SHARING PERSONAL INFORMATION IN RELATIONSHIPS: THE

IMPLICATIONS OF ANTICIPATED RESPONSE FOR INFORMATION

MANAGEMENT THEORY AND MEASUREMENT

by

KATE MAGSAMEN-CONRAD

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ABSTRACT OF THE DISSERTATION

Sharing personal information in relationships: The implications of anticipated response

for information management theory and measurement

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KATE MAGSAMEN-CONRAD

Dissertation Director:
Dr. Kathryn Greene

Many models, theories, and frameworks of information management (e.g., privacy, disclosure, secrets) incorporate the concept of anticipated response to sharing information. These models, however, do not consistently conceptualize or operationalize anticipated response. This dissertation project consisted of two studies. The first study explored the conceptualization of anticipated response and developed measurement. The second study continued to validate the anticipated response measures created and tested how information, relationship, and response attributes predict anticipated response. Measured variables included anticipated response (emotional reaction, avoidance, reciprocity, and support: emotional, informational, and instrumental), anticipated outcome (discloser-, receiver-, relationship-, and other relationship- oriented), relational evaluation (overall relational quality, relational love, relationship uncertainty), information assessment (information valence, stigma, identity threat), efficacy (general communication efficacy, disclosure efficacy), self-concealment, responsiveness (anticipated responsiveness, prior responsiveness: receiver to discloser, receiver to others,

and others to the information), and likelihood of disclosure. Results supported the

dimensional structure, validity, and reliability of the anticipated response measure created

(the Disclosure Anticipated Response Scale – DARS). The studies additionally verified

the utility of information, relationship, and response attributes in predicting anticipated

response to disclosure of personal/private information. The dissertation also discusses

findings, implications, limitations, and directions for future research. The conceptual and

operational clarity of the concept of anticipated response presented in this dissertation

will augment existing information management models and contribute to future work in

this area.

Keywords: anticipated response, outcome, effect, responsiveness, disclosure, privacy,

secrets, information management, disclosure decisions, measurement

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DEDICATION

To Jordan, Gabe, and Renni

For being in my life: <u>You</u> are my greatest joys in life

To my parents

For teaching me how to work hard and persevere

And for your bottomless support

To Dr. Kathryn Greene

For helping me to become the scholar I am today

To my Heavenly Father

For blessing me beyond measure

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Chapter 1

Introduction

Individuals manage personal and/or private information through a variety of strategies. One strategy that has received considerable research attention over the last 50 years is self-disclosure. Other related information management strategies include non-disclosure, secret keeping, or topic avoidance. Collectively, the management of this type of information, and these management strategies, may fall under the broader heading of privacy.

Scholars have endeavored to create theories, models, and frameworks that explain and predict the management of personal/private information through these various strategies (i.e., disclosure, non-disclosure, secret keeping, topic avoidance). These frameworks incorporate a number of different perspectives and components (e.g., relationship, efficacy, intimacy), some of which overlap. One concept that is present within many of these models but generally not clearly articulated is how the potential discloser thinks the recipient might react to receiving the information, often called anticipated response. The next section discusses the self-disclosure research tradition first because it accounts for the bulk of the research in personal/private information management.

Background

Two of the reasons that self-disclosure research has received considerable attention are because of the important role disclosure plays in relationships and because of the connection to positive outcomes. Self-disclosure is an essential part of relationships (see Derlega, Metts, Petronio, & Margulis, 1993; Taylor, 1979). For

example, Dindia (2002) called self-disclosure the "key to the development and maintenance of relationships" (p. 169). Additionally, research demonstrates consistent associations between self-disclosure and positive health outcomes (see Frattaroli, 2006 for meta-analysis) and catharsis (see Pennebaker, 1984).

Although the effects of self-disclosure on relationships and health are well established in research, self-disclosure theory lags behind. Scholars have sought to develop theories and predictive models of self-disclosure (and nondisclosure) since the late 1960s (e.g., Jourard, 1964), and continue to do so nearly 50 years later. Despite this effort, a preponderance of often unrelated empirical studies of self-disclosure and few theories and models with quantifiable measures still plague this theoretical tradition. This is also a limitation research within other information management strategies (e.g., topic avoidance, secrets).

Early disclosure perspectives. Early models of self-disclosure focused on predicting the outcomes of self-disclosure (e.g., Social Penetration Theory, SPT, Altman & Taylor, 1973) and emphasized the developmental track of new relationships. Scholars tended to validate these theories based on inferences from studies that addressed the outcome of relationships (e.g., relationship formation or dissolution, see Taylor & Altman, 1987). Much of this early research conceptualized self-disclosure in a very positive light. For example, some work claims that disclosure is always beneficial for individuals and relationships (see Pennebaker, 1995). Borrowing from dialectic theory (Baxter & Montgomery, 1988), scholars later proposed that revealing private information may contribute to feelings of vulnerability and threaten face, and controlling information may lead individuals to feel less vulnerable. Petronio (1991, 2002) used the concept of

dialectics to develop Communication Privacy Management Theory (CPM; Petronio, 1991, 2002). CPM explains how people regulate and control private information in relationships through a rule-based management system that views privacy and disclosure at opposite ends of a dialectic (however, the Derlega perspective initially described the concept of boundaries, see Derlega & Chaikin, 1977).

The development of CPM (Petronio, 1991, 2002) was an essential step forward for privacy research and theory. However, quantitative research to date testing CPM is still limited. First, the original developers of dialectic theory caution scholars against the dangers of conceptualizing self-disclosure and privacy as binary opposites (Montgomery & Baxter, 1998). Montgomery and Baxter (1998) express concerns about continuing to research this phenomenon dualistically, disregarding the interactive unity of openness and privacy regulation. Second, to date, CPM (Petronio, 1991, 2002) has predominantly been used as an overall framework to guide investigations (e.g., Caughlin & Afifi, 2004; Caughlin & Golish, 2002; Durham, 2008; Graham, 2003; Weiner, Silk, & Parrott, 2004; Thorson, 2009). Thus, complete quantitative measures of CPM do not presently exist (Petronio, 1991, 2002; for exception see Morr Serewicz & Canary, 2008 or Child, Pearson, & Petronio, 2009 for operationalization of some concepts in very specific contexts), nor is testing the model as a whole or even in major sections possible at this time.

It is indisputable that information management models such as SPT and CPM have made an important contribution to self-disclosure and privacy research. However, criticisms of some of these models (such as SPT, Altman & Taylor, 1973) include the limited scope and utility and assumed linear direction (see Schaefer & Olson, 1981).

Further, although it offers a useful framework for disclosure research, CPM (Petronio, 1991, 2002) currently has limited usefulness in quantitative research, as there is currently limited operationalization of concepts. This is a similar quandary with other models of disclosure as well, for example, Disclosure Decision Model (Omarzu, 2000), Disclosure Process Model (Chaudoir & Fisher, 2010) and the Model of Disclosure Decision Making in a Single Episode (Greene, Derlega, & Mathews, 2006). However, some models of disclosure have provided testable hypotheses and operationalization.

Information management models. Recently developed information management models (specifically disclosure and secret revelation) are making progress toward filling the noticeable gap in self-disclosure research by providing testable models of information management processes that identify rejectable paths and hypotheses (for discussion see Greene, 2009). These models (see the Cycle of Concealment Model, CCM, Afifi & Steuber, 2010; Disclosure Decision-Making Model, DD-MM, Greene, 2009; Revelation Risk Model, RRM, Afifi & Steuber, 2009[1]) examine disclosure as an outcome and endeavor to outline the process of coming to a decision to disclose, or continue to conceal or not reveal, personal or private information or secrets to particular recipients. For example, CCM predicts "continued concealment" of a secret as opposed to a "decision to disclose," however, the process through which individuals' evaluate these decisions (whether or not to disclose or conceal) are the same. These recent models have made an important contribution in addressing a perennial problem in information management research that is variable analytic and not theoretically integrated. Despite this, a dilemma still remains in the testing of these models; specifically, there is inconsistency in the conceptualization and operationalization of specific concepts, such as anticipated

response, between the models (i.e., items used to measure "anticipated response" components in these models often represent a wide range of potential responses, effects, and outcomes). Existing information management models identify a number of different variables (ranging from seven to 22) that affect decisions to disclose/conceal personal, private, or secret information. Other information management research identifies ideas that also fit conceptually with anticipated response (e.g., reasons for non-disclosure, see Derlega, Winstead, Greene, Serovich, & Elwood, 2002; or The Chilling Effect in topic avoidance, see Afifi & Guerrero, 2000).

Summary. Research has evolved over the years to include models that enable scholars to explain and predict decision-making in information management (e.g., decisions to disclose or continue to conceal personal/private information). However, in order for information management models to be truly testable, falsifiable, and usable, scholars must have the ability to consistently and reliably measure each variable within the models. At the present time, that is not true of at least one variable within information management research. The present project addresses the problem of an important variable included in several information management models that currently fails this requirement, anticipated response to disclosure. Despite the inconsistent operationalization, research demonstrates that anticipated response is important to the information management process. The following section discusses the contributions of anticipated response to information management decisions in more detail.

Anticipated Response

There are several reasons why the concept of anticipated response is important to the disclosure decision-making process. First, empirical research and many of the models

of disclosure listed previously demonstrate that individuals often consider the response of the disclosure target before sharing (e.g., Ben-Ari, 1995; Brown-Smith, 1998; Derlega et al., 2000; Edgar, 1994). Greene et al. (2006) purport that the recipient reaction is "critical in understanding the disclosure process" (p. 417, see also IPMI, Reis & Shaver, 1988), in particular, the transactional nature of disclosure has ramifications for the discloser's perceptions of self-worth and identity. Afifi and Caughlin (2006) suggest that the likelihood of experiencing the oft-touted benefits of disclosure might be contingent upon partner response, especially when the information one is considering disclosing could be a threat to identity and impression management.

