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## Why People Share When They Shouldn't: Antecedents and Consequences of Impulsive Secret-Sharing

Natalie Ann Mordini  
*DePaul University*, nmordini@depaul.edu

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**Why People Share When They Shouldn't:  
Antecedents and Consequences of Impulsive Secret-Sharing**

A Dissertation

Presented in

Partial Fulfillment of the  
Requirements for the Degree of  
Doctor of Philosophy

By

Natalie Ann Mordini

June, 2022

Department of Psychology  
College of Science and Health  
DePaul University  
Chicago, Illinois

## **Dissertation Committee**

Verena Graupmann, PhD, Chair

Ralph Erber, PhD

Yan Li, PhD

Leah Bryant, PhD

Kendra Knight, PhD

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## **Biography**

The author was born in Elmhurst, Illinois on December 22, 1992. Natalie graduated from York Community High School in Elmhurst, Illinois, 2011. She received her Bachelor of Arts from the University of Notre Dame in 2015, majoring in Psychology with a supplemental major in Applied and Computational Mathematics and Statistics. She received her Master of Arts from DePaul University in 2018, studying Psychological Science.

## Table of Contents

Dissertation Committee .....	ii
Acknowledgments.....	iii
Biography.....	iv
List of Tables .....	ix
List of Figures .....	x
Abstract.....	1
Why People Share When They Shouldn't .....	3
Communication Privacy Management Theory .....	5
Goals of Secret-Keeping.....	6
<i>Intrinsic Goals of Secret-Keeping</i> .....	7
<i>Extrinsic Goals of Secret-Keeping</i> .....	10
Goals of Secret-Sharing .....	14
<i>Intrinsic Goals of Secret-Sharing</i> .....	15
<i>Extrinsic Goals of Secret-Sharing</i> .....	18
<i>Health Outcomes Associated with Revealing and Concealing Secrets</i> .....	24
Models of Self-Disclosure .....	26
<i>When Should We Reveal?</i> .....	26
<i>What and How Much do We Reveal?</i> .....	27
Triggers of Secret-Sharing.....	28
<i>Pressure to Reciprocate</i> .....	28
<i>Psychological Distress</i> .....	30
Model of Impulsive Secret-Sharing.....	31

Individual Differences and Measurements of Secret-Sharing Behaviors .....	33
Rationale .....	34
The Current Research .....	35
Study 1: Perceptions of Secret-Sharing .....	36
Study 1 Research Question and Hypotheses.....	36
<i>Research Question 1</i> .....	36
<i>Hypothesis 1a</i> .....	36
<i>Hypothesis 1b</i> .....	37
<i>Hypothesis 1c</i> .....	37
<i>Hypothesis 1d</i> .....	37
Study 1 Method.....	37
<i>Research Participants and Design</i> .....	37
<i>Measures</i> .....	38
<i>Procedure</i> .....	42
Study 1 Results .....	43
<i>Motivational and Situational Factors</i> .....	44
<i>Contextual Factors</i> .....	46
<i>Perceptions of Secret Risk</i> .....	49
<i>Perceptions of Confidant</i> .....	49
<i>Level of Planning</i> .....	53
<i>Affective Outcomes</i> .....	54
Study 1 Discussion.....	59
Study 2: Evaluations of Secret-Sharing .....	63

Study 2 Research Question and Hypotheses.....	63
<i>Research Question 2</i> .....	63
<i>Hypothesis IIa</i> .....	64
<i>Hypothesis IIb</i> .....	64
<i>Hypothesis IIc</i> .....	64
<i>Hypothesis IId</i> .....	64
<i>Hypothesis IIe</i> .....	65
Study 2 Method.....	65
<i>Participants and Design</i> .....	65
<i>Measures and Procedure</i> .....	66
Study 2 Results .....	68
<i>Motivational and Situational Factors</i> .....	69
<i>Perceptions of Secret Risk</i> .....	73
<i>Perceptions of Confidant</i> .....	73
<i>Level of Planning</i> .....	74
<i>Affective Outcomes</i> .....	74
Study 2 Discussion.....	78
Study 3: Behavioral Examination of Trigger.....	80
Study 3 Research Question and Hypotheses.....	81
<i>Research Question 3</i> .....	81
<i>Hypothesis IIIa</i> .....	81
<i>Hypothesis IIIb</i> .....	82
Study 3 Method.....	82



<i>Participants and Design</i> .....	82
<i>Measures and Procedure</i> .....	83
Study 3 Results .....	87
<i>Perceptions of Secret Risk</i> .....	89
<i>Affective Outcomes</i> .....	90
<i>Perceptions of Secret-Sharing Experience</i> .....	90
<i>Behavioral Outcome</i> .....	90
Study 3 Discussion.....	90
General Discussion .....	92
References.....	103
Appendix A: Gender by Condition Cross-Tabulations.....	110
Appendix B: Secret Risks Questionnaire.....	111
Appendix C: Confidant Rating Scale.....	112
Appendix D: Motivational and Situational Factors Questionnaire.....	113
Appendix E: Affective Outcomes.....	114
Appendix F: Study 2 Vignettes.....	115

## List of Tables

Table 1 .....	7
Table 2 .....	45
Table 3 .....	55
Table 4 .....	88
Table 5 .....	89
Table A1.....	109
Table A2.....	109
Table A3.....	109

## List of Figures

Figure 1 .....	32
Figure 2 .....	48
Figure 3 .....	51
Figure 4 .....	53
Figure 5 .....	58
Figure 6 .....	70
Figure 7 .....	76
Figure 8 .....	76
Figure 9 .....	98

## Abstract

This dissertation, comprised of three studies, explores goals and antecedents of sharing and keeping personal secrets, examines how secret-sharing and secret-keeping experiences differ and are perceived to differ, and investigates the emotional outcomes of sharing and keeping secrets. It also suggests two potential “triggers” which may lead to increased impulsive secret-sharing. Study 1 explored, retrospectively, how secret-sharing and secret-keeping experiences align and differ. It found key differences between these experiences, particularly regarding motivations, level of planning, contextual factors, confidant perceptions, and the emotional consequences related to the decision. Study 2 examined perceptions of secret-keeping and secret-sharing decisions and predicted emotional consequences through the use of vignettes. This study uncovered differences across perceptions of secret-sharing and secret-keeping situations, including differences in perceived risk associated with the secret, level of planning, confidant perceptions, and the emotional consequences pertaining to the decision. Comparisons between Studies 1 and 2 pinpointed several mismatches between participant predictions and perceptions (Study 2) and actual experiences (Study 1), which might play a role in why people’s secret-sharing and secret-keeping experiences do not always lead to their intended outcomes. Finally, Study 3 used an experimental manipulation to investigate the influence of one of the potential secret-sharing triggers – reciprocity pressure – on secret-sharing behavior in real time using a novel paradigm. While not finding the expected effect of the threat manipulation, the results of Study 3 point to the influence of a different potential secret-sharing trigger – psychological distress – on secret-sharing perceptions and behavior. The culmination of findings from this dissertation refined the working model of impulsive secret-sharing and its predictions to advance research and inform ways to remedy maladaptive tendencies in secret-sharing.

*Keywords:* secrecy, secret-sharing, secret-keeping, impulsive secret-sharing

## **Why People Share When They Shouldn't:**

### **Antecedents and Consequences of Impulsive Secret-Sharing**

We are often faced with the decision of whether we should share parts of ourselves with others. In some cases, sharing our innermost secrets can lead us to develop very fulfilling and deep connections with others, relieve us of a burden that has been weighing us down, or even help us to cope with difficult parts of our pasts. However, sharing our personal secrets can feel unnerving or even frightening, and sometimes with good reason. Divulging our secrets to others can lead to mild or serious repercussions, including leaving others feeling uncomfortable, becoming the subject of gossip, or even being alienated or rejected by our closest friends or family members. In such cases, our secrets are clearly better left untold.

There are many situations where the outcomes of sharing our secrets are unpredictable. Perhaps we find ourselves revealing a secret spontaneously before having a chance to think about the consequences. On the other hand, maybe we feel it is so important or tempting for us to share our secret that we do so despite understanding the consequences that will follow. Every so often, we may disclose an unflattering truth about ourselves to someone and regret it shortly after, even without direct consequences. Instead, we realize that there was something particular about the situation causing an urge to communicate previously unshared personal information. Regardless of our reasons for doing so, sharing secrets comes with risk.

In order to frame the concept of personal secret-sharing for the purposes of this dissertation, it is important to consider its relation to the topic of self-disclosure as well as to distinguish it from the sharing of others' secrets or gossip. Secrecy has been defined as intentional and deliberate concealment (Bok, 1983), often (but not always) regarding painful or distressing experiences (Larson & Chastain, 1990). Secrets also have been described as highly

restricted private information that is inherently riskier to disclose (Petronio, 2002, p. 31). Secrets have greater control needs than other types of self-disclosures and are characterized by impermeable boundaries and low flow of information (Petronio, 2010). The current research focuses on the sharing and keeping of *personal* secrets, so gossip or revealing another's secret are out of the scope, as these are forms of secondary sharing.

Although revealing personal secrets has overlap with the general self-disclosure literature, it is important to keep in mind the distinction between self-disclosing personal information in general and revealing information that had been concealed previously for a specific purpose. For example, a person might tell someone about their career aspirations which would most likely be indicative of self-disclosure. However, if this person was ashamed of their career ambition or afraid they might fail and therefore have strategically kept this goal to themselves, revealing their career aspiration in this case would be a form of secret-sharing. In this way, personal secret-sharing is a distinct type of self-disclosure. In the upcoming sections of this dissertation in the cases where research is limited from a secrecy standpoint, the self-disclosure body of literature is thus used as a guiding framework.

Given the risk and potential unwanted outcomes associated with sharing secrets, this dissertation poses the question: why do we share our secrets when we may be better off keeping them to ourselves? In attempt to answer this complex question, Communication Privacy Management theory is first discussed through the lens of secrecy. Next, goals for keeping and revealing secrets are reviewed and synthesized from the secrecy and self-disclosure literature, including both the intrinsic and extrinsic motives which may influence people's decisions to reveal or conceal their personal secrets. *Intrinsic* motives include the psychological motivations inherent in the act of revealing or keeping secrets, while *extrinsic* motives include the

psychological motivations associated with the outcomes of the act. Health outcomes associated with revealing secrets are also discussed within these goals. Much research has been devoted to the area of health outcomes, demonstrating that confiding secrets is beneficial for the secret-revealer, but it may not paint the complete picture regarding consequences of revealing personal secrets. Finally, in attempt to explain what provokes people to share when they may be better off otherwise, two potential psychological triggers of secret-sharing are deliberated, leading into a model of impulsive secret-sharing which captures the particular contextual dynamics involved.

This dissertation is comprised of three studies which were designed to examine factors involved in secret-sharing, to understand perceptions of secret-sharing situations leading to negative outcomes compared to those with more positive consequences, and to investigate the influence of the proposed triggers of secret-sharing on secret-sharing behavior. These studies also serve to test the proposed model of impulsive secret-sharing, thus refining its predictions to advance research and inform ways to remedy maladaptive tendencies in secret-sharing.

### **Communication Privacy Management Theory**

Communication Privacy Management (CPM) is a framework developed for managing private and personal information through revealing and concealing that information (e.g. Petronio, 2002, 2010, 2013). This framework is channeled through a lens of dialectics, where disclosure is not entirely personal but often relational (Petronio, 2010, 2013), and which takes into account the tensions between relationship and autonomy goals. CPM brings focus to the target recipient (i.e. the confidant), and poses that in order to fully grasp the concept of privacy management, one must take into consideration both the self and others (Petronio, 2010). CPM suggests that it is through this dialectical lens that decisions about privacy and disclosure are



made. As such, Communication Privacy Management may provide insights into understanding decisions to share and keep secrets.

The CPM system involves the following elements: privacy ownership and boundaries, privacy control, and privacy turbulence (e.g. Petronio, 2010, 2013). *Privacy ownership* refers to the idea that a person owns their personal information and has the right to control whether to give others access or to restrict them from the information. When someone is granted access to the private information, they become a co-owner and become partially responsible for the management of the information (Petronio, 2013).

*Privacy control* refers to the system of developing, maintaining, or altering privacy rules to regulate the flow of information. When considering the use of these privacy rules, there exist *core decision criteria*, which are stable and underlying (Petronio, 2013), such as culture, personality, and privacy orientation. There also exist *catalyst criteria* which include aspects such as motivational goals as well as needs that are triggered situationally (Petronio, 2013). This dissertation explores these catalyst criteria by considering goals of sharing and keeping secrets. It also considers two avenues where situational triggers may act to alter privacy rules in the moment, contributing to *privacy turbulence* or a breakdown of privacy management.

Eight axioms have been developed in conjunction with CPM. One of these axioms associated with privacy turbulence suggests that breakdowns in privacy regulation are unpredictable (Petronio, 2013). This dissertation, however, explores the possibility that there may actually be systematic reasons that privacy regulation breaks down (i.e., the triggers of impulsive secret-sharing, to be discussed), particularly through the lens of secrecy. It seeks to better understand the conditions that may lead to mistakes in the management of secret information as well as the associated consequences.

### **Goals of Secret-Keeping**

As discussed previously, people keep secrets hidden for a reason - they perceive that there may be unwanted outcomes when others gain access to their secrets or other highly personal information. People actively and strategically keep this information guarded in order to protect themselves or others from perceived or actual risks, to frame their identities, or for reasons pertaining to privacy regulation. Consequently, there are many good reasons to keep our secrets hidden (refer to Table 1 for a list of intrinsic and extrinsic reasons for concealing and revealing secrets).

**Table 1**

***Goals of Secret Management***

	<i>Intrinsic Goals</i>	<i>Extrinsic Goals</i>
<b><i>Secret-Keeping</i></b>	<b>Intrinsic Goals of Secret-Keeping</b> Boundary Regulation Privacy Dissonance Reduction	<b>Extrinsic Goals of Secret-Keeping</b> Self-Presentation Prevention of Negative Outcomes Relationship Regulation Confidentiality Concerns
<b><i>Secret-Sharing</i></b>	<b>Intrinsic Goals of Secret-Sharing</b> Expression Pleasure & Thrill Gaining Insights Emotional Catharsis Sense of Control	<b>Extrinsic Goals of Secret-Sharing</b> Self-Presentation & Identity Management Social Validation & Social Comparison Shared Reality Relationship Regulation Helping Others Social Control Social Power and Manipulation

*Note.* Intrinsic and extrinsic goals for secret-keeping and secret-sharing.

***Intrinsic Goals of Secret-Keeping***

Several motives for secret-keeping can be categorized as intrinsic – that it is not about the specific contents of the secret, but rather about the act of keeping a secret in and of itself. For instance, the act of secret-keeping serves to regulate boundaries and create a sense of privacy. Additionally, secret-keeping can be used as a dissonance reduction strategy. These intrinsic goals as well as others are discussed more thoroughly in the upcoming paragraphs.

Keeping personal secrets can serve positive functions related to personal identity, specifically creating a sense of autonomy and uniqueness (Derlega & Chaikin, 1977). According to commodity theory, when an individual keeps personal information to themselves to which only they have access, it helps people to feel unique (Brock, 1968), which can improve one's sense of self-worth.

Additionally, being able to understand the concept of secrecy marks a developmental milestone in understanding the self (Meares & Orley, 1988). For example, understanding the concept of secrecy means that one can comprehend that thoughts are private and inaccessible to others, and that they only belong to that individual. Having this knowledge is an indicator that a boundary has developed between the concepts of the self and non-self, beyond merely an understanding of a physical self-boundary. In this way, concealing secrets may be motivated by a desire to regulate boundaries and to signal autonomy.

Secrets are often kept hidden from certain others because people feel the information is not relevant to those others (e.g. Derlega, Winstead, Mathews, Braitman, 2008). Secret-keeping can be a way people regulate privacy, by maintaining a public and private self. Negative emotions (i.e. shame, guilt, embarrassment) may result if this boundary is penetrated. Concealing secret information is a way to protect one's privacy and prevent feeling these negative emotions.

During stressful and emotional life events, such as losing a family member or having a life-threatening illness, people often receive unhelpful and inappropriate support attempts from those who wish to comfort them, which may be uncomfortable and undesirable for the individual (Lehman, Ellard, & Wortman, 1986). Receiving inappropriate attempts at support can lead to more negative emotions, feelings of isolation or being misunderstood, or even feelings of social exclusion (Wesselmann, Michels, & Slaughter, 2019). Through the lens of concealment, research has also demonstrated that people take into consideration someone's past responses and reactions to disclosures when deciding whether to disclose with that person in the future (Afifi & Steuber, 2010). If people have received similar inappropriate support attempts in past experiences, they may decide to keep particular life events and the associated emotional outcomes to themselves in the future to avoid potential distressing outcomes.

Dissonance reduction is another motivation that may guide a person to keep a secret hidden. Festinger's Cognitive Dissonance Theory (1957) is the premise that people seek to achieve consistency among their cognitions – their actions, beliefs, and attitudes. When inconsistencies become salient and brought into awareness, people will act to reduce the dissonance, which is experienced as a psychological discomfort. Thus, experiencing cognitive dissonance is a motivational state, leading to three potential types of actions to help reduce or eliminate the inconsistency. These actions include trivializing the importance of the incompatible beliefs, adding consonant beliefs or attitudes in order to outweigh the dissonance, or removing the behavior or thought that is causing the dissonance.

In this way, secrets may be held when people's inner drives or thoughts do not align with their beliefs, attitudes, or values. People may choose to keep this information to themselves in order to alleviate the inconsistency they are feeling. Keeping it hidden and out of thought acts to

trivialize the inharmonious behavior, making it feel like less severe of a violation of one's own values and allowing for one to still be able to perceive themselves as a consistent being.

Accordingly, secret-keeping can be used as a dissonance reduction strategy.

### ***Extrinsic Goals of Secret-Keeping***

Complementary to these intrinsic goals, several goals of secret-keeping are extrinsic (i.e. related to the content of the secret and expected consequences of its unveiling). For instance, people may conceal secrets as a self-presentation strategy, to avoid being rejected by others, or to avoid punishment that would result if the secret were to be revealed. Furthermore, secrets may be kept hidden from certain others in order to regulate relationships, or to prevent secondary sharing of secrets by confidants.

Secret-keeping can be used as a self-presentation strategy. As such, a person may strategically decide to keep information hidden from others to paint a good image of themselves. According to the literature on impression management and self-presentation, people will use avoidance strategies in order to maintain their desired self-image and avoid disapproval, and are likely to conceal information that may be embarrassing or inconsistent with how they want to be perceived (e.g., Leary, 1995; Schlenker, 1980; Schlenker, 2012). This is often the case when people feel embarrassed about a situation, behavior, or thought they have. For example, children in middle childhood commonly reported they would keep an embarrassing situation (i.e., wetting their pants) a secret from classmates because of fear of being made fun of, being publicly humiliated, and social shame that could damage their reputation (Watson & Valtin, 1997). Keeping this type of embarrassing secret strategically hidden from specific others serves to protect one's reputation and to maintain a positive public image.

The desire to reduce dissonance is not only an intrinsic motivator when deciding to keep a secret but can also be extrinsically motivated through a desire to gain or maintain social approval and liking. Dissonance reduction can be a powerful motivator in how we engage with others through what we present about ourselves and what we do not. When the dissonant aspects of one's identity or behavior are kept secret, a person's sense of appearing consistent to others can be maintained (Aronson, 1969). In this way, keeping secrets can be used as a dissonance reduction strategy through maintaining a consistent and positive public self.

Looking at the content of secrets, the secrets of those in a collegiate sample were associated with perceptions of risk (Norton, Feldman & Tafoya, 1974). Results of a content analysis found that most of the secrets expressed by the students were categorized as relating to sex, failure, and masking (i.e. discrepancies between private and public behavior). Those secrets related to sex were rated as the riskiest to disclose. This may be due to the idea that people's judgments of sexual secrets may be harsher and more stigmatizing. When these types of judgments occur, it can change the way people perceive someone's identity and even the way that one perceives their own identity. For this reason, people may be motivated to keep certain secrets hidden to avoid negative judgment.

Both secrets that are positive or negative may lead to negative reactions from others in one's social networks that are harmful to the self or that change the way others may perceive them. For instance, a person who received a raise at work may keep this hidden from their coworkers to avoid them feeling jealousy or hostility. Another motivation for keeping secrets may be to protect oneself from punishment for a misdeed. Even children in middle childhood are aware of the repercussions of revealing secrets to an authority figure for fear of consequences pertaining to punishment (Watson & Valtin, 1997), leading them to keep misdeeds to

themselves. Thus, revealing a secret may lead the secret-revealer to be rejected or punished. Keeping personal secrets hidden guards people from these negative outcomes.

Often, people cite the reason they keep secrets hidden from others is to protect them emotionally (e.g. Derlega, Lovejoy, & Winstead, 1998). For example, a person recently diagnosed with cancer may choose to hide this information for as long as possible from their family members or close friends in order to protect them from emotional pain. Revealing a secret to someone may also lead the targeted individual to feel anxiety, stress, or other negative emotions regarding the information received (Coates, Wortman, & Abbey, 1979). People may thus choose to keep their secrets to themselves to spare others from these negative emotional responses.

People also keep secrets from others in order to regulate their relationships. For instance, individuals may decide not to disclose secrets or highly personal information to protect or maintain a relationship (e.g. Afifi & Guerrero, 2000; Derlega et al., 2008). Derlega and colleagues (2008) found that a commonly cited reason for keeping secrets from their dating partners was that disclosure may put the relationship at risk. Avoiding disclosure about a topic that has the potential to harm a cherished relationship may be less risky and more worthwhile than the potential positive connectedness that may occur from disclosing, thus serving a protective purpose. Importantly, it is the content of these secrets that may be harmful to the relationship.

