have no predictive value in terms of the desire to share, they are important factors in the decision to *act* on that desire. The right panel of Table 7 presents the results of a mixed-method logistic regression taking as the dependent variable the binary decision to share a given scenario with others (1) or not (0). The models are again pooled (Models 4 through 6) and broken out by positive and negative valence (Models 7 and 8, respectively), and include the same regressors as Models 1 through 3. In addition, however, we

have included the desire to share (*DTS*) in Models 4 and 6 through 8. The coefficients here are presented as odds ratios, such that any coefficient less than 1 indicates a lower likelihood to share than the comparison group. We see here that the effect of the motives and traits discussed above are mediated almost entirely by the desire to share, as illustrated by the dramatic reduction in the magnitude and significance of their coefficients with the inclusion of *DTS* in Models 6 through 8. Controlling for the desire to share, we see that Age and time preferences (*Future-Biased*) now play a significant role in the decision to share information. One's likelihood to share negative information is decreasing in age and with present-bias. This latter relationship is somewhat counterintuitive but may be reconciled by considering that it is measured as agreement with the statement, "In comparison to others, I am a person who is generally willing to give up something today in order to benefit from it in the future." This result makes sense to the extent that sharing negative information has immediate negative consequences but positive long-term benefits.

A very important finding from these regressions relates to the dummy variable *Male*. Existing research documents a greater propensity to share by women than by men. While the present research confirms this finding (Models 1, 4, and 5), the remaining models reveal a more nuanced gender difference. In the present sample, males exhibit a lower desire and likelihood to share a given scenario only when it involves negative information, and are equally likely to divulge positive thoughts and experiences.

Note that, because participants were asked about their desire and decision to share for only five out of the possible 18 scenarios, the vast majority of scenarios were unanswered by any given participant. We cannot assume these values are missing at random, because participants essentially opted out of answering questions about scenarios they did not experience. To address

this issue of possible selection bias, we employed Heckman's (1979) two-stage correction model.

Whether or not the dependent variable, *DTS* or *Shared*, is observed for a given participant is determined by the following selection equation:

$$e_{ij} = \gamma_0 + \gamma_1 Male_i + \gamma_2 Age_i + \gamma_3 Traits_i + \gamma_4 Motives_i + \gamma_5 Sharing_i + \gamma_6 Oversharing_i + \gamma_7 TotalDisplayed_i + u_{ij}$$

where $Traits_i$ and $Motives_i$ represent all trait and motive measures captured in the survey for a given individual, i . We also include two self-reported sharing measures, a composite measure of the sharing items and the measure of under- vs. over-sharing discussed in the previous subsection, denoted here as *Sharing* and *Oversharing*, respectively. In addition, the selection equation includes the term $TotalDisplayed_i$, a variable that captures the total number of scenarios presented to participant i over the course of the survey. This number is influenced by two factors. First, it increases as one's overall likelihood to have experiences in general decreases: any value above five suggests that there are some scenarios that a participant indicated having *not* experienced, and the larger the value, the more scenarios a participant explicitly did not experience. The second factor is the order in which scenarios are presented to a participant: to the extent that a participant happened to see scenarios that were unusual for them early in the survey, the value of this number would increase as an artefact of question order. Randomized scenario order was intended to mitigate this latter factor and, thus, $TotalDisplayed_i$ is included in the model of one's likelihood to have answered "Yes" to experiencing a scenario that he or she never actually saw in the survey. This selection equation was executed in using a probit model and the resulting Heckman's lambda, λ , is included in the models presented Appendix Table A8. The results described above are robust to the inclusion of this correction.

Discussion

The decision to share information with another person is the outcome of a complex decision-making process, contingent upon various features of the situation and information content. One key component of this decision that has been neglected in the literature is the psychological experience of the *desire* to share. This desire is itself dynamic and context-dependent, and the present research represents a first attempt at exploring the factors that bolster or moderate the desire to share, as well as to understand the role this desire plays in actual sharing behavior.

In Study 1, we find that the feeling of “dying” to tell someone something is widely experienced but does not alone perfectly predict one’s subsequent decision to share. This is evidenced by the fact that those topics that most frequently evoke an intense desire to share – namely, work-related events – are among the least likely to be ultimately shared. Similarly, both positively-valenced information and information about oneself are characteristic of the information that people are dying to share, but the interaction between these two factors is critical in determining whether or not one acts on that desire, with individuals less willing to share negative information about themselves as opposed to others.

Study 2 reveals that the desire to share information can vary in intensity, depending on the domain and emotional content of the information and the traits and demographic characteristics of the individual. Here, again, valence plays a critical role. Negative experiences are associated with a weaker desire, and sense that one is able, to disclose to others, as well as a stronger perception of possible damage from disclosure and a lower likelihood of information ultimately being shared. We also find that valence interacts with novelty: conditional on electing to share with others, increasing rarity of a positive (but not negative) experience is accompanied

by an increase in the likelihood of sharing and the number of confidantes with whom the information is shared. The desire to share negative information appears to be driven by high levels of trust and the need for emotional regulation (i.e., venting), whereas the desire to share positive information is associated with the rehearsal and self-enhancement motives.

Valence also provides a more nuanced perspective on gender differences in sharing behavior. Consistent with prior research, the present study finds robust gender differences. Female participants in Study 1 are significantly more likely than males to report a time when they were “dying” to share information with others, and female participants in Study 2 not only rate themselves significantly higher than males on self-perceived sharing measures, but also report a higher average desire, ability, and propensity to share across different scenarios. However, our model reveals that males are in fact equally likely to want to tell others about positive information and to act on that desire, but exhibit a significantly lower desire and propensity to share negative information.

Aside from the role of valence, our model reveals the importance of this psychological construct of interest – the desire to share – in understanding the decision to share information with others. This desire is highly predictive of the decision to share, and the individual characteristics and motivations presumed to drive the decision to share are almost entirely mediated by this construct. That factors such as age, gender, and time-discounting continue to influence the decision to share even when controlling for this construct suggest an avenue for future research, namely, to explore what factors explain the decision to share information above and beyond what is explained by the psychological drive alone.

Previous research has explored how people share different types of information in different motivational states, and the present study suggests that different motives drive the

desire and decision to share information of positive and negative valence. Another path for future research would be to investigate the situational factors that activate one motivational state over another, as well as how individuals behave when multiple conflicting motives are activated.

Finally, Study 1 presented respondents with a slightly different task than typically employed in prior research, which confines participants to think about specific experiences or emotional content. Instead, we ask them to think freely about the thoughts and experiences that most strongly evoke the desire to share. An alternative method for learning about what types of information people want to share is to investigate the information that people actually opt to share outside the experimental context, specifically, on the Internet. Future research might take advantage of the wealth of data available on social media sites such as Twitter and Facebook. Although it may not generalize to sharing in other contexts, this approach has high internal validity and is increasingly relevant in the Internet age.

Limitations

Study 2 addresses several of the design concerns from Study 1, but both studies have limitations. As with any sample of convenience, the participants in this study (i.e., graduates of a private university) are atypical in many ways from the general population and the sample is thus of limited economic and cultural diversity. Additionally, the nature of recruitment allows for self-selection and the possibility that responses are driven in part by unobservable characteristics. Counterpoised against the non-representativeness of the sample, this unpaid participant pool includes people who are intrinsically motivated to participate in research, and who are likely to give more thoughtful, and potentially honest, responses than those motivated by payment.

Additionally, as with any retrospective self-report, the recall task in both studies likely skews responses toward recent experiences or those that are particularly memorable. Two factors

that influence memorability are particularly relevant, as they threaten to confound the present results. The first is emotionality. In Study 2, we addressed the possibility that recall of specific types of emotional (namely, positive) experiences may be more salient in memory by specifically prompting participants to think of negative as well as positive experiences. However, it should be noted that, for all but three scenarios, we ask participants whether or not they have had the experience. Thus, any recall bias that favors positive experiences should diminish the response rate for negative scenarios. The second factor that may influence memorability is the act of sharing itself. This can operate in either of two ways. The Zeigarnik effect describes the phenomenon wherein uncompleted or interrupted tasks are remembered better than their completed or uninterrupted counterparts. This would suggest that information that was not shared would be more salient in memory. That 79% of the top-of-mind responses in Study 1 (i.e., the first instances that participants recalled) were later reported as being shared suggests that this effect might not play a substantial role in recall of sharing behavior. But we are not able to rule out the possibility that the opposite mechanism is at work, that is, that the act of sharing may make the experience more salient, or even retrospectively inflate perceptions of the desire to share at the time. Future research using behavioral data instead of self-reports is needed to address these issues.