Information management models vary greatly in parsimony and scope, but most take into consideration characteristics of the receiver in some way. More specifically, the Disclosure Decision-Making Model (DD-MM, Greene, 2009), Model of Disclosure Decision Making in a Single Episode (Greene et al., 2006), Revelation Risk Model (RRM, Afifi & Steuber, 2009), Cycle of Concealment Model (CCM, Afifi & Steuber, 2010), and Interpersonal Process Model of Intimacy[1] (IPMI; Reis & Shaver, 1988) all identify disclosure target attributes such as anticipated response/reaction as an important component of the disclosure process. However, there are several basic differences in the conceptualization and measurement of anticipated response across various models and in empirical research. The next section highlights the differences in how information management research has conceptualized anticipated response to disclosure of personal/private information.

Conceptualization. Some information management research tends to conceptualize anticipated response in terms of valence. Specifically, much of the existing

research refers to "positive" and "negative" anticipated responses. For example, the DD-MM (Greene, 2009) proposes that people are more likely to disclose if they anticipate responses that are more positive. The CCM (Afifi & Steuber, 2010) proposes that people consider the extent of the negativity of the receiver's response.

Other information management research conceptualizes anticipated response as a finite action(s) or behavior(s) of the target (for general discussion see Kelly & McKillop, 1996). One example of this would be third party disclosure/gossip (see Greene et al., 2009). Other examples that appear in the literature are judgment (Derlega, Winstead, Greene, Serovich, & Elwood, 2004) or an emotional reaction such as anger (e.g., Afifi & Steuber, 2009). Looking to research considering recalled actual responses to personal/private information after it was disclosed, participants report more positively valenced responses such as emotional, physical, or spiritual support (e.g., Greene & Faulkner, 2002).

A third approach is the conceptualization of response not in terms of valence or specific action but instead to considering the discloser's perceptions of the target's "responsiveness" (to what degree the response made the discloser feel accepted, cared for, and understood, see IPMI, Reis & Shaver, 1988). That is, recipients may respond with the same type of response but deliver it in different ways, or similar responses may be perceived or assessed in different ways by different receivers (i.e., what one person considers "helpful" another might not). Finally, even when conceptualized similarly (e.g., as valence) anticipated response is not measured in a consistent manner, instead reflecting scales that vary from study to study. In addition to inconsistencies in

conceptualization and measurement, there are also some general inconsistencies in labeling, which the next section discusses.

Labeling constructs. The models discussed previously and empirical research often use the terms response and reaction (and anticipated response and anticipated reaction) interchangeably. Although anticipated "response" (vs. reaction) is the variable identified in most of the models of disclosure identified (for exception see RRM, Afifi & Steuber, 2009, "risk assessment") some research investigates reactions and anticipated reactions to disclosure (e.g., CCM, Afifi & Steuber, 2010; additionally, Caughlin, Afifi, Carpenter-Theune, & Miller, 2005; Goodpaster & Hewitt, 1992; Greene & Faulkner, 2002; Peacock et al., 2001; Serovich, Kimberly, & Greene, 1998; Zea, Reisen, Poppen, Echeverry, & Bianchi, 2004). Other research describes "reasons" for and against disclosure (see Derlega et al., 2002), "criteria" for revealing secrets (see Vangelisti, Caughlin, & Timmerman, 2001) and "functions" of secrets (see Vangelisti & Caughlin, 1997). There is further overlap among these different conceptualizations that has not been articulated or systematically categorized.

It makes sense that individuals' perceptions of the "reaction" of the disclosure recipient affect or are part of the perceived outcome of the disclosure. What is still unclear is the difference in terms used to describe what the disclosure recipient says or does following another person's disclosure. The following section explores this conceptual and operational dilemma.

Summary. The previous review demonstrated that it is necessary to hone the conceptualization and measurement of anticipated response. It is clear that anticipated response is critical based on available empirical evidence and theories. However, the

anticipated response concept is not well articulated, nor do we understand what variables predict anticipated response or how actual perceived responses (both past and future) relate to anticipated responses. It is also clear that there may be differences between anticipated and actual responses (e.g., to secret disclosure, see Caughlin et al., 2005; to HIV disclosure, see Greene & Faulkner, 2002), and that past responses affect future anticipated responses (e.g., verbally aggressive responses to prior revelations, see CCM, Afifi & Steuber, 2010; prior reactions form the basis of anticipated response, see DD-MM, Greene, 2009). However, theory does not clearly explicate the potential relationships between these variables. In order to improve existing information management theory, this project will systematically review the assorted variables that related to anticipated response (anticipated response or reaction, actual response or reaction, and effect or outcome) in relevant information management frameworks and in empirical research and organize the various conceptualizations into meaningful categories. Then, this project will create consistent and reliable measurement structure for those categories.

Overall summary. One of the major evaluative components of a theory is testability (e.g., Chaffee & Berger, 1987). In order to facilitate future theory development, researchers need to be able to measure all of the components of models. Currently, the inconsistency in existing measurement and conceptualization of anticipated response to disclosure of personal/private information limits the utility of theories/models of information management. By developing a comprehensive conceptualization and operationalization of anticipated response, this project will augment information

management research and contribute to enhancing researchers' ability to predict disclosure decisions.

Preview

The goal of this project is twofold. The first goal is to provide clarity to the conceptualization and measurement of anticipated response to disclosure of personal/private information. The second goal is to identify elements that predict anticipated response. This document contains three sections. The first section, literature review, includes a review of information management and relevant theories, models, and perspectives of information management as well as the ways in which information management research has conceptualized and measured anticipated response within theoretical frameworks and in empirical research. I organized the first section by management strategy (privacy, self-disclosure, secrets[2]) and discussed anticipated response within each individual theory/framework/model. This section will review the theoretical framework as well as the function and measurement of anticipated response within each framework. The next section is Study I, which develops a measure to operationalize anticipated response and reports psychometric properties. The subsequent section, Study II, will examine different variables that affect perceptions of anticipated response, including information, relationship, and response attributes. Finally, an integrative conclusion provides a summary discussion.

Chapter 2

Review of the Literature

Information Management

Self-disclosure, privacy, and secrets can be categorized under the broader umbrella of information management, specifically, the management of personal and/or private information (see also topic avoidance, often investigated within the context of privacy management). In order to measure anticipated response, this study will review frameworks from each of these different branches of information management. First, this section discusses the similarities and differences between these approaches to conceptualizing sharing information, beginning with a discussion of privacy.

Privacy. Scholars generally consider "privacy" the broadest of the three terms. It is often considered an umbrella term that encompasses the concepts self-disclosure, topic avoidance, and secrets. Early research often conflated privacy and self-disclosure, with disclosure considered a type of privacy regulation (e.g., Derlega & Chaiken, 1977). More recently, privacy has been most strongly associated with Communication Privacy Management theory (CPM, Petronio, 1991, 2002), a dialectic theory that explains how people regulate and control private information through a rule-based management system. According to CPM (Petronio, 1991, 2002), privacy is "the feeling that one has the right to own private information" (p. 5) whereas the Derlega perspective would define privacy as perceived control over the flow of information. The next term, self-disclosure, is narrower than privacy.

Self-disclosure. One way to manage private information is to disclose it. Information management researchers most commonly define self-disclosure as an

interaction between two individuals where one person intentionally shares personal or

private information (for example, feelings, thoughts, and experiences, see Derlega et al.,

1993). Further, these perspectives generally define self-disclosure as a

voluntary/deliberate/intentional process (see Derlega et al., 1993). This paper discusses

three models of self-disclosure: the Derlega tradition (see Derlega, 1984; Derlega &

Winstead, 2001; Derlega et al., 2004), Model of Disclosure Decision-Making in a Single

Episode (Greene et al., 2006), and the Disclosure Decision-Making Model (DD-MM,

Greene, 2009). In addition to discussing models of disclosure, this paper will also discuss

models of intimacy where self-disclosure is a major component: Social Penetration

Theory (SPT, Altman & Taylor, 1973) and the Interpersonal Process Model of Intimacy

(IPMI, Reis & Shaver, 1988). The Disclosure Decision Model (Omarzu, 2000) and the

Disclosure Process Model (Chaudoir & Fisher, 2009) also offer robust theoretical

contributions to the understanding of self-disclosure as an information management

strategy but are currently untested and therefore not reviewed in detail in this project. The

broader concept of self-disclosure also includes non-disclosure of information.

Non-disclosure. Non-disclosure is an alternative information management

strategy. Just as individuals may choose to disclose personal or private information, they

may choose *not* to disclose, to keep *secrets* about, or to *avoid* (e.g., topic avoidance)

communicating about private information as strategies within information management.

The Derlega tradition discusses reasons for non-disclosure of personal/private

information. Scholars often discuss non-disclosure within the context of self-disclosure

and perceive non-disclosure as fundamentally different from concealing (keeping secret)

or avoiding sharing information. The next section discusses secrets.

Secrets. Secret information is similar to information that would be considered self-disclosure if shared in that only the "discloser" knows the information and s/he is intentionally not sharing that information. Kelly (2002) explains that the major difference between secret keeping and disclosure is in the discloser's labeling of the information or the perception (i.e., whether the discloser views the information "secret," "private," or "personal"). Individuals may intentionally withhold secret information because they consider the information especially risky or negative (Afifi, Olson, & Armstrong, 2005). This paper discusses two models of secret keeping as an information management strategy: the Cycle of Concealment Model (CCM, Afifi & Steuber, 2010) and the Revelation Risk Model (RRM, Afifi & Steuber, 2009). The paper additionally discusses a major phenomenon underlying these two models, the "Chilling Effect" (see Roloff & Cloven, 1990).

Overview

The following section divides the review into three major areas: privacy, self-disclosure (and non-disclosure), and secrets. Each area provides a discussion of major model(s) that fall under that heading. The subsections divide the discussion of each model into four parts: a) description of the model, b) summary of tests of the model, c) the role of anticipated response in the model, and d) measurement of anticipated response in the model. Although privacy is an umbrella term under which the related concepts of self-disclosure and secrets may fall, I organized the review in this manner because these three concepts are often, if not exclusively, studied independently.