On the other hand, sometimes the purpose for revealing may be more pertinent than the information contained in the secret. As mentioned previously, Vangelisti and Caughlin (1997) describe relationship maintenance as a reason for keeping family secrets. It was found that family members are more likely to share a family secret if they have a negative relationship with

their family members. Therefore, if a member has a positive relationship with their family, they may be more willing to keep a secret for the sake of protecting this relationship. On the other hand, there are also cases in which target confidants may be unwilling to be the recipient of secret disclosures. In these cases, the targets are referred to as *reluctant confidants* (e.g. Biss & Geist-Martin, 2022; McBride & Bergen, 2008). Sharing a secret with someone who does not want to become the owner of such information can potentially have negative relational consequences. If someone takes into account this possibility, it may ultimately lead to a decision to keep the secret concealed. So, keeping secrets may serve the purpose of maintaining relationships and protecting others from perceived possible outcomes that may arise if the secret were to be revealed.

Conversely, keeping secrets can be used to de-escalate or disengage from a relationship (e.g. Afifi & Guerrero, 2000). Secrecy is often viewed as a cue to friendship, even by children (e.g. Liberman & Shaw, 2018), so strategically keeping secrets from another can be a cue that the individual does not want to establish or continue a relationship with that particular person. Consistent with social penetration theory (Altman & Taylor, 1973), without personal disclosures, a relationship cannot truly develop. And without feeling bonded to another, the relationship is likely to disintegrate. In summary, keeping secrets can be motivated by a desire to regulate relationships, whether it be to protect a relationship from potential damage or to disengage from an unfulfilling or unwanted relationship entirely.

When people do share secrets, it is with the stipulation and assumption that their information is safe with that confidant. It is common to ask for confidentiality when sharing a secret, and thus people assume that their information is kept safe and not shared beyond the intended audience. Unfortunately, this assumption of confidentiality is not soundly based, at least



for cases involving the sharing of emotional episodes. Christophe and Rimé (1997) found that a majority (66% in Study 1; 79% in Study 2) of those selected as confidants for the sharing of emotional experiences reported secondary social sharing of the emotional episode. The researchers ascribe this to the idea that socially sharing an emotional experience is emotion-eliciting in itself, giving the listener a need to share the emotional experience that just occurred. Of particular interest and to the demise of the secret-revealer, the greater the intensity of the emotional event shared, the more likely it was to be secondarily shared by the confidant. Research on the use of privacy rules also demonstrates that even the use of explicit privacy rules when sharing a secret does not fully protect a secret from being further revealed by confidants (Venetis et al., 2012). Thus, people may be motivated to conceal secrets in order to keep the information contained and to avoid the information being spread against their will.

### **Goals of Secret-Sharing**

This extensive list of reasons to conceal secrets and maintain that concealment suggests that keeping secrets can be beneficial to the owners of those secrets. After all, secrets are often concealed due to the perceived risks they pose both personally and relationally. However, there may be cases where the potential benefits outweigh the risk. For example, people may choose to reveal their secrets in order to develop deeper relationships or connections to others, as a way to express or understand themselves relative to others, or even for a sense of relief, similar to general self-disclosures. People may also be faced with specific situations where they must decide to reveal certain secrets they hadn't planned on revealing in order to help others cope with similar situations, to gain insights for themselves, or to get in front of the inevitable release of the information by another source. As such, there are several good reasons to reveal secrets.

### *Intrinsic Goals of Secret-Sharing*

Just as some goals of secret-keeping are intrinsically motivated, several goals of secret-sharing can similarly be categorized. Self-disclosure has been found to be inherently rewarding (Tamir & Mitchell, 2012). For instance, participants' neural regions associated with reward processing were more actively engaged when discussing their own personality traits or opinions as opposed to the personality traits and opinions of others. Furthermore, participants were willing to forego more money when there was an opportunity to talk about themselves compared to opportunities to talk about others or a fact, suggesting that self-disclosure is reward in itself. Importantly, these studies also demonstrated that sharing personal information with another is more rewarding than only reflecting on one's own opinions (Tamir & Mitchell, 2012). Just as general self-disclosure is rewarding, this may also apply to the disclosing of secrets in some circumstances. The main intrinsic motives of secret-sharing discussed include expressing oneself or clarifying one's position on a topic, sharing risky information for the thrill, revealing in order to gain new insights on a situation or for a sense of catharsis, and sharing in order to maintain control over the secret information.

Derlega and Grzelak (1979) categorized five different functions of self-disclosure in their chapter on appropriateness of self-disclosure: expression, self-clarification, social validation, relationship development, and social control. Expression referred to the expression of emotions, dispositions, and personal states. Derlega and Grzelak reported that self-disclosure is appropriate to the extent that it has an expressive or cathartic function, such as expressing grief after the loss of a loved one. Revealing to others about one's inner psychological states and feelings is a way to connect with people and allow them to gain a deeper understanding of the revealer's thoughts and emotional experiences. This opens up an opportunity for confidants to respond appropriately

and offer comfort and support. Importantly it allows for the discloser or secret revealer to feel heard and understood.

Another reason someone might reveal a secret is to foster feelings of excitement, pleasure, or thrill. Individuals with higher levels of sensation-seeking have been found to be more willing to self-disclose than those with lower levels of sensation-seeking tendencies (Franken, Gibson, & Mohan, 1990). Franken, Gibson, and Mohan (1990) conducted a study where participants ( $N = 413$ ) responded to Zuckerman's (1979) Sensation Seeking Scale (Form V) in addition to items measuring self-disclosure to both close and casual friends. The self-disclosure items included items ranging from comfort sharing thoughts, feelings, and ambitions (less risky disclosures) to items regarding openness to disclose sexual fantasies or sexual problems (more risky disclosures). Those categorized as having high levels of sensation-seeking tendencies were more open to self-disclose - particularly regarding the riskier disclosures - to both casual and close friends, although the mechanism behind the relation between sensation-seeking and self-disclosure should be studied further.

Kelly, Klusas, von Weiss, and Kenny (2001) sought to understand some of the benefits of revealing secrets. Through two studies, these researchers examined two factors – *catharsis* and *new insights* as they pertain to secret-sharing. The first study looked at cases of revealing a personal secret in the past and how participants currently feel about the secret. It was found that when participants reported that they had gained new insights about the secret, they had more positive feelings regarding the secret currently. Conversely, when participants reported that they felt catharsis or a chance to get things off their chest, they actually tended to have more negative current feelings about the secret. The second study manipulated whether participants were asked to write about a secret while trying to gain new insights about the situation or trying to gain

catharsis. Consistent with the first study, it was found that those participants in the new insights group reported a greater improvement in positive affect regarding the secret than those in the catharsis group. The researchers believe that it is the process of making meaning from the secrets that is beneficial, whereas attempting to gain catharsis may end up intensifying the negative emotions felt about the secret when revealing them. Pennebaker's theory of inhibition and confrontation (1989) invoked similar ideas – that simply sharing emotions through venting or other forms of catharsis actually enacts to intensify the negative feelings associated with an event. Rather, it is the process of assimilating the feelings and facts of the event into one's self-concept that acts to have positive outcomes for those confiding their secrets.

Often people do have the goal of emotional catharsis when deciding to reveal their secrets (Afifi & Steuber, 2009), attempting to release their emotional burdens. Unfortunately, those who are given advice to confide secrets to “get them off their chest” may be misguided given this endeavor. Kelly and McKillop (1996) suggest through their model that one should only reveal a personal secret if an appropriate confidant is available. These researchers note that a crucial aspect of whether a confidant is appropriate is whether they are able to provide new and useful insights or perspectives on the situation, such as a counselor or therapist – someone highly skilled in framing information in new and useful ways. Thus, it may not be in people's best interest to reveal their secrets unless new insights and meaning can be found through revelation.

One reason cited for revealing secrets is that the revealer perceived that the secrets were bound to be released from another source (e.g. Vangelisti, Caughlin, & Timmerman, 2001). Thus, when a secret is perceived to not be in safe hands, people often resort to sharing the information themselves in order to get ahead of the future consequences by regulating from whom the information is revealed. Therefore, the secret-revealer can maintain a sense of control

over the situation by revealing the secret on their own terms and from their personal perspective. In this way, even if they do not have control over whether the secret is revealed by somebody else, the secret-revealer may be motivated by a desire to retain control over at least the circumstances in which the targets receive the information.

### ***Extrinsic Goals of Secret-Sharing***

Many goals of sharing secrets can be categorized according to their extrinsic nature. When people are determining whether to share a secret, they may consider the outcomes and consequences, for themselves and for others. These extrinsic motivations may underlie goals pertaining to self-presentation or managing one's identity, validating one's beliefs or comparing oneself to others, or to create shared realities in order to find collective meaning from certain situations. Other goals relate to relationship regulation, helping others cope, or even for reasons pertaining to social control, or social power and manipulation.

Secret-sharing can be used as a self-presentation strategy or a way to manage one's identity. For instance, a teenager trying to befriend a group of rebellious peers may strategically decide to reveal highly personal information to this group involving a previous encounter with the law in order to present themselves favorably (whereas the individual may typically keep this information hidden from others). Additionally, people may wish to portray themselves as open and authentic, especially to those with whom they have a close relationship. Strategically revealing certain secrets or selected parts of secrets to these people thus gives the desired impression of appearing authentic and being an "open book." This way of revealing oneself to others has clear implications for identity management and self-identification, especially according to Schlenker's (1986, p.23) definition of self-identification as a "process, means, or result of showing oneself to be a particular type of person, thereby specifying one's identity."

Thus, revealing secrets in a strategic manner may be motivated by a desire to present oneself favorably to targeted others and accordingly manage one's public identity.

Social validation or comparison is another motivating factor to reveal a secret. Social validation serves as a way of receiving feedback from others to test whether their own attitudes, beliefs and values are appropriate or correct in comparison to those of others (Festinger, 1954). As mentioned previously, Derlega and Grzelak (1979) discussed social validation as being a function of self-disclosure. More specifically, the authors note that people compare their attitudes, beliefs, and values to social reality to learn about their appropriateness or correctness within the context of societal norms. This may be why the content of secrets often contains taboo information (e.g. Rosenfeld, 2000). The reaction of the confidant to the information shared may serve to either solidify the revealer's beliefs, change the revealer's beliefs to address the discrepancy, or lead the revealer to keep their beliefs hidden from others. Thus, sharing a secret can help the secret-revealer to understand how their beliefs, attitudes, and values stand in relation to those around them; learning this information can then help a person decide whether to reveal that secret to others who are perceived as being more judgmental or who have stronger opinions on the topic of the secret.

Attempting to create a shared reality may be yet another good reason to share a secret. According to shared reality theory, people wish to share their experiences for two reasons: to create a connection with others, and to learn about the world through aligning with others' perspectives (Hardins & Higgins, 1996). By sharing experiences, people can connect and relate to others they like and feel close with as well as create meaning out of the shared experiences. Keeping secrets prevents the opportunity for creating shared realities, leading to missed opportunities for connection as well as for understanding the world (Liu & Slepian, 2018). This

may lead us to feel alone and misguided when we keep our secrets from others. Thus, sharing our secrets may help us to feel a sense of belonging and meaning in the world.

Often, highly personal information is disclosed for purposes of relationship maintenance or regulation. For instance, a study was conducted with college student participants examining attributions for self-disclosure in four types of relationship partners – mothers, fathers, same-sex friends, and dating partners (Derlega, Winstead, Mathews, and Braitman, 2008). Duty to inform or feeling obligated to disclose certain types of personal information to a partner, was found to be the third most common reason to self-disclose overall behind reasons relating to having a close, trusting relationship and seeking help. It was also cited as the most frequent reason by research participants for those who disclosed to their romantic partner.

In addition, researchers also sought to learn about reasons regarding decisions to disclose or conceal in regard to receiving a positive HIV diagnosis (Derlega, Lovejoy, & Winstead, 1998). Although a majority of participants decided to share their diagnosis in order to receive emotional support from friends and family, participants also mentioned reasons for disclosure that serve to protect and maintain their relationships, including demonstrating loyalty and honesty in their relationships as well as concern with the health of romantic partners. Differences in reasons for disclosure also emerged depending on the type of relationship (e.g., family, friend, romantic partner, acquaintance, co-worker), meaning reasons for disclosing or not disclosing secrets are strategic depending on the needs, values, and standards of those involved in each type of relationship.

Derlega and Grzelak (1979) discuss the importance of revealing secrets in regard to maintaining relationships. Specifically, it is mentioned that revealing personal secrets and other highly intimate personal information to close others can help to meet a partner's emotional needs

in a relationship and can provide positive outcomes to relationships through meaningful social exchange. Further, revealing secrets to important others may act to reinforce a sense of trust in the relationship, which can be rewarding for the relationship partner.

Revealing secrets to each other is also a crucial way to *develop* relationships – creating intimate relationships requires self-disclosure of information that is not commonly disclosed to mere acquaintances (Altman & Taylor, 1973). Early in a relationship, the extent to which intimate personal information is revealed can demonstrate one’s willingness and interest in developing a relationship. Thus, the information we choose to reveal to others can be indicative of the types of relationships we want to form and maintain. Without revealing intimate personal information to others, we cannot develop or truly maintain our social relationships. Accordingly, revealing secrets can be motivated by a desire to foster fulfilling relationships with others.

Some research has explored the effects of keeping a romantic relationship a secret from others (e.g., Foster & Campbell, 2005; Lehmiller, 2009). Given the research indicating the attractiveness and allure of secret romantic relationships (Wegner, Lane, & Dimitri, 1994), Foster and Campbell (2005) sought to understand the relational consequences of keeping relationships a secret. For this research, relationship quality was operationalized through four measures: thought (about the relationship partner), perceived physical attractiveness of the partner, breakup distress, and love. Through a series of three studies, it was found that romantic secrecy was associated with lower levels of relationship quality and decreased trajectories of relationship quality over a period of two weeks. Romantic secrecy was also found to be related to increased relationship burdens and lower levels of relationship satisfaction. Results from these studies indicate that although keeping a relationship secret may be alluring, it actually may have negative consequences for the relationship.



In a similar manner, Lehmiller (2009) examined the consequences of secret romantic relationships on the well-being of those involved in the relationship as well as on the well-being of the relationship itself. Romantic secrecy was measured using Foster and Campbell's (2005) seven-item measure. Other variables measured included relationship commitment, cognitive interdependence, behavioral limitations, interaction barriers, self-esteem, and physical and psychological well-being. It was found that greater romantic secrecy was associated with lower commitment levels, lower levels of interconnectedness with the relationship partner, more difficulty spending time with the partner, and greater perceived need to change behaviors with the partner in public. Additionally, higher levels of romantic secrecy were related to lower levels of self-esteem and well-being. So although alluring, keeping relationships a secret can be detrimental to personal as well as relational well-being, suggesting that secret-sharing regarding one's relationship can be motivated by a desire to have more satisfying and higher quality relationships and to limit the negative personal and relational outcomes associated with romantic secrecy.

On a separate note, another motivation people may have for revealing secrets may be to help others who are in a comparable situation. People tend to share their secrets with those that they perceive as similar to themselves or have been in similar circumstances as their own (e.g. Derlega, Lovejoy, & Winstead, 1998; Vangelisti, Caughlin, & Timmerman, 2001). For instance, a friend may disclose to us about a situation they are going through, and in the case where we have been through a similar situation, we may decide to reveal our own personal secret in order to offer support to this individual. Sharing of our personal information to this individual can offer them advice on the situation, emotional support, and give them a sense of security knowing that

they are not alone in their circumstances. In this way, revealing our secrets to others can be motivated by a desire to help others cope (Caughlin & Vangelisti, 2009).

Some people may share their secrets as a form of social control. Mentioned previously, Derlega and Grzelak (1979) refer to social control as a function of self-disclosure. Some people may selectively reveal highly personal information about themselves in order to control or exploit others. For example, people may provide misleading or incomplete information about themselves or their own secrets in order to learn about others' intentions or to provoke others to disclose their secrets to them. This may give the initial revealer control over the other and their outcomes in a situation and can provide them with means to socially manipulate the other through taking advantage of the information received.

People may also reveal secrets in order to gain social power or as a way to manipulate others. In certain cases, the personal information involved in people's secrets may provide them with feelings of power, oftentimes because they hold rare information that few to no other people have access to (Vangelisti, Caughlin, & Timmerman, 2001). In this way, divulging our secrets can give people power and status through demonstrating access to privileged information. Furthermore, if more than one individual is involved with the situation being kept secret, revealing the secret can give the revealer control or power over the other persons involved. Revealing the secret can also be used a means to hurt the others involved if they have a negative relationship or have had a falling out. For example, it was found that having a negative relationship with family members is related to a higher likelihood of divulging a family secret (Vangelisti and Caughlin, 1997). This research therefore demonstrates that the revealing of secrets can be strategically manipulative, given the social value of a secret and the power it can have over other individuals.

### *Health Outcomes Associated with Revealing and Concealing Secrets*

Past research has focused on the positive health outcomes associated with confiding in others. James Pennebaker, for instance, made substantial contributions to this field of research with a focus on those who have experienced trauma. The experience of trauma and the emotional consequences associated with a traumatic event tend to be sensitive topics to discuss. Due to the highly personal nature of these topics, they tend to be discussed less frequently with others and often kept secret by those involved. Pennebaker's research has found a relation between keeping traumatic incidents secret and negative long-term health (Pennebaker, 1989). More specifically, it was found that *not* confiding trauma was associated with a greater likelihood of contracting illness and disease compared to those who had confided their traumas (Pennebaker & Susman, 1988). This finding has been emphasized in the self-concealment literature (Larson & Chastain, 1990), where self-concealment was found to be associated with increased anxiety, depression, and other negative physical health outcomes.

In addition, writing about the facts and emotions involved in a traumatic experience was associated with fewer visits to a student health center for university students than those who wrote about merely the facts *or* the emotions of the traumatic experience, as well as compared to those who wrote only about a trivial experience (Pennebaker & Beall, 1986). Although writing is not a form of *verbal* communication, this literature demonstrates that expressing a traumatic experience more holistically may be related to better health outcomes. Fascinatingly, it was also found that immune function improved after confiding traumatic experiences (Pennebaker, Kiecolt-Glaser, & Glaser, 1988). One of the proposed mechanisms through which this process works is the idea that putting these traumatic experiences into words helps to make meaning and coherency of the situation and assimilate it into the self-concept, allowing the revealer to move

forward (Pennebaker, 1997). A meta-analysis of experimental disclosures from 146 studies (48% unpublished articles) supports this effect of positive health outcomes associated with confronting and confiding trauma and other life stressors (Fratarolli, 2006).

More recently, Slepian and Moulton-Tetlock (2018) specifically examined the confiding of secrets in relation to perceived well-being through a set of four studies. Confiding secrets was operationalized as separate from the sharing of emotions or general self-disclosure, and was specifically recognized as sharing with a request for help and confidentiality. These studies found that confiding secrets led to increased well-being through multiple pathways. First, confiding only led to increased well-being at high levels of social support, but had the reverse effect if the confidant was assessed as low in social support. Additionally, the researchers found that confiding secrets led to decreased mind-wandering back to the secret, which in turn led to increased perceived well-being. Importantly, confiding led to perceived coping efficacy, which also was associated with increased perceived well-being. It was found that perceived coping efficacy was actually a stronger predictor of perceived well-being than was frequency of mind-wandering. Confiding our secrets to others can have positive health outcomes for the discloser, with the stipulation that the selected confidant is highly supportive during the revelation. One possible mechanism of Pennebaker's theory of inhibition and confession (1989) suggests that keeping secrets is a form of active inhibition which involves cognitive and physiological work. This work becomes an underlying stressor in the person's life and may influence their risk of disease or illness. This means that confiding our secrets should relieve us of this psychological burden of suppressing our secrets and therefore improve our health outcomes (Pennebaker, 1989).

This is in line with research involving ironic processes of mental control (Lane & Wegner, 1995; Wegner, 1994; Wegner, Erber, & Zanakos, 1993). When people actively attempt to suppress a thought, they may ironically begin to think about it more often, reversing the intended effects. For example, in an experiment involving effortful control to change mood (Wegner, Erber, & Zanakos, 1993), the intended effect was reversed with the introduction of cognitive load – those who were told not to feel sad after reminiscing about a sad event were more sad than those who were given no instruction after reminiscence.

Consistent with this idea, Lane & Wegner (1995) developed the Preoccupation Model of Secrecy. This model predicts that secrecy leads to thought suppression, which in turn leads to thought *intrusion*. In other words, attempting to suppress a secret leads to fixation on that secret. Thought intrusion then causes more attempts at thought suppression and it becomes a cycle of preoccupation with the secret. In this way, actively attempting to keep a secret hidden may induce these ironic processes which lead the secret-keeper to think about the secret more often, making it more readily accessible, and presenting the secret-keeper with constant underlying stress. To relieve this stress, the secret-keeper may decide to share the secret as a form of emotional catharsis.

In summary, research on the positive health outcomes associated with revealing highly personal or secret information is extensive and consistently demonstrates that there are health benefits associated with revealing secrets. However, people may not be aware of these health outcomes when making the decision of whether to reveal a secret.

## **Models of Self-Disclosure**

### ***When Should We Reveal?***

We are often told to share our secrets in order to get them off our chests, or that we will feel better once we reveal them. Although this can be true in some circumstances, it can sometimes be that we are better off keeping them to ourselves. Kelly and McKillop (1996) created a simple decision-making model for when to reveal secrets. They recommend that if a secret is not troubling or causing stress-related physical symptoms, it should not be revealed. However, if the secret is troubling, it should *only* be revealed if an appropriate confidant is available, such as when confidentiality is guaranteed, the confidant will not judge the discloser, and if they are able to help the discloser deal with the situation. Given their recommendation, it is clear that Kelly and McKillop believe we should err on the side of caution when choosing to reveal our secrets. This model suggests an appropriate course of action that should be taken when deciding to reveal a secret, which seems to diverge from the decision-making process people follow in actuality.