Future Directions

Results from the studies discussed herein demonstrate that there are differences between the desire to disclose and the ultimate decision to disclose. The next step is to identify the circumstances under which they diverge and explore the reasons for their divergence. The models presented in Table 7 suggest some possible factors that might play a role, such as the self-enhancement motive and traits such as gender and age, but more should be done to explore

when one should expect actual disclosing behavior to be misaligned with the underlying desire to disclose. Another area for investigation is the persistence of a desire to disclose despite recognition of the potential for doing so to be damaging to the discloser. Future studies might explore the boundary conditions of this phenomenon, as well as the motives specifically underlying such cases and the psychological outcomes of actual disclosure under such circumstances.

The desire to share is closely related to privacy concerns, a central topic in the Internet age. We suspect that the existence of an innate psychological desire to disclose may help to explain the privacy paradox – that people profess to care deeply about privacy, yet share information with abandon. Understanding this desire may serve to enrich theory and empirics within the privacy literature and across the field of social psychology. While this study marks a first attempt at distinguishing between the *desire* and the *decision* share information, it is one of many attempts at understanding sharing behavior more broadly. In an era when technology and social media outlets offer diverse and increasingly public means for sharing information that are rapidly taken up by large segments of the population, it will likely not be the last.

References

- Acock, Alan C. (2012). What to do about missing values. In H. Cooper, P. Camic, D. Long, A. T. Panter, D. Rindskopf & K. Sher (Eds.), *APA handbook of research methods in psychology* (Vol. 3, pp. 27-50). Washington, DC: APA Books.
<http://dx.doi.org/10.1037/13621-002>.
- Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). Privacy and human behavior in the age of information. *Science*, 347(6221), 509-514. <https://doi.org/10.1126/science.aaa1465>.

- Acquisti, A., John, L. K., & Loewenstein, G. (2012). The impact of relative standards on the propensity to disclose. *Journal of Marketing Research*, 49(2), 160-174.
<http://dx.doi.org/10.1509/jmr.09.0215>.
- Acquisti, A., John, L. K., & Loewenstein, G. (2013). What is privacy worth?. *The Journal of Legal Studies*, 42(2), 249-274. <http://dx.doi.org/10.1086/671754>.
- Afifi, W. A., & Guerrero, L. K. (1998). Some things are better left unsaid II: Topic avoidance in friendships. *Communication Quarterly*, 46(3), 231-249.
<http://dx.doi.org/10.1080/01463379809370099>.
- Alexandrov, A., Lilly, B., & Babakus, E. (2013). The effects of social-and self-motives on the intentions to share positive and negative word of mouth. *Journal of the Academy of Marketing Science*, 41(5), 531-546. <http://dx.doi.org/10.1007/s11747-012-0323-4>.
- Altman, I., & Taylor, D. A. (1973). *Social penetration: The development of interpersonal relationships*. Oxford, England: Holt, Rinehart & Winston.
- Alter, A. L., & Oppenheimer, D. M. (2009). Suppressing secrecy through metacognitive ease: Cognitive fluency encourages self-disclosure. *Psychological science*, 20(11), 1414-1420.
<http://dx.doi.org/10.1111/j.1467-9280.2009.02461.x>.
- Anderson, E. W. (1998). Customer satisfaction and word of mouth. *Journal of service research*, 1(1), 5-17. <http://dx.doi.org/10.1177/109467059800100102>.
- Andalibi, N., & Forte, A. (2018, April). Announcing pregnancy loss on Facebook: A decision-making framework for stigmatized disclosures on identified social network sites. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems* (p. 158). ACM. <http://dx.doi.org/10.1145/3173574.3173732>.

- Andrade, E. B., Kaltcheva, V., & Weitz, B. (2002). Self-disclosure on the web: The impact of privacy policy, reward, and company reputation. In S. M. Broniarczyk & K. Nakamoto (Eds.), *North American Advances in Consumer Research* (Vol. 29, pp. 350-353). Valdosta, GA: Association for Consumer Research.
- Andreoni, J. (1990). Impure altruism and donations to public goods: A theory of warm-glow giving. *The economic journal*, 100(401), 464-477. <http://dx.doi.org/10.2307/2234133>.
- Argyle, M., Trimboli, L., & Forgas, J. (1988). The bank manager/doctor effect: Disclosure profiles in different relationships. *Journal of Social Psychology*, 128, 117-124. <http://dx.doi.org/10.1080/00224545.1988.9711690>.
- Armistead, L., Morse, E., Forehand, R., Morse, P., & Clark, L. (1999). African-American women and self-disclosure of HIV infection: Rates, predictors, and relationship to depressive symptomatology. *AIDS & Behavior*, 3, 195-204. <http://dx.doi.org/10.1023/A:1025400410099>.
- Baek, E. C., Scholz, C., O'Donnell, M. B., & Falk, E. B. (2017). The value of sharing information: a neural account of information transmission. *Psychological science*, 28(7), 851-861. <http://dx.doi.org/10.1177/0956797617695073>.
- Balswick, J., & Avertt, C. P. (1977). Differences in expressiveness: Gender, interpersonal orientation, and perceived parental expressiveness as contributing factors. *Journal of Marriage and the Family*, 39(1), 121-127. <http://dx.doi.org/10.2307/351068>.
- Barasch, A., & Berger, J. (2014). Broadcasting and narrowcasting: How audience size affects what people share. *Journal of Marketing Research*, 51(3), 286-299. <http://dx.doi.org/10.1509/jmr.13.0238>.

- Baumann, E. C., & Hill, C. E. (2016). Client concealment and disclosure of secrets in outpatient psychotherapy. *Counselling Psychology Quarterly*, 29(1), 53-75.
<http://dx.doi.org/10.1080/09515070.2015.1023698>.
- Baumeister, R. F., Zhang, L., & Vohs, K. D. (2004). Gossip as cultural learning. *Review of general psychology*, 8(2), 111-121. <http://dx.doi.org/10.1037/1089-2680.8.2.111>.
- Baxter, L. A., & Wilmot, W. W. (1985). Taboo topics in close relationships. *Journal of Social and Personal Relationships*, 2(3), 253-269.
<http://dx.doi.org/10.1177/0265407585023002>.
- Beersma, B., & Van Kleef, G. A. (2011). How the grapevine keeps you in line: Gossip increases contributions to the group. *Social Psychological and Personality Science*, 2(6), 642-649.
<http://dx.doi.org/10.1177/1948550611405073>.
- Berg, J. H., & Archer, R. L. (1982). Responses to self-disclosure and interaction goals. *Journal of Experimental Social Psychology*, 18(6), 501-512. [http://dx.doi.org/10.1016/0022-1031\(82\)90069-5](http://dx.doi.org/10.1016/0022-1031(82)90069-5).
- Berg, J. H., & Wright-Buckley, C. (1988). Effects of racial similarity and interviewer intimacy in a peer counseling analogue. *Journal of Counseling Psychology*, 35(4), 377-384.
<http://dx.doi.org/10.1037/0022-0167.35.4.377>.
- Berger, J. (2011). Arousal increases social transmission of information. *Psychological science*, 22(7), 891-893. <http://dx.doi.org/10.1177/0956797611413294>.
- Berger, J. (2013). Beyond viral: Interpersonal communication in the internet age. *Psychological Inquiry*, 24(4), 293-296. <http://dx.doi.org/10.1080/1047840X.2013.842203>.