Privacy. The review begins with a discussion of the broadest of the information management areas, privacy. Derlega (see Derlega & Margulis, 1982) conceptualizes self-

disclosure as a facet or "example" of privacy regulation, where the level of privacy people have in relationships is determined by the degree of control maintained over individuals' personal information. This conceptualization of privacy regulation, one that "describes how individuals seek to control the flow of information between themselves and others" (Derlega & Margulis, 1982, p. 153) predates privacy regulation as conceptualized in CPM (Petronio, 1991, 2002).

There are some similarities in the ways that existing theoretical perspectives define *private information* and *self-disclosure*. Both terms refer to information that is otherwise unknown to others. The divergence occurs in that *private information* is not limited to information about the self (other scholars use the terms *disclosure* versus *self-disclosure* to emphasize this difference); private information may be shared (or co-owned) with others. CPM (Petronio, 1991, 2002) also makes a distinction between the process of sharing information and the process of intimacy building (see later section on models of intimacy). CPM postulates that disclosure of private information is not always used as a tool to increase intimacy in a relationship (in contrast to the function of self-disclosure in some theories of intimacy, e.g., IPMI, Reis & Shaver, 1988; SPT, Altman & Taylor, 1973), nor does the revealing of such information always contribute to increased intimacy. To support this distinction, Petronio (2002) references the "stranger on the train" phenomenon (see Jourard, 1971) and relationships where being the recipient of private information is an occupational hazard (e.g., therapists, bartenders or hairdressers, see Petronio, Schiebel, & Snider, 1991). Thus, there are examples of individuals' tendency to share private information despite the fact that increased intimacy with the receiver is not likely a goal of the interaction.

The next section reviews the theory of information management that dominates the research associated with "privacy" (as opposed to self-disclosure, intimacy, or secrets), Communication Privacy Management Theory (Petronio, 1991, 2002). This section begins with a general description of CPM, then discusses tests of the CPM, next highlights anticipated response in CPM, and finally concludes with an examination of the measurement of anticipated response in CPM.

Communication Privacy Management theory (*CPM*). CPM (Petronio, 1991, 2002) is a dialectical theory[3] that explains how people regulate and control private information through a rule-based management system. CPM views privacy and disclosure at opposite ends of a dialectic. According to CPM (Petronio, 1991, 2002), privacy is "the feeling that one has the right to own private information" (p. 5). People simultaneously feel the need to both control and reveal this private information. CPM is based on five primary theoretical assumptions (a) private information is the substance of disclosures, (b) there is a metaphorical boundary between private and public information, (c) sharing private information contributes to feelings of vulnerability, which contributes to the need to control private information, (d) people use a rule-based system to manage private information in interactions, and (e) privacy-disclosure is a dialectical tension in relationships (Petronio, 1991, 2002).

Petronio (1991, 2002) refers to a metaphorical barrier or boundary enacted by individuals and groups to protect or retain private information. Boundary coordination includes three operations: *permeability, linkage, and ownership* (Petronio, 1991, 2002). The size and permeability of privacy boundaries vary, although boundaries are relatively consistent among certain groups. For example, young children tend to have small (little

private information that is owned by themselves) and highly permeable (information flows freely to outsiders) boundaries, yet as they age, these boundaries increase in size and become less permeable. Derlega and Chaikin (1977) originally described this boundary concept, and Derlega and colleagues have developed a line of quantitative research explaining disclosure decisions in the framework of HIV.

When information is co-owned by many individuals (such as in an organization or family), privacy management becomes more complicated because of coordination. Linkage involves the assimilation of information from personal into collective boundaries. Several factors influence linkage including the strength or weakness of ties between group members (e.g., as studied in an organization context), the amount of information disclosed, the proportionality of each person's contribution to the boundary, and individuals' rules about timing, topic, and target(s) of disclosure. These factors determine the extent to which people link others into a privacy boundary (Petronio, 1991, 2002).

The goal of privacy management at any level is coordination, which individuals accomplish through defined rules and negotiations. Coordination is frequently more difficult at the group level than at the individual level, because more people have ownership of, and control over, the information (see Venetis et al., in press, for a discussion of prior restraint phrases). According to CPM, *boundary turbulence* results when one (or more) group member(s) do not adhere to the same privacy rule. The rule-based management system is comprised of the process of rule development and application, boundary coordination, and boundary turbulence (Petronio, 1991, 2002).

The competing tension of disclosure versus concealment of private information governs privacy management. In practice, this dialectic does not exist in absolutes but rather in degrees (Petronio, 2002, argues that it is not possible to be either fully disclosive or completely private). Attempting to disclose or conceal all private information would violate an expectation of skillful management of information through a balance of privacy and disclosure (Petronio, 2002). Therefore, the goal of privacy management is to handle private information competently, not to achieve a certain level of disclosure or privacy, as that level may vary by individual or context.

Individuals feel the dialectic tension of privacy management at many different levels simultaneously. People coordinate their own information, as well as information that is co-owned with relational partners and groups. For example, both husbands and wives must manage disclosure issues surrounding infertility (see Steuber & Solomon, 2011). In large groups, such as families, a dyadic privacy boundary can manifest into a family privacy dilemma (Petronio, Jones, & Morr, 2003; cf. Vangelisti's family secrets). It is in the contexts of family communication or couples that CPM is most frequently, applied and the following section discusses tests of the CPM framework.

Tests of theory/framework. CPM (Petronio, 1991, 2002) is a framework and not testable in a traditional sense. Specifically, the theory offers no testable propositions, and most applications of CPM to date are qualitative. However, a few quantitative investigations have also applied CPM. The following paragraphs discuss first the quantitative and then the qualitative investigations of CPM.

Two of the quantitative tests of CPM have been within the context of topic avoidance. In the first, Caughlin and Golish (2002) used CPM's boundary permeability

assumption to argue that topic avoidance may be benign or even satisfying (especially for those with highly impermeable boundaries). They surveyed 100 heterosexual dating dyads and 114 parent-child dyads. They measured topic avoidance using an expanded version of Guerrero and Afifi's (1995a) seven point Likert scale where higher numbers indicate more topic avoidance. They averaged the scores across 24 items to create four indices of topic avoidance and four "counterpart" perceived topic avoidance indices (i.e., perceptions of topics that the other avoided): boyfriends' own topic avoidance with their girlfriends (M = 2.42, SD = .96, α = .88) and their perceptions of their girlfriend's topic avoidance (M = 2.39, SD = .94, α = .86), girlfriends' own topic avoidance with their boyfriends (M = 2.08, SD = .74, α = .82) and their perceptions of their boyfriend's avoidance (M = 2.37, SD = .95, α = .85), parents' own topic avoidance with their child (M = 2.32, SD = 1.05, α = .93) and their perceptions of their child's avoidance (M = 2.67, SD = 1.21, α = .94), and children's own topic avoidance with their parent (M = 3.31, SD = 1.19, α = .89) and their perceptions of their parent's avoidance (M = 3.12, SD = 1.13, α = .89). They measured relational satisfaction with a modified version of the Marital Opinion Questionnaire (Huston, McHale, & Crouter, 1986). This eight item semantic differential scale ranged from (1) completely dissatisfied to (7) completely satisfied. Participants were generally satisfied with their relationships: boyfriends (M = 6.03, SD = .81, α = .90), girlfriends (M = 6.12, SD = .95, α = .94), parents (M = 5.92, SD = 1.08, α = .93), and children (M = 5.77, SD = 1.14, α = .95). Authors presented no additional measurement information (e.g., principle components analysis or confirmatory factor analysis).

Caughlin and Golish (2002) found support for CPM's notion of different preferences for permeability of boundaries; topic avoidance might be preferable for individuals with more rigid boundaries. Specifically, utilizing t-tests and maximum likelihood estimation in EQS (a SEM program) without latent variables (allowing for smaller sample sizes), Caughlin and Golish (2002) determined that topic avoidance is reciprocal (in both parent/child and dating partner dyads) and that individuals are generally accurate in their assessments of others' avoidance. Further, in general, more topic avoidance is generally associated with more relational dissatisfaction.

In another quantitative investigation of CPM, also surveying 100 heterosexual dating dyads and 114 parent-child dyads, Caughlin and Afifi (2004) found partial support for CPM when comparing parent-child dyads testing the associations between topic avoidance and relational dissatisfaction using HLM. In addition to reporting perceptions of topic avoidance and relational satisfaction (see above for means, alphas, and standard deviations), this study also reported reasons for avoidance (self protection, relationship protection, partner unresponsiveness, avoid conflict, privacy, and lack of closeness) from the perspective of both self and counterpart (either boyfriend/girlfriend or parent/child), perceptions of communication competence, and influence power. CPM proposes that as children grow older, parents and children must renegotiate privacy boundaries. Caughlin and Afifi (2004) demonstrated some support for CPM's suggestion that individuals' perceived reasons for avoiding ought to moderate the associations between topic avoidance and dissatisfaction. They also found that certain motivation-related personal and relational characteristics moderate the same associations between topic avoidance

and dissatisfaction. However, this only provides support for a very narrow portion of CPM.

Metzger (2007) applied CPM to understand the tension between information disclosure and privacy within e-commerce relationships. Metzger (2007) had participants come to an on-campus computer lab and interact with one of three stimulus versions (weak, strong, or no privacy policy) of a specially created website. To measure participants' privacy access and protection rules, Metzger (2007) recorded participants' actual disclosure and withholding of information (all three versions of the sites offered two opportunities for disclosure of personal information, such as first and last name, postal address, education level, etc.). To determine participants' boundary access rules, Metzger (2007) asked participants how comfortable (on a scale from one to four) they were in giving 23 types of personal information. To measure participants' rules governing boundary coordination by seeking information from the website's privacy policy Metzger (2007) captured participants' "clickstream" data during browsing and had participants report if they recalled seeing the site's privacy policy. Results applied aspects of CPM in the domain of CMC by demonstrating that "similar kinds of balancing dynamics appear to operate in the Web environment as they do in face-to-face situations" (Metzger, 2007, p. 354). However, in this particular quantitative investigation of CPM, the measures lack face validity and the findings are vague as a "test" of CPM because public disclosure is not really a context that fits scope of CPM.