### ***What and How Much do We Reveal?***

Omarzu (2000) developed a Disclosure Decision-Making Model based on the assumptions that self-disclosures are strategic and used as tools to achieve salient social or personal goals. In this model, the default social goal is social approval. Other goals may include intimacy, relief of distress, social control, and clarification of identity. Once salient goals are established, the next stage involves target and strategy selection, which influence whether or not a disclosure will be made. This model deems that subjective utility and subjective risk of the disclosure influences the breadth, depth, and duration of self-disclosures. The greater the risk of disclosure, the less intimate the disclosure is likely to be. Thus, as secrets inherently tend to be more risky self-disclosures, people may shy away from disclosing, not disclose the full situation beyond surface level, or decide on a different disclosure topic, according to this model.

Consequently, disclosure of highly intimate information will most likely occur in situations where there is perceived to be very low risk according to this model.

### **Triggers of Secret-Sharing**

For every good reason to reveal our secrets, there seems to be an equally good reason not to. People are guided by the aforementioned intrinsic and extrinsic motivations that factor into their decisions of whether to reveal or conceal secrets, and they often may make well-informed choices that align with their personal and social goals. However, there still exists a gap in the literature addressing factors which lead people to make decisions to share their secrets with negative consequences or that they may later regret, despite being aware of the risks involved. For example, when there is not an appropriate confidant available or when disclosure may not be the most appropriate strategy people may disclose nonetheless. There may be forces or additional aspects of interpersonal dynamics at play of which communicators are not always consciously aware, which may lead people to share even when it might not be beneficial. To address this question, it is important to understand the interplay between the seemingly contradictory tendencies of wanting to reveal our secrets and wanting to keep them hidden by considering specific instances where catalyst criteria may be involved in the management of our privacy rules for our secrets. Pressure to reciprocate and relief of psychological distress are discussed as potential triggers of secret-sharing.

#### ***Pressure to Reciprocate***

Pressure to reciprocate in social exchanges may be a trigger of secret disclosure. According to social penetration theory (Altman & Taylor, 1973), reciprocity of self-disclosures comes in part from the “norm of reciprocity” or an obligation to reciprocate communication in a social exchange, but also in terms of forecasting whether a relationship will be worthwhile to

pursue given its rewards-to-costs ratio and history of relationship. Generally, during social exchange, “you get what you give.” For instance, Jourard and Jaffee (1970) found that characteristics of an experimenter’s disclosure, such as length of speech duration, influenced the responses received from the subjects in a social exchange; longer utterances by the experimenter led to longer utterances by the subjects. Similarly, social penetration theory predicts that the level of intimacy disclosed by one member of a social exchange will elicit a similar level of intimacy as a response. Along this line, if one member of the exchange is distant or reserved in their disclosures, the other member will follow suit. Perhaps when one social partner reveals information about themselves it creates an imbalance of power in a relationship; the other social partner must reciprocate in order to restore the balance. Due to these patterns of demonstrated reciprocity, it seems that an individual will be provoked to reveal a secret in response to a social partner’s revelation of a secret, especially if the relationship has been evaluated as more rewarding than costly and there is pressure to restore the balance of the social relationship.

On the other hand, secret-keeping can create cognitive dissonance when the act of *not disclosing* a secret is inconsistent with a person’s beliefs that 1) they are an honest and straightforward individual or 2) they should not keep secrets from a close other. The psychological discomfort evoked from this dissonance could thus be alleviated by revealing the secret. For instance, imagine a relationship partner who was unfaithful in a previous romantic relationship. In their new relationship, this individual decides to reveal to their partner their previous infidelity in order to be upfront and honest about themselves. As a result, the new romantic partner loses trust in the individual, putting their relationship at risk. The psychological discomfort felt from the dissonance motivated the individual to take action, leading them to reveal their secret despite



the risk of hurting this new relationship. In this regard, a person's urge to relieve themselves of cognitive dissonance may lead them to reveal a secret when it is risky to do so.

### ***Psychological Distress***

Psychological distress is also a potential trigger of secret-sharing. According to Stiles' Fever Model of Disclosure (1987), people are likely to disclose during times of psychological distress, and even more likely to disclose (and with more frequency) as feelings of distress increase in intensity. Stiles posits that disclosure under these circumstances serves a restorative purpose which benefits the well-being of the discloser by relieving the distress. Important to this model is that the function of disclosure under these circumstances is primarily expressive, and not strategic.

The Fever Model of Expressive Disclosure describes an internal pressure incorporating usually negative and occasionally very positive emotion that builds from specific life events. These feelings tend to overwhelm thinking. According to this model, the bottled-up emotional experience is either expressed through disclosure or must be actively concealed, which as discussed previously is associated with negative health outcomes (e.g., Larson & Chastain, 1990; Pennebaker, 1989; Pennebaker & Susman, 1988).

The Fever Model thus suggests that disclosure from distressed individuals is beneficial to the individual. However, although disclosing or revealing secrets can immediately benefit the discloser by allowing them a sense of relief, there may be short-term or long-term negative consequences that follow, depending on the social outcomes of disclosing. Given the risky nature of secrets, emotional expression provoked by a need to relieve psychological distress may result in negative outcomes for the discloser, especially if a strategic plan to reveal to an appropriate confidant has not been put into place or followed. Therefore, regardless of whether the outcome

is positive or negative, revealing an emotional secret due to a desire to relieve psychological distress may be unwise.

### **Model of Impulsive Secret-Sharing**

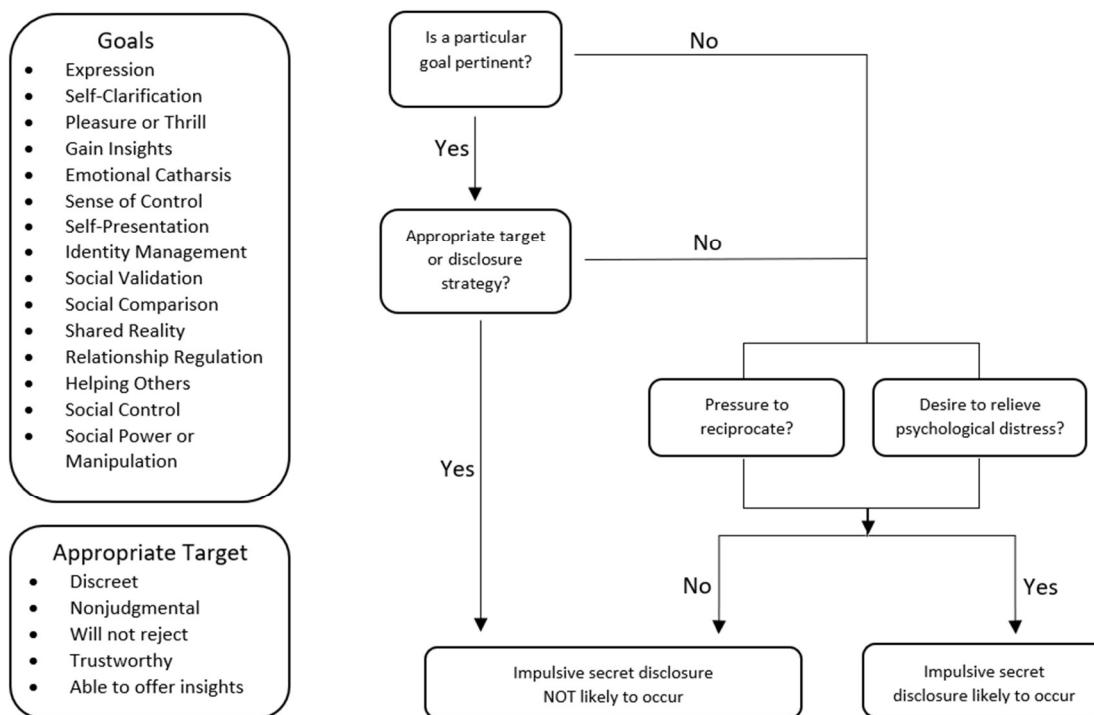
These triggers for revealing secrets –pressure to reciprocate and psychological distress – represent a pressure to act on an imbalance or inconsistency in order to return to a state of equilibrium. These imbalances become motivational states; individuals feel an urgency to take action to relieve themselves of the imbalance, and perhaps they lose sight of the consequences. The pressures then either outweigh or bias the perceived consequences of secret disclosure. Thus, people’s attempts to restore balance might explain why they are pulled to share more than they should or in inappropriate circumstances.

Although a disclosure decision-making model has been developed (Omarzu, 2000) as well as a model that delineates when a person ideally should or should not reveal a secret (Kelly & McKillop, 1996), a model has yet to be proposed which focuses on the decision-making process specifically involving the sharing of secrets. The decision for secret-revealing may have nuanced differences from a more general disclosure model and can shed light on a distinctive form of self-disclosure – secret-sharing – which is perceived as riskier and more personal than general self-disclosures.

Additionally, the Fever Model of Disclosure (Stiles, 1987) describes disclosure as both a symptom of psychological distress as well as a restorative process to relieve the distress, and ascertains that people are more likely to disclose when they are emotionally distraught. However, there are other dynamics that can push people to self-disclose beyond this trigger. A proposed model of impulsive secret-sharing is displayed below, which integrates and builds upon these

three models of disclosure, and which focuses specifically on the self-disclosure of secrets (see Figure 1).

**Figure 1**



*Proposed Model of Impulsive Secret-Sharing*

The model first takes into account whether an individual has a strategic motive for revealing their secret. When a goal for revealing a secret is pertinent, then whether or not it is likely to lead to regret is determined by the appropriateness of the chosen confidant and disclosure strategy.

Next, the model accounts for the triggers of secret-sharing. If a particular goal is not salient (or if an appropriate confidant or disclosure strategy is not available or selected), then whether or not the secret-sharing is likely to be imprudent depends on whether the triggers (pressure to reciprocate or a need to relieve psychological distress) are activated. When a trigger

is activated, impulsive disclosure is likely to occur. Otherwise, the secret is likely to be revealed with a more strategic and positive outcome.

### **Individual Differences and Measurements of Secret-Sharing Behaviors**

In everyday life, we know of certain people who are very open with the details of their private lives and often disclose personal information easily and readily. On the other end of the spectrum, we know people who are very private with their thoughts and personal information and have very contained privacy boundaries. If someone more readily shares the details of their personal lives, are they more likely to engage in secret-sharing than someone who keeps to themselves? Does this tendency to self-disclose change the way people perceive and evaluate secret-sharing?

Self-disclosure has been differentially conceptualized in the literature. It has been conceptualized and measured as a stable trait or tendency (e.g., Jourard & Lasakow, 1958; Kahn & Hessling, 2001; Larson & Chastain, 1990; Miller, Berg, & Archer, 1983), often distinguishing between interaction partners. Others have understood self-disclosure to be more situated and context-dependent (e.g., Chelune, 1976). When operationalizing self-disclosure, measures exist along a dimension between behavior and perception or self-report (Kreiner & Levi-Belz, 2019). Self-disclosure has been measured behaviorally through evaluating the content of the disclosure through analysis of recorded or live conversations (e.g., Mikulincer & Nachshon, 1991). It has also been measured through analyzing qualities of the content, including factors such as depth, breadth, and duration of the disclosure (Omarzu, 2000). These methods have been particularly useful in virtual contexts, where linguistic parameters can be measured including number of words and style of writing (Barak & Gluck-Ofri, 2007). When measured as a self-reported trait,

instruments tend to be sensitive to individual differences and are often used as quasi-experimental factors or dependent variables (Kreiner & Levi-Belz, 2019).

As a consideration for the current research, if someone is more prone to self-disclosing regardless of context, the way they evaluate secret-sharing decisions, risks of secrets, and their own decisions regarding sharing secrets may differ from someone who is much more generally private. In this way, it may be beneficial to control for self-disclosure tendencies when considering potential association with secret-sharing perceptions and behaviors.

On a separate tangent, given the above operationalizations of self-disclosure, and the conceptualization of secret-sharing as a riskier form of self-disclosure, one potential way to measure self-disclosure of secrets (i.e., secret-sharing behavior) could therefore be to measure perceptions of the riskiness of a self-disclosure. Measuring secret-sharing perceptions in this way, complemented by behavioral measures of self-disclosure and general self-disclosure tendencies could provide a more comprehensive understanding of secret-sharing.

## **Rationale**

The reasons people decide to share or keep their secrets can vary vastly from situation to situation and person to person – this is no surprise. Although empirical research exists regarding secrecy and its underlying motivations (McDonald, Salerno, Greenaway, & Slepian, 2020), there is limited research on the motivations underlying secret-*sharing* and how those motivations can shape the experience of revealing a secret. For instance, are there specific motives people have when deciding to share versus keep a secret or certain contextual factors involved that lead to poorer emotional outcomes and greater regret than others in these situations? If so, are people aware of the motives and situations that can lead to more negative outcomes compared to more beneficial long-term outcomes? Findings from this dissertation aim to address these questions.

Additionally, the above research suggests two avenues where people may be triggered to reveal a secret unwisely –desire to relieve psychological distress and pressure to reciprocate. This dissertation will also address whether and to what extent one of these triggers is associated with secret-sharing with greater potential for negative outcomes, and whether perceptions on sharing secrets differ when people are versus are not exposed to these triggers.

This series of studies strives to provide us with a deeper understanding of the experience of sharing secrets, particularly regarding situations and motivations where secret-sharing is likely to result in a more negative outcome rather than be beneficial for the individual sharing the secret. Not only can we use this information to potentially make better decisions for ourselves and for our relationships, but this research also has implications for counseling interventions, and to help people navigate and cope with the personal circumstances that they keep hidden within themselves.

### **The Current Research**

The goal of this set of three studies was to establish a baseline understanding of the motivations and situational factors that influence secret-sharing decisions and outcomes using a mixed-method approach, and in doing so, to test aspects of the proposed model of impulsive secret-sharing. Study 1, an exploratory study, retrospectively examined the influence of the motivational and situational factors involved in situations where participants decided to share or keep a secret from somebody as well as the outcomes which resulted from their decisions. Study 2 investigated perceptions and evaluations of various secret-sharing and secret-keeping decisions in light of the hypothesized triggers of secret-sharing in order to understand how participants evaluate secret-sharing decisions. Study 3 used a created online social situation to explore secret-sharing behaviors based on manipulations of one of the two proposed triggers (reciprocity

pressure) of impulsive secret-sharing with the purpose of determining whether and how exposure to a trigger influences the secrets that people are willing to share.

### **Study 1: Perceptions of Secret-Sharing**

The purpose of Study 1 was to get a baseline understanding of the situational contexts and motivational factors involved when people decide to share versus keep personal secrets, and to examine how these factors are associated with the positive and negative outcomes associated with these decisions. Due to limited existing empirical research on these issues, Study 1 is exploratory.

In Study 1, participants are asked to reflect on a past secret-sharing or secret-keeping experience and then respond retrospectively to questions about the situation leading up to the decision to share or keep the secret, information about the confidant with whom the secret was shared or kept from, and perceived riskiness of the secret for themselves and for others. They also respond to questions about their motivations to reveal or conceal the secret, and their current feelings about the secret.

### **Study 1 Research Question and Hypotheses**

#### ***Research Question 1***

How do experiences of secret-sharing and secret-keeping differ?

#### ***Hypothesis 1a***

Although this research is exploratory, it is predicted that across the secret sharing and keeping conditions, there will be differences in which motivational and situational factors are most pertinent. This prediction stems from the CPM conceptualization of motivational goals as catalyst criteria for changes in privacy rules (Petronio, 2013).

### ***Hypothesis Ib***

Given the CPM literature and emphasis on the personal and relational significance of self-disclosure (Petronio, 2002, 2010, 2013), it is predicted there will be differences across conditions in both perceptions of the riskiness of the secret for oneself and for others, as well as in perceptions of the target confidant.

### ***Hypothesis Ic***

A greater extent of planning will be associated with secret-keeping, and a greater extent of spontaneity will be associated with secret-sharing. This reasoning is again guided by the possibility that those who decided to share their secrets may have been more likely to have encountered or been influenced by catalyst criteria for managing privacy rules (Petronio, 2013), thus altering their privacy rules based on situational, in-the-moment considerations.

### ***Hypothesis Id***

It is also predicted that there will be differences across conditions regarding the long-term consequences of sharing or keeping a secret, including the affective outcomes pertaining to the secret, and feelings of regret and gladness regarding the decision to reveal or conceal it.

## **Study 1 Method**

### ***Research Participants and Design***

Participants included 216 students enrolled in introductory psychology courses at DePaul University. Two participants were excluded from the analysis for not following the writing prompt, leaving a total of 214 participants included in the analyses. Participants ranged in age from 18 to 41 years ( $M = 19.73$ ;  $SD = 2.89$ ), with female participants making up 72% of the sample, male participants making up 26%, and 2% preferring to self-describe their gender (for the gender by condition participant distribution see Appendix A, Table A1). Race and ethnicities



of the participants were 50% European American Non-Hispanic White, 19% Hispanic or Latino, 14% Black or African American, 11% Asian or Asian American, 5% identified as multiracial, and 1% as American Indian or Alaska Native.

Recruitment ads for this research were posted in the online participant pool system for the university, where participants voluntarily self-selected the study to sign up. All participants received academic credit for their participation in the online research study.

An experimental between-subjects design with two conditions (secret-sharing and secret-keeping) was implemented. The dependent variables consist of perceptions of motivational and situational influences, the extent of planning regarding their decision, perceptions of the riskiness of the secret, the status of the secret, perceptions of the confidant and predictions of future secret-sharing interactions with that confidant, the extent of regretting versus feeling glad about their secret-sharing or secret-keeping decision, and the emotional outcomes of sharing or keeping the secret.

### ***Measures***

**Instructions.** Participants were randomly assigned to one of two conditions, where the instructions either asked them to reflect on a time they decided to share or decided to keep a personal secret (adapted from Kelly, 2002).

***Share Condition Instructions.*** “Virtually everyone keeps secrets, or hides personal information from others at some point in time. In other words, we hold private information that we would want very few other people (or no one) to know about. Please take a moment to reflect on a time in which you shared a very private and personal secret with someone else. Select a secret from the past or present that involves you directly and personally.

Please type your secret below, and keep in mind this specific instance of sharing your secret when answering all questions during this survey. At the end of the study, your response below will automatically be deleted - nobody will see your typed secret besides yourself.”

***Keep Condition Instructions.*** These instructions were exactly the same as the Share Condition Instructions with the underlined portion replaced with “kept a very private and personal secret from someone else.”

**Regret vs. Glad Questions.** Participants were asked to select how they currently feel about their decision to share or keep their secret (“Please select the point on the scale which best describes how you currently feel about your decision to [share/keep] your secret.”). Participants were to respond using an 11-point scale (-5 = extremely regretful, +5 = extremely glad). They were also asked to elaborate on their responses by answering an open-ended question on why they are glad or regret sharing or keeping the secret (“Why do you feel that way?”).

**Timing Question.** Participants were asked how long ago the interaction of deciding to share or keep their secret took place by recording the number of years, months, and/or weeks ago the decision occurred.

**Secret Risks Questionnaire.** This questionnaire contained 14 items pertaining to participants’ perceived risks of their secret before the interaction, retrospectively (i.e. “In retrospect, please indicate to what extent you perceived the following risks to be associated with your secret at the time”). Seven items pertained to personal risks for the participant (e.g. “Damaging your reputation,” “Feeling embarrassed,” “Being rejected by others”). The other seven items corresponded to participants’ perceived risks of the secret attributed to a close other (e.g. “Getting a close other in trouble,” “Damaging a close other’s relationships”). Participants responded by selecting the extent to which each of the items is a risk associated with their secret

on a 5-point scale (1 = not at all, 5 = extremely). See Appendix B for the full list of items for this measure. Risk scores were calculated separately for personal risk ( $\alpha = .86$ ) and risk to others ( $\alpha = .93$ ) by summing the ratings for each of the items. Risk scores could range from 7 (not risky) to 35 (extremely risky) for both personal risk and risk to others.

**Secret Status Questions.** Participants were asked to select the status of their secret before it was revealed or kept in that instance, and the status of the secret currently (“Please select the status of your secret *before* the interaction,” “Please select the status of your secret *now*”). Multiple choice options were provided to participants for each of the two questions. The response options included: a) I [had/have] kept this secret from everyone, b) I [had/have] only shared this secret anonymously or with a stranger, c) I [had/have] only shared this secret with a small number of people, d) I [had/have] only kept this secret hidden from a small number of people, e) I had once kept this secret, but it [was not a secret anymore at the time/is not a secret anymore]. As options were listed from total secret to not a secret anymore, each option was assigned a value (a=1, b=2, c=3, d=4, e=5) for both questions, and change in status was calculated by subtracting status *before* from status *now*, with larger difference values indicative of sharing the secret with more people as time progressed.

**Confidant Rating Scale.** This scale contained 6 items pertaining to the participants’ perceptions of their confidant before sharing their secret with or keeping it hidden from them. This scale (adapted from the Counselor Rating Form; Corrigan & Schmidt, 1983) contained items pertaining to sociability (i.e. *friendly, likeable, kind, helpful, warm, cooperative*). See Appendix C for the full measure. Instructions for this measure were: “For each of the following characteristics, please select the point on the scale that best represents how you viewed this person at the time.” The response format was a seven-point scale (1 = not very, 7 = very;  $\alpha =$

.97). Scores were averaged across all items to create a single confidant rating score with possible scores ranging from 1 (low in sociability) to 7 (high in sociability).

**Confidant Questions.** To better understand participants' experience and perceptions regarding this individual, participants were asked 4 additional questions. The first set of questions asked participants in an open-ended format how they *thought* the confidant would react if the participant shared their secret with them, and how the participant *thought* they would react if they knew the participant had kept the secret from them. The second set of question asked, "How likely would you be to *share* a secret with this person in the future?" and "How likely would you be to *keep* a secret from this person in the future?" and called for participants to respond using a 5-point scale (1 = very unlikely, 5 = very likely).

**Level of Planning Questions.** These questions asked participants to recollect the extent to which their decision to reveal or keep their secret was spontaneous or planned (i.e. "In this circumstance, to what extent was [sharing/keeping] your secret spontaneous?" "In this circumstance, to what extent was [sharing/keeping] your secret planned?"). Participants were asked to respond using a 5-point scale (1 = not at all, 5 = extremely). Additionally, an open-ended question was posed, asking participants to "Please describe the situation leading up to the moment. Include as many details as possible, such as time, location, and the general environment."