- Berger, J. (2014). Word of mouth and interpersonal communication: A review and directions for future research. *Journal of Consumer Psychology*, 24(4), 586-607.
<http://dx.doi.org/10.1016/j.jcps.2014.05.002>.
- Berger, J., & Buechel, E. (2012). Facebook therapy? Why do people share self-relevant content online? Available at SSRN: <https://ssrn.com/abstract=2013148>.
<http://dx.doi.org/10.2139/ssrn.2013148>.
- Berger, J., & Heath, C. (2007). Where consumers diverge from others: Identity signaling and product domains. *Journal of Consumer Research*, 34(2), 121-134.
<http://dx.doi.org/10.1086/519142>.
- Berger, J., & Iyengar, R. (2013). Communication channels and word of mouth: How the medium shapes the message. *Journal of consumer research*, 40(3), 567-579.
<http://dx.doi.org/10.1086/671345>.
- Berger, J., & Milkman, K. L. (2012). What makes online content viral?. *Journal of marketing research*, 49(2), 192-205. <http://dx.doi.org/10.1509/jmr.10.0353>.
- Berger, J., & Schwartz, E. M. (2011). What drives immediate and ongoing word of mouth?. *Journal of Marketing Research*, 48(5), 869-880.
<http://dx.doi.org/10.1509/jmkr.48.5.869>.
- Berman, J. J., Murphy-Berman, V., & Pachauri, A. (1988). Sex differences in friendship patterns in India and in the United States. *Basic and applied social psychology*, 9(1), 61-71.
http://dx.doi.org/10.1207/s15324834basp0901_5.
- Bjørkelo, B., Einarsen, S., Nielsen, M. B., & Matthiesen, S. B. (2011). Silence is golden? Characteristics and experiences of self-reported whistleblowers. *Journal European*

- Journal of Work and Organizational Psychology*, 20(2), 206-238.
<http://dx.doi.org/10.1080/13594320903338884>.
- Bond, B. J. (2009). He Posted, She Posted: Gender Differences in Self-Disclosure on Social Network Sites. *Rocky Mountain Communication Review*, 6(2), 29-37.
- Booth, R. J., Petrie, K. J., & Pennebaker, J. W. (1997). Changes in circulating lymphocyte numbers following emotional disclosure: evidence of buffering?. *Stress medicine*, 13(1), 23-29. [http://dx.doi.org/10.1002/\(SICI\)1099-1700\(199701\)13:1<23::AID-SMI714>3.0.CO;2-E](http://dx.doi.org/10.1002/(SICI)1099-1700(199701)13:1<23::AID-SMI714>3.0.CO;2-E).
- Bos, A. E., Kanner, D., Muris, P., Janssen, B., & Mayer, B. (2009). Mental illness stigma and disclosure: Consequences of coming out of the closet. *Issues in Mental Health Nursing*, 30(8), 509-513. <http://dx.doi.org/10.1080/01612840802601382>.
- Bozett, F. (1980). Gay Fathers: How and Why They Disclose Their Homosexuality to Their Children. *Family Relations*, 29(2), 173-179. <http://dx.doi.org/10.2307/584068>.
- Brundage, L. E., Derlega, V. J., & Cash, T. F. (1977). The Effects of Physical Attractiveness and Need for Approval on Self-Disclosure. *Personality and Social Psychology Bulletin*, 3(1), 63-6. <http://dx.doi.org/10.1177/014616727600300108>.
- Buchanan, T., Paine, C., Joinson, A. N., & Reips, U. D. (2007). Development of measures of online privacy concern and protection for use on the Internet. *Journal of the American society for information science and technology*, 58(2), 157-165.
<http://dx.doi.org/10.1002/asi.20459>.
- Butler, E. A., Egloff, B., Wilhelm, F. H., Smith, N. C., Erickson, E. A., & Gross, J. J. (2003). The social consequences of expressive suppression. *Emotion*, 3, 48 – 67.
<http://dx.doi.org/10.1037/1528-3542.3.1.48>.

- Chelune, G. J. (1977). Disclosure flexibility and social-situational perceptions. *Journal of Consulting and Clinical Psychology, 45*(6), 1139-1143. <http://dx.doi.org/10.1037/0022-006X.45.6.1139>.
- Chen, Z., & Berger, J. (2013). When, why, and how controversy causes conversation. *Journal of Consumer Research, 40*(3), 580-593. <http://dx.doi.org/10.1086/671465>.
- Chung, C. M., & Darke, P. R. (2006). The consumer as advocate: Self-relevance, culture, and word-of-mouth. *Marketing Letters, 17*(4), 269-279. <http://dx.doi.org/10.1007/s11002-006-8426-7>.
- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: a meta-analytic review. *Psychological bulletin, 116*(3), 457. <http://dx.doi.org/10.1037/0033-2909.116.3.457>.
- Consedine, N. S., Sabag-Cohen, S., & Krivoshekova, Y. S. (2007). Ethnic, gender, and socioeconomic differences in young adults' self-disclosure: Who discloses what and to whom?. *Cultural Diversity and Ethnic Minority Psychology, 13*(3), 254-263. <http://dx.doi.org/10.1037/1099-9809.13.3.254>.
- Cooney, G., Gilbert, D. T., & Wilson, T. D. (2017). The Novelty Penalty: Why Do People Like Talking About New Experiences but Hearing About Old Ones?. *Psychological science, 28*(3), 380-394. <http://dx.doi.org/10.1177/0956797616685870>.
- Corrigan, P. W., Larson, J. E., Hautamaki, J., Matthews, A., Kuwabara, S., Rafacz, J., Walton, J., Wassel, A., & O'Shaughnessy, J. (2009). What lessons do coming out as gay men or lesbians have for people stigmatized by mental illness?. *Community Mental Health Journal, 45*(5), 366-374. <http://dx.doi.org/10.1007/s10597-009-9187-6>.
- Corrigan, P. W., Morris, S., Larson, J., Rafacz, J., Wassel, A., Michaels, P., Wassel, A., Michaels, P., Wilkniss, S., Batia, K., & Rüsch, N. (2010). Self-stigma and coming out

- about one's mental illness. *Journal of community psychology*, 38(3), 259-275.
<http://dx.doi.org/10.1002/jcop.20363>.
- Cozby, P. C. (1973). Self-disclosure: a literature review. *Psychological bulletin*, 79(2), 73.
<http://dx.doi.org/10.1037/h0033950>.
- Cravens, R. W. (1975). The need for approval and the private versus public disclosure of self. *Journal of personality*, 43(3), 503-514. <http://dx.doi.org/10.1111/j.1467-6494.1975.tb00718.x>.
- Dailey, R. M., & Palomares, N. A. (2004). Strategic topic avoidance: An investigation of topic avoidance frequency, strategies used, and relational correlates. *Communication Monographs*, 71(4), 471-496. <http://dx.doi.org/10.1080/0363452042000307443>.
- Davey, A., & Savla, J. (2010). *Statistical power analysis with missing data: A structural equation modeling approach*. New York, NY, US: Routledge/Taylor & Francis Group.
<http://dx.doi.org/10.4324/9780203866955>.
- De Angelis, M. D., Bonezzi, A., Peluso, A. M., Rucker, D. D., & Costabile, M. (2012). On braggarts and gossips: A self-enhancement account of word-of-mouth generation and transmission. *Journal of Marketing Research*, 49(4), 551-563.
<http://dx.doi.org/10.1509/jmr.11.0136>.
- De Matos, C. A., & Rossi, C. A. V. (2008). Word-of-mouth communications in marketing: a meta-analytic review of the antecedents and moderators. *Journal of the Academy of Marketing Science*, 36(4), 578-596. <http://dx.doi.org/10.1007/s11747-008-0121-1>.
- Derlega, V. J., & Grzelak, J. (1979). Appropriateness of self-disclosure. *Self-disclosure: Origins, patterns, and implications of openness in interpersonal relationships*, 151-176.

- Derlega, V. J., Winstead, B. A., Wong, P. T., & Hunter, S. (1985). Gender effects in an initial encounter: A case where men exceed women in disclosure. *Journal of Social and Personal Relationships*, 2(1), 25-44. <http://dx.doi.org/10.1177/0265407585021002>.
- Dindia, K., & Allen, M. (1992). Sex differences in self-disclosure: A meta-analysis. *Psychological bulletin*, 112(1), 106. <http://dx.doi.org/10.1037/0033-2909.112.1.106>.
- Dutton, Y. C., & Heath, C. (2011). Why Are Some Cultural Variants More Successful Than Others?. M. Schaller, A. Norenzayan, S. J. Heine, T. Yamagishi, & T. Kameda (Eds.) *Evolution, culture, and the human mind*. New York, NY: Taylor & Francis Group Psychology Press.
- Ehrlich, H. J., & Graeven, D. B. (1971). Reciprocal self-disclosure in a dyad. *Journal of Experimental Social Psychology*, 7(4), 389-400. [http://dx.doi.org/10.1016/0022-1031\(71\)90073-4](http://dx.doi.org/10.1016/0022-1031(71)90073-4).
- Eisingerich, A. B., Chun, H. H., Liu, Y., Jia, H., & Bell, S. J. (2015). Why recommend a brand face-to-face but not on Facebook? How word-of-mouth on online social sites differs from traditional word-of-mouth. *Journal of Consumer Psychology*, 25(1), 120-128. <http://dx.doi.org/10.1016/j.jcps.2014.05.004>.
- Emler, N. (1994). Gossip, reputation, and social adaptation. In R. F. Goodman & A. Ben-Ze'ev (Eds.), *Good gossip* (pp. 117-138). Lawrence, KS: University Press of Kansas.
- Ensari, N., & Miller, N. (2002). The out-group must not be so bad after all: the effects of disclosure, typicality, and salience on intergroup bias. *Journal of personality and social psychology*, 83(2), 313-329. <http://dx.doi.org/10.1037/0022-3514.83.2.313>.