Morr Serewicz and Canary (2008) conducted a two-study investigation of private disclosures in in-law relationships and developed measures for some CPM variables. In the first study, they surveyed recently married couples and the parent of one spouse ($N =$

271). Specifically, they created scales to measure disclosure of family information, family privacy orientation, and family in-group status. Morr Serewicz and Canary (2008) based scale creation on a CPM driven qualitative investigation (Morr, 2002). The disclosure scale resulted in four factors: *relational trouble* (eight items, α = .95), *historical identity* (α = .87), *acceptance* (five items, α = .93), and *slander* (two items, α = .77). The family privacy orientation scale resulted in two factors: *interior privacy orientation* (six items, α = .83), and *exterior privacy orientation* (five items, α = .78). Family in-group status was represented by a single factor (five items, α = .90). The primary purpose of this study was to create measures for use in the second study.

The second study by Morr Serewicz and Canary (2008) was conducted online with one spouse of a recent marriage (*N* = 106). The results provided general support for the effect of family privacy orientations on personal and relationship outcomes. However, contrary to what CPM (Petronio, 1991, 2002) proposes, they found no moderating effects between participant family privacy orientation and either disclosure from in-laws or the in-law relationship (they did find direct relationships). They found both main and moderating relationships between in-law's disclosures about relational trouble and about the family's historical identity and relational outcomes. More specifically, there is a positive association between acceptance disclosure and in-law satisfaction and between slanderous information disclosure and negative outcomes (Morr Serewicz & Canary, 2008). Historical identity disclosures were positively related to perceived in-group status. These main effects suggest that some disclosures (some types of information) are not affected by family member privacy orientation when filtering information from in-laws. However, the moderated relational findings suggest that family privacy orientation of the

original family also affects in-law disclosure assessment and outcomes. For example, the permeability of the boundaries as set by the original family privacy orientation moderated the relationship between disclosure and in-law satisfaction. Overall, the investigation supported CPM's proposition that in-law disclosure (with the exception of slander) was positively related to feelings of in-group status. However, Morr (2002) did not find clear support for CPM's (Petronio 1991, 2002) proposition that people are most satisfied when family privacy orientations are equivalent. Therefore, while this study (Morr Serewicz & Canary, 2008) tested CPM quantitatively and designed measures that are easy to implement, these scales measure only a very small portion of CPM (Petronio, 1991, 2002) and encourage further scrutiny of CPM's propositions. Also, these studies represent very specific relationships/context, no reason to assume would generalize to other co-owned contexts (e.g., organizations).

Scholars have applied CPM more frequently in qualitative investigations. For example, Afifi (2003) used qualitative interview methodologies to extend CPM by further examining the role of dialectical tensions in stepfamily members' boundary coordination efforts. Afifi (2003) demonstrated that these dialectical tensions produced boundary turbulence, and family members used both positive and negative communication management strategies to reduce the dissonance produced by the tensions. However, she found that these efforts were not always compatible with boundary rules, resulting in instability among stepfamily members.

Petronio, Sargent, Andea, Reganis, and Cichocki (2004) used a semi-structured survey to examine the privacy dilemmas created when "informal" healthcare advocates (such as family members or friends) participate in a patient's visit with a physician. Four

qualitative themes emerged that illustrate how family members and friends dialectically manage the issues of privacy regulation: a) coping mechanisms of *patients* for a violated privacy boundary, and *advocates* for protecting the health of the patient, b) advocates' description of their role as altruistic supporters, c) physicians' information seeking directed toward the advocate instead of the patient, and d) patients' attribution of advocate responsibility in assistance with decision-making about patients' health issues. In addition, the analysis highlighted a finer point regarding the confusing nature of co-ownership of information. Petronio et al. (2004) found that there are different levels of co-ownership and that co-owners may misinterpret the scope of their "rights" to the information. "Although a 'co-owner' of the information, the parameters of how much is co-owned and whether co-owners can use their own personal privacy rules and discretion when someone still considers it his or her sole private information becomes an issue" (Petronio et al., 2004, p. 50). These co-ownership issues also lead to boundary turbulence.

   Anticipated response in theory/framework. Anticipated response is mentioned in CPM as a condition that affects the likelihood of disclosure (willingness to disclose). Petronio (1991) discusses prerequisite conditions, anticipated ramifications and criteria for disclosure decisions. Anticipated ramifications are the outcomes expected or estimated by individuals prior to the disclosure (Petronio, Martin, & Littlefield, 1984). Petronio and Martin (1986) propose that anticipated ramifications become a function of rules (boundary regulators). Additionally, Petronio (1991) suggests that there are sex differences in these rules based on gendered cultures. A cultural group view explains both prerequisites (likelihood of disclosure) and anticipated ramifications (including

anticipated responses; Petronio, 1991). Petronio (1991) suggests that women's likelihood of disclosure is based on a "discreet, trustworthy, sincere, liked, respectful . . . warm" receiver, who is a good listener and open in return (p. 48; see also Kelly & McKillop, 1996).

CPM does not explicitly describe the variable "anticipated response." However, studies using CPM as a framework have assessed anticipated response. Greene and Faulkner (2002) used CPM as a framework to scrutinize how expected and actual responses to HIV disclosure contributed to African American adolescents' disclosure decisions. Through grounded theory based analysis of interviews, they determined that CPM is applicable to HIV disclosure decisions in terms of constructs such as ownership, rule construction and violation, and timing. Greene and Faulkner (2002) found that young women constructed disclosure rules about their HIV status as a means of self-protection. These decision rules were founded on family role, relational quality, or anticipated response.

Greene and Faulkner (2002) also examined the relationship between anticipated and actual responses to HIV disclosure. They demonstrated that HIV-positive African American adolescents expected responses such as negative emotional reactions, differential treatment, reception of support, target telling others, no differential treatment, and unsure of response. The actual responses, though similar, were reported in different frequency: differential treatment, negative emotional reaction, reception of support, target told others, and no differential treatment. In sum, negative emotional response was the most expected response, but differential treatment was the most common actual response.

The Greene and Faulkner (2002) study is the first systematic evidence of investigation into different types of response (instead of assumed positive responses or reciprocity).

Another example of research that measures concepts that overlap with anticipated response and uses CPM as a framework is Caughlin and Afifi's (2004) work that developed reasons for topic avoidance in relationships. Caughlin and Afifi (2004) utilized existing research (e.g., Golish & Caughlin, 2002; Guerrero & Afifi, 1995a, 1995b) to develop and test six general reasons for topic avoidance: self protection, relationship protection, partner unresponsiveness, avoiding conflict, privacy, and lack of closeness. They assessed these reasons for topic avoidance within two different types of relationships, heterosexual dating relationships and parent-child relationships from the perspective of each partner (girlfriend, boyfriend, parent, child). They used these measures in conjunction with other constructs to examine variables that the CPM framework (e.g., Petronio, 2002) suggests would moderate the association between topic avoidance and relationship satisfaction (dating relationships and parent-child relationships). CPM would suggest that individuals' reasons for avoidance (i.e., self protection, relationship protection, partner unresponsiveness, avoiding conflict, privacy, and lack of closeness) and other motivation-related personal and relational characteristics (i.e., communication competence, influence power, and relational satisfaction) would moderate the association between topic avoidance and dissatisfaction. Of these reasons, relationship protection overlaps conceptually with relationship-related outcomes for how the information sharing would affect the relationship between the discloser and the potential target. Afifi and Caughlin (2004) discovered that reasons related to relationship protection and unresponsiveness moderated the association between topic avoidance and

satisfaction such that topic avoidance had a less negative effect on the relationship when people (girlfriends, boyfriends, parents, and children) reported that their motivation for avoiding the topic was related to protecting the relationship or that their motivation for avoiding was because they expected avoidance from the other person (their partner, parent, or child).

Measurement of anticipated response in theory/framework. At this point, very few quantitative measures of CPM exist. Scholars most frequently use CPM (Petronio, 1991, 2002) as a framework to guide investigations using qualitative research methods, and the few quantitative studies of CPM did not measure anticipated response. There has only been one CPM based study to date investigating anticipated response (Greene & Faulkner, 2002), and this study was based on interviews and provided no quantitative measures of anticipated response. In Caughlin and Afifi's (2004) investigation of topic avoidance, they measured six reasons for avoidance that overlap with the concept of anticipated response. They measured self protection (α = .70-.80 depending on whether the relationship was with a partner, a parent, or a child) with four items including "I might get hurt" and "my [counterpart] might look down on me." They measured relationship protection (α = .87-.91) with four items including "I don't want to change the nature of my relationship with my [counterpart]." They measured partner unresponsiveness (α = .68-.79) with four items including "my [counterpart] may not respond or say anything in return when I talk to him/her." They measured conflict (α = .70-.83) with two items including "I want to avoid conflict." They measure privacy (α = .77-.83) with two items including "I want to keep my privacy." Finally, they measured

lack of closeness ($\alpha = .77-.80$) with two items including "I am not emotionally close to my [counterpart]."

Summary. Communication Privacy Management theory (CPM, Petronio, 1991, 2002) has made an important contribution to the study of information management. Many studies have used CPM as a framework to guide their investigation of disclosure and have found general support for the theory's propositions. Far fewer studies have used CPM in quantitative investigations, and in these studies support for CPM's propositions is less straightforward (see Caughlin & Afifi, 2004; Metzger, 2007; Morr Serewicz & Canary, 2008). Further, anticipated response is mentioned briefly in the theory, with only a short explanation of the potential influence "anticipated ramifications" may have on privacy rule formation. Only one qualitative CPM study considered anticipated response (see Greene & Faulkner, 2002), and there are no existing measures for anticipated response as it is conceptualized in CPM (disclosure ramifications). Afifi and Caughlin used CPM as a framework to investigate the association between topic avoidance and relational satisfaction and used reasons or motivations for topic avoidance that share overlap with the concept of anticipated response.