**Motivational and Situational Factors Questionnaire.** This questionnaire included 20 items to thoroughly examine which motivations and situational factors may have led the participant to reveal or keep their secret (e.g. "I wanted to get the secret off my chest," "My secret was bound to be found out," "My secret made me feel uneasy," "My secret made me feel independent"). Instructions for this scale were to "Please indicate to what extent you agree with

these statements as they pertained to the decision of whether you should share or keep your secret” and called for 5-point Likert scale responses (1 = not at all, 5 = very much). See Appendix D for the full list of items. All items were included in an exploratory factor analysis to extract a number of factors. Average scores for each factor were calculated from the results of the factor analysis loading pattern. See Study 1 Results for details.

**Affective Outcomes.** To better understand the long-term outcomes associated with keeping or sharing their secrets, participants were asked how they currently feel about their secrets. Eight mood description items (Erber & Tesser, 1992) were provided to participants (i.e. *good, sad, happy, calm, inspired, blue, gloomy, apprehensive*) with the instructions (adapted from Kelly, Klusas, von Weiss, & Kenny, 2001), “Please reflect on your secret, feel the emotions associated with this secret, and for each of the following adjectives, indicate to what extent you feel this way whenever you think about your secret.” Participants were asked to respond using a 7-point scale (1 = not at all, 7 = a lot; see Appendix E). Two scores were calculated, such that responses were summed for both negative affect ( $\alpha = .83$ ) and positive affect ( $\alpha = .88$ ), where scores could range from 4 to 28. Higher scores indicated greater levels of negative or positive affect.

### ***Procedure***

Upon signing up for the research study, participants were given a link for the online questionnaire. Following the link, participants were provided with the informed consent information. By continuing with the questionnaire, participants agreed to participate in the research.

Following consent, participants were randomly assigned to one of the two conditions through the survey website – Share or Keep. The difference between the conditions pertained

only to the instructions participants were provided with (to reflect on a time they either revealed a personal secret *or* kept a personal secret). All remaining questions were the same across conditions, with the wording adjusted to reflect the assigned condition where needed.

Participants were provided with the measures described in the materials in the order they are presented above. Questions with multiple items presented the items in randomized orders to the participants. Upon completion of the study, participants were redirected to the university's research participant pool website, which automatically granted credit to the participants. The entirety of the study took approximately 30 minutes to complete.

### **Study 1 Results**

To determine whether differences occurred between secret-sharing and secret-keeping experiences, a one-way multivariate analysis of variance (MANOVA) was conducted with condition as the independent variable and the following factors contributing as dependent variables: perceived risk of the secret for the self, perceived risk of the secret for others, confidant rating, likelihood of keeping a future secret from the confidant, likelihood of sharing a future secret with the confidant, extent of spontaneity and planning when deciding to share or keep the secret, the positive and negative affective outcomes, and the extent to which participants regretted or were glad about their secret-sharing decisions. Bartlett's test of sphericity was significant,  $\chi^2(45) = 347.64$ ,  $p < .001$ , indicating the dependent variables are correlated and suitable for use in the MANOVA. The Box's Test of Equality of Covariances was significant for this analysis,  $p = .020$ , however research indicates that with a large enough sample size and a p-value above .005, it is safe to proceed with the analysis using Pillai's Trace. The value for Pillai's Trace was significant, indicating condition differences within the dependent variables,

$F(10, 203) = 5.30, p < .001$ , with a partial eta squared of .207. Post-hoc univariate analyses will be reported within the relevant sections below.

### ***Motivational and Situational Factors***

An exploratory factor analysis was first conducted for the twenty items in the Motivational and Situational Factors Questionnaire. Principal axis factoring was used as an extraction method, with a rotation using Promax with Kaiser Normalization. Coefficients with an absolute value below 0.40 were suppressed. Based upon the total variance explained by the potential factors and interpretation of the scree plot, the ideal number of factors to extract was between two and four. Based on the pattern matrix, it was determined that four items should be removed from the set due to poor alignment with the factors (e.g., loading onto multiple factors or not loading strongly onto any factors). The exploratory factor analysis was run with the set of sixteen items included, and the final result included the extraction of four factors, renamed as follows: Distress, Relationship and Perspective Management, Avoidance of Negative Outcomes, and Intrinsic Rewards. See Table 2 below for the final Pattern Matrix. Distress accounted for 17% of the variance explained, Relationship and Perspective Management accounted for 10%, Avoidance of Negative Outcomes accounted for 6%, and Intrinsic Rewards accounted for 5%, for a total of 39% of the variance explained by the four-factor structure.

A composite variable was created for each of the four factors from the MSFQ by averaging ratings from the identified items. A separate one-way MANOVA was conducted with condition as the independent variable and the four motivation composite factors as dependent variables. The Box's Test of Equality of Covariances was not significant indicating it was safe to proceed with the analysis. The Pillai's Trace value was significant for condition,  $F(4, 210) = 3.840, p = .005$ , with a partial eta squared of .404, indicating differences exist between the share

and keep conditions within the dependent variables. After determining that the assumption for equality of error variances had been met for all factors, post-hoc univariate analyses were conducted. It was found that the only significant difference across conditions occurred for the Avoidance of Negative Outcomes factor,  $F(1, 213) = 6.42, p = .012$ , such that participants in the keep condition were more motivated by this factor ( $M = 2.76, SD = 1.04$ ) than those in the share condition ( $M = 2.43, SD = 0.86$ ).

**Table 2**

*Results from a Factor Analysis of the Motivational and Situational Factors Questionnaire (MSFQ)*

MSFQ Item	Factor Loading			
	1	2	3	4
<b>Factor 1: Distress</b>				
I was feeling great levels of emotional distress.	.715			
My secret made me feel uneasy.	.697			
I wanted to get the secret off my chest.	.643			
<b>Factor 2: Relationship and Perspective Management</b>				
My conversation partner had revealed a secret to me previously.		.587		
I hoped to get a new perspective on the situation.		.524		
I wanted the confidant to share something personal about themselves with me.		.497		
I wanted to understand whether my beliefs were appropriate compared to those around me.		.493		
I wanted to take my relationship with my conversation partner in a certain direction.		.462		
I wanted my conversation partner to like me.		.441		
<b>Factor 3: Avoidance of Negative Outcomes</b>				
I felt disconnected in my relationship with my conversation partner.			.710	



I was worried about the potential negative consequences of sharing my secret. .455

I felt my conversation partner perceived me as a closed off person. .420

Factor 4: Intrinsic Rewards

The idea of sharing my secret with somebody seemed exciting. .632

My secret made me feel independent. .478

My secret was bound to be found out. .477

I felt my conversation partner perceived me as predictable. .408

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*Note.*  $N = 214$ . Pattern matrix for the factor analysis. The extraction method was principal axis factoring with a rotation using Promax with Kaiser Normalization. Factor loadings above .40 are included.

### ***Contextual Factors***

Participants were asked about the contextual factors leading up to the decision to disclose or conceal their secret in an open-ended format. These qualitative responses were assessed according to their content using a combination of deduction and analytical induction (Bulmer, 1979). For example, while considering the goals of this research, themes were initially established for the triggers of impulsive secret-sharing (reciprocity pressure and psychological distress), as well as level of planning (planned and spontaneous). One coder then read a random subset of 20% of the responses for this question and used these to develop the remaining set of themes. After discussing the themes with a second coder, the final coding scheme was established.

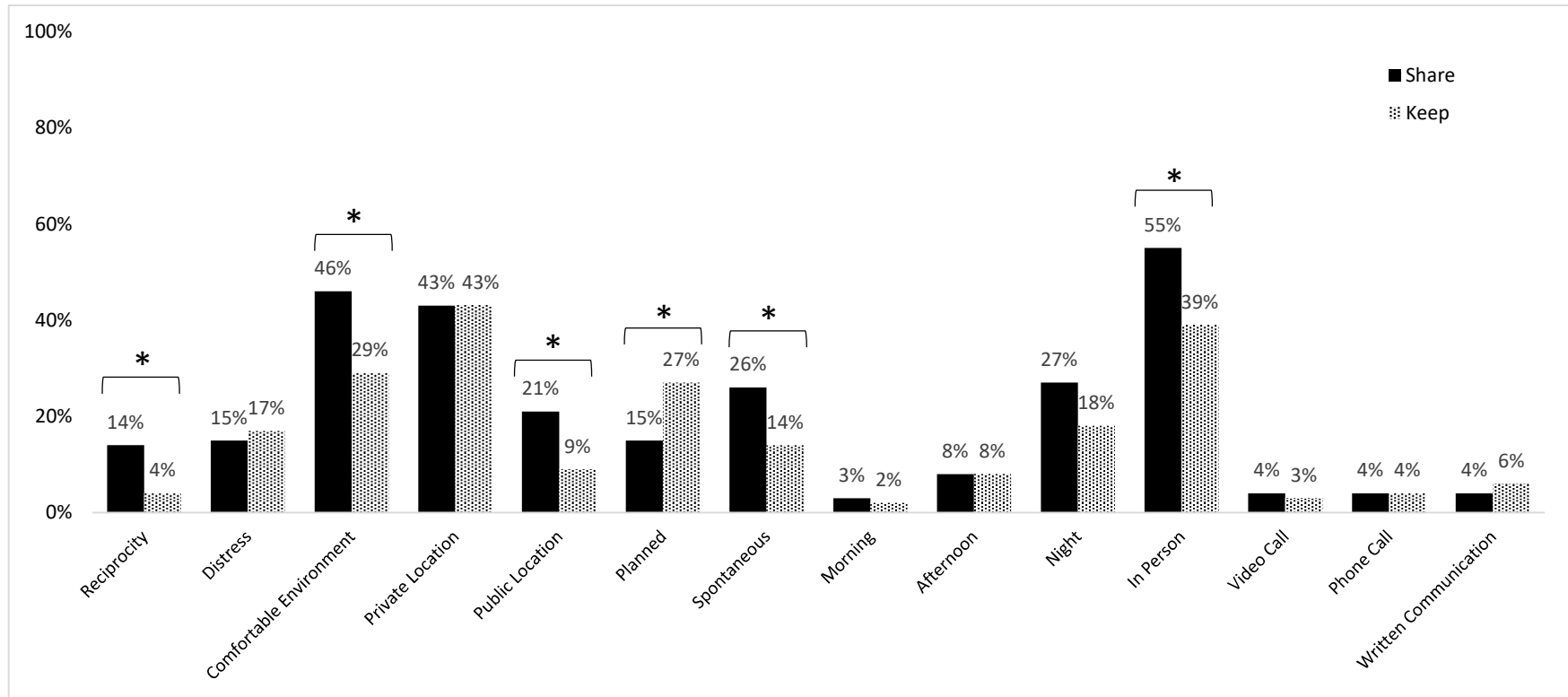
Two coders then separately coded all responses according to the final coding scheme, where each response could be associated with as many themes as were mentioned within the response. Finally, codes were compared across each theme to determine interrater reliability. All

themes had a percentage of agreement between coders above 78%, however only themes with Kappa values above 0.50 are discussed. See Figure 2 for frequencies of themes across the share and keep conditions.

Regarding the hypothesized triggers of secret-sharing, it was found that more participants in the share condition discussed reciprocity pressure (14%) than those in the keep condition (4%),  $\chi^2(1, N = 215) = 5.55, p = .018$ . For example, one participant mentioned, "...I was very anxious but we had both said we had things we needed to tell each other so that made me feel better about it." Psychological distress did not differ in frequency discussed across the share (15%) and keep conditions (17%),  $\chi^2(1, N = 215) = .23, p = .63$ .

Participants discussed more frequently a comfortable environment in the share condition (46%) than in the keep condition (29%),  $\chi^2(1, N = 215) = 6.72, p = .010$ . They mentioned being in a public location more often in the share condition (21%) than the keep condition (9%),  $\chi^2(1, N = 215) = 6.55, p = .011$ , however there was not a difference in the frequency of a private location being mentioned between the share (43%) and keep conditions (43%),  $\chi^2(1, N = 215) = .00, p = .98$ .

Participants discussed decision planning more often in the keep condition (27%) than in the share condition (15%),  $\chi^2(1, N = 215) = 4.84, p = .028$ , and more spontaneous decisions in the share condition (26%) than in the keep condition (14%),  $\chi^2(1, N = 215) = 4.77, p = .029$ . As an example, one participant discussed the moment they decided to keep their secret to themselves while considering potential courses of action, "I remember that I decided to keep my secret in my home in the middle of the night, I was anxious and scared and decided that the best course of action was to keep my secret to myself."

**Figure 2***Condition Differences in Contextual Themes**Note.  $p < .05$*

Mentioning the time of day of the decision as nighttime did not differ across the share (27%) and keep conditions (18%),  $\chi^2(1, N = 215) = 2.69, p = .10$ , and there also were no differences regarding the mention of the afternoon across the share (8%) and keep conditions (8%),  $\chi^2(1, N = 215) = .005, p = .094$ , nor the morning across the share (3%) and keep conditions (2%),  $\chi^2(1, N = 215) = .87, p = .35$ .

Finally, more participants mentioned being in person with the confidant or conversation partner in the share condition (55%) than in the keep condition (39%),  $\chi^2(1, N = 215) = 5.55, p = .018$ . However, differences were not seen across the share and keep conditions, respectively, for mentioning being in a video call (4% compared to 3%;  $\chi^2(1, N = 215) = .247, p = .62$ ), a phone call (4% compared to 4%;  $\chi^2(1, N = 215) = .045, p = .83$ ), or written communication (4% compared to 6%;  $\chi^2(1, N = 215) = .619, p = .43$ ).

### ***Perceptions of Secret Risk***

As a post-hoc analysis following the MANOVA, perceived risk of the secret for oneself was compared across the share and keep conditions in a univariate analysis, after determining that the assumption for equality of error variances was met. However, we did not see a significant difference between conditions,  $F(1, 212) = .29, p = .58$ .

Similarly, perceived risk of the secret for others was compared across conditions after the assumption for equality of error variances was met. Again, a significant difference was not found for this value between conditions,  $F(1, 212) = .41, p = .52$ .

### ***Perceptions of Confidant***

As a post-hoc analysis following the MANOVA, confidant rating was compared across the share and keep conditions in a univariate analysis. The assumption for equality of error variances was not met for this measure, however because sample sizes are large and similar

across the share and keep conditions, standard deviations for the conditions were similar in value, and responses are independent, it was deemed safe to proceed with the analysis. A significant difference between conditions was found,  $F(1, 212) = 8.54, p = .004$ , with partial  $\eta^2 = .039$ , such that participants rated their confidants as greater in sociability in the share condition ( $M = 5.11, SD = .99$ ), than in the keep condition ( $M = 4.64, SD = 1.39$ ).

Accordingly, as post-hoc analyses following the MANOVA, both likelihood to share a future secret with the confidant and likelihood to keep a future secret from the confidant were compared across conditions after the assumptions for equality of error variances were met. Significant differences were not found for either of these items between conditions respectively,  $F(1, 212) = 2.18, p = .141$ ;  $F(1, 212) = 1.33, p = .250$ .

**Qualitative Response – Confidant Share.** Participants were asked how they predicted their confidant would react if they shared their secret with them (before their decision was made) in an open-ended format. These qualitative responses were assessed in conjunction with the related open-ended question for predicted confidant reactions regarding if confidants found out they had kept their secret from them, using analytical induction (Bulmer, 1979). This decision was made in order to use a consistent coding scheme across the two associated questions. One coder then read a random subset of 20% of the responses for both questions and used these to develop the set of themes and sub-themes. A second coder read over a subset of responses, and both coders met to discuss the themes. Both coders agreed with the set of themes, establishing the final coding scheme.

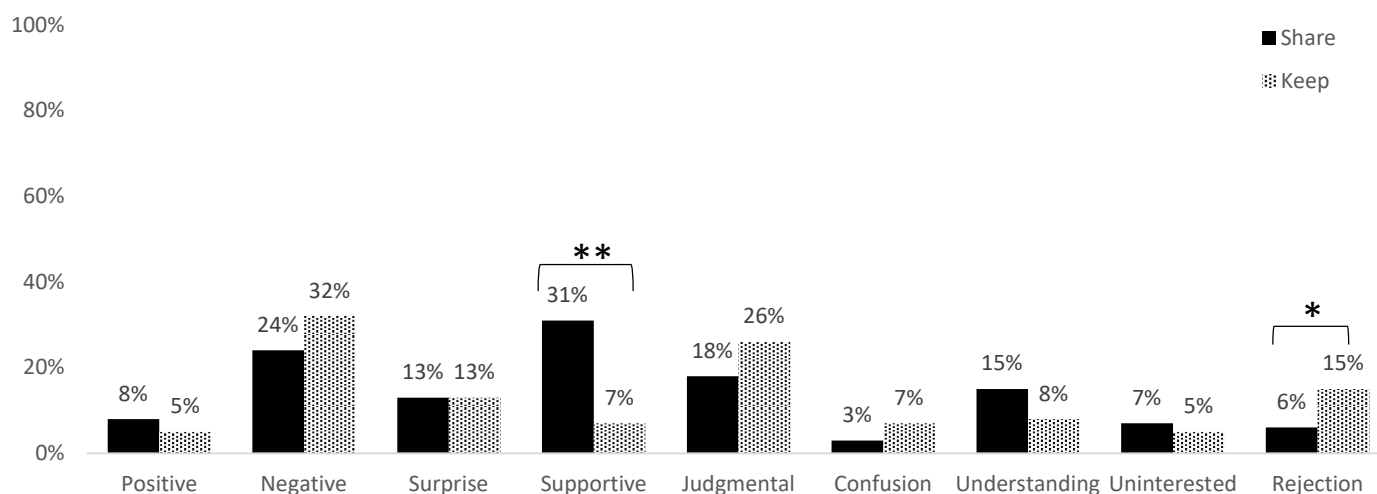
The two coders then separately coded all responses according to the final coding scheme. Each response could be associated with as many themes as were mentioned by the respondents. Finally, codes were compared across each theme to determine interrater reliability. All themes

had a percentage of agreement between coders above 77%, however only themes with Kappa values above 0.50 are discussed. See Figure 3 for frequencies of themes across the share and keep conditions.

No difference was found for the frequency of discussing negative emotions across the share (24%) and keep conditions (32%),  $\chi^2(1, N = 215) = 1.64, p = .20$ . Positive emotions also did not differ in frequency discussed across the share (8%) and keep conditions (5%),  $\chi^2(1, N = 215) = .51, p = .48$ . Participants did not differ either in the frequency in which surprise was mentioned across the share (13%) and keep conditions (13%),  $\chi^2(1, N = 215) = .001, p = .98$ .

**Figure 3**

*Condition Differences in Predicted Confidant Reaction Themes - Sharing Personal Secrets*



*Note.*  $p < .05^*$ ;  $p < .001^{**}$

Participants mentioned the topic of support much more frequently in the share condition (31%) than in the keep condition (7%),  $\chi^2(1, N = 215) = 19.04, p < .001$ . However, they did not mention judgment differently in the keep condition (26%) compared to the share condition (18%),  $\chi^2(1, N = 215) = 2.68, p = .10$ . Importantly, the theme of predicted rejection from their potential confidant was more often discussed in the keep condition (15%) than in the share

condition (6%),  $\chi^2(1, N = 215) = 4.91, p = .027$ . For example, one participant expressed, “I thought that I would be completely rejected by them, they would not want to be around me anymore, and they possibly would tell other people and talk badly about me.”

Finally, participants did not mention the theme of predicted understanding differently across the share (15%) and keep conditions (8%),  $\chi^2(1, N = 215) = 2.31, p = .13$ . Predicted confusion also did not differ in frequency mentioned in the share (3%) and keep conditions (7%),  $\chi^2(1, N = 215) = 1.08, p = .30$ . Additionally, predicted indifference did not seem to differ much across the share (7%) and keep conditions (5%),  $\chi^2(1, N = 215) = .20, p = .66$ .

**Qualitative Response – Confidant Keep.** Participants were asked how they predicted their confidant would react if they knew they had kept their secret from them in an open-ended format. See the above section for details on the analytical induction method used to establish the final coding scheme for this question (Bulmer, 1979). Two coders separately coded all responses according to the final coding scheme. Each response could be associated with as many themes as were mentioned within it. Finally, codes were compared across each theme to determine interrater reliability. All themes had a percentage of agreement between coders above 80%, however only themes with Kappa values above 0.50 are discussed. See Figure 4 below for frequencies of themes across conditions.

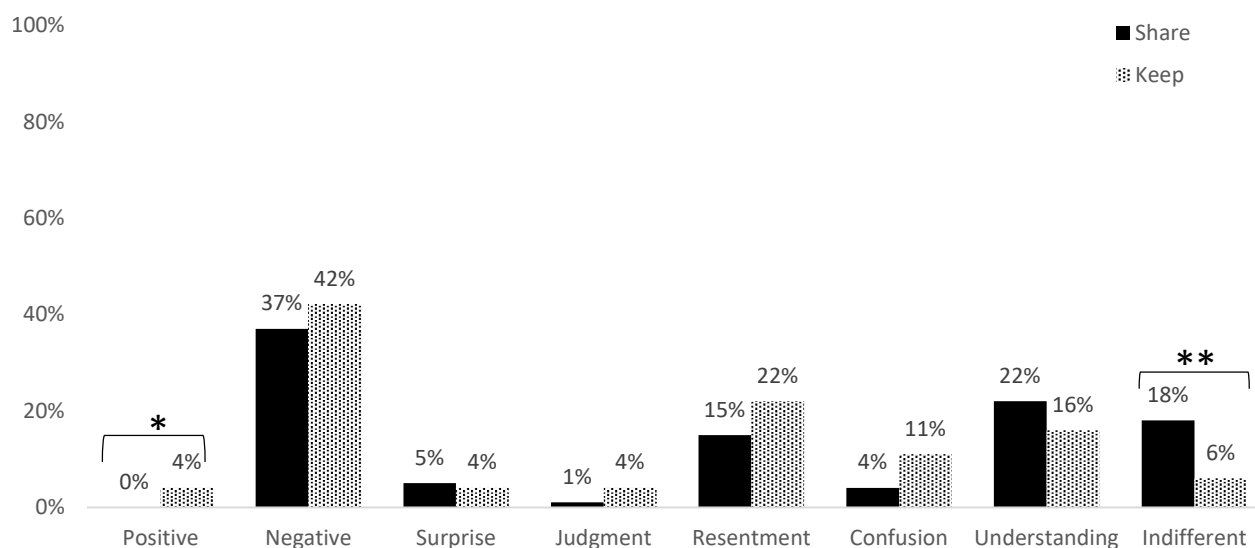
Differences in the frequency of positive emotions were found in participant responses across the share (0%) and keep conditions (4%),  $\chi^2(1, N = 215) = 4.71, p = .03$ , however differences in the frequency of negative emotions discussed were not found between the share (37%) and keep conditions (42%),  $\chi^2(1, N = 215) = .58, p = .45$ . No difference was found for frequency of mentioning confidant surprise between the share (5%) and keep conditions (4%),  $\chi^2(1, N = 215) = .22, p = .64$ .