- Falk, A., Becker, A., Dohmen, T., Huffman, D., & Sunde, U. (2016). The preference survey module: A validated instrument for measuring risk, time, and social preferences.
- Foster, E. K. (2004). Research on gossip: Taxonomy, methods, and future directions. *Review of general psychology*, 8(2), 78-99. <http://dx.doi.org/10.1037/1089-2680.8.2.78>.
- Frattaroli, J. (2006). Experimental disclosure and its moderators: a meta-analysis. *Psychological bulletin*, 132(6), 823. <http://dx.doi.org/10.1037/0033-2909.132.6.823>.
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of personality and social psychology*, 87(2), 228. <http://dx.doi.org/10.1037/0022-3514.87.2.228>.
- Gluckman, M. (1963). Papers in honor of Melville J. Herskovits: Gossip and scandal. *Current anthropology*, 4(3), 307-316. <http://dx.doi.org/10.1086/200378>.
- Goldstein, H. (1987). Multilevel covariance component models. *Biometrika*, 74, 430-432. <http://dx.doi.org/10.1093/biomet/74.2.430>.
- Greenberg, M. A., & Stone, A. A. (1992). Emotional disclosure about traumas and its relation to health: Effects of previous disclosure and trauma severity. *Journal of personality and social psychology*, 63(1), 75-84. <http://dx.doi.org/10.1037/0022-3514.63.1.75>.
- Greene, K., Derlega, V. J., & Mathews, A. (2006). Self-disclosure in personal relationships. *The Cambridge handbook of personal relationships*, 409-427. <http://dx.doi.org/10.1017/CBO9780511606632.023>.
- Guerrero, L. K., & Afifi, W. A. (1995). Some things are better left unsaid: Topic avoidance in family relationships. *Communication quarterly*, 43(3), 276-296. <http://dx.doi.org/10.1080/01463379509369977>.

- Harper, V. B., & Harper, E. J. (2006). Understanding Student Self-Disclosure Typology through Blogging. *The Qualitative Report*, 11(2), 251-261.
- Heath, C. (1996). Do people prefer to pass along good or bad news? Valence and relevance of news as predictors of transmission propensity. *Organizational behavior and human decision processes*, 68(2), 79-94. <http://dx.doi.org/10.1006/obhd.1996.0091>.
- Heath, C., Bell, C., & Sternberg, E. (2001). Emotional selection in memes: the case of urban legends. *Journal of personality and social psychology*, 81(6), 1028. <http://dx.doi.org/10.1037/0022-3514.81.6.1028>.
- Heckman, J. J. (1979). Sample selection bias as a specification error. *Econometrica*, 47(1), 153-161. <http://dx.doi.org/10.2307/1912352>.
- Hilton, D. J. (1995). The social context of reasoning: Conversational inference and rational judgment. *Psychological Bulletin*, 118(2), 248- 271. <http://dx.doi.org/10.1037/0033-2909.118.2.248>.
- Himelstein, P., & Kimbrough Jr, W. W. (1963). A study of self-disclosure in the classroom. *The Journal of Psychology*, 55(2), 437-440. <http://dx.doi.org/10.1080/00223980.1963.9916637>.
- Hurley, J. R., & Hurley, S. J. (1969). Toward authenticity in measuring self-disclosure. *Journal of Counseling Psychology*, 16(3), 271-274. <http://dx.doi.org/10.1037/h0027390>.
- James, D., & Drakich, J. (1993). Understanding gender differences in amount of talk: A critical review of research. In D. Tannen (Ed.), *Oxford studies in sociolinguistics. Gender and conversational interaction* (p. 281–312). Oxford University Press.

- Jansen, B. J., Zhang, M., Sobel, K., & Chowdury, A. (2009). Twitter power: Tweets as electronic word of mouth. *Journal of the American society for information science and technology*, 60(11), 2169-2188. <http://dx.doi.org/10.1002/asi.21149>.
- John, L. K., Acquisti, A., & Loewenstein, G. (2010). Strangers on a plane: Context-dependent willingness to divulge sensitive information. *Journal of consumer research*, 37(5), 858-873. <http://dx.doi.org/10.1086/656423>.
- Joinson, A. N. (2001). Self-disclosure in computer-mediated communication: The role of self-awareness and visual anonymity. *European Journal of Social Psychology*, 31, 177-192. <http://dx.doi.org/10.1002/ejsp.36>.
- Joinson, A. N., & Paine, C. B. (2007). Self-disclosure, privacy and the internet. In A. N. Joinson, K. Y. A. McKenna, T. Postmes, & U. Reips (Eds.), *The Oxford handbook of Internet psychology* (pp. 237-252). Great Britain: Oxford University Press.
- Jourard, S. M. (1971). *The transparent self* (pp. 133-152). New York: Van Nostrand Reinhold.
- Jourard, S. M., & Lasakow, P. (1958). Some factors in self-disclosure. *The Journal of Abnormal and Social Psychology*, 56(1), 91-98. <http://dx.doi.org/10.1037/h0043357>.
- Kaptein, M. (2011). From inaction to external whistleblowing: The influence of the ethical culture of organizations on employee responses to observed wrongdoing. *Journal of Business Ethics*, 98(3), 513-530. <http://dx.doi.org/10.1007/s10551-010-0591-1>.
- Kaushansky, D., Cox, J., Dodson, C., McNeeley, M., Kumar, S., & Iverson, E. (2017). Living a secret: Disclosure among adolescents and young adults with chronic illnesses. *Chronic illness*, 13(1), 49-61. <http://dx.doi.org/10.1177/1742395316655855>.

- Kelly, A. E., & Achter, J. A. (1995). Self-concealment and attitudes toward counseling in university students. *Journal of Counseling Psychology, 42*(1), 40-46.
<http://dx.doi.org/10.1037/0022-0167.42.1.40>.
- Kelly, A. E., & McKillop, K. J. (1996). Consequences of revealing personal secrets. *Psychological Bulletin, 120*(3), 450-465. <http://dx.doi.org/10.1037/0033-2909.120.3.450>.
- King, G., III. (1999). The implications of an organization's structure on whistleblowing. *Journal of Business Ethics, 20*(4), 315-326. <http://dx.doi.org/10.1023/A:1006028417000>.
- Klein, K., & Boals, A. (2001). Expressive writing can increase working memory capacity. *Journal of Experimental Psychology: General, 130*, 520-533.
<http://dx.doi.org/10.1037/0096-3445.130.3.520>.
- Krasnova, H., Spiekermann, S., Koroleva, K., & Hildebrand, T. (2010). Online social networks: Why we disclose. *Journal of Information Technology, 25*(2), 109-125.
<http://dx.doi.org/10.1057/jit.2010.6>.
- Krippendorff, K. (2011). Agreement and Information in the Reliability of Coding. *Communication Methods and Measures, 5* (2), 93-112.
<http://dx.doi.org/10.1080/19312458.2011.568376>.
- Lambert, N. M., Gwinn, A. M., Baumeister, R. F., Strachman, A., Washburn, I. J., Gable, S. L., & Fincham, F. D. (2013). A boost of positive affect: The perks of sharing positive experiences. *Journal of Social and Personal Relationships, 30*(1), 24-43.
<http://dx.doi.org/10.1177/0265407512449400>.
- Lampel, J., & Bhalla, A. (2007). The role of status seeking in online communities: Giving the gift of experience. *Journal of computer-mediated communication, 12*(2), 434-455.
<http://dx.doi.org/10.1111/j.1083-6101.2007.00332.x>.

- Langston, C. A. (1994). Capitalizing on and coping with daily-life events: Expressive responses to positive events. *Journal of Personality and Social Psychology*, 67(6), 1112-1125.
<http://dx.doi.org/10.1037/0022-3514.67.6.1112>.
- Laufer, R. S., & Wolfe, M. (1977). Privacy as a concept and a social issue: A multidimensional developmental theory. *Journal of social Issues*, 33(3), 22-42.
<http://dx.doi.org/10.1111/j.1540-4560.1977.tb01880.x>.
- Leary, M. R. (1983). A brief version of the Fear of Negative Evaluation Scale. *Personality and Social Psychology Bulletin*, 9(3), 371-375. <http://dx.doi.org/10.1177/0146167283093007>.
- Lepore, S. J., Ragan, J. D., & Jones, S. (2000). Talking facilitates cognitive–emotional processes of adaptation to an acute stressor. *Journal of personality and social psychology*, 78(3), 499-508. <http://dx.doi.org/10.1037/0022-3514.78.3.499>.
- Lowry, P. B., Cao, J., & Everard, A. (2011). Privacy concerns versus desire for interpersonal awareness in driving the use of self-disclosure technologies: The case of instant messaging in two cultures. *Journal of Management Information Systems*, 27(4), 163-200.
<http://dx.doi.org/10.2753/MIS0742-1222270406>.
- Lowry, P. B., Moody, G. D., Galletta, D. F., & Vance, A. (2013). The drivers in the use of online whistle-blowing reporting systems. *Journal of Management Information Systems*, 30(1), 153-190. <http://dx.doi.org/10.2753/MIS0742-1222300105>.
- Lubin, B., & Harrison, R. L. (1964). Predicting small group behavior with the self-disclosure inventory. *Psychological Reports*, 15(1), 77-78.
<http://dx.doi.org/10.2466/pr0.1964.15.1.77>.