The first section of this review examined one theory of privacy. The current project discussed privacy first because it is the umbrella term that may capture the other information management strategies (e.g., self-disclosure, secret keeping, topic avoidance). The next section examines another one of these information strategies, self-disclosure.

Self-Disclosure

Scholars consider disclosure one possible strategy for information management. Social science researchers have studied self-disclosure since the late 1960s. Numerous studies have confirmed the role of self-disclosure in relationship development, maintenance, and deterioration (see Derlega, Metts, Petronio, & Margulis, 1993; Taylor, 1979). Self-disclosure ("including what, when, and how to disclose versus not to disclose" Greene et al., 2006, p. 2) and the response to that disclosure (of both the recipient and the discloser) may be "used to infer how much partners like and trust one another" (Greene et al., 2006, p. 2). That is, self-disclosure is so instrumental that people may be able to make observations about the types of relationships individuals have simply by examining the content of and response to personal or private information.

One particularly prolific line of self-disclosure research is in the effects of self-disclosure on individuals and relationships. Self-disclosure is often, but not always, related to positive outcomes such as positive health outcomes (Derlega et al., 1993[4]). For example, researchers have found that verbally discussing or writing about extremely traumatic or upsetting life experiences (compared to trivial events) is positively associated with lower illness rates (Pennebaker & O'Heeron, 1984), fewer physician visits (Pennebaker, Colder, & Sharp, 1990; Pennebaker, Kiecolt-Glaser, & Glaser, 1988), less immune dysfunction (Pennebaker et al., 1988), and decreased severity of physical symptoms (Kelley, Lumley, & Leisen, 1997). Meta-analyses have found support for these findings in the aggregate (Smyth, 1999). Scholars often link self-disclosure of distressing information to catharsis (e.g., Kelly, Klusas, von Weiss, & Kenny, 2001). Self-disclosure may also provide an opportunity for the discloser to receive social support from others.

Research has established the connection between revealing personal or private information and positive outcomes (Pennebaker, 1984; see Frattaroli, 2006 or Smyth, 1999 for meta-analysis). However, the likelihood of experiencing the positive benefits of self-disclosure is connected to partner response and reciprocal disclosure. Afifi and Caughlin (2006) demonstrated only disclosers who reported perceptions of positive receiver reactions reported positive psychological benefits (such as rumination reduction and increase in self-esteem). They suggest that this phenomenon may be even more salient when the private information relates to identity or impression management concerns (Afifi & Caughlin, 2006). Studies of stigmatized topic disclosure (e.g., sexual orientation, HIV) have illustrated this interdependent relationship. For example, Ulrich et al. (2003) demonstrated an improvement in the physiological health of homosexuals who disclosed their sexual orientation only when that disclosure was responded to positively (e.g., support). This phenomenon is also relevant in negative responses to disclosure. Derlega, Winstead, Oldfield, and Barbee (2003) discovered that negative health outcomes (depressive symptoms) were associated with negative (e.g., avoidant) reactions to HIV disclosures[5]. The next section turns to a review of disclosure theories and models.

Relevant theories and models of self-disclosure. The following sections address several predominant theories of self-disclosure including two major approaches to self-disclosure that dominate existing literature. This section first focuses on two frameworks of intimacy (SPT; Altman & Taylor, 1973; IPMI, Reis &Shaver, 1988) that highlight self-disclosure as a variable that contributes significantly to intimacy building. In early self-disclosure research, disclosure and intimacy were conceptualized as so highly correlated that they were often confounded (for discussion see Greene, 2009; Morr &

Petronio, 2007). The frameworks discussed here do not confound self-disclosure with intimacy but view self-disclosure as an important component in the development of intimacy in relationships. This section next reviews three frameworks (Derlega's program of self-disclosure research, hereafter referred to as the Derlega tradition; the Model of Disclosure Decision Making in a Single Episode, Greene et al., 2006; and the DD-MM, Greene, 2009) that shift the focus to self-disclosure as the outcome of a decision process. Each of the frameworks discussed in this section identifies partner response (or reaction) as a variable in the disclosure process (the DDM, Omarzu, 2000, and the DPM, Chaudoir & Fisher, 2010, are not discussed in detail this section because the DDM does not identify partner response and both the DDM and the DPM are untested[1]). There are both similarities and differences in the way(s) each of these frameworks address anticipated response, in addition to similarities and differences between how the intimacy and self-disclosure theories address anticipated response, and how CPM (Petronio, 1991, 2002) addresses anticipated response.

Four subsections organize the disclosure and intimacy theories reviews. The first subsection reviews the theory (model, perspective), the second subsection examines tests of the framework, the third subsection discusses the specific role of anticipated response and emphasizes how the findings of anticipated response are important to that framework, and the final subsection describes the measurement of anticipated response in the tests of the framework(s). These sections also include comparisons between the different self-disclosure and intimacy theories and CPM (Petronio, 1991, 2002). The first section begins with the earliest of the frameworks, Social Penetration Theory (Altman & Taylor, 1973).

Social penetration theory (SPT). Social Penetration Theory (SPT, Altman & Taylor, 1973) is rooted in social exchange theory (SET, Thibaut & Kelley, 1959) and interdependence theory (IT, Kelley, Holmes, Kerr, Reis, Rusbult, & Van Lange, 2003). SPT predicts the developmental track between self-disclosure and intimacy in interpersonal relationships. Existing research has predominantly applied SPT to the development of friendship and romantic relationships. According to SPT, self-disclosure increases in depth and breadth as relationships become more intimate, and, as a result, the bonds of intimacy build gradually in a spiral fashion as individuals take turns disclosing increasingly more personal information. Specifically, "as relationships develop, interpersonal exchange gradually progresses from superficial, non-intimate areas to more intimate, deeper layers of the selves of the social actor" (Altman & Taylor, 1973, p. 6). Partner response to disclosure is considered in that individuals are expected to respond positively to self-disclosure and reciprocate with openness in return.

SPT is contextualized within a framework of rewards and costs that is based in SET. Altman and Taylor (1973) reference the "the dyadic effect" (basic tenet of SET, Thibaut & Kelley, 1959) explaining that the costs and rewards in interpersonal relationships influence relationship development; rewards motivate people to maintain their relationship and engage in deeper levels of exchange, whereas relationship dissolution results when there are numerous or repeated costs. Taylor and Altman (1987) demonstrated that rewards and costs in social exchanges (as conceptualized by Thibaut & Kelley, 1959, SET) function as conceptualized in an overview of all the studies using or testing SET (Taylor & Altman, 1987).

According to Altman and Taylor (1973), "penetration" (the process of exchanging increasing levels of self-disclosure that builds intimacy) occurs in a number of stages. The first stage is *orientation*, where self-disclosure is low in both depth and breadth. Superficial disclosures that reflect social desirability concerns and norms about what is appropriate disclosure when getting to know someone characterize the orientation stage. The second stage is *exploratory affective*, which is commonly the level of casual friendships. In the exploratory affective stage, people begin to disclose information that is more personal such as attitudes about moderate topics (e.g., politics, education). According to Altman and Taylor (1973), many relationships do not get "closer" than this stage. The third stage, *affective,* reflects increasingly deeper and wider disclosures. This stage is often associated with romantic relationships and may include the use of personal idioms, criticism, arguments, and intimate touching. *Stable* is the final stage of relationship growth, which is where self-disclosure, which has been linear in its trajectory thus far, starts to plateau. Partners still self-disclose, but the disclosure does not necessarily continue to increase in breadth or depth at this point. Altman and Taylor (1973) state that SPT "is not necessarily a linear process, but cycles and recycles through levels of exchange" (p. 135). However, much of the empirical research testing SPT is prone to a linear orientation. The final stage of SPT is *depenetration.* Depenetration is period of time where the relationship starts to disintegrate in part because partners (or one partner) perceive the costs of the relationship outweigh the rewards. According to SPT, in depenetration disclosure decreases and the relationship eventually ends (note that some relationships may "end" or "continue" in the stable stage and never depenetrate).

SPT is more limited in scope than CPM. SPT primarily considers self-disclosure, or personal/private information management, within the context of relational development and does not consider, for example, the exchange of personal/private information among dyads in groups or other contexts (e.g., co-owned information). Further, past research often examined communication between strangers (e.g., confederate and participant) to test the tenants of SPT. The next section describes the tests of SPT in more detail.

Tests of theory/framework. This section describes the contextual applications of SPT (Altman & Taylor, 1973). SPT was predominantly used as a framework in relationship research, such as in friendships (e.g., Barth & Kinder, 1988; Keiser & Altman, 1976) and romantic relationships (e.g., Gibbs, Ellison, & Heino, 2006; Goodwin, Nizharadze, Luu, Kosa, & Emelyanova, 1999; Yoder & Nichols, 1980). SPT has also been applied to intimacy in families (e.g., Goodwin et al., 1999), as well as to research investigating sex differences in self-disclosure (e.g., Barth & Kinder, 1988; Dindia, 2002; Solano, 1981). SPT has been applied in related contexts such as leader-follower relationships (e.g., Boyd & Taylor, 1998) and to cultural or ethnic issues within relationships (e.g., Gudykunst & Hammer, 1988; Gudykunst & Nishida, 1986; Gudykunst, Nishida, & Chua, 1987; Hammer & Gudykunst; 1987; Won-Doornink, 1979, 1985). Finally, studies that are more recent have applied SPT to communication through mediated channels (Chan & Cheng, 2004; Gibbs et al., 2006; Yum & Hara; 2005).