It was also found that participants mentioned indifference more frequently in the share condition (18%) than in the keep condition (6%),  $\chi^2 (1, N = 215) = 7.51, p = .006$ , for example one participant stated, “I didn't think they would care, the secret didn't involve them and it was something that happened before I knew them...” The theme of resentment did not differ in frequency across the share (15%) and keep conditions (22%),  $\chi^2 (1, N = 215) = 1.60, p = .21$

Finally, confusion did not differ in frequency as a confidant prediction for participants in the keep condition (11%) compared to the share condition (4%),  $\chi^2 (1, N = 215) = 2.53, p = .11$ . Understanding also did not differ in occurrence across the share (22%) and keep conditions (16%),  $\chi^2 (1, N = 215) = 1.36, p = .24$ . Similarly, the theme of judgment did not differ between the share (1%) and keep conditions (4%),  $\chi^2 (1, N = 215) = 1.08, p = .30$ .

#### Figure 4

*Condition Differences in Predicted Confidant Reaction Themes - Keeping Personal Secrets*



*Note.*  $p < .05^*$ ;  $p < .01^{**}$

#### *Level of Planning*

As a post-hoc analysis following the MANOVA, both the extent to which the secret-sharing decision was spontaneous and the extent to which it was planned were compared across



the share and keep conditions in univariate analyses, after determining that the assumption for equality of error variances was met. Significant differences between conditions were determined for both values respectively,  $F(1, 212) = 19.89, p < .001$ , partial  $\eta^2 = .086$ ;  $F(1, 212) = 25.44, p < .001$ , partial  $\eta^2 = .107$ . Greater levels of spontaneity were reported in the share condition ( $M = 3.18, SD = 1.38$ ) than in the keep condition ( $M = 2.39, SD = 1.24$ ), while greater levels of planning were reported in the keep condition ( $M = 3.50, SD = 1.42$ ) than the share condition ( $M = 2.53, SD = 1.39$ ).

### *Affective Outcomes*

As a post-hoc analysis following the MANOVA, current negative affect was compared across the share and keep conditions in a univariate analysis, after determining that the assumption for equality of error variances was met. A significant difference between conditions was found,  $F(1, 212) = 5.79, p = .017$ , partial  $\eta^2 = .027$ , such that participants in the share condition reported greater levels of current negative feelings about their secrets ( $M = 16.61, SD = 6.52$ ), that those in the keep condition ( $M = 14.33, SD = 7.27$ ).

On the other hand, current positive affect was compared across conditions after determining the assumptions for equality of error variances were met. A significant difference was not found between conditions,  $F(1, 212) = .49, p = .49$ .

Similarly, the extent to which participants reported being regretful or glad of their secret-sharing decision was compared across conditions after the assumptions for equality of error variances were met. A significant difference was not found between conditions,  $F(1, 212) = .096, p = .756$ .

Correlations were also run to examine the patterns of responses as related to the affective outcomes measured (see Table 3).

**Table 3**

*Correlations Between Positive Affect, Negative Affect, Regret, and Other Measures*

Measure	Positive Affect	Negative Affect	Regret vs Glad
Perceived Risk of Secret			
Risk - Self	<b>-.252**</b>	<b>.400**</b>	-.072
Risk - Other	<b>-.201*</b>	<b>.289**</b>	-.082
Confidant Perceptions			
Willingness to Share in Future	<b>.193*</b>	-.087	.099
Likelihood to Keep from in Future	<b>-.246**</b>	<b>.225**</b>	.000
Sociability Rating	.122	-.058	.117
Level of Planning			
Extent Spontaneous	.120	-.060	-.029
Extent Planned	.069	-.066	<b>.140*</b>
Motivational Factors			
Factor 1: Distress	<b>-.156*</b>	<b>.378**</b>	-.107
Factor 2: Relationship/ Perspective Management	.130	.126	-.026
Factor 3: Avoidance of Negative Outcomes	<b>-.160*</b>	<b>.255**</b>	<b>-.176*</b>
Factor 4: Intrinsic Rewards	<b>.547**</b>	<b>-.268**</b>	.115

*Note.*  $N = 215$  participants;  $p < .05^*$ ,  $p < .001^{**}$

Greater current positive affect was associated with lower levels of perceived risk of the secret for both the self ( $r(212) = -.25, p < .001$ ) and for another ( $r(212) = -.20, p = .003$ ). It was also significantly related to predicted future secret-sharing behaviors with regards to the confidant, such that greater extent of positive affect was associated with a lesser likelihood to keep a secret from this confidant in the future ( $r(212) = -.25, p < .001$ ), and a greater likelihood to share a secret with this confidant in the future ( $r(212) = .19, p = .005$ ).

Positive affect regarding the secrets was also significantly related to three of the motivational factors: Distress ( $r(212) = -.16, p = .022$ ), Avoidance of Negative Outcomes ( $r(212) = -.16, p = .019$ ), and Intrinsic Rewards ( $r(212) = .55, p < .001$ ).

Additionally, greater current negative affect was associated with greater perceived risk of the secret for the self ( $r(212) = .40, p < .001$ ) and for another ( $r(212) = .29, p < .001$ ). It was also associated with a greater predicted likelihood to keep a secret from the confidant in the future ( $r(212) = .23, p < .001$ ). Similar to positive affect, negative feelings regarding the secret were significantly related to three of the motivational factors, but in the opposite directions: Distress ( $r(212) = .38, p < .001$ ), Avoidance of Negative Outcomes ( $r(212) = .26, p < .001$ ), and Intrinsic Rewards ( $r(212) = -.27, p < .001$ ).

Furthermore, the extent of regret or gladness regarding the secret-sharing decision was found to be significantly related to the extent of planning ( $r(212) = .14, p = .04$ ), such that greater gladness correlates with more planning of the disclosure. Finally, extent of regret or gladness was also significantly related to the motivational factor of Avoiding Negative Outcomes ( $r(212) = -.18, p = .01$ ), where greater levels of regret were associated with a greater drive to avoid negative outcomes.

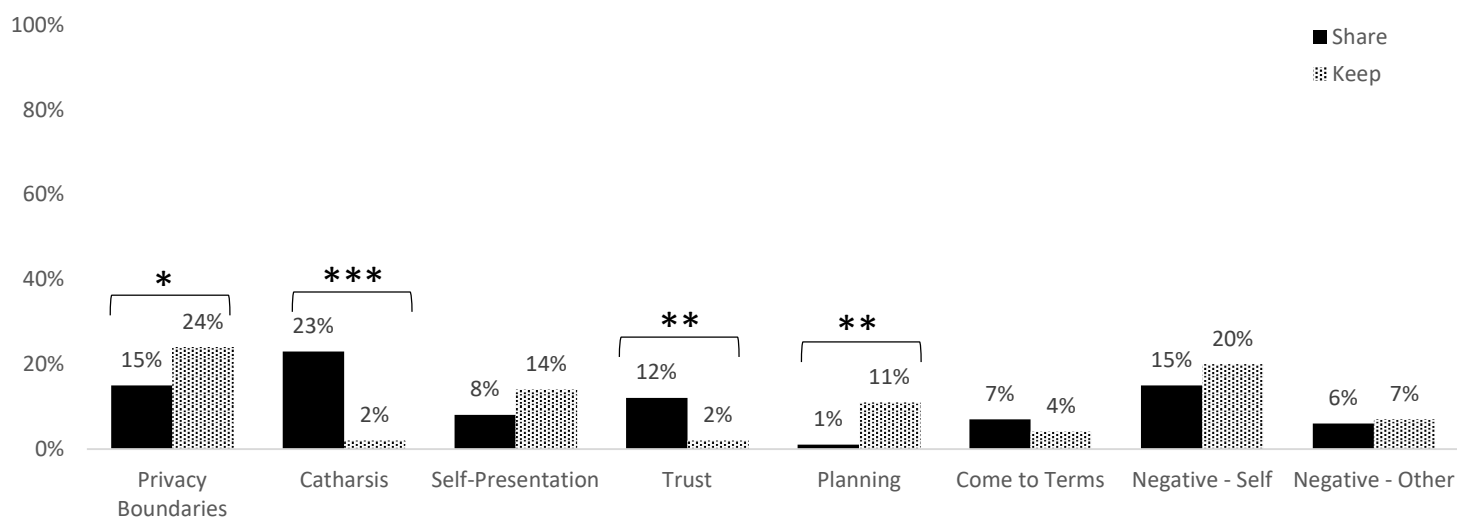
**Qualitative Regret Versus Gladness Responses.** Participants were asked, in an open-ended format, why they selected their responses regarding the extent of regret vs. gladness they feel about their decision. These qualitative responses were assessed in conjunction with a similar question from Study 2 which asked about reasoning for *predictions* of the extent of regret vs. gladness participants would feel in a hypothetical situation, using analytical induction (Bulmer, 1979). This decision was made in order to use a consistent coding scheme across the two associated questions. One coder then read a random subset of 20% of the responses for both questions and used these to develop the set of themes and sub-themes. A second coder read over a subset of responses, and both coders met to discuss the themes, resulting in an agreed upon final coding scheme.

The two coders then separately coded all responses according to the final coding scheme. Each response could be associated with as many themes as were mentioned within it. Finally, codes were compared across each theme to determine interrater reliability. All themes had a percentage of agreement between coders above 77%, however only themes with Kappa values above 0.50 are discussed. See Figure 5 for theme frequencies across conditions.

It was found that participants discussed the theme of privacy boundaries marginally more frequently in the keep condition (24%) than in the share condition (15%),  $\chi^2(1, N = 215) = 3.11$ ,  $p = .078$ . This seemed to particularly be the case when participants expressed more gladness to have kept their secret (29%). For example, one participant who expressed gladness for keeping their secret stated, “I feel like it's no one's business. If I keep it a secret, then I don't want to share it.”

**Figure 5**

*Condition Differences in the Themes for Extent of Regret versus Gladness*



*Note.*  $p < .10^*$ ;  $p < .01^{**}$ ;  $p < .001^{***}$

The theme of emotional catharsis was discussed more frequently in the share condition (23%) than in the keep condition (2%),  $\chi^2(1, N = 215) = 23.36, p < .001$ , which also seemed especially the case when participants expressed more gladness to have shared their secret (39%). One participant discussed, “It was one of the hardest conversations I’ve had to have, but getting it off my chest made me feel much better.”

The theme of self-presentation did not differ in frequency between the keep (14%) and the share conditions (8%),  $\chi^2(1, N = 215) = 1.61, p = .21$ , however, the topic seemed to occur most often when participants were glad to have kept their secret (22%). The theme of trust was more frequently mentioned in the share condition (12%) compared to the keep condition (2%),  $\chi^2(1, N = 215) = 9.71, p = .002$ . Additionally, planning of the decision was more often communicated in the keep condition (11%) than in the share condition (1%),  $\chi^2(1, N = 215) = 7.72, p = .005$ .

The theme of negative outcomes for the self did not differ in frequency across the keep (20%) and share conditions (15%),  $\chi^2(1, N = 215) = 1.32, p = .25$ . Similarly, negative outcomes for another did not differ across the share (6%) and keep conditions (7%),  $\chi^2(1, N = 215) = .01, p = .92$ . However, participants who expressed more regret regardless of condition more frequently seemed to mention negative outcomes for the self (36%) and for others (12%) than those participants who expressed more gladness about their decision (4% and 2%, respectively). Finally, the theme of coming to terms with the secret did not differ in frequency across the share (7%) and keep conditions (4%),  $\chi^2(1, N = 215) = 1.79, p = .18$ .

### **Study 1 Discussion**

In Study 1, past secret-sharing and secret-keeping decisions were compared to determine whether and how these experiences and their outcomes differ. Several noteworthy findings emerged. First, it was found that while the motivations for sharing and keeping secrets were generally similar, there was a difference in the extent which one motivational factor in particular was perceived to influence the decision – avoidance of negative outcomes. This motivational factor was more prevalent when participants decided to keep their secrets compared to when they decided to share them. This finding is in line with the CPM concept of catalyst criteria, where motivational goals can act to influence existing privacy rules on a situational basis.

Participants' open-ended responses about the context leading up to the decision seemed to support the idea that reciprocity pressure is associated with secret-sharing, however support was not seen in these cases for the influence of psychological distress on secret-sharing behavior. Interestingly a comfortable environment was discussed more often in secret-sharing situations, indicating that people may be more likely to share a secret when they are in a safe setting, which is in alignment with Omarzu's (2000) decision-making model. A context which involves an in-

person interaction (as opposed to virtual or written communication) was also mentioned more frequently for those who shared their secrets compared to those who kept them. This may possibly be due to an increased opportunity for reciprocity pressure to occur.

Surprisingly, risk of the secret did not seem to play a role in secret-keeping or secret-sharing experiences, although it was predicted that risk might be perceived as greater for the self as well as for others when a secret is kept. Perhaps the decision to keep or share a secret has less to do with the secret itself, and more to do with outside factors.

As expected, participants perceived their confidants as higher in sociability or warmth in the share condition than in the keep condition. It may be that people perceive individuals who have warm and friendly personalities as more trustworthy. However, Study 1 does not measure perceived closeness of the target confidant to the participant, which is a limitation of this study. Closeness to a target confidant might be a key factor involved in both decisions to share or keep a secret as well as the outcomes of doing so, and also has implications from a CPM perspective when considering the relational aspect of communicating private information.

On the other hand, willingness to disclose or keep a future secret from the individuals with whom the secrets were originally shared or kept did not differ across conditions. Participants' open-ended responses about predicted confidant reactions lend support to the idea that these predicted reactions may have influenced decisions to keep or share secrets with their confidants. This is in line with previous research that emphasizes the role of predicted confidant reactions in relation to the concealment of private information (Afifi & Steuber, 2010). For instance, those who kept their secrets discussed more often the possibility of rejection if they were to have revealed their secret to them. Participants who shared their secrets more often mentioned the possibility that their confidant would provide support or understanding of the

situation. It is no surprise that these predictions of a confidant's reaction might play a role in the decision of whether to share or keep a secret.

Level of planning regarding the decision to share or keep a secret also was found to differ across the share and keep conditions. Participants in the share condition reported more spontaneity and less planning in their decisions than those in the keep condition who reported that a greater extent of planning was involved in their decisions. Participants' responses to the open-ended question regarding the context leading up to the secret also aligned with these findings – more participants in the keep condition mentioned aspects of planning for the decision, while more participants in the share condition mentioned spontaneity. These findings support the prediction that there may be situational triggers, or catalyst criteria influencing privacy rule decisions, which lead to impulsive, in-the-moment secret-sharing decisions.

One of the most important and intriguing findings of Study 1 has to do with the long-term outcomes of sharing versus keeping secrets. More specifically, how participants feel about their secrets currently. It was found that those who shared their secrets actually retained more negative feelings about the secret over time than those who decided to keep their secrets, and that there was no difference in the positive feelings retained about the secret whether it was shared or kept. This suggests that although people may expect or receive short-term feelings of catharsis or unburdening after revealing their secrets, it does not necessarily mean they feel better about their secret in the long-term. Sharing secrets, then, may not always be the best decision.

Interestingly, a pattern emerged regarding factors associated with the long-term outcomes of sharing or keeping secrets. Current feelings about the secret were related to the perceived risk of the secret, confidant reactions, and even the motivational factors involved in the decision to share or keep a secret. More specifically, positive feelings about the secret were related to lower



secret risk, more positive confidant reactions, and being more motivated by intrinsic rewards. Negative feelings about the secret were related to greater perceived risk of the secret, more negative confidant reactions, a stronger motivation to avoid negative outcomes, and the decision being more motivated by distress. This result regarding the association between confidant reactions and the consequences of revealing a secret aligns with the finding that revealing secrets is only beneficial to the extent that the confidant reacts positively (Afifi & Caughlin, 2006).

However, despite having more negative feelings regarding the secret after sharing the secret, participants did not report greater levels of regret. It is possible that the extent of regret does not depend on whether a secret was shared or kept, but rather the outcomes of doing so. Results from a deeper dive into regret versus gladness indicated that the extent of regret of the decision to share or keep the secret was found to be related to level of planning as well as the motivation to avoid negative outcomes. Participants' open-ended responses about the extent of regret they feel regarding their decision indicated that participants who were glad to have kept their secrets frequently discussed maintaining privacy. Those who were glad to have shared their secret more frequently mentioned emotional catharsis. In general, those who shared their secret more often mentioned trust and emotional catharsis, while those who kept their secret more often mentioned the planning involved in their decision and valuing privacy.

Overall, findings from Study 1 indicate that secret-sharing and secret-keeping experiences differ in several critical ways. Not only do these experiences involve differences in the contextual factors leading up to the decision to share or keep a secret, but they also include differences in the motivations driving the decision as well as in the long-term outcomes, where people actually seem to feel more negatively if they decided to share their secret. Interestingly, several factors included in this study were associated with more positive or more negative

emotional outcomes regardless of the decision. However, it is important to keep in mind the potential for hindsight bias to have contributed to some of the responses, which is to be expected for retrospective study designs. Although this is a limitation of Study 1, it is also an interesting avenue to explore as this might be an unexpected outcome of secret-sharing. Study 2 takes this limitation into account by creating vignettes to more tightly control the variables of interest.

### **Study 2: Evaluations of Secret-Sharing**

While Study 1 retrospectively examined factors that differed between secret-sharing and secret-keeping experiences, Study 2 honed in on two of the hypothesized triggers of secret-sharing – reciprocity pressure and psychological distress – through examining participants’ perceptions and evaluations of secret-sharing and secret-keeping situations involving each of these triggers. In this study, participants read one of four vignettes (imagining themselves in the scenario) involving a decision to share or not share their secret with a classmate, and then responded to a set of quantitative and qualitative questions about their perceptions of the riskiness of the secret, the level of planning of the decision to share or keep the secret, the confidant’s sociability, what would have led them in this situation to share or keep their secret, and predicted affective outcomes of their decision. Ultimately, this study aimed to provide insight into whether people’s perceptions of the components involved in secret-sharing and whether a secret should be shared are influenced by the context of the situation, particularly in situations involving exposure to the triggers.

### **Study 2 Research Question and Hypotheses**

#### ***Research Question 2***

How does the type of secret-sharing trigger affect perceptions and evaluations of secret-sharing and secret-keeping situations and their predicted outcomes?

***Hypothesis IIa***

On the basis of the existing literature, a main effect of secret-sharing decision is predicted for perceptions of the riskiness of a secret, such that greater risk will be associated with the decision to keep a secret.

***Hypothesis IIb***

A main effect of secret-sharing decision is hypothesized for predicted decision regret, such that greater levels of regret are expected to occur when a secret is shared compared to when a secret is kept. An interaction effect is also hypothesized, such that greater levels of regret will be predicted in the reciprocity pressure condition than in the psychological distress condition when the secret was shared, while the reverse pattern will occur when the secret is kept.

***Hypothesis IIc***

A main effect of secret-sharing decision is hypothesized for perceived level of planning, such that greater levels of perceived planning are expected when a secret is kept compared to when a secret is shared.

***Hypothesis II d***

A main effect of secret-sharing decision is hypothesized for perceptions of the potential confidant, such that confidant perceptions will be more positive when a secret is shared with them than when a secret is kept from them. An interaction effect is also predicted such that confidant perceptions will be more positive in the psychological distress condition than the reciprocity pressure condition when the secret is shared, but there will be no difference in confidant perceptions between type of trigger when a secret is kept.

### ***Hypothesis IIe***

A main effect of secret-sharing decision is hypothesized for predicted emotional outcomes, such that sharing a secret will be associated with more positive emotional outcomes than keeping a secret. An interaction effect is also predicted such that less favorable emotional outcomes are predicted when the situation involves reciprocity pressure compared to when it involves psychological distress when a secret is shared, but there will be no difference in predicted emotional outcomes when a secret is kept.

### **Study 2 Method**

#### ***Participants and Design***

Participants included 263 students enrolled in introductory psychology courses at DePaul University. Due to not passing the reading check questions, seventy participants were excluded from analysis, for a total of 193 participants included. Participants ranged in age from 18 to 35 years ( $M = 19.38$ ,  $SD = 1.85$ ), with female participants making up 64% of the sample, male participants making up 34%, and 2% preferring to self-describe their gender (for the gender by condition participant distribution see Appendix A, Table A2). Race and ethnicities of the participants were 57% European American Non-Hispanic White, 19% Hispanic or Latino, 12% Asian or Asian American, 6% Black or African American, and 6% of the sample identified as multiracial.

Recruitment ads for this research were posted in the online participant pool system for the university, where participants voluntarily self-selected the study to sign up. All participants received academic credit for their participation in the online research study.