- Lundholm, R., & Van Winkle, M. (2006). Motives for disclosure and non-disclosure: a framework and review of the evidence. *Accounting and Business Research*, 36(sup1), 43-48. <http://dx.doi.org/10.1080/00014788.2006.9730044>.
- Luminet IV, O., Bouts, P., Delie, F., Manstead, A. S., & Rimé, B. (2000). Social sharing of emotion following exposure to a negatively valenced situation. *Cognition & Emotion*, 14(5), 661-688. <http://dx.doi.org/10.1080/02699930050117666>.
- Luminet, O., Zech, E., Rimé, B., & Wagner, H. (2000). Predicting cognitive and social consequences of emotional episodes: The contribution of emotional intensity, the five factor model, and alexithymia. *Journal of Research in Personality*, 34(4), 471-497. <http://dx.doi.org/10.1006/jrpe.2000.2286>.
- MacIntyre, P. D. (1994). Variables underlying willingness to communicate: A causal analysis. *Communication Research Reports*, 11(2), 135-142. <http://dx.doi.org/10.1080/08824099409359951>.
- Marcellin, F., Suzan-Monti, M., Vilotitch, A., Sagaon-Teyssier, L., Mora, M., Dray-Spira, R., Préau, M., Lert, F., Spire, B., & ANRS VESPA2 Study Group. (2017). Disclosure of HIV status beyond sexual partners by people living with HIV in France: a call for help? Results from the national cross-sectional survey ANRS-VESPA2. *AIDS and Behavior*, 21(1), 196-206. <http://dx.doi.org/10.1007/s10461-016-1549-9>.
- Masiliūnas, A. (2017). Overcoming coordination failure in a critical mass game: strategic motives and action disclosure. *Journal of Economic Behavior & Organization*, 139, 214-251. <http://dx.doi.org/10.1016/j.jebo.2017.04.018>.

- Matthews, A. K., & Peterman, A. H. (1998). Improving provision of effective treatment for racial and cultural minorities. *Psychotherapy: Theory, Research, Practice, Training*, 35, 291–305. <http://dx.doi.org/10.1037/h0087762>.
- McCroskey, J. C. (1992). Reliability and validity of the willingness to communicate scale. *Communication Quarterly*, 40(1), 16-25. <http://dx.doi.org/10.1080/01463379209369817>.
- Mehrabian, A. (1976). Questionnaire measures of affiliative tendency and sensitivity to rejection. *Psychological Reports*, 38(1), 199-209. <http://dx.doi.org/10.2466/pr0.1976.38.1.199>.
- Mesmer-Magnus, J. R., & Viswesvaran, C. (2005). Whistleblowing in organizations: An examination of correlates of whistleblowing intentions, actions, and retaliation. *Journal of business ethics*, 62(3), 277-297. <http://dx.doi.org/10.1007/s10551-005-0849-1>.
- Miceli, M. P., & Near, J. P. (1988). Individual and situational correlates of whistleblowing. *Personnel Psychology*, 41(2), 267-281. <http://dx.doi.org/10.1111/j.1744-6570.1988.tb02385.x>.
- Miller, N. (2002). Personalization and the promise of contact theory. *Journal of Social Issues*, 58(2), 387-410. <http://dx.doi.org/10.1111/1540-4560.00267>.
- Morrison, L. L., & Downey, D. L. (2000). Racial differences in self-disclosure of suicidal ideation and reasons for living: Implications for training. *Cultural Diversity & Ethnic Minority Psychology*, 6, 374 –386. <http://dx.doi.org/10.1037/1099-9809.6.4.374>.
- Mosher, C. M. (2001). The social implications of sexual identity formation and the coming-out process: A review of the theoretical and empirical literature. *The Family Journal*, 9(2), 164-173. <http://dx.doi.org/10.1177/1066480701092011>.

- Near, J. P., & Miceli, M. P. (1985). Organizational dissidence: The case of whistle-blowing. *Journal of Business Ethics*, 4(1), 1-16. <http://dx.doi.org/10.1007/BF00382668>.
- Nevo, O., Nevo, B., & Derech-Zehavi, A. (1993). The development of the tendency to gossip questionnaire: Construct and concurrent validation for a sample of Israeli college students. *Educational and Psychological Measurement*, 53(4), 973-981. <http://dx.doi.org/10.1177/0013164493053004010>.
- Nielsen. (2012). Consumer trust in online, social and mobile advertising grows. Retrieved from <https://www.nielsen.com/us/en/insights/news/2012/consumer-trust-in-online-social-and-mobile-advertising-grows.html>.
- Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological review*, 84(3), 231-259. <http://dx.doi.org/10.1037/0033-295X.84.3.231>.
- Omarzu, J. (2000). A disclosure decision model: Determining how and when individuals will self-disclose. *Personality and Social Psychology Review*, 4(2), 174-185. http://dx.doi.org/10.1207/S15327957PSPR0402_05.
- Pachankis, J. E., Cochran, S. D., & Mays, V. M. (2015). The mental health of sexual minority adults in and out of the closet: A population-based study. *Journal of consulting and clinical psychology*, 83(5), 890-901. <http://dx.doi.org/10.1037/ccp0000047>
- Paine, R. (1967). What is gossip about? An alternate hypothesis. *Man*, 2, 278-285. <http://dx.doi.org/10.2307/2799493>.
- Paine, C., Joinson, A. N., Buchanan, T., & Reips, U. D. (2006). Privacy and self-disclosure online. In *CHI'06 Extended Abstracts on Human Factors in Computing Systems* (April) (pp. 1187-1192). ACM. <http://dx.doi.org/10.1145/1125451.1125674>.

- Pennebaker, J. W. (1997). *Opening up: The healing power of emotional expression*. New York: Guilford.
- Pennebaker, J.W., Booth, R.J., Boyd, R.L., & Francis, M.E. (2015). Linguistic Inquiry and Word Count: LIWC2015. Austin, TX: Pennebaker Conglomerates (www.LIWC.net).
- Petronio, S. (1991). Communication boundary management: A theoretical model of managing disclosure of private information between marital couples. *Communication theory*, 1(4), 311-335. <http://dx.doi.org/10.1111/j.1468-2885.1991.tb00023.x>.
- Powell, A. E., Camilleri, A. R., Dobeles, A. R., & Stavros, C. (2017). Developing a scale for the perceived social benefits of sharing. *Journal of Consumer Marketing*, 34(6), 496-504. <http://dx.doi.org/10.1108/JCM-03-2017-2124>.
- Quattrone, G. A., & Jones, E. E. (1978). Selective self-disclosure with and without correspondent performance. *Journal of Experimental Social Psychology*, 14(6), 511-526. [http://dx.doi.org/10.1016/0022-1031\(78\)90046-X](http://dx.doi.org/10.1016/0022-1031(78)90046-X).
- Reis, H. T., Smith, S. M., Carmichael, C. L., Caprariello, P. A., Tsai, F. F., Rodrigues, A., & Maniaci, M. R. (2010). Are you happy for me? How sharing positive events with others provides personal and interpersonal benefits. *Journal of Personality and Social Psychology*, 99, 311-329. <http://dx.doi.org/10.1037/a0018344>.
- Rimé, B. (1989). Le partage social des émotions [The social sharing of emotion]. In B. Rimé & K. Scherer (Eds.), *Les émotions* (pp. 271–303). Neuchâtel: Delachaux et Niestlé.
- Rimé, B., Mesquita, B., Boca, S., & Philippot, P. (1991). Beyond the emotional event: Six studies on the social sharing of emotion. *Cognition & Emotion*, 5(5-6), 435-465. <http://dx.doi.org/10.1080/02699939108411052>.