Many of the studies listed above used SPT to ground their investigation of relationship closeness and self-disclosure. For example, Barth and Kinder (1988) used peripheral, intermediate, and central levels of information to code topics discussed by

same-sex undergraduate friends. They determined that females discussed more intimate and deeper topics more frequently, and that females were more intimate (than males) at all levels of friendship. Gudykunst et al. (1987) also examined undergraduate dyads. They discovered that in Japanese-North Americans communication between partners became more personalized, synchronized, and "easier" as the level of relational intimacy increased. They also found that relationship role affected the social penetration. In general, Gudykunst et al. (1987) determined that SPT is generalizable to the Japanese North-American culture.

Scholars have frequently investigated SPT in experimental contexts. Keiser and Altman (1976) studied groups in a two by two design (casual acquaintances or good friends paired with either intimate or nonintimate topics). They ascertained that the good friend/superficial topic pairing demonstrated relaxed types of nonverbal behavior, where the casual acquaintance/intimate topic pairing demonstrated more tension in nonverbal behaviors (in both the good friend/intimate topic pairing and the casual acquaintance/nonintimate topic pairing nonverbal were neither relaxed nor tense). Keiser and Altman (1976) concluded that nonverbal behaviors and verbal communication blend to form a complex communicative system.

Investigations that are more recent scrutinize SPT in the context of computer-mediated communication. For example, Chan and Chen (2004) used content coding to examine SPT between on- and offline friends. They determined that offline friends reported greater communication, specifically greater breadth and depth of disclosure than online friends. Yum and Hara (2005) examined the role of self-disclosure in computer-mediated relationship development across three cultures (Korean, Japanese, and

American). They determined that there are more similarities than differences between face-to-face and computer-mediated communication in the context of self-disclosure and relational quality (see also Joinson, 2001). Further, they discovered an association between self-disclosure in computer-mediated contexts and positive and desired relational qualities that is consistent SPT application in offline contexts.

Several studies have confirmed, in part, the SPT proposition that increased breadth and depth of disclosure result in increased intimacy. Several caveats are that few of these studies directly examine a developmental process, few are longitudinal, and many rely on inferences from studies that address the outcome of relationships (Taylor & Altman, 1987). Notwithstanding, there is a general linear association between relationship development and the frequency, range, and depth of self-disclosure (Altman, Vinsel, & Brown, 1981; Petronio, 2002). Self-disclosure accelerates with relationship development (either gradually or rapidly) in frequency, depth, and range of topics (e.g., Altman & Taylor, 1973). Relationship closeness is associated with likelihood of disclosure (e.g., Altman & Taylor, 1973; Chaiken & Derlega, 1974; Vangelisti & Caughlin, 1997) as well as increased intentions to disclose (Greene, 2009). Discussing private topics increases intimacy (see Derlega et al., 1993). Disclosure largely shapes what types of relationships individuals have with each other (Greene et al., 2006, p. 409). However, it is not clear if quality relationships drive intimate communication or if disclosure of personal/private information increases closeness in relationships.

SPT tends to highlight the more positive aspects and outcomes of disclosure, suggesting that more disclosure of greater breadth and depth accelerates relationship intimacy. Unfortunately, although SPT alludes to response to disclosure, it does not

adequately take into consideration different types of responses or the valence of the information. The few types of responses/outcomes it does address (increased intimacy, reciprocity, liking) are predominantly positively valenced (for exception, see loss of relationship as outcome of self-disclosure during depenetration).

The development proposition of SPT also addresses the "depenetration" of relationships. However, scholars have tested this part of the proposition far less frequently. For example, Tolstedt and Stokes (1984) found mixed support for relationship dissolution dynamics outlined in SPT. Consistent with the theory's propositions, they found that intimacy was correlated with disclosure breadth as well as valence. However, they also found a negative correlation between self-disclosure depth and intimacy for both evaluation and descriptive depth. Taylor and Altman (1987) admitted that the SPT prediction for depth may be inaccurate due to possibility that "the pain and anger that accompany the loss of an intimate relationship" (p. 262) inspires disclosures of substantial depth.

Numerous studies have tested different pieces of SPT. However, much like CPM, no studies to date have tested SPT as a whole. A further limitation of existing studies is the design (e.g., experimental contexts that do not reflect "real life"). In general, "response" or anticipated response to disclosure is contextualized as inherently positive. Further, there is limited consideration of types of response or outcomes of disclosure beyond increased relational intimacy. The next section turns to a more in depth discussion of the role of anticipated response in SPT.

Anticipated response in theory/framework. Although SPT does not explicitly address the concept of anticipated response to disclosure, several of the projections or

tenets of the theory are related to anticipated response. First, at the most fundamental level, SPT predicts the development track between self-disclosure and intimacy in interpersonal relationships. The basic equation is that more self-disclosure equals more intimacy in relationships. Increased closeness builds primarily through reciprocity, a response to self-disclosure where the recipient shares personal information with the discloser. Finally, increased self-disclosure and reciprocity also predict liking, which may be considered another type of response (see Berg & Archer, 1980, Derlega, Winstead, & Greene, 2008).

The reciprocity element of SPT that may be most directly related to partner response (and therefore anticipated response). The basic premise of the reciprocity proposition of SPT is that intimate disclosures encourage intimate disclosures, and superficial disclosures encourage superficial disclosures (Altman & Taylor, 1973). Altman and Taylor (1973) describe reciprocity as a set of verbally communicative behavioral events but not necessarily as an explanation of those events. In his privacy theory, Altman (1973) expanded upon the concept of reciprocity by proposing a model that incorporates the norm of reciprocity and social reward as motivational determinants of mutual disclosure.

Altman (1973) introduced the concept of trust, postulating that reciprocal self-disclosure was a basis for establishing trust. Once trust is established, reciprocation is not as important because of reduced perceptions of vulnerability and risk. Therefore the norm of reciprocity functions more within the context of nonintimate disclosures (vs. highly intimate) and the original SPT proposition was amended to convey an inverse relationship between stage of relationship and degree of reciprocity. SPT additionally

postulates that degree of intimacy interacts with disclosure and individuals expect the highest degree of reciprocity with nonintimate topics among strangers (although this information is less useful predictively for studies of non-stranger relationships). Walster, Walster, and Berscheid (1978) found support for this postulate, but others do not consistently report such effects. Upon further review (e.g. Jones & Archer, 1976, Taylor et al., 1981; Taylor & Hinds, 1985), trust was ruled out as a possible mediating variable in disclosure reciprocity. Derlega, Winstead, Wong, and Greenspan (1987, discussed in the next section) modified this proposition claiming that recipients' attributions (subjective reasons) accounting for the self-disclosure mediate the recipient's evaluation of the discloser and reciprocal self-disclosure.

Existing literature indicates that individuals may respond to others personal or private information disclosure by sharing their own personal or private information. Research has isolated reciprocity as a response that most likely occurs in disclosures that are more superficial. However, reciprocity can be very specific (e.g., disclosure of diseases) such as, "I'm a diabetic, too." CPM acknowledges that reciprocity may function as a motivating force for boundary regulation and rule establishment. For example, in an investigation of disclosure of sexual abuse among children, Petronio, Reeder, Hecht, Mon't Ros-Mendoza (1996) reference reciprocity as an example of a privacy access rule in that scenario ("tacit permission"). What is still unclear is what other types of responses people anticipate and experience in conjunction with more intimate disclosures. A final potential response that SPT addresses is "liking."

SPT explores whether individuals like others because they have disclosed to them, or whether people disclose to others because they like them (although SPT does not

directly address the causality of this association). Liking may be considered a "type" or

form of partner response. For example, "liking" someone as a response to disclosure is

conceptually similar to examples of reactions in other research (e.g., Derlega Perspective:

inferring mutual trust or mistrust, co-ownership of sensitive information, feeling

emotionally close, labeling one another "close friends; see the Model of Disclosure

Decision Making in a Single Episode, Greene et al., 2006, discussed later in this review).

The "disclosure-liking hypothesis" (that people disclose more to individuals whom they

like) has been confirmed in meta-analysis (Collins & Miller, 1994). Specifically, there

are three findings: (a) Disclosure is positively associated with *recipients' liking of*

disclosers, (b) disclosure is positively associated with *disclosers' liking of recipients*, and

(c) liking is positively associated with the degree of privacy (or depth) of the disclosure[6].

Effect of disclosure and response to disclosure are closely related variables that

are often overlapping both in SPT and in other research that I will review later in this

project. Increased intimacy (or the cycle of communication that results in increased

intimacy) may be considered an effect, although others have conceptualized intimacy as a

response to self-disclosure. One of the limitations of SPT is that during the relationship

development trajectory SPT does not consider other responses to personal/private

information disclosure such as offering to accompany the discloser to the doctor's office,

crying or communicating hurt or anger, or judgment. SPT considers reciprocity the

principle response to self-disclosure, which results in the continued spiral growth in

intimacy. Therefore, a second limitation is that SPT does sufficiently address the

potential negative responses/outcomes to disclosure, even in the dissolution or

depenetration of a relationship. Further, SPT draws connections between self-disclosure

and liking but addresses few other potential disclosure outcomes (especially more

negative outcomes). In contrast, loss of relationship is considered as a potential outcome

or effect of disclosure in other frameworks (e.g., functions of secrets, see Vangelisti &

Caughlin 1997, discussed in more detail in subsequent sections) but is also

conceptualized as a type of response (e.g., Afifi & Steuber, 2009) or a reason for non-

disclosure (e.g., Derlega et al., 2002). While it is important to incorporate breadth, depth,

and valence of self-disclosure (reciprocal self-disclosure) as a response to self-disclosure,

reciprocity is not the only possible response to self-disclosure.