This experiment consisted of a 2 (decision: share versus keep) x 2 (trigger: reciprocity pressure, psychological distress) between-subjects factorial design. The dependent variables

included participant perceptions and evaluations of secret-sharing and secret-keeping situations involving each of these triggers, as well as the predicted affective outcomes of sharing or not sharing the secret. Specifically, the dependent variables included perceptions regarding the extent to which the decision to share or keep a secret would be planned and spontaneous, perceived risks of the secret for oneself and for others, perceptions of the potential confidant, predictions of regret or gladness, and predictions of future emotional outcomes.

### ***Measures and Procedure***

**Vignettes.** Participants read one of four vignettes, where participants were asked to imagine themselves in that particular situation. Within the vignettes, the secret was held constant – that the participant had been planning to drop out of college. The background was also held consistent across the vignettes (i.e., the amount of time the secret had been kept for, and that the secret had never been shared with anybody else), as well as the confidant, who was always a classmate of the participant. The differences between the vignettes arose in whether the secret was shared or kept and in the type of trigger involved. For example, one vignette included the participant *sharing* their secret during a situation where *reciprocity pressure* was involved:

*“Imagine you have been keeping a secret about yourself for almost one month – that you are planning to drop out of college. You haven’t told anybody about the secret because you are nervous about the consequences of people finding out. One day, a classmate of yours reveals very personal information about themselves to you. In response, you decide to share your secret with them.”* See Appendix F for the full set of vignettes.

**Perceived Motivation.** After reading the vignette, participants were asked to describe their motivation for having shared or kept the secret, in an open-ended response format (“In this

situation, why do you believe you would have made that decision? Please be as specific as possible.”).

**Perceived Strategy.** Participants were also asked to rate how spontaneous and how planned the decision to share or keep the secret would have been, using 5-point scales from 1 (not at all) to 5 (extremely).

**Predicted Regret Questionnaire.** Participants were then asked to predict how likely they will end up regretting versus being glad about their decision, using an 11-point scale from -5 (extremely regretful) to +5 (extremely glad). Additionally, participants were asked why they selected that rating, using an open-ended response format.

**Perceived Secret Risks Questionnaire.** This questionnaire contained 14 items pertaining to the extent to which participants attributed each of the following risks to the secret of dropping out of college. Seven items pertained to personal risks (e.g., “Damaging your reputation,” “Feeling embarrassed,” “Being rejected by others”). The remaining seven items corresponded to perceived risks of the secret for close others (e.g., “Getting a close other in trouble,” “Damaging a close other’s relationships”). Participants responded by selecting the extent to which each of the items was a risk associated with their secret on a 5-point scale (1 = not at all, 5 = extremely). Risk scores were calculated separately for perceived personal risk ( $\alpha = .89$ ) and perceived risk to others ( $\alpha = .94$ ) by summing the ratings for each of the items. Perceived risk scores could range from 7 (not risky) to 35 (extremely risky) for both personal risk and risk to others.

**Confidant Rating Scale.** This scale contained 6 items pertaining to participant perceptions of their confidant, the classmate. This scale (adapted from the Counselor Rating Form; Corrigan & Schmidt, 1983) contained items pertaining to the confidant’s sociability (i.e., *friendly, likeable, kind, helpful, warm, cooperative*). Instructions for this measure were: “For

each of the following characteristics, please select the point on the scale that best represents how you probably viewed your classmate at the time.” The response format was a seven-point scale (1 = not very, 7 = very). This scale had high internal consistency ( $\alpha = .94$ ). Responses to the six items were averaged to create a composite perceived sociability rating, with possible scores ranging from 1 to 7, with higher scores meaning greater perceived sociability.

**Affective Outcome Prediction.** To better understand participants’ understanding of the potential long-term outcomes associated with sharing secrets, participants were asked how they thought they would feel about their secret in the future whenever they thought about their secret. Eight mood description items (Erber & Tesser, 1992) were provided to participants (i.e., *good, sad, happy, calm, inspired, blue, gloomy, apprehensive*) with the instructions (adapted from Kelly, Klusas, von Weiss, & Kenny, 2001), “Please reflect on the secret from the scenario as if it were your own. Feel the emotions associated with this secret, and then for each of the following adjectives, indicate to what extent you think you would feel this way in the future whenever you think about your secret.” Participants were asked to respond using a 7-point scale (1 = not at all, 7 = a lot). Two scores were calculated, such that responses were summed for both predicted negative affect ( $\alpha = .81$ ) and positive affect ( $\alpha = .86$ ) separately, where scores could range from 4 to 28. Higher scores indicated greater levels of predicted negative or positive affect.

## Study 2 Results

To determine whether differences are perceived between secret-sharing and secret-keeping experiences as well as type of trigger present (reciprocity or distress), a two-way multivariate analysis of variance (MANOVA) was conducted with secret-sharing decision (share, keep) and trigger (reciprocity, distress) as the independent variables and the following factors contributing as dependent variables: perceived risk of the secret for the self, perceived

risk of the secret for others, confidant rating, extent of spontaneity and planning when deciding to share or keep the secret, the positive and negative affective outcomes, and the extent to which participants regretted or were glad about their secret-sharing decisions. The Box's Test of Equality of Covariances was not significant,  $p = .112$ , indicating it is safe to proceed with the analysis. The Pillai's Trace value was significant for secret-sharing decision,  $F(8,182) = 15.42$ ,  $p < .001$ , with a partial eta squared of .404, indicating differences exist between the share and keep conditions within the dependent variables. However, the Pillai's Trace values were not significant for the trigger as a main effect,  $F(8,182) = .437$ ,  $p = .897$ , nor for the interaction between secret-sharing decision and trigger,  $F(8,182) = 1.36$ ,  $p = .217$ , indicating a lack of significant differences for the dependent variables across these factors. Post-hoc univariate analyses will thus only be reported for the secret-sharing decision within the relevant sections below.

### ***Motivational and Situational Factors***

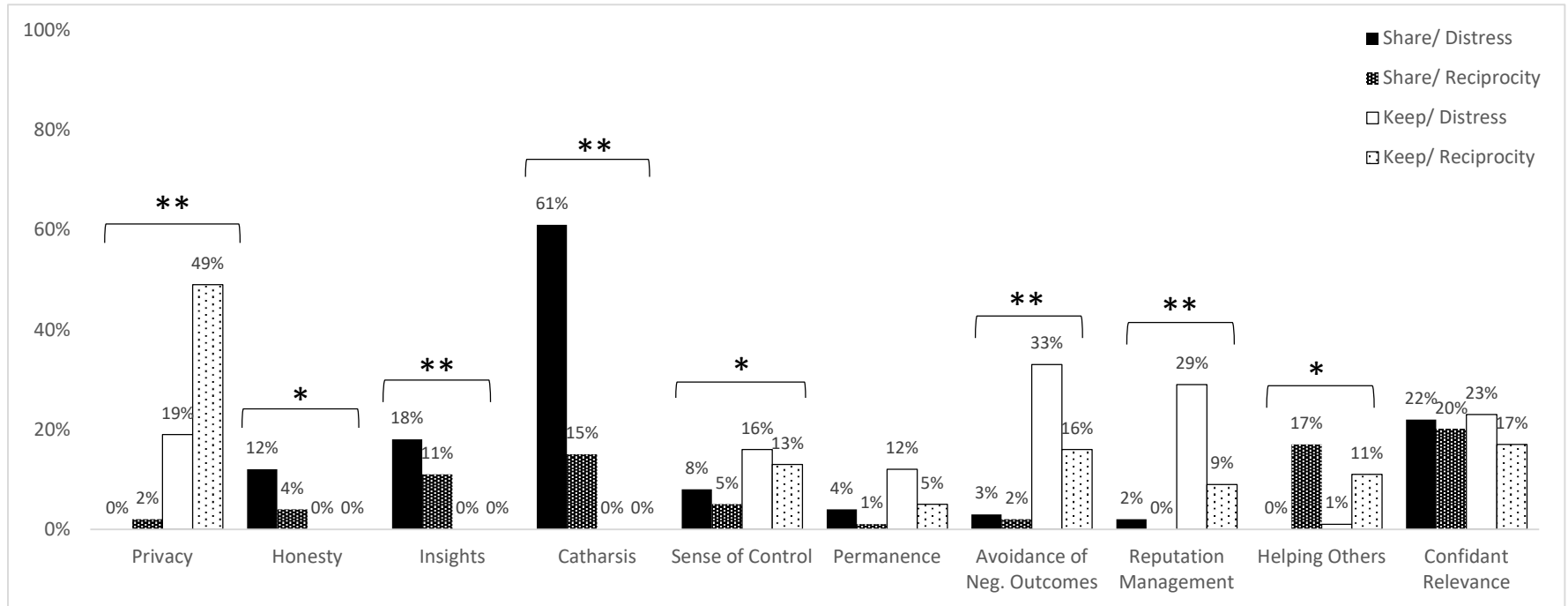
Participants were asked, in an open-ended format, why they would have decided to share or keep their secret in their provided scenario. These qualitative responses were assessed according to their content using a combination of deduction and analytical induction (Bulmer, 1979). For example, themes were initially established in accordance with the motivations discussed within the literature review for both keeping and sharing secrets. One coder then read a random subset of 20% of the responses for this question and used these to develop additional themes. Discussion with a second coder led to the establishment of the final coding scheme. The two coders then separately coded all responses according to the final coding scheme. Each response could be associated with as many themes as were mentioned by the respondents. Finally, codes were compared across each theme to determine interrater reliability. All themes



had a percentage of agreement between coders above 77%, however only themes with Kappa values above 0.40 are discussed. See Figure 6 for theme frequencies across the four conditions.

Participants mentioned the theme of privacy more frequently in the keep conditions (33%) than in the share conditions (1%),  $\chi^2(1, N = 193) = 34.42, p < .001$ . This theme was also more commonly mentioned in the reciprocity conditions (26%) than the distress conditions (11%),  $\chi^2(1, N = 193) = 7.12, p = .008$ . This was particularly the case for those participants in the keep and reciprocity condition (49%). The theme of valuing honesty was discussed more frequently in the share condition (8%) than in the keep condition (0%),  $\chi^2(1, N = 193) = 9.16, p = .002$ , with no difference in occurrences across the distress (6%) and reciprocity (2%) conditions,  $\chi^2(1, N = 193) = 1.80, p = .18$ .

Participants in the share conditions discussed more frequently the theme of emotional catharsis (38%) than those in the keep conditions (0%),  $\chi^2(1, N = 193) = 46.94, p < .001$ . Additionally, emotional catharsis was discussed more often in the distress conditions (28%) compared to the reciprocity conditions (8%),  $\chi^2(1, N = 193) = 13.61, p < .001$ . This was especially the case for participants in the share and distress condition (61%). Similarly, the theme of gaining new insights was also more frequently mentioned in the share conditions (14%) compared to the keep conditions (0%),  $\chi^2(1, N = 193) = 15.30, p < .001$ , with no differences across the distress (8%) and reciprocity (5%) conditions,  $\chi^2(1, N = 193) = .528, p = .47$ . One participant's response discussed their predicted motivation for sharing a secret as a way to seek advice, "If I am unsure of something, I bring it up to others and formulate my decision based on their opinion. I also don't just ask anybody; I ask people who I trust and know will help me make that decision."

**Figure 6***Condition Differences in Predicted Motivations**Note.  $p < .01^*$ ,  $p < .001^{**}$*

Additionally, participants mentioned the theme of sense of control more frequently in the keep condition (28%) than in the share condition (7%),  $\chi^2(1, N = 193) = 14.13, p < .001$ . This difference was not found between the distress (20%) and reciprocity (17%) conditions,  $\chi^2(1, N = 193) = .25, p = .62$ . The permanence of sharing a secret was discussed marginally more often in the keep conditions (9%) than in the share conditions (3%),  $\chi^2(1, N = 193) = 3.38, p = .066$ , with no differences in occurrences across the reciprocity (4%) and distress (9%) conditions,  $\chi^2(1, N = 193) = 1.69, p = .19$ .

Participants mentioned the theme of avoiding negative outcomes more frequently in the keep conditions (25%) than in the share conditions (3%),  $\chi^2(1, N = 193) = 19.06, p < .001$ . It was also more frequently mentioned in the distress (20%) than the reciprocity conditions (10%),  $\chi^2(1, N = 193) = 4.02, p = .045$ . A similar pattern was demonstrated for the theme of reputation management, which was more frequently discussed in the keep (20%) than in the share conditions (1%),  $\chi^2(1, N = 193) = 17.39, p < .001$ , as well as more often in the distress (17%) compared to the reciprocity (4%) conditions,  $\chi^2(1, N = 193) = 8.01, p = .005$ .

Finally, relevance of the confidant did not differ in frequency across the share (21%) and keep conditions (20%),  $\chi^2(1, N = 193) = .026, p = .87$ , or the reciprocity (19%) and distress conditions (23%),  $\chi^2(1, N = 193) = .38, p = .54$ . While the theme of wanting to help others did not differ in frequency across the share and keep conditions (9% and 5%, respectively,  $\chi^2(1, N = 193) = .54, p = .46$ ), it did differ depending on the trigger type, where those in the reciprocity condition mentioned this theme more frequently (14%) than those in the distress condition (1%),  $\chi^2(1, N = 193) = 12.06, p < .001$ .

### ***Perceptions of Secret Risk***

As a post-hoc analysis following the two-way MANOVA, perceived risk of the secret for oneself was compared across the share and keep conditions in a univariate analysis, after determining that the assumption for equality of error variances was met. A significant difference between conditions was found,  $F(1, 189) = 10.86, p = .001$ , with partial  $\eta^2 = .054$ , such that participants perceived the secret as having more personal risk in the keep condition ( $M = 24.96, SD = .705$ ), than in the share condition ( $M = 21.61, SD = .736$ ).

Similarly, perceived risk of the secret for another was compared across the share and keep conditions in a univariate analysis, after determining that the assumption for equality of error variances was met. A significant difference between conditions was found,  $F(1, 189) = 5.29, p = .023$ , with partial  $\eta^2 = .027$ , such that participants perceived the secret as having greater risk for somebody in the keep condition ( $M = 18.76, SD = .791$ ) than in the share condition ( $M = 16.13, SD = .825$ ).

### ***Perceptions of Confidant***

As a post-hoc analysis following the MANOVA, confidant rating was compared across the share and keep conditions in a univariate analysis. The assumption for equality of error variances was not met for this measure,  $F(3, 189) = 3.12, p = .027$ , however because sample sizes are large and similar across the share and keep conditions, standard deviations for the conditions were similar in value, and responses are independent, it was deemed safe to proceed with the analysis. A significant difference between conditions was found,  $F(1, 189) = 18.95, p < .001$ , partial  $\eta^2 = .091$ , such that participants perceived the confidant more positively in the share condition ( $M = 5.48, SD = .122$ ) than in the keep condition ( $M = 4.75, SD = .117$ ).

### ***Level of Planning***

As a post-hoc analysis following the MANOVA, both the extent to which the secret-sharing decision was spontaneous and the extent to which it was planned were compared across the share and keep conditions in univariate analyses, after determining that the assumption for equality of error variances was met. Significant differences between conditions were determined for both values respectively,  $F(1, 189) = 49.17, p < .001, \text{partial } \eta^2 = .206$ ;  $F(1, 189) = 63.50, p < .001, \text{partial } \eta^2 = .252$ . Participants perceived a greater level of spontaneity in the share condition ( $M = 3.49, SD = .122$ ) than in the keep condition ( $M = 2.30, SD = .117$ ), and a greater level of planning in the keep condition ( $M = 3.34, SD = .112$ ) than in the share condition ( $M = 2.05, SD = .117$ ).

### ***Affective Outcomes***

As a post-hoc analysis following the MANOVA, current negative affect was compared across the share and keep conditions in a univariate analysis, after determining that the assumption for equality of error variances was met. A significant difference between conditions was found,  $F(1, 189) = 5.18, p = .024, \text{partial } \eta^2 = .027$ , such that participants predicted greater negative affect in the keep condition ( $M = 19.14, SD = .502$ ) than in the share condition ( $M = 17.49, SD = .542$ ).

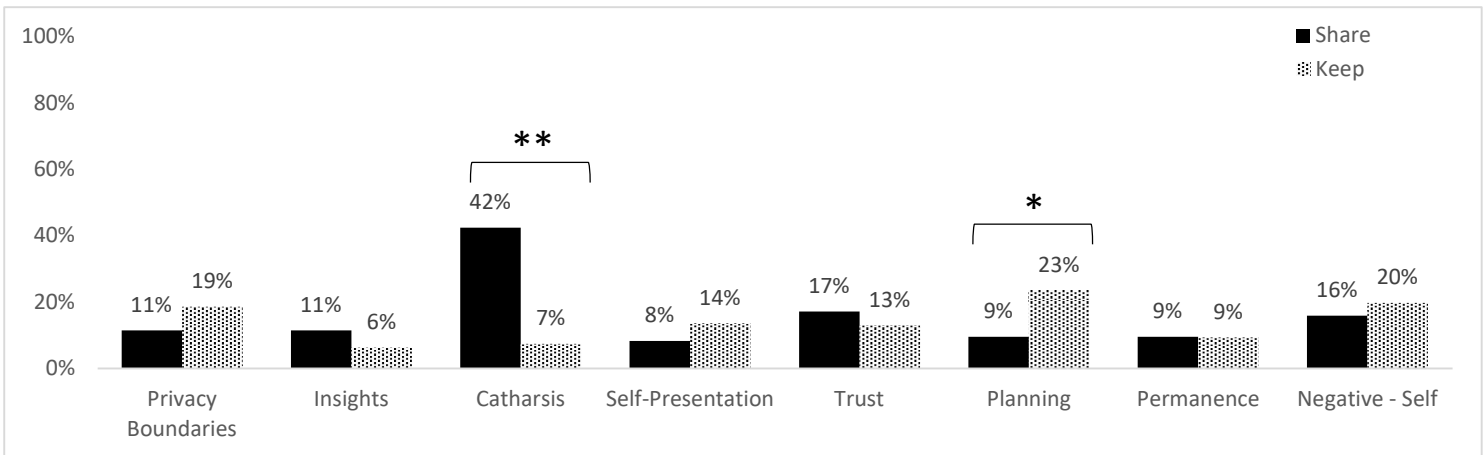
Similarly, current positive affect was compared across conditions in a post-hoc analysis following the MANOVA after determining the assumption for equality of error variances was met. A significant difference was found between conditions,  $F(1, 189) = 6.28, p = .013, \text{partial } \eta^2 = .032$ , such that participants predicted greater positive affect in the share condition ( $M = 12.87, SD = .542$ ) than in the keep condition ( $M = 10.99, SD = .519$ ).

On the other hand, the extent to which participants reported being regretful or glad of their secret-sharing decision was compared across conditions as part of the post-hoc analysis after the assumptions for equality of error variances were met. A significant difference was not found between the share and keep conditions,  $F(1, 189) = 1.63, p = .204$ .

**Qualitative Regret Versus Gladness Responses.** Participants were asked, in an open-ended format, why they selected their responses regarding the extent of regret versus gladness they predicted they would feel about their decision. As reported within Study 1, the final coding scheme for this question was established in conjunction with the similar question asked in Study 1, using analytical induction (Bulmer, 1979). Two coders separately coded all responses, where each response could be associated with as many themes as were mentioned within it. Finally, codes were compared across each theme to determine interrater reliability. All themes had a percentage of agreement between coders above 84%, however only themes with Kappa values above 0.40 are discussed. A subset of participant responses was not relevant to the question ( $n = 33$ ), so these responses were removed from the analyses. Accordingly, the following analyses were run only across the main levels of interest (comparisons between Share and Keep conditions, and Distress and Reciprocity conditions), and not according to individual condition. See Figure 7 below for frequencies of these themes across the Share and Keep conditions, and Figure 8 for theme frequencies across the Distress and Reciprocity conditions.

**Figure 7**

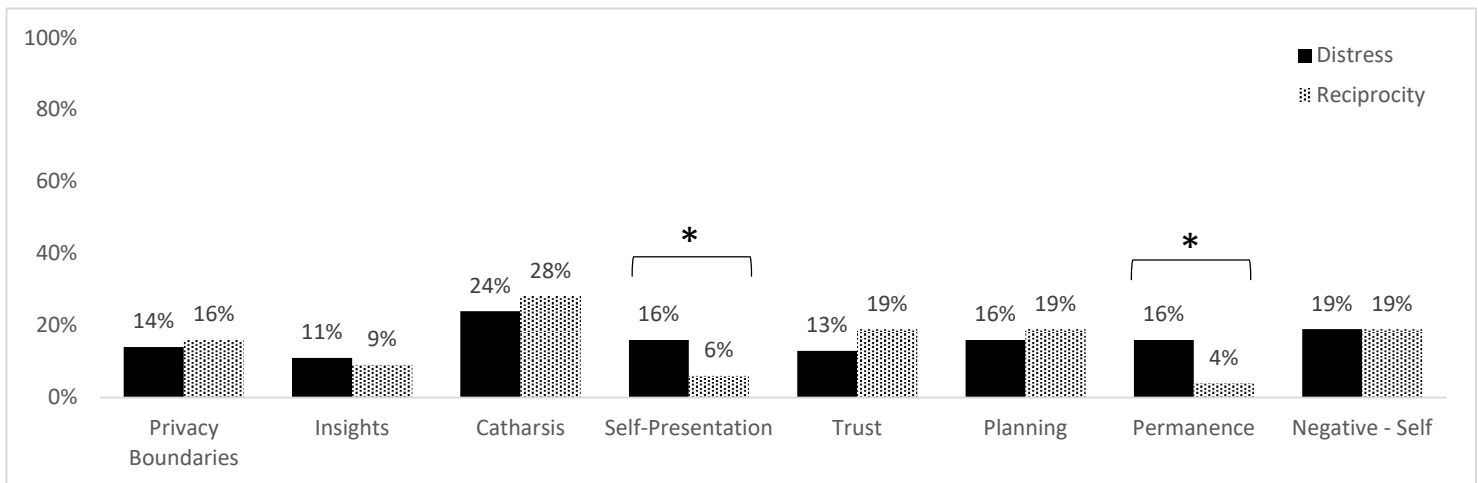
*Share and Keep Condition Differences in Reasons for Extent of Regret vs Glad Themes*



*Note.*  $p < .05^*$ ,  $p < .001^{**}$

**Figure 8**

*Distress and Reciprocity Condition Differences in Reasons for Extent of Regret vs Glad Themes*



*Note.*  $p < .05^*$

The theme of emotional catharsis was discussed more frequently in the share conditions (42%) than in the keep conditions (7%),  $\chi^2(1, N = 160) = 24.83, p < .001$ , but did not differ across the distress (24%) and reciprocity (28%) conditions,  $\chi^2(1, N = 160) = .30, p = .59$ . No difference was found in the frequency of the privacy boundary theme across the share (11%) and keep (19%) conditions,  $\chi^2(1, N = 160) = 1.59, p = .21$ , or the distress (14%) and reciprocity

(16%) conditions,  $\chi^2 (1, N = 160) = .20, p = .66$ . Similarly, the theme of gaining new insights did not differ in frequency across either the share (11%) and keep (6%) conditions,  $\chi^2 (1, N = 160) = 1.23, p = .27$ , or the distress (11%) and reciprocity (9%) conditions,  $\chi^2 (1, N = 160) = .28, p = .60$ .