- Ritson, M., & Elliott, R. (1999). The social uses of advertising: an ethnographic study of adolescent advertising audiences. *Journal of Consumer Research*, 26(3), 260-277. <http://dx.doi.org/10.1086/209562>.
- Rose, J. M., Brink, A. G., & Norman, C. S. (2018). The effects of compensation structures and monetary rewards on managers' decisions to blow the whistle. *Journal of Business Ethics*, 150(3), 853-862. <http://dx.doi.org/10.1007/s10551-016-3222-7>.
- Rosenberg, M. (1965). Rosenberg self-esteem scale (RSE). *Acceptance and commitment therapy. Measures package*, 61, 52. <http://dx.doi.org/10.1037/t01038-000>.
- Rubin, D. B. (1987). *Multiple imputation for nonresponse in surveys*. New York, NY: Wiley. <http://dx.doi.org/10.1002/9780470316696>.
- Schwarz, N. (1999). Self-reports: how the questions shape the answers. *American psychologist*, 54(2), 93-105. <http://dx.doi.org/10.1037/0003-066X.54.2.93>.
- Serovich, J. M. (2001). A test of two HIV disclosure theories. *AIDS Education and Prevention*, 13(4), 355-364. <http://dx.doi.org/10.1521/aeap.13.4.355.21424>.
- Sheldon, P. (2013). Examining gender differences in self-disclosure on Facebook versus face-to-face. *The Journal of Social Media in Society*, 2(1), 88-105.
- Stokes, J., Childs, L., & Fuehrer, A. (1981). Gender and sex roles as predictors of self-disclosure. *Journal of Counseling Psychology*, 28, 510–514. <http://dx.doi.org/10.1037/0022-0167.28.6.510>.
- Tamir, D. I., & Mitchell, J. P. (2012). Disclosing information about the self is intrinsically rewarding. *Proceedings of the National Academy of Sciences*, 109(21), 8038-8043. <http://dx.doi.org/10.1073/pnas.1202129109>.

- Tourangeau, R. (2004). Survey research and societal change. *Annual Review of Psychology*, 55, 775-801. <http://dx.doi.org/10.1146/annurev.psych.55.090902.142040>.
- Vadera, A. K., Aguilera, R. V., & Caza, B. B. (2009). Making sense of whistle-blowing's antecedents: Learning from research on identity and ethics programs. *Business Ethics Quarterly*, 19(4), 553-586. <http://dx.doi.org/10.5840/beq200919432>.
- Vondracek, F. W. (1969). Behavioral measurement of self-disclosure. *Psychological Reports*, 25, 914. <http://dx.doi.org/10.2466/pr0.1969.25.3.914>.
- Waldner, L. K., & Magrader, B. (1999). Coming out to parents: Perceptions of family relations, perceived resources, and identity expression as predictors of identity disclosure for gay and lesbian adolescents. *Journal of homosexuality*, 37(2), 83-100.
- Walker, W. R., Vogl, R. J., & Thompson, C. P. (1997). Autobiographical memory: Unpleasantness fades faster than pleasantness over time. *Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition*, 11(5), 399-413. [http://dx.doi.org/10.1002/\(SICI\)1099-0720\(199710\)11:5<399::AID-ACP462>3.0.CO;2-E](http://dx.doi.org/10.1002/(SICI)1099-0720(199710)11:5<399::AID-ACP462>3.0.CO;2-E).
- Wert, S. R., & Salovey, P. (2004). A social comparison account of gossip. *Review of General Psychology*, 8(2), 122-137. <http://dx.doi.org/10.1037/1089-2680.8.2.122>.
- Westbrook, R. A. (1987). Product/consumption-based affective responses and postpurchase processes. *Journal of marketing research*, 258-270. <http://dx.doi.org/10.1177/002224378702400302>.
- Wilson, D. S., Wilczynski, C., Wells, A., & Weiser, L. (2000). Gossip and other aspects of language as group-level adaptations. *The evolution of cognition*, 347-365.

- Yoshioka, M. R., Gilbert, L., El-Bassel, N., & Baig-Amin, M. (2003). Social support and disclosure of abuse: Comparing South Asian, African American, and Hispanic battered women. *Journal of family violence, 18*(3), 171-180.
<http://dx.doi.org/10.1023/A:1023568505682>.
- Yu, H., A. Sirsat, S., & Neal, J. A. (2019). Linking food safety training with whistle-blowing: The mediation roles of job satisfaction and self-efficacy. *International Journal of Contemporary Hospitality Management, 31*(1), 141-160.
<http://dx.doi.org/10.1108/IJCHM-10-2017-0689>.
- Zech, E., Rimé, B., & Nils, F. (2004). Social sharing of emotion, emotional recovery, and interpersonal aspects. *The regulation of emotion, 157-185*.

Appendix

Table A1*Coded Responses for Event Descriptions (By Age)*

	Age Group			
	18-24 (N = 5)	25-44 (N = 100)	45-64 (N = 107)	Over 65 (N = 51)
Job change (e.g., job offer, quitting/fired)	0.0%	12.0%	13.1%	15.7%
News about company/coworkers	40.0%	13.0%	14.0%	5.9%
Birth or discovery of pregnancy/baby's gender	0.0%	10.0%	5.6%	9.8%
Medical information/diagnosis	0.0%	3.0%	8.4%	9.8%
Success/good news (general)	0.0%	6.0%	4.7%	7.8%
Judging other's behavior/misconduct	0.0%	8.0%	3.7%	2.0%
News about love/dating/flirtation	20.0%	7.0%	4.7%	2.0%
Academic success (e.g., admittance, graduation)	20.0%	2.0%	5.6%	2.0%
News of engagement or marriage	0.0%	2.0%	4.7%	5.9%
Relationship trouble (e.g., divorce/cheating)	0.0%	2.0%	5.6%	3.9%
Entertainment, news, or cultural event	0.0%	6.0%	0.9%	2.0%
Travel plans/experiences	0.0%	3.0%	0.9%	2.0%
Death/murder/suicide	0.0%	2.0%	1.9%	3.9%
Epiphany (e.g., personal, spiritual)	0.0%	3.0%	1.9%	2.0%
Little [trivial] things/facts	20.0%	2.0%	1.9%	2.0%
Relocation to a new home or home renovations	0.0%	3.0%	1.9%	3.9%
Traumatic event/"close call"	0.0%	1.0%	1.9%	5.9%
Chance [re]encounter / celebrity sighting	0.0%	3.0%	1.9%	0.0%
Gossip (general)	0.0%	2.0%	1.9%	2.0%
Social tension/negative social encounter	0.0%	3.0%	0.9%	3.9%
"Coming out" (i.e., sexual orientation, gender identity)	0.0%	1.0%	2.8%	0.0%
Family news or events	0.0%	2.0%	2.8%	0.0%
Family "drama"	0.0%	1.0%	0.9%	3.9%
Inside joke/relevant to recent discussion	0.0%	1.0%	1.9%	2.0%
Alcohol/substance abuse	0.0%	1.0%	1.9%	0.0%
Gift/new purchase	0.0%	0.0%	1.9%	2.0%
Total	100%	100%	100%	100%

Note: Significance tested using Tukey HSD pairwise comparisons. No significant group differences emerge.

Table A2*Coded Responses for Event Descriptions (By Gender)*

	Female (<i>N</i> = 153)	Male (<i>N</i> = 107)
Job change (e.g., job offer, quitting/fired)	9.8%	17.8%
News about company/coworkers	10.5%	15.9%
Birth or discovery of pregnancy/baby's gender	10.5%	4.7%
Medical information/diagnosis	7.8%	3.7%
Success/good news (general)	3.9%	7.5%
Judging other's behavior/misconduct	5.9%	3.7%
News about love/dating/flirtation	5.9%	4.7%
Academic success (e.g., admittance, graduation)	3.9%	3.7%
News of engagement or marriage	4.6%	2.8%
Relationship trouble (e.g., divorce/cheating)	5.2%	1.9%
Entertainment, news, or cultural event	2.6%	3.7%
Travel plans/experiences	0.0%	4.7% **
Death/murder/suicide	1.3%	3.7%
Epiphany (e.g., personal, spiritual)	1.3%	3.7%
Little [trivial] things/facts	2.6%	1.9%
Relocation to a new home or home renovations	2.0%	3.7%
Traumatic event/"close call"	2.6%	1.9%
Chance [re]encounter / celebrity sighting	1.3%	2.8%
Gossip (general)	2.6%	0.9%
Social tension/negative social encounter	3.9% *	0.0%
"Coming out" (i.e., sexual orientation, gender identity)	1.3%	1.9%
Family news or events	3.3%	0.0%
Family "drama"	2.0%	0.9%
Inside joke/relevant to recent discussion	2.0%	0.9%
Alcohol/substance abuse	1.3%	0.0%
Gift/new purchase	1.3%	0.9%
Total	100%	100%