Social Penetration Theory (Altman & Taylor, 1973) is foundational in both

intimacy and disclosure theory. SPT is and has demonstrated good parsimony and

heurism. However, SPT's conceptualization of anticipated response to disclosure (or

actual response to disclosure) is inadequate and positively skewed. In general, SPT

adopts a somewhat imbalanced perspective on disclosure and response, in some ways

assuming that most responses to disclosure are positively valenced, and people anticipate

responses to their personal/private information disclosure that are primarily positive. This

is somewhat different from CPM, which refers to "disclosure ramifications" – the term in

and of itself conveying a negative orientation. Further, SPT offers a limited

conceptualization of response (predominantly characterized as reciprocity), which is

similar to the limitations of CPM's conceptualization of response discussed previously.

Finally, neither CPM nor SPT clearly distinguish responses to self-disclosure and

outcomes /effects of self-disclosure. That is, both theories reference reciprocity

(something that occurs within the same interaction as the initial disclosure) and building

intimacy or liking (something that, more likely, accrues across interactions). The next

section discusses the measurement of anticipated response to disclosure of personal/private information in SPT.

Measurement of anticipated response in theory/framework. Scholars continue to investigate and often confirm the basic propositions of SPT (Altman & Taylor, 1973) and extend the theory to contexts not originally conceptualized in the theory's development (see Gibbs et al., 2006). However, like CPM (Petronio, 1991, 2002), scholars more frequently use SPT as a framework, and to date there are limited quantitative measures. Further, also similar to CPM (Petronio, 1991, 2002), SPT's conceptualization of anticipated response is vague and not clearly conceptualized. Finally, studies to date of SPT offer no quantitative measures for anticipated response, and SPT is not widely used presently.

Summary. Although not a theory of disclosure per se, Social Penetration Theory has been an important contributor to early self-disclosure research. SPT addresses partner response to a limited degree (for example, response conceptualized as primarily positive in general and as reciprocity specifically). Other research illustrates that response is much more complicated than the few responses SPT addresses (e.g., see Greene & Faulkner, 2002). Despite these limitations, the discussion of trust and vulnerability is relevant to recipient responses and anticipated responses because it brings into focus the possibility that not all responses/anticipated responses are positive. One of the reasons that disclosure necessitates trust and makes people vulnerable is because of potential negative recipient reactions as well as outcomes that may be contingent upon those reactions (for exceptions see Derlega et al., 2000 discussion of reasons for disclosure). Finally, SPT's conceptualization of the range of outcomes of self-disclosure is narrow and generally

skewed toward positive outcomes (e.g., relational intimacy, for exception see minimal work on relationship dissolution).

Privacy and disclosure theory comparison. SPT and CPM clearly represent different orientations to disclosure and anticipated response. SPT views disclosure primarily as a positively valenced concept that propels individuals to greater level of intimacy within relationships. Response is likewise conceptualized as positive (e.g., reciprocity), as are outcomes related to disclosure (e.g., intimacy, liking; relationship dissolution is a negative outcome explored by SPT, but this is generally associated with less disclosure where decreased disclosure is considered more as a causal ramification of relationship dissolution, rather than relationship dissolution as an outcome of disclosure, see Altman & Taylor, 1973). CPM (Petronio, 1991, 2002), like the Derlega perspective (e.g., Derlega & Margulis, 1982), views disclosure as a facet of privacy regulation. CPM does not conceptualize disclosure as primarily positive but as a dialectic tension where full disclosure is often associated with risks. Like SPT, CPM also does not adequately articulate the concept anticipated response to disclosure of personal/private information. In contrast to SPT, CPM characterizes anticipated response (conceptualized in CPM as anticipated ramifications) as primarily negative, emphasizing the potential risks and costs of disclosure that an individual considers as a component of privacy rule formation. Neither theory offers published measures of anticipated response.

The first disclosure section reviewed Social Penetration Theory (Altman & Taylor, 1973). Although clearly a theory of intimacy and not of disclosure, SPT highlights self-disclosure as an important variable in relationship building. Further, people often consider SPT a theory of disclosure, and it is incorporated into many basic

interpersonal communication textbooks and courses as such. The next section discusses a second framework that also conceptualizes self-disclosure as a component of intimacy building.

Interpersonal process model of intimacy (IPMI). The Interpersonal Process Model of Intimacy (IPMI, Reis & Shaver, 1988) is similar to SPT (Altman & Taylor, 1973) in that it is not a model designed to predict self-disclosure or to predict the outcomes of self-disclosure specifically. Like SPT, the IPMI focuses on predicting/building intimacy in relationships. As prior research demonstrates, self-disclosure is an important component of building intimacy (see Derlega et al., 1993). The distinction between the IPMI and SPT is that the IPMI recognizes that self-disclosure alone is insufficient to create and build intimacy in relationships. This model recognizes that in order to build intimacy in relationships, disclosers must consider recipient responses' to their personal/private information "responsive" (further, the IPMI incorporates a reciprocity component, partner disclosure, which is separate from perceptions of receiver responsiveness). Additionally, the IPMI conceptualizes the process of building intimacy from a transactional perspective (taking into consideration an appraisal of the average daily give and take of communication between both partners) in contrast to the more linear conceptualization in SPT. In stark contrast with early frameworks of self-disclosure, Reis and Shaver developed the IPMI as an "antidote to the models that equated intimacy with self-disclosure" (Reis, 2007, p. 10).

Reis and Shaver (1988) developed the IPMI by incorporating a number of different theoretical traditions, "clinical, communicational, developmental,

personological, and social" (p. 368). Within these traditions, Reis and Shaver identified

and incorporated several reoccurring concepts into their model:

> Approach and avoidance motives related to intimacy, verbal and nonverbal
> disclosure of self-relevant information and feelings that in other kinds of
> interaction remain private or hidden, attentiveness and responsiveness on the part
> of an interaction partner (spouse, friend, therapist), validation of important aspects
> of one or both interaction partners' self-concepts or identities, and feelings of
> being understood, cared for, and approved of. (Reis & Shaver, 1988, p. 368)

There are four basic components of the IPMI including self-disclosure, partner-

disclosure, partner responsiveness, and intimacy. *Self* and *partner disclosures* can be

factual (facts or information), emotional, or about thoughts. Partner disclosure (the

recipient's actual factual, emotional, or cognitive response to the initial disclosure, akin

to the concept of reciprocity) and partner responsiveness describe the disclosure

recipient's response to the self-disclosure. However, the perceived degree of privacy of

the information is not explicitly stated (for either self or partner disclosures). That is, it is

not clear if the facts, emotions, or thoughts shared between partners in this

conceptualization are personal/private, about the discloser or related to the discloser,

something that the receiver would not know without being told, etc. *Partner*

responsiveness describes the degree to which the receiver's response makes the discloser

feel understood (i.e., perceives that the receiver accurately captured the discloser's needs,

feeling, and the situation), accepted (i.e., the discloser feels accepted and valued as an

individual), and cared for (i.e., the discloser perceives that the receiver is affectionate and

demonstrates concern). Note that partner responsiveness describes the discloser's

perception of a partner's responsiveness, not the partner's actual communication

behavior, or a "type" of response, or a polarized valence of response. Finally, *intimacy*

describes the "closeness" or "connectedness" between relational partners, which is also

measured by disclosers' perceptions of how close they feel to their partner and is a variable in many models of disclosure.

The IPMI emphasizes the role of disclosers' perceptions of the receivers' responses (as opposed to the receivers' actual communication). In most studies (e.g., Laurenceau & Bolger, 2005; Laurenceau, Feldman Barrett, & Pietromonaco, 1998; Laurenceau, Feldman Barrett, & Rovine, 2005; Manne, Ostroff, Rini, Fox, Goldstein, & Grana, 2004a), the actual partner disclosure/response is not measured (for exception see Manne, Ostroff, Sherman, Heyman, Ross, & Fox, 2004b). Instead, disclosers rate the recipient's actual response to the initial disclosure on the degree to which they felt the recipient disclosed facts/information, emotions/feelings (both positive and negative), and thoughts in response to the disclosure (in contrast to ratings of how the response made them *feel*, which is partner responsiveness).

Tests of theory/framework. The tests of the IPMI are markedly different from the other theories reviewed thus far. In contrast to both SPT and CPM, the IPMI describes specific operationalization for all theory variables (self and partner disclosure, partner responsiveness, and intimacy). Although not included in the original publication of the model, Laurenceau et al. (1998) later developed and validated these measures.

The contrast between tests of the SPT and the IPMI is similar to the divergence between tests of CPM and the IPMI. Recent research does provide operationalization for several concepts described in CPM. However, unlike the IPMI which provides operationalization for all of the major variables in the model, the measurement that exists for CPM is limited and only addresses very explicit limited concepts that are relationship specific (e.g., family privacy orientation, Morr Serewicz & Canary, 2008). In contrast,

Laurenceau et al. (1998) conducted a two study project utilizing HLM to test the fit of a model very similar to the original model proposed by Reis and Shaver (1988). Both studies found support for the basic tenets of the IPMI. The authors modified measures (including the response measures) between the first and second study, described in more detail in the anticipated response measurement section. All subsequent investigations of the IPMI have used a version of the scales created by Laurenceau et al. (1998).

Anticipated response in theory/framework. The variables in the IPMI that are most related to anticipated response to disclosure of personal/private information are responsiveness and partner response. In general, empirical tests of the IPMI support the propositions that partner responsiveness and partner response contribute to perceptions of intimacy (Laurenceau et al., 1998, 2005; Manne et al., 2004a, 2004b; Reis & Shaver, 1988). Laurenceau et al. (1998, 2005) established that both self-disclosure and partner-disclosure are predictors of relational intimacy as long as the process occurs in the presence of a "responsive" partner. They discovered that perceptions of partner responsiveness (the discloser's feeling understood, accepted, and cared for) play a greater role in the experience of intimacy than perceptions of behavior (i.e., partner-disclosure). In a study of married couples, Manne et al. (2004b) investigated the impact of breast cancer on marital intimacy and reported that perceived partner responsiveness mediated the association between self-disclosure and perceived intimacy, as well as between partner-disclosure and perceived intimacy. They found a strong association between partner responsiveness and intimacy in these couples, and perceptions of intimacy were stronger among couples who perceived their partners made them feel accepted, cared for, and understood (i.e., partners were responsive). They also found a relationship between

the partner disclosure (reciprocity) variable and overall levels of distress such that when individuals reported more reciprocity they also reported lower overall levels of distress.