While participants in the distress conditions discussed more frequently the theme of self-presentation (16%) than those in the reciprocity conditions (6%),  $\chi^2 (1, N = 160) = 4.01, p = .045$ , there were no differences across the share (8%) and keep (14%) conditions,  $\chi^2 (1, N = 160) = .89, p = .35$ . One participant mentioned their potential concern for self-presentation, “Because if I would have told them, I would have constantly been worried about what they thought of me, and who they told, whereas if I didn't say anything, I would never have those feelings/thoughts.” The theme of trust neither differed in occurrences across the share (17%) and keep (13%) conditions,  $\chi^2 (1, N = 160) = .52, p = .47$ , nor the distress (13%) and reciprocity (19%) conditions,  $\chi^2 (1, N = 160) = 1.19, p = .28$ .

Planning of the decision was more often communicated in the keep condition (23%) than in the share condition (9%),  $\chi^2 (1, N = 160) = 5.88, p = .015$ , but did not differ across the distress (16%) and reciprocity (19%) conditions,  $\chi^2 (1, N = 160) = .17, p = .68$ . While the theme of the permanence of sharing a secret did not differ in frequency across the share (9%) and keep conditions (9%),  $\chi^2 (1, N = 160) = .003, p = .96$ , it did differ across whether the situational trigger was reciprocity (4%) or psychological distress (16%),  $\chi^2 (1, N = 160) = 6.94, p = .008$ . Finally, no differences in frequencies were found for negative self-outcomes between the share (16%) and keep (20%) conditions,  $\chi^2 (1, N = 160) = .54, p = .46$ , or between the distress (19%) and reciprocity (19%) conditions,  $\chi^2 (1, N = 160) = .000, p = 1.00$ .



## Study 2 Discussion

The purpose of Study 2 was to understand how perceptions of experiences and predicted outcomes differ in secret-sharing versus secret-keeping situations depending on the type of secret-sharing trigger present. Although intended to have a 2x2 design with secret-sharing decision and trigger type as the independent variables, it was interestingly found that trigger type did not have any influence on any of the quantitative dependent variables in this study. Although it was hypothesized that these two triggers might play varying roles for some of the dependent variables, perhaps it is actually the case that the secret-sharing triggers were perceived similarly simply because they are both in-the-moment factors that could trigger a secret-sharing response. However, more clarity on the effects of the triggers could have been provided if a control condition without the inclusion of a trigger had been included in the design of Study 2. In any case, several differences in perceptions and predictions did result depending on whether the secret in the vignette was shared or kept. These differing perceptions are critically important to acknowledge, especially because the remaining details of the vignettes were held constant, particularly the secret itself.

In line with our hypothesis, it was found that perceptions of the risk of the secret for both oneself and for others differed across the share and the keep conditions. More specifically, the secret was perceived as greater in risk in the keep condition than in the share condition. This demonstrates that perceptions of risk of the same secret differed solely on the basis of whether the secret was shared or kept. This finding suggests that participants perceive a secret which is kept private to have greater inherent risk associated with it.

It was also found that perceptions of the confidant's sociability differed across the share and keep conditions, such that participants perceived the confidant as greater in warmth or

sociability in the share condition. This result was again in line with our hypothesis. Given that the confidant was kept constant as a classmate across the conditions, this finding demonstrates that participants make assumptions on the qualities of a confidant merely based on whether a secret was shared with or kept from them.

Perceived levels of planning and spontaneity were also compared across the share and keep conditions, and as expected, participants associated secret-sharing with more spontaneity and secret-keeping with more planning. Although this was predicted, it is interesting to note that planning was not mentioned at all in the vignettes and the secret was always kept by the participant for the same length of time, so perceptions of planning were influenced seemingly by whether the secret was shared or kept.

Several compelling findings emerged regarding participants perceived motivations for sharing or keeping a secret through their open-ended responses. Those in the share conditions focused more on being driven by a desire for emotional catharsis, gaining new insights on the situation, and by a value for honesty. Those in the keep conditions focused more on maintaining privacy boundaries, avoiding negative outcomes (e.g., unwanted advice), preserving their reputations, and to maintain a sense of control over the situation. Interestingly, those in the reciprocity condition seemed to have an increased concern for helping others as a motivation compared to those in the distress condition.

Finally and importantly, participants predicted that sharing a secret would lead to better emotional outcomes, while keeping a secret would lead to worse emotional outcomes. Despite these predicted outcomes, participants did not perceive any differences in the extent of regret they would feel depending on whether they shared or kept the secret. However, there were differences in the topics discussed across conditions when providing reasons for their predictions

of regret versus gladness. Specifically, those in the share condition were more likely to associate the opportunity for emotional catharsis with their predicted regret or gladness regarding the decision to share or keep the secret, while those in the keep condition were more likely to consider the extent of planning for the decision as an indicator of regret or gladness. Those in the distress condition seemed to have a greater focus on the longer-term outcomes of sharing secrets, particularly the permanence of sharing a secret (i.e., you cannot take it back once it has been shared) and a focus on how others would view them. These affective predictions may be a critical component in understanding why people may share when they should not.

### **Study 3: Behavioral Examination of Trigger**

The first two studies examined recollections of previous decisions to share or keep a secret (Study 1) as well as perceptions and evaluations of secret-sharing and secret-keeping scenarios involving the hypothesized triggers of secret-sharing (Study 2). However, neither of these studies examined real-time decisions that people make in social situations regarding the sharing of personal information or secrets. Study 3 aimed to understand these real-time decisions in a situation involving one of the hypothesized triggers of secret-sharing – reciprocity pressure – by manipulating participants' levels of threat in a social situation. The trigger of reciprocity pressure was selected in particular as it can be controlled most clearly within this novel paradigm. Therefore, this study examined whether this trigger does indeed lead to differences in the revelation of secrets compared to a control condition.

In this study, psychological distress was intended to be measured as a mediating variable to understand more specifically the relationship between the manipulation of threat and participants' secret-sharing behaviors and perceptions. This feature of the study design allowed us to clarify the role that psychological distress plays in secret-sharing situations.

This design of this study importantly added the potential for social consequences regarding the information participants shared in two ways. First, participants will be told they were interacting with a group of DePaul students – a group of their peers – which leaves open the possibility of interacting with students they potentially already know. Second, participants were told that based on the ratings of other students after their first interaction, they may or may not move forward to the next round of the “social experiment.” This aspect of the study design created a situation in which participants could be rejected by a group of their peers. Due to this possibility, Study 3 also has implications for social exclusion research. If someone has received positive feedback from their peers, how will their secret-sharing behavior and perceptions of the risk differ from someone who received less positive feedback, particularly within a situation which may lead to exclusion from the group?

### **Study 3 Research Question and Hypotheses**

#### ***Research Question 3***

Does the proposed trigger of impulsive secret-sharing – reciprocity pressure – lead to increased secret-sharing behavior, and what differences in outcomes occur as a result?

#### ***Hypothesis IIIa***

It is hypothesized that exposure to the trigger will result in increased secret-sharing behavior. Additionally, it is predicted that exposure to the trigger will lead to greater perceived risk of the secret shared, more conservative secret status (the secret has been shared with little to no other people), higher levels of negative affect and lower levels of positive affect regarding current feelings about the secret. Additionally, exposure to the trigger is predicted to lead to greater levels of vulnerability and greater likelihood of regret.

### ***Hypothesis IIIb***

The experience of psychological distress will mediate the relationship between exposure to the threat manipulation and the dependent variables.

### **Study 3 Method**

#### ***Participants and Design***

Participants included 178 students enrolled in introductory psychology courses at DePaul University. Due to not passing the manipulation check, six students were excluded from the results, leaving a total of 172 participants included. Participants ranged in age from 18 to 41 years ( $M = 20.38$ ,  $SD = 3.50$ ), with female participants making up 72% of the sample, male participants making up 26%, and 2% preferring to self-describe their gender (for the gender by condition participant distribution see Appendix A, Table A3). Race and ethnicities of the participants were 50% European American Non-Hispanic White, 19% Hispanic or Latino, 14% Black or African American, 11% Asian or Asian American, 5% identified as multiracial, and 1% as American Indian or Alaska Native.

Recruitment ads for this research were posted in the online participant pool system for the university, where participants voluntarily self-selected the study to sign up. All participants received academic credit for their participation in the online research study.

This experiment used a between-subjects design with two conditions: high threat and low threat, manipulated through the feedback participants received from their supposed group members. Participants were randomly assigned to conditions through the survey platform. Psychological distress (state anxiety) was included as a potential mediating variable. The dependent variables included quantitative responses of participant feelings regarding the

experience of sharing their secret, perceived risk of their secret, the status of their secret, current feelings about the secret itself, and character length of the secret disclosure.

### ***Measures and Procedure***

**Introduction.** All participants regardless of condition were provided with the following information, with each paragraph displayed on one page of the online survey at a time:

*“Research shows that communicating and connecting with a group of peers online can have beneficial mental health implications. As DePaul researchers, we want to test these effects by creating small online communities of DePaul students, which we will call your Circle, and examining how relationships foster in these communities. In order for this to really work, it is important for all members to feel connected.*

*This social experiment will include several rounds of responding to questions about yourself in order for the members of your Circle to get to know each other. Throughout the social experiment, all members will vote on who they feel most connected to within the group. Those in the group who the Circle feel most connected to will move forward together to the next round of questions. Those who the group doesn't feel connected to will move forward alone.*

*Throughout this process, we will ask you to respond to questions about your experience. Your responses to these questions will be seen by researchers only. While your responses to the prompts will be seen by members of your Circle, all other information you respond to will be seen only by the researchers.”*

**Round 1 Procedure and Context-Building.** All participants were asked to participate in Round 1 of the social experience, where they responded to an open-ended question about what they like to do most in their spare time. After submitting their response and “waiting for the other participants to respond” for 60 seconds, participants saw the other members’ supposed responses to this question, which in actuality were pre-defined responses.

After seeing the responses from the other Circle members, participants were asked to rank order their group members from who they felt most likely to form a bond with to least likely, reminded that the results from the rank ordering would influence which group members would move forward with the social experience. Participants then waited for the results to compile (30 seconds).

**Round 1 Feedback (Threat Manipulation).** In order to manipulate a high threat versus low threat situation for participants, they received randomized false feedback from their supposed group members’ rank orders. They were given one of the following responses as part of this manipulation:

1. “You have made it to the next round, most other members of your Circle felt they could connect with you compared to the other members. This may be because research shows that people feel connected to those they perceive as authentic.”
2. “You have made it to the next round, however most other members of your Circle felt they could connect better with other members. This may be because research shows that people feel connected to those they perceive as authentic.”

**Psychological Distress.** Next, to measure psychological distress, participants responded to the State-Trait Anxiety Inventory short form (Marteau & Bekker, 1992), with the instructions corresponding to state anxiety (i.e., how participants are feeling *right now*). This measure

included six items (e.g., “I feel calm (R),” “I am tense,” “I am worried”), responded to on a four-point scale (1 = not at all, 4 = very much). This scale had good internal consistency ( $\alpha = .83$ ). Responses to the six items were summed, taking into account the reverse scores. In order to be comparable to the full STAI, the sums were divided by six and multiplied by twenty.

***Experience Recap.*** Participants responded to this set of four questions at the end of both Round 1 and Round 2. The response format used seven-point scales (1 = not at all, 7 = completely) regarding 1) the extent to which participants felt the information they shared represents who they are, 2) the extent of information they shared about the situation, 3) the extent to which they would like to have shared something else instead, and 4) the extent to which the information they shared makes them feel vulnerable. This recap was not analyzed for Round 1, as it was included there only to create a more realistic and consistent experience for Round 2.

***Round 2 Prompt.*** The purpose of the Round 2 Prompt was to ask participants to share a personal secret. The prompt was worded as follows:

“The next question is intended to help your group understand you on a deeper level. This is a crucial step in getting to know your Circle and forming connections. For this round, please share something deep and personal about yourself that you typically keep hidden from most or all other people.”

Participants responded to the prompt, however to protect the confidentiality of their responses, all responses to this open-ended question were automatically deleted by the survey platform upon completion of the study.

***Secret Status Question.*** Participants were then asked to select the status of their secret in that moment (“Please select the status of the information you just shared for Round 2”). Multiple choice options were provided to participants, with options including: a) I have never



told this information to anyone before, b) I have only shared this information anonymously or with a stranger, c) I have only shared this information with a small number of people before, d) I have only kept this information hidden from a small number of people, e) I don't keep this information from anyone intentionally.

**Secret Risks Questionnaire.** All participants then responded to questions about the risk of their secret. This questionnaire contained 14 items pertaining to participants' perceived risks of their secret before they shared it, retrospectively (i.e., "Please indicate to what extent you perceived the following risks to be associated with the information you shared for Round 2, if people were to link this information to you personally"). Seven items pertained to personal risks for the participant (e.g., "Damaging your reputation," "Feeling embarrassed," "Being rejected by others"). Seven items corresponded to participants' perceived risks of the secret attributed to a close other (e.g., "Getting a close other in trouble," "Damaging a close other's relationships"). Participants responded by selecting the extent to which each of the items was a risk associated with their secret on a 5-point scale (1 = not at all, 5 = extremely). Risk scores were calculated separately for personal risk ( $\alpha = .86$ ) and risk to others ( $\alpha = .94$ ) by summing the ratings for each of the items. Perceived risk scores could range from 7 (not risky) to 35 (extremely risky) for both personal risk and risk to others.

**Feelings about Secret.** To understand how participants currently felt about their secrets, eight items (Erber & Tesser, 1992) were provided to participants (i.e. *good, sad, happy, calm, inspired, blue, gloomy, apprehensive*) with the instructions (adapted from Kelly, Klusas, von Weiss, & Kenny, 2001), "Please reflect on the information you shared in Round 2 and feel the emotions associated with it. For each of the following adjectives, please indicate to what extent you feel this way whenever you think about that information." Participants responded using a 7-

point scale (1 = not at all, 7 = a lot). Two scores were calculated, such that responses were summed for both negative affect ( $\alpha = .84$ ) and positive affect ( $\alpha = .86$ ) separately, where scores could range from 4 to 28. Higher scores indicated greater levels of negative or positive affect.

**Experience Recap.** This recap included the same four questions as the previous one, however only responses to this recap were analyzed. Each of the four responses was analyzed separately. After completion of the second experience recap, the experiment concluded and participants were debriefed to the true intent of the research.

### Study 3 Results

To determine whether differences occurred between the low threat and high threat conditions, a multivariate analysis was conducted with condition as the fixed factor independent variable and the following factors contributing as dependent variables: perceived risk of the secret for the self, perceived risk of the secret for others, the positive and negative affective outcomes, differences in responses to the experience recap questions, and the text length of the revealed secret. Results from Box's Test of Equality of Covariances,  $p = .88$ , indicated it was safe to proceed with the analysis. Surprisingly, the Pillai's Trace value was not significant for condition,  $F(11, 160) = 0.715, p = .723$ , suggesting that condition did not directly influence the dependent variables.

In order to test Hypothesis IIIb, several simple mediation analyses were conducted using PROCESS (Hayes, 2013) with condition as the independent variable, psychological distress level as the mediating variable, and each of the following nine dependent variables separately: risk of the secret for oneself, risk for others, current negative feelings regarding the secret, current positive feelings, text length of the disclosure, and each of the four experience recap items from

Round 2 of the study. No significant mediating relationships were found (see Table 4 for specific indirect effects and 95% bootstrapping confidence interval for each dependent variable tested).

**Table 4**

*Mediation Analysis Results*

Measure	Indirect Effect	LLCI	ULCI
<b>Perceived Risk of Secret</b>			
Risk – Self	.6850	-.0807	1.5730
Risk – Other	.4445	-.0595	1.1884
<b>Affective Outcomes Regarding Secret</b>			
Feelings – Positive	-.3490	-.9069	.0450
Feelings – Negative	.3759	-.0298	1.0026
<b>Experience Recap Items</b>			
Extent Secret Represents Who They Are	.0446	-.0196	.1426
Extent of Information Shared About Secret	.0433	-.0284	.1541
Extent Would Have Liked to Share Something Else	.0516	-.0231	.1822
Feelings of Vulnerability	.0839	-.0078	.2293
Text Length of Secret	-.7035	-6.4942	4.6189

*Note.* All confidence intervals are at the 95% confidence level

Since psychological distress was originally predicted to be a mediator and this hypothesis was not supported, correlations were then conducted between distress and the dependent variables. This was the next logical step, as it was predicted that psychological distress would have a direct influence on secret-sharing perceptions and behavior. These correlations are reported within the relevant sections below and in Table 5.

**Table 5***Correlations between Psychological Distress and Dependent Variables*

Measure	Psychological Distress
Perceived Risk of Secret	
Risk – Self	<b>.360***</b>
Risk – Other	<b>.215**</b>
Affective Outcomes Regarding Secret	
Feelings – Positive	<b>-.221**</b>
Feelings – Negative	<b>.211**</b>
Experience Recap Items	
Extent Secret Represents Who They Are	.105
Extent of Information Shared About Secret	.087
Extent Would Have Liked to Share Something Else	.102
Feelings of Vulnerability	<b>.162*</b>
Text Length of Secret	-.034

*Note.*  $p < .05^*$ ;  $p < .01^{**}$ ;  $p < .001^{***}$

### ***Perceptions of Secret Risk***

Both perceived risk of the secret for oneself and perceived risk of the secret for others were examined alongside psychological distress as part of the correlation analysis. Significant relationships were found between distress and both perceived risk for oneself,  $r(170) = .36, p < .001$ , and for perceived risk for others,  $r(170) = .22, p = .005$ . For both variables, greater levels of distress were associated with greater perceived risk of the secret.

### ***Affective Outcomes***

Both current negative feelings about the secret and current positive feelings about the secret were also analyzed in relation to psychological distress. Significant relationships were found between distress and both negative feelings,  $r(170) = .21, p = .005$ , and for positive feelings,  $r(170) = -.22, p = .004$ . Greater levels of distress were associated with greater a greater extent of current negative feelings about the secret and a lesser extent of current positive feelings about the secret.

### ***Perceptions of Secret-Sharing Experience***

All four experience recap ratings were also analyzed alongside psychological distress. A significant relationship was only found between distress and extent of vulnerability,  $r(170) = .16, p = .034$ , where greater distress was associated with greater feelings of vulnerability. No relationships were found between distress and perceived extent of the secret representing the participant,  $r(170) = .11, p = .17$ , perceived level of details disclosed about the secret,  $r(170) = .09, p = .26$ , or extent participants would have preferred to share something else instead of the secret chosen to be disclosed,  $r(170) = .10, p = .18$ .

### ***Behavioral Outcome***

Finally, text length was examined alongside psychological distress. Interestingly, no relationship was found between distress and text length of the secret disclosure,  $r(170) = -.03, p = .66$ .

### **Study 3 Discussion**

The purpose of Study 3 was to examine the effects of a hypothesized trigger of secret-sharing on secret-sharing behavior in a real-time social situation. Study 3 yielded both surprising and unsurprising results. Surprisingly, the manipulation of self-threat was not strong enough to

produce main effects for any of the dependent variables and did not lead to increased levels of psychological distress. One possible explanation for not finding condition differences may be that perhaps regardless of condition, participants felt a low level of anxiety in general about connecting with their peers due to the lingering possibility of being rejected by their group in the upcoming rounds. It might also be useful to examine whether factors such as self-esteem might play a role in how the manipulations are perceived and reacted to, and whether these individual difference factors mitigate condition differences.

Unsurprisingly in accordance with the fever model of disclosure (Stiles, 1987), psychological distress was significantly related to several of the dependent variables, including perceived risk of the secret for both oneself and for others, current negative and positive feelings regarding the secret, and feelings of vulnerability. These findings suggest one of two possibilities. It is possible that distress indeed led to more secret-sharing behavior through sharing more risky, vulnerable, and negatively-valenced personal information. However, the possibility also exists that being in a state of anxiety and vulnerability led to changes in *perceptions* of the risks associated with the secret and the positive and negative feelings participants had about their secret. Unfortunately, not having access to the secrets shared by participants (for the benefit of providing confidentiality) limits our ability to understand these possible explanations more clearly.

Interestingly, the behavioral measure of text length of the secret was not related to psychological distress levels, so even though distress was associated with some secret-sharing factors, it was not related to the extent of information or details provided about their secret. It was also not related to differences in participant perceptions of how personally relevant their secrets were. These findings suggest that psychological distress may lead to differences in the

content of the information shared in particular, but does not seem to affect the depth of the information disclosed.