** $p < 0.01$, * $p < 0.05$

Table A3*Complete Participant Demographics*

	N	%
<i>Age</i>		
18-34	115	20.8%
35-50	186	33.7%
51-64	136	24.6%
65 or older	115	20.8%
<i>Gender</i>		
Female	288	52.2%
Male	260	47.1%
Other/Prefer not to answer	4	0.7%
<i>Ethnicity</i>		
Caucasian	439	79.5%
Asian	55	10.0%
Other/Prefer not to answer	58	10.5%
<i>Marital Status</i>		
Married	367	66.5%
Single/never married	74	13.4%
Partner/committed relationship	61	11.1%
Divorced	33	6.0%
Other/Prefer not to answer	17	3.0%
<i>Education</i>		
Doctoral/professional degree	318	57.6%
Master's degree	117	21.2%
Bachelor's degree	97	17.6%
Less than a bachelor's degree	20	3.6%
<i>Employment Status</i>		
Employed full-time	368	66.7%
Retired	95	17.2%
Employed part-time	42	7.6%
Unemployed	28	5.1%
Other/Prefer not to answer	19	3.1%

Table A4*Construction of Independent Variables: Traits*

Please indicate how well each of the following statements describe you as a person.
Scale: 0 (“Does not describe me at all”) to 10 (“Describes me perfectly”)

Variable	N	Mean	SD	Min	Max
Self-Perceived Sharing	552	4.63	2.08	0	10
I sometimes catch myself sharing too much information with others.	552	4.63	2.86	0	10
It takes a long time for people to get to know me. [†]	552	4.59	2.66	0	10
People would generally describe me as a private person. [†]	552	4.67	2.80	0	10
Trust (Falk et al. 2016)	552	4.82	2.02	0	10
As long as I am not convinced otherwise, I assume that people have only the best intentions.	552	6.02	2.54	0	10
I feel that I can trust other people with intimate information about myself.	552	3.62	2.44	0	10
Affiliative Tendency (Mehrabian 1976)	552	6.35	1.87	0	10
I am much more attracted to warm, open people than I am to standoffish ones.	552	6.82	2.46	0	10
I would rather read an interesting book or go to the movies than spend time with friends. [†]	552	5.87	2.47	0	10
Time Discounting (Falk et al. 2016)	552	6.58	2.39	0	10
In comparison to others, I am a person who is generally willing to give up something today in order to benefit from it in the future.	552	4.68	2.47	0	10
Fear of Negative Evaluation (Leary 1983)	552	4.30	3.11	0	10
I am frequently afraid that other people will notice my shortcomings.	552	4.03	2.99	0	10
I am afraid others will not approve of me.	552	5.71	2.71	0	10
If I know someone is judging me, it has little effect on me. [†]	552	7.58	1.65	0	10
Self Esteem (Rosenberg 1965)	552	6.84	3.11	0	10
I wish I could have more respect for myself. [†]	552	8.03	1.75	0	10
I feel that I have a number of good qualities.	552	7.73	1.93	0	10
I am able to do things as well as most other people.	552	7.89	2.66	0	10
I feel that I do not have much to be proud of. [†]	552	7.42	2.15	0	10
On the whole, I am satisfied with myself.	552	4.63	2.08	0	10

[†]Items were recoded such that higher scores reflect greater levels of the trait of interest.

Table A5*Construction of Independent Variables: Motivations*

Please indicate your level of agreement with each of the following statements. Scale: 0 (“Strongly disagree”) to 10 (“Strongly agree”)					
Variable	N	Mean	SD	Min	Max
Self-Enhancement	552	5.63	1.60	0	10
It is very important to me that other people have a positive opinion of me.	552	6.88	2.17	0	10
I sometimes have trouble preventing myself from bragging about things to other people	552	3.52	2.43	0	10
It makes me feel good to tell people something they didn't already know.	552	6.48	2.16	0	10
Desire to be Understood	552	5.42	1.41	0.75	10
It makes me feel good when someone else understands who I am or what I’m feeling.	552	7.35	2.07	0	10
I feel frustrated when someone close to me misinterprets what I do or say.	552	7.52	2.03	0	10
It bothers me when I’m feeling bad (e.g., depressed or in pain) and no one knows about it	552	4.33	2.54	0	10
I have a strong sense of who I am, regardless of the feedback I receive from those around me. [†]	552	2.50	2.01	0	10
Rehearsal	552	5.30	2.24	0	10
When something important happens in my life, it doesn’t feel quite real until I tell someone else about it.	552	4.15	2.71	0	10
Experiences feel more special when I share them with someone else.	552	6.44	2.42	0	10
Social Bonding	552	5.72	1.90	0	10
Being close to someone means having no secrets between the two of you.	552	4.91	2.77	0	10
Sharing information makes me feel closer to people.	552	6.52	2.07	0	10
Seeking Advice	552	5.82	1.90	0.5	10
When I make a difficult decision, I find it reassuring when others have advised me.	552	6.47	2.14	0	10
I like to make my own decisions, uninfluenced by other people’s perspectives. [†]	552	5.18	2.27	0	10
Emotion Regulation	552	4.83	1.89	0	10
The more emotional I feel, the less I want to talk with others about my feelings. [†]	552	4.88	2.54	0	10

I have a hard time keeping upsetting information to myself.	552	4.37	2.62	0	10
I feel a sense of relief when others are aware that something is troubling me.	552	5.24	2.39	0	10

**Items were recoded such that higher scores reflected greater levels of the trait of interest.*

Table A6*Correlation Between Motives/Traits and Individual's Average Desire/Propensity to Share*

Motives	Mean Rating (Scale: 0 to 10)	Correlations			
		Desire to Share (Scale: -5 to 5)		Shared (Yes=1; No=0)	
		Individual Means Across Scenarios		Proportion Shared by Average Individual Across Scenarios	
		Positive	Negative	Positive	Negative
Advice Seeking	5.82	0.09	0.16**	0.12**	0.15**
Social Bonding	5.72	0.21**	0.17**	0.15**	0.17**
Self Enhancement	5.63	0.32**	0.15**	0.17**	0.09
Desire to be Understood	5.42	0.23**	0.22**	0.13**	0.13**
Rehearsal	5.30	0.32**	0.23**	0.27**	0.14**
Emotion Regulation	4.83	0.25**	0.30**	0.21**	0.19**
Traits					
Self-Esteem	7.58	0.02	0.05	0.02	0.00
Future Bias	6.58	-0.02	-0.03	-0.02	0.03
Affiliative Tendency	6.35	0.17**	0.18**	0.17**	0.07
Trust	4.82	0.09	0.17**	0.10	0.13**
Fear of Negative Evaluation	4.68	0.07	0.09	0.07	0.10
Self-Perceived Sharing	4.63	0.28**	0.24**	0.18**	0.16**

** $p < 0.01$

Table A7*OLS and Logistic Regression Results (No Scenario Pooling)*

VARIABLES	DTS (1)	Positive DTS (2)	Negative DTS (3)	Shared (4)	Shared (5)	Shared (6)	Positive Shared (7)	Negative Shared (8)
<i>Desire to Share (DTS)</i>				1.77*** (0.06)		1.75*** (0.06)	2.19*** (0.18)	1.62*** (0.06)
<i>Negative</i>	-0.33*** (0.10)				0.83 (0.10)	1.11 (0.16)		
<i>Perceived Damage</i>	-0.14*** (0.02)	-0.12*** (0.03)	-0.13*** (0.03)		0.93*** (0.02)	1.00 (0.03)	0.98 (0.06)	1.01 (0.04)
<i>Emotion Regulation</i>	0.14*** (0.03)	0.04 (0.04)	0.21*** (0.05)		1.12*** (0.04)	1.06 (0.05)	1.15** (0.08)	1.02 (0.06)
<i>Rehearsal</i>	0.11*** (0.03)	0.16*** (0.03)	0.08** (0.04)		1.10*** (0.03)	1.04 (0.04)	1.11 (0.08)	0.99 (0.04)
<i>Self Enhancement</i>	0.13*** (0.03)	0.24*** (0.05)	0.05 (0.05)		1.06 (0.04)	1.02 (0.05)	1.05 (0.08)	1.00 (0.06)
<i>Trust</i>	0.04 (0.02)	0.00 (0.03)	0.09** (0.04)		1.06* (0.03)	1.05 (0.04)	1.00 (0.05)	1.08* (0.05)
<i>Future-Biased</i>	-0.01 (0.02)	-0.00 (0.02)	-0.02 (0.03)		1.03 (0.03)	1.06** (0.03)	1.02 (0.05)	1.08** (0.04)
<i>Male</i>	-0.23** (0.10)	-0.14 (0.13)	-0.32** (0.15)	0.71** (0.10)	0.76** (0.09)	0.79 (0.12)	1.11 (0.26)	0.65** (0.12)
<i>Age</i>	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.98*** (0.00)	0.99*** (0.00)	0.98*** (0.00)	1.00 (0.01)	0.97*** (0.01)
<i>Constant</i>	0.06 (0.36)	-0.23 (0.43)	-0.33 (0.55)	4.44*** (1.54)	2.51** (1.12)	2.25* (1.03)	0.26* (0.19)	7.94*** (4.62)
Observations	2,545	1,170	1,375	2,384	2,287	2,287	1,029	1,258
Scenario Controls	Y	Y	Y	Y	Y	Y	Y	Y
Participant-Clustered SE	Y	Y	Y	Y	Y	Y	Y	Y
[Pseudo] R-squared	0.22	0.25	0.23	[0.363]	[0.203]	[0.367]	[0.457]	[0.345]
Adjusted R-squared	0.209	0.238	0.221					

Robust standard errors in parentheses

** $p < 0.01$, * $p < 0.05$

Coefficients for Models 4-8 presented as odds ratios.

Note: z-scores for odds ratio values (OR) are calculated as follows: $\ln(\text{OR})/\text{SE}$.

Table A8*OLS and Logistic Regression Results with Heckman's Correction*

VARIABLES	DTS (1)	Positive DTS (2)	Negative DTS (3)	Shared (4)	Shared (5)	Shared (6)	Positive Shared (7)	Negative Shared (8)
<i>Desire to Share (DTS)</i>				1.77*** (0.06)		1.74*** (0.06)	2.19*** (0.17)	1.61*** (0.06)
<i>Negative</i>	-0.33*** (0.10)				0.84 (0.10)	1.12 (0.16)		
<i>Perceived Damage</i>	-0.15*** (0.02)	-0.13*** (0.03)	-0.14*** (0.03)		0.92*** (0.02)	0.99 (0.03)	0.97 (0.06)	1.01 (0.04)
<i>Emotion Regulation</i>	0.14*** (0.03)	0.04 (0.04)	0.21*** (0.05)		1.12*** (0.04)	1.06 (0.05)	1.15** (0.08)	1.02 (0.06)
<i>Rehearsal</i>	0.12*** (0.03)	0.16*** (0.03)	0.09** (0.04)		1.10*** (0.03)	1.04 (0.04)	1.11 (0.08)	1.01 (0.04)
<i>Self Enhancement</i>	0.12*** (0.03)	0.23*** (0.05)	0.04 (0.05)		1.04 (0.04)	1.01 (0.05)	1.05 (0.08)	0.98 (0.06)
<i>Trust</i>	0.03 (0.02)	0.00 (0.03)	0.08** (0.04)		1.05* (0.03)	1.05 (0.04)	0.99 (0.05)	1.07 (0.05)
<i>Future-Biased</i>	-0.01 (0.02)	-0.00 (0.02)	-0.02 (0.03)		1.03 (0.03)	1.06** (0.03)	1.02 (0.05)	1.08** (0.04)
<i>Male</i>	-0.20** (0.10)	-0.13 (0.12)	-0.29* (0.15)	0.73** (0.11)	0.79* (0.10)	0.81 (0.12)	1.12 (0.27)	0.70* (0.13)
<i>Age</i>	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.98*** (0.00)	0.99*** (0.00)	0.98*** (0.00)	1.00 (0.01)	0.97*** (0.01)
λ	-0.43*** (0.15)	-0.24 (0.19)	-0.34 (0.25)	0.64* (0.15)	0.55*** (0.12)	0.65* (0.15)	0.65 (0.22)	0.47** (0.15)
<i>Constant</i>	0.36 (0.38)	-0.12 (0.44)	-0.07 (0.60)	5.10*** (1.83)	3.74*** (1.79)	2.98** (1.42)	0.30 (0.23)	14.76*** (9.40)
Observations	2,545	1,170	1,375	2,384	2,287	2,287	1,029	1,258
Scenario Controls	Y	Y	Y	Y	Y	Y	Y	Y
Participant-Clustered SE	Y	Y	Y	Y	Y	Y	Y	Y
[Pseudo] R-squared	0.22	0.25	0.24	[0.365]	[0.206]	[0.369]	[0.458]	[0.349]
Adjusted R-squared	0.211	0.238	0.221					

Robust standard errors in parentheses

** $p < 0.01$, * $p < 0.05$

Coefficients for Models 4-8 presented as odds ratios.

Note: z-scores for odds ratio values (OR) are calculated as follows: $\ln(\text{OR}) * \text{OR} / \text{SE}$.

Figure A1*Diagram of Survey Structure*

Figure A2

Valence and Sentimental Composition of Shared vs. Not Shared Events (Using LIWC)

* $t(292) = 2.23, p = 0.01$

Figure A3

Ratio of Valence and Sentiment in Shared vs. Not Shared Responses (Using LIWC)

Note: Bars represent 95% Confidence Intervals.

Figure A4

*Number of Confidante Categories with Whom a Given Respondent Feels Able to Share a
Given Scenario*

Footnotes

¹ It is worth noting, of course, that not all WOM is perceived to be without risk. Eisingerich, Chun, Liu, Jia, and Bell (2014) find that individuals are less likely to offer electronic word-of-mouth – particularly on social sites – as compared to face-to-face WOM, an effect mediated by the perceived social risk (e.g., disapproval, embarrassment) associated with the former.

² Responses to this question, and the related follow-up question about whether the decision to share was ultimately damaging, were coded such that any reference to the possibility of damage was recorded in the affirmative, even if the respondent believed this possibility to be relatively unlikely. Krippendorff's alpha (inter-coder reliability) scores for sharing as potentially and ultimately damaging were 0.90 and 0.92, respectively.

³ This difference may result from variation in the experiential base rate of the desire to share among men and women, or it may instead reflect a gender difference in the threshold of intensity that is categorized as “dying to share.” This issue is addressed in Study 2, in which participants were asked instead to assign a numeric value to their desire to share specific information.

⁴ Note that the order of these questions depended on whether they indicated that they ultimately disclosed the information in the first instance that they reported.

⁵ These changes consisted of the addition of three codes (“Abortion”, “Party/event”, and “Social Media”), each of which was applied to only a single response. These three responses were treated as a disagreement between coders and assessed by a third coder who adjudicated between the responses. In all three cases, the original codes were deemed sufficient to incorporate these three specific instances.

⁶ As discussed above, disagreements between coders were adjudicated by a third coder. The frequencies shown in Figure 2 represent the codes agreed upon by the majority (i.e., two coders).

⁷ NRC Word-Emotion Association Lexicon, Version 0.92, 10 July 2011. National Research Council Canada (NRC).

⁸ In comparing the results, note that LIWC contains fewer codes for specific emotions. In addition, percentages for affect and emotion in LIWC are calculated based on total word count, whereas the NRC analysis takes non-stopwords as the denominator.

⁹ Note that there is not a perfect correspondence between valence and specific emotions: the word “abandon”, for example, is associated with the sentiment *Trust* but has a negative valence.

¹⁰ The latter category, which is excluded from the figure below, applied to roughly 20% of all responses and included a slightly larger portion of non-shared events.

¹¹ This emerged only for participants with an active need to self-enhance, due either to low self-esteem or a threatened self-view.

¹² Scaled responses are, of course, not without limitation. See, for example, Hilton (1995) and Schwarz (1999).

¹³ Because participants provide these ratings after considering their disclosure decisions under five different scenarios, subsequent evaluations of their overall behavior may be biased by these earlier responses.

¹⁴ Subsequent analyses in the present paper regarding the propensity to disclose a given scenario are *de facto* conditional on feeling able to share with someone, as only 2.5% of responses involved the decision to share in the absence of viable confidante.

¹⁵ One explanation might be the lack of emotional equivalence between the words “infuriating” and “impressive,” as the former implies a stronger emotional response than the latter.

¹⁶ Five outliers that exceed 999 are excluded from the mean calculation.

¹⁷ A quantile regression was selected due to the handful of extreme outliers, including one respondent who indicated sharing election news with 80,000,000 people.

¹⁸ Motives are derived largely from Berger (2014).

¹⁹ All differences are statistically significant at the 1% level (one-tailed independent samples t-test).