### **General Discussion**

The main purpose of this dissertation was to establish a baseline understanding of secret-sharing and secret-keeping antecedents, perceptions, and experiences in relation to the consequences of sharing personal secrets. To support this purpose comprehensively, we established a set of three studies from three different vantage points using a mixed-method approach. In Study 1, we explored retrospective experiences with secrecy through examining motivations for sharing and keeping secrets, contextual influences, level of planning involved, perceptions that may have influenced these decisions, as well as the long-term affective outcomes of sharing or keeping these secrets. In Study 2, we brought focus to perceptions and outcome predictions of secret-sharing and secret-keeping decisions, particularly when situations included involvement of the potential triggers of impulsive secret-sharing. In Study 3, we concentrated on the influence of the hypothesized triggers by exploring whether and how exposure to a potential trigger influenced secret-sharing behaviors in real time. The culmination of findings from this dissertation will pave the way for future in-depth avenues of research. It serves as a first step to uncover a breadth of insights about what leads us to share secrets, and crucially, what leads us to have more positive and beneficial long-term outcomes when making secret-sharing decisions.

In Study 1, we found key differences between secret-sharing and secret-keeping experiences. While keeping and sharing personal secrets often is often motivated through similar goals, this research found that the motivation to avoid negative outcomes was more prevalent in the cases when participants had decided to keep their secrets rather than to share them. This

finding extends the findings in the literature that initial reasons for keeping a secret are related to both perceived likelihood to reveal a secret in the future (Vangelisti & Caughlin, 1997), as well as actual decisions to reveal a secret (Caughlin, Afifi, Carpenter-Theune, & Miller, 2005). It demonstrates that the general motivational goals that arise after the initial decision to keep something secret are also associated with actual decisions of whether to conceal or reveal a secret.

Results from this study also indicated that secret-sharing decisions seem to be more spontaneous than decisions to keep secrets, and that those who kept their secrets put more active planning into their decisions. It also supported the notion that secret-sharing can often be a result of reciprocity pressure in a given situation, when participants' responses about the context of their decisions mentioned reciprocity pressure and in-person interactions more frequently for those who shared their secrets than those who kept them. Both of these points lend support for the influence of catalyst criteria in the decision-making process for sharing secrets (Petronio, 2013).

Participants who shared their secrets retrospectively rated their confidants as being greater in warmth and sociability at the time of the disclosure decision than those who decided to keep them. Their responses also indicated that predictions of confidant reactions may have played a role in the decisions to keep or share secrets, aligning with research conducted associating predicted and actual confidant reactions with patterns of concealment (Afifi & Steuber, 2010). Those who kept their secrets more often mentioned the possibility of rejection from their potential confidants, while those who shared their secrets more often predicted their confidants would provide them with support and understanding.



Finally and remarkably, differences in long-term emotional outcomes did occur between those who kept their secrets and those who shared them, where those who shared their secrets actually reported a greater extent of negative current feelings (with no difference in positive feelings) about their secrets than those who decided to keep them. This finding contrasts with and extends the literature regarding the consequences of confiding (e.g., Pennebaker, 1989), indicating that while sharing secrets might have short-term positive consequences associated with relief, there is support for the idea that sharing secrets is not always personally beneficial in the long term.

In Study 1, we also determined several factors as being associated with these long-term affective outcomes. While the extent of perceived risk of the secret did not seem to play a role in decisions to share or keep secrets, it did relate to the affective outcomes of secret-sharing decisions. More specifically, participants who reported a greater extent of current positive feelings about their secrets also perceived their secrets as lower in risk, while those with greater negative feelings about their secrets perceived greater risk being associated with their secrets. Additionally, several motivational factors were associated with affective outcomes. Whereas more positive outcomes were associated with motivations pertaining to intrinsic rewards, more negative emotional outcomes were associated with motivations pertaining to distress and desire to avoid negative outcomes. Confidant reactions, as measured by participants' willingness to share with them or keep future secrets from them, were also related to emotional outcomes. Finally, while extent of regret and gladness did not differ generally across situations where secrets were kept versus were shared, it more so seemed to depend on the outcomes of each of those decisions. Participants indicated more regret when motivated by a desire to avoid negative

outcomes, as well as when there was less planning involved, which supplements the idea that impulsive secret-sharing may lead to worse emotional outcomes.

Study 2, which used a more controlled experimental design, also resulted in several key findings which complemented the results of Study 1. As discussed previously, while intended to have a 2x2 design, manipulating whether the secret was shared or kept and whether the trigger involved in the vignette was reciprocity pressure or psychological distress, we found that trigger type did not lead to any significant differences for our quantitative variables. This finding contrasted in part with several of our Study 2 hypotheses, particularly those which predicted interaction effects (IIb, IIc, IIe).

However, analyzing the results across whether the secret was shared or kept allowed us to directly compare the predictions and perceptions from Study 2 to the experiences recalled in Study 1. First, results of Study 2 indicated that participants associated greater risk with secrets when they were kept compared to when they were shared. This result is in line with Hypothesis IIa and suggests that perceptions of a secret's risk is influenced by whether that secret is shared or kept. However, this finding contrasts participant experiences reported in Study 1, which found no differences of perceived secret risk when secrets were shared versus kept. Similar to Study 1, Study 2 results also suggested no difference across share and keep conditions for predicted extent of regret or gladness when sharing versus keeping secrets, however this was not in line with Hypothesis IIb, for which we predicted more regret in secret-sharing situations than in secret-keeping situations.

In line with Hypothesis IIc of Study 2, participants also predicted a greater extent of planning involved in situations where the secret was kept, and a greater extent of spontaneity when the secret was shared. This prediction matched participants' recollections from Study 1,

solidifying the idea that secret-sharing tends to be more of a spontaneous decision, and that the spontaneity of secret-sharing is typically acknowledged when considering secret-sharing versus secret-keeping decisions. Similarly, Study 2 results indicated that participants associate greater extents of perceived warmth and sociability of a potential confidant when the decision is made to share with this confidant. This finding supports Hypothesis II d (with the exception of the predicted interaction effect), and also aligns with participant ratings of their projected confidants in Study 1.

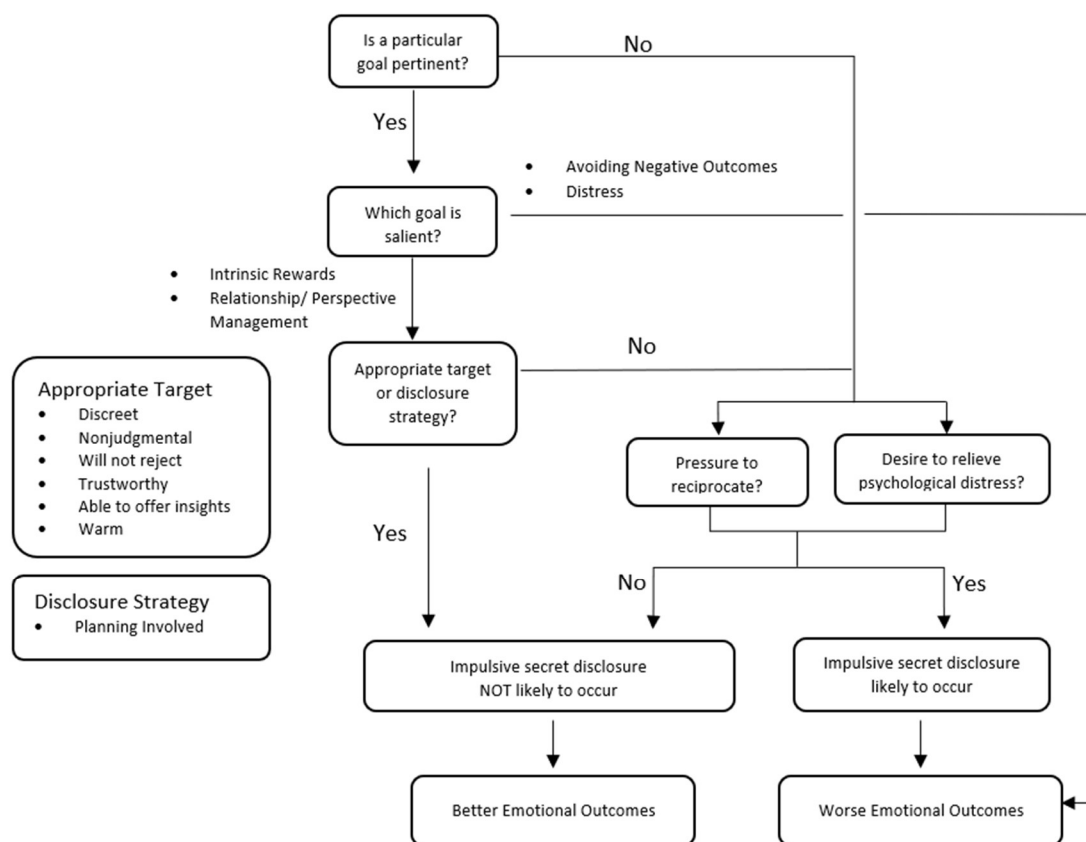
Finally, results from Study 2 indicated that participants predicted better emotional outcomes when secrets were shared compared to when they were kept, in line with Hypothesis II e. This contrasts in an important way with the experiences recalled in Study 1, which demonstrated a greater extent of negative emotional outcomes when secrets were shared. Comparing the results of Study 1 and Study 2 shows us that participant predictions in Study 2 align with the actual experiences recalled in Study 1, particularly regarding confidant ratings, level of planning involved, and the lack of difference in extent of regret or gladness. However, there are several cases in which the participants predictions from Study 2 differ from the experiences recalled in Study 1. These differences occur for perceived risk of the secret and the emotional outcomes of sharing and keeping secrets. These mismatches between participant predictions and actual experiences may play a role in why people's secret-sharing and secret-keeping experiences do not always lead to their intended outcomes.

Finally, Study 3 still yielded pertinent findings, even though the threat manipulation did not result in the predicted condition differences of Hypothesis III a. Pressure to reciprocate based on supposed group member feedback did not influence secret-sharing behaviors, and support was not found for hypothesized mediational relationships of Hypothesis III B for any of the dependent

variables. However, it is possible this effect may have been mitigated by the novel study design used, which may require refinement for future research. Interestingly, psychological distress (another proposed trigger) was related to several of the dependent variables of this study, lending partial support to Hypothesis IIIb, and extending the literature on psychological distress as an antecedent of self-disclosure (Stiles, 1987). This finding also extends the Communication Privacy Management literature, which has called for an examination of the role of emotions in privacy regulation (Petronio 2010, 2013).

Increased psychological distress in Study 3 led to greater perceived risk of the secret, greater extent of current negative feelings about the secret, lesser extent of current positive feelings about the secret, and feelings of increased vulnerability. A particular limitation of this study is that it is unclear whether these relationships are due to changes in *perception* while in a heightened in a state of anxiety, or whether participants actually shared more risky secrets under psychological distress. Despite seeing greater perceived risks associated with the secrets at elevated psychological distress levels, there was not found to be a relationship with the level of detail provided by participants, which does not align with Omarzu's (2000) Disclosure Decision-Making Model. However, having access to participant responses in a future study may provide clarity on this finding.

A second main goal of this dissertation was to test aspects of the proposed Model of Impulsive Secret-Sharing, and in doing so to refine the model (see Figure 9 for an updated working model).

**Figure 9***Working Model of Impulsive Secret-Sharing*

While many aspects of this model stayed consistent, several noteworthy changes have been applied due to results of this dissertation. One change in particular is the refinement of the motivations included in the model, as results of Study 1 suggest that the motivation for intrinsic rewards is related to more positive emotional outcomes, while being more motivated by distress and a desire to avoid negative outcomes is associated with more negative emotional outcomes. Additionally, warmth was added as a contributor for an appropriate target or confidant, and level of planning was specifically indicated as a disclosure strategy. While perceived risk of the secrets was related to the emotional outcomes of Study 1, Study 3 suggests perceived risk as more of an outcome of secret-sharing rather than a contributor to the decision, so perceived risk was not

included in this working model. Finally, the relation of impulsive secret-sharing with emotional outcomes was added to this model to account for the differences in emotional outcomes seen across the studies included in this dissertation.

In addition to some of the concerns already addressed for each study specifically, there are additional limitations of to bring to awareness, some of which lead into future avenues of research. One of these limitations is that of the selected sample of participants. While DePaul students were necessary for the purposes of Study 3's relevance, it was also decided to select DePaul students for both Study 1 and Study 2 to allow for a more controlled population to be clearly compared across the studies, however this decision also makes the results less generalizable to other populations, particularly to those of different age groups and socioeconomic status. The types of secrets college students hold may be different than that in other populations, however the purpose of this study was not focused on the content of secrets, but rather the consequences of sharing secrets.

A second limitation, mentioned previously, is that of not being able to access participants' actual secrets. This decision served as a benefit to participants, ensuring privacy of their information, however having access might have provided clarity on whether perceptions of risk of the secret were justified. Accessing this information in a future refinement of Study 3 might provide more clarity as to whether participant it was perception or behavior that was influenced by the trigger, especially in the case of Study 3 where participants assumed their response was being seen by other participants anyway.

There also existed a limitation regarding the online nature of the studies. Due to the pandemic, all the studies were conducted online. While this was more suitable for Study 1, since it was collecting potentially very private personal and carefully thought-out information, it was

less ideal for the fast-paced Studies 2 and 3, where a focused environment with limited distractions would have been preferable. This concern can easily be verified by the number of participants who were excluded from Study 2 for not passing the reading check questions ( $n = 70$ ), and the number of participants in Study 3 who misread or misinterpreted the open-ended question about regret for decision-making ( $n = 33$ ). It is possible that a simple change of environment involving participants to complete the study in the research lab might have mitigated many outside distractions.

Finally, one of the goals of this research was to identify both antecedents and consequences of secret-sharing decisions. One limitation was the extent of what could be gleaned from this set of studies regarding these antecedents. Some of the antecedents examined stemmed from concept of catalyst criteria from the CPM literature (e.g., Petronio, 2013), serving to alter privacy rule decisions situationally – these included motivational goals and the two triggers of impulsive secret-sharing. While support was found for an influence of these criteria in instances throughout this dissertation, more research would be required in order to determine whether these factors consistently precede and influence secret-sharing decisions.

Given the breadth of this dissertation and its role in providing a baseline understanding of impulsive secret-sharing and its consequences, future research should involve digging deeper with more focused and controlled experiments aimed at testing and refining the working Model of Impulsive Secret-Disclosure. It would also be useful to learn about individual-level characteristics that might play a role in both secret-sharing behaviors and reactions to situational triggers, as well as perceptions of the outcomes of secret-sharing decisions.

Regarding next steps at the study level, I would be interested in replicating Study 1 with a 2x2 design, with secret-sharing decision (Share and Keep) as one of the independent variables

and outcome as the other independent variable (Negative Outcome and Positive Outcome). This would allow for more controlled comparisons of the measures to determine more carefully what leads to positive and negative outcomes rather than merely correlations.

To improve and expand upon Study 2, it would be useful to add a control condition without the presence of a trigger to determine whether there are differences in perceptions between triggers and non-triggers. A similar study could be run with the four factors of motivations (from Study 1) to determine whether perceptions of secret-sharing situations with these motivations relates to the outcomes seen in Study 1. Finally, the Study 2 distress condition should be altered for future studies so as not to pertain to the secret held in the vignette, in order to make sure the relation between the manipulation to the secret does not confound the results.

Lastly, refinements to Study 3 could include first establishing baseline levels of the outcome variables for participants to look for changes within these variables rather than at a single timepoint. The way this paradigm is set up leaves the possibility to test each of the potential triggers individually to determine if similar patterns of responses are demonstrated. Participant feedback also indicated that perhaps more buildup in the beginning or a longer study might be useful in putting participants in context.

In conclusion, there are many good reasons to both share and keep secrets. This dissertation emphasizes that our expectations do not always align with the reality of secret-sharing, especially given the finding that those who share their secrets seem to have worse long-term emotional outcomes. It would therefore be beneficial to our mental health to make these decisions more carefully, with more planning, and more consideration of our target confidant. We should also take with us the awareness that certain motivations may lead us to feel worse about sharing or keeping our secrets at later point, and that certain situations may trigger us to want to



share our secrets when we may be better off keeping them to ourselves. The development of the Model of Impulsive Secret-Sharing through this dissertation is an important first step to predict and address maladaptive tendencies in secret-sharing.

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## Appendix A: Gender by Condition Cross-Tabulations

**Table A1**

*Study 1 Gender by Condition Cross-Tabulation*

	Share		Keep	
	<i>n</i>	% of gender	<i>n</i>	% of gender
Male	29	51.8%	27	48.2%
Female	72	47.1%	81	52.9%
Prefer to Self-Describe	1	20.0%	4	80.0%
Prefer Not to Respond	1	100.0%	0	0.0%

*Note.* Column proportions did not differ significantly at the .05 level.

**Table A2**

*Study 2 Gender by Condition Cross-Tabulation*

	Share/ Reciprocity		Share/ Distress		Keep/ Reciprocity		Keep/ Distress	
	<i>n</i>	% of gender	<i>n</i>	% of gender	<i>n</i>	% of gender	<i>n</i>	% of gender
Male	16	24.6%	17	26.2%	14	21.5%	18	27.7%
Female	29	23.8%	26	21.3%	32	26.2%	35	28.7%
Prefer to Self-Describe	2	50.0%	1	25.0%	0	0.0%	1	25.0%
Prefer Not to Respond	0	0.0%	1	50.0%	0	0.0%	1	50.0%

*Note.* Column proportions did not differ significantly at the .05 level.

**Table A3**

*Study 3 Gender by Condition Cross-Tabulation*

	Positive Feedback		Negative Feedback	
	<i>n</i>	% of gender	<i>n</i>	% of gender
Male	25	55.6%	20	44.4%
Female	65	53.3%	57	46.7%
Prefer to Self-Describe	1	33.3%	2	66.7%
Prefer Not to Respond	1	50.0%	1	50.0%

*Note.* Column proportions did not differ significantly at the .05 level.

## Appendix B: Secret Risks Questionnaire

**Instructions:** In retrospect, please indicate to what extent you perceived the following risks to be associated with your secret at the time: (1= not at all risky, 5= extremely risky)

### Self

1. Damaging your relationships with others.
2. Damaging your reputation.
3. Being punished.
4. Feeling embarrassed.
5. Feeling humiliated.
6. Being rejected by others.
7. Receiving negative judgment from others.

### Other

8. Damaging a close other's relationships.
9. Damaging a close other's reputation.
10. Getting a close other in trouble.
11. A close other feeling embarrassed.
12. A close other feeling humiliated.
13. A close other being rejected by others.
14. A close other receiving negative judgment.

### Appendix C: Confidant Rating Scale

**Instructions:** Now, think about the person [with/from] whom you [shared/kept your secret]. In the following questions, this person may be referred to as your "conversation partner."

For each of the following characteristics, please select the point on the scale that best represents how you viewed this person immediately before the interaction (adapted from the Counselor Rating Form; Corrigan & Schmidt, 1983). [1 – Not Very, 7 – Very]

- Friendly
- Likeable
- Kind
- Helpful
- Warm
- Cooperative

## Appendix D: Motivational and Situational Factors Questionnaire

**Instructions:** Please indicate to what extent you agree with these statements as they pertained to the decision of whether you should share or keep your secret. (1= Not at all, 5= Very much)

- 1) I felt disconnected in my relationship with my conversation partner.
- 2) My conversation partner had revealed a secret to me previously.
- 3) I was feeling great levels of emotional distress.
- 4) I felt my conversation partner perceived me as a closed off person.
- 5) I felt my conversation partner perceived me as predictable.
- 6) My secret made me feel independent.
- 7) My secret was bound to be found out.
- 8) I generally find it difficult to keep secrets from people who are important to me.
- 9) I wanted to get the secret off my chest.
- 10) The idea of sharing my secret with somebody seemed exciting.
- 11) I hoped to get a new perspective on the situation.
- 12) My secret contained private information that was not relevant to my relationship with my conversation partner.
- 13) My conversation partner was going through a similar situation, and I wanted to help them.
- 14) My secret is important to my identity.
- 15) I wanted my conversation partner to like me.
- 16) My secret made me feel uneasy.
- 17) I wanted the confidant to share something personal about themselves with me.
- 18) I wanted to understand whether my beliefs were appropriate compared to those around me.
- 19) I was worried about the potential negative consequences of sharing my secret.
- 20) I wanted to take my relationship with my conversation partner in a certain direction.

## Appendix E: Affective Outcomes

**Instructions:** Please reflect on your secret, feel the emotions associated with this secret, and for each of the following adjectives, indicate to what extent you feel this way whenever you think about your secret (items from Erber & Tesser, 1992; instructions adapted from Kelly, Klusas, von Weiss, & Kenny, 2001).

### Positive

- Good
- Happy
- Calm
- Inspired

### Negative

- Sad
- Blue
- Gloomy
- Apprehensive

## Appendix F: Study 2 Vignettes

**Instructions:** While reading the following scenario, try to imagine yourself in the situation described. Reflect on how you would be feeling in this scenario, what you would be thinking about, and how you would act.

### Secret-Sharing Situations

- **Reciprocity:** Imagine you have been keeping a secret about yourself for almost one month – that you are planning to drop out of college. You haven't told anybody about the secret because you are nervous about the consequences of people finding out. One day, a classmate of yours reveals very personal information about themselves to you. In response, you decide to share your secret with them.
- **Psychological Distress:** Imagine you have been keeping a secret about yourself for almost one month – that you are planning to drop out of college. You haven't told anybody about the secret because you are nervous about the consequences of people finding out. One day, you become very anxious and stressed after learning you failed an important exam. While venting to your classmate, the thought of sharing your secret comes to mind, so you decide to share it with them.

### Secret-Keeping Situations

- **Reciprocity:** Imagine you have been keeping a secret about yourself for almost one month – that you are planning to drop out of college. You haven't told anybody about the secret because you are nervous about the consequences of people finding out. One day, a classmate of yours reveals very personal information about themselves to you, however, you decide not to share your secret with them.
- **Psychological Distress:** Imagine you have been keeping a secret about yourself for almost one month – that you are planning to drop out of college. You haven't told anybody about the secret because you are nervous about the consequences of people finding out. One day, you become very anxious and stressed after learning you failed an important exam. While venting to your classmate, the thought of sharing your secret comes to mind, however you decide not to share it with them.