The IPMI is one of the few models discussed in this review that provides consistent conceptualization and operationalization of the theoretical concepts most directly related to anticipated response. In the IPMI's conceptualization, the responsiveness and partner response variables are related to what occurs after information has been shared (i.e., after disclosure). These concepts do not describe *anticipated* response. However, this temporal issue could easily be amended to assess forms of anticipated response (or responsiveness) disclosers might have. Finally, also unlike other concepts, these variables have been measured and tested in numerous studies.

Measurement of anticipated response in theory/framework. The majority of relevant research conducted in conjunction with responsiveness and self-disclosure has used the response (partner-disclosure, partner responsiveness) items created by Laurenceau et al. (1998)'s two study project. The scales were modified between the first and second study in three ways: 1) They extended the data collection period (from one to two weeks), and they altered the measurement of 2) responsiveness and 3) self- and partner- disclosure. Measurement items for partner responsiveness increased from one to three items in the second study. In the first study, Laurenceau et al. (1998) measured partner responsiveness by having participants rate the degree to which they felt accepted by their interaction partner (one item). In the second study, they measured partner responsiveness "more broadly" and "in a manner that more closely paralleled Reis and Shaver's (1988) conceptualization" (p. 1245). Participants rated the degree to which they

felt accepted, understood, and cared for by their interaction partner with one item each (three items total, summary variable created using the average).

Scholars have modified measures of self- and partner-disclosure to assess different types of disclosures. In the first study Laurenceau et al. (1998) measured self-disclosure by having participants rate the amount they disclosed in general and how much they expressed their emotions (two items). They then created a summary variable. In the second study, they altered the measurement of self- and partner-disclosure with "items that distinguished descriptive disclosures (disclosures of facts) from evaluative disclosures (disclosures of feelings) to allow for a finer grained analysis of the relative contributions of different types of self-disclosure" (p. 1245). Self- and partner- disclosure is measured using three items each, one to measure how much participants report their own, or the recipient's disclosure of facts, one for thoughts, and one for disclosure of emotion (items were again averaged to create a summary variable for each concept).

The two empirical studies conducted by Laurenceau et al. (1998, 2005) and one of the Manne et al., (2004a, 2004b) used a daily diary methodology to collect data. Subjects were asked to summarize and report the amount of self-disclosure, partner disclosure, perceived partner responsiveness, and intimacy across all interactions with their target daily using seven to ten Likert-type items (the Laurenceau studies used five-point Likert items ranging from *very little* to *a great deal*, the Manne et al. studies 2004a & b used seven-point items ranging from *not at all* to *very much*). Perceived partner responsiveness was measured by three items (such as "to what degree did you feel accepted by your partner?") that were summed and averaged to create a summary variable. Partner disclosure was measured by one (Laurenceau et al., 1998) to three items (Laurenceau &

Bolger, 2005; Laurenceau et al., 2005; Manne et al., 2004a, 2004b) such as "how much did your partner disclose thoughts and feelings?" that were summed and averaged if appropriate. The Laurenceau et al. (2005) is the only study for which alphas are reported (Day 1 α for husbands and wives were .86 and .88, respectively). All of the empirical studies used very similarly worded (if not identical) items[7].

Privacy and disclosure theory comparison. The second model reviewed in the theories of self-disclosure and intimacy was the Interpersonal Process Model of Intimacy. Like SPT, the IPMI is a model of intimacy building that incorporates self-disclosure in a significant way. Unlike SPT and CPM (Petronio, 1991, 2002), the IPMI also meaningfully incorporates receiver response (in the form of partner-disclosure and perceived partner responsiveness). None of the models discussed thus far (CPM, SPT, IPMI) explicitly conceptualize or describe *anticipated* response. However, models reviewed thus enable a better understanding of how anticipated response may influence disclosure decisions. SPT emphasizes the positive outcomes of partner response and illustrates how responses such as reciprocity might contribute to building relationships. CPM focuses more on the potential risks associated with disclosure and the ramifications (negative outcomes) associated with potential negative responses to disclosure (e.g., boundary turbulence). The IPMI illustrates how important the perception of a responsive partner is to the intimacy building process (specifically, responsive to disclosure). Finally, unlike both SPT and CPM, measurement exists for IPMI concepts of partner response (partner- disclosure and partner responsiveness). Although IPMI measures do not measure *anticipated* response, the concept of responsiveness may be related to the types of responses people anticipate and scholars can utilize responsiveness to clarify the

concept of anticipated response. Further, the current project will also explore the

possibility that the concept of responsiveness, especially adapting the measures to assess

anticipated responsiveness, may function as a useful alternative to a multi-dimensional

structure of anticipated response for some types of research. The next section is more

directly related to anticipated response as it reviews the first of the self-disclosure

perspectives (rather than intimacy building perspectives). The next section discusses the

work of Derlega and his contributions to disclosure research.

    Derlega tradition. The "Derlega Tradition" represents the collective disclosure

work of Valerian Derlega and colleagues. Derlega's work has been influential to

information management research including self-disclosure and privacy (e.g., Derlega,

1984; Derlega & Chaiken, 1977), attributions for self-disclosure (e.g., Derlega &

Winstead, 2001), and motivations/reasons for self-disclosure (e.g., see Derlega,

Winstead, Folk-Barron, 2000; Derlega et al., 2004, 2008) much of which has been tested

within the context of HIV disclosure and stigma. The Derlega tradition is dissimilar to the

theories/models discussed thus far in that is it not explicitly a "model" designed to predict

disclosure decisions. However, the Derlega tradition is included in this section because it

has significantly influenced self-disclosure research as well as the development of other

models discussed later in this section.

    Derlega (1984) discusses self-disclosure within the context of developing intimate

relationships, defining self-disclosure as a "process by which one person lets him/herself

be known by another person" (Derlega, 1984, p. 2). In addition, self-disclosure

> . . . includes any information exchange that refers to the SELF, including personal
> states, dispositions, events in the past, and plans for the future. It can be
> objectively defined as any verbal message that formally begins with the word "I"

(for instance, "I think," "I feel") or any other verbal message about the self. (Derlega & Grzelak, 1979, p. 152)

Derlega et al. (1987) argue that an important factor that distinguishes "intimate" relationships from other types of relationships is partners' perceptions of each other's honesty and truthfulness. A major goal of intimate relationships is that individuals gain acceptance from partners of their "true selves," which cannot happen without self-disclosure. Derlega (1984) addressed some of the limitations of SPT by proposing that theories of intimacy must make clear the role of negative self-disclosures (negative personal information) in relationships and related effects on people who feel the need to conceal such information. Later research (see Afifi & Steuber, 2009, 2010; Greene, 2009; Greene et al., in press) demonstrates that one of the reasons people may choose to conceal negative information is because of anticipated partner response.

One of the main propositions in SPT is that people primarily share information to progress relationally, but Derlega identifies several other relevant motivations for disclosure (e.g., for catharsis, to test relationships, to educate others). Derlega (1987) modified the reciprocity proposition of SPT (Altman & Taylor, 1973) to introduce the idea of receiver attributions and motivations in the disclosure process, described in more detail in the following sections.

Derlega (see Derlega et al., 2000; Derlega et al., 2004, 2008; Greene et al., 2004, 2006; Greene & Magsamen-Conrad, 2010) identifies several motivations for disclosure and nondisclosure organized into self-, other-, relationship-focused and situational-environmental categories. Self-focused reasons for disclosure are related to tangible and psychological benefits of disclosure including catharsis, seeking help, and self-clarification. Self-focused reasons for nondisclosure are related to the tangible or

psychological costs of disclosure including rejection, self-blame or self-concept issues, and the potential loss of privacy. Other-focused reasons for disclosure are a sense of duty to inform and a desire to educate. Other-focused reasons for nondisclosure are about protecting the other person, or are based on the perception that the other cannot or will not offer help or support. Relationship-focused reasons for disclosure include being in a supportive, close relationship, similarity or a common bond, and the desire to test the other's reaction or to increase closeness/intimacy. Relationship-focused reasons for nondisclosure include being part of a superficial relationship, dissimilarity, the perception that the information is insignificant or irrelevant to the relationship, or the fear of losing the relationship (Derlega et al., 2004; Greene et al., 2006). Situational-environmental reasons for disclosure include the availability of the target or the target's involvements in the content of the disclosure, as well as in cases where another person "demands" disclosure or asks questions. Situational-environmental reasons for nondisclosure include prior knowledge of disclosure content or unavailability of desired disclosure target (Derlega et al., 2008). These reasons, in addition to the other tenets of the Derlega tradition, extend SPT and have been tested in numerous contexts, which the next section elaborates.

Tests of theory/framework. Scholars have utilized the Derlega tradition frequently within the context of STI disclosure (Derlega & Winstead, 2000; Derlega et al., 2000; Greene & Serovich, 1996). Several empirical articles point to the ability of potential target/recipient reaction to explain some disclosure decision-making of HIV-positive individuals (e.g., Derlega, Lovejoy, & Winstead, 1998; Mansergh, Marks, & Simoni, 1995; Serovich & Greene, 1993; Simoni, Mason, Marks, Ruiz, Reed, & Richardson,

1995). Greene and Serovich (1996) reported that relational quality and anticipated response were the best predictors of willingness to disclose information about HIV. Kiltzman (1999) found that individuals disclosed their HIV-positive status because of their close relationship with their partner and because they felt that they could trust their partner's reaction. In fact, people often will not disclose their HIV-positive status if they expect a negative response or if they are unsure about the target's response (e.g., Serovich et al., 1998; Zea, Reisen, Poppen, & Diaz, 2003, for exception see Zea, Reisen, Poppen, Echeverry, & Bianchi, 2004). The stigma of HIV/AIDS and the risks of disclosure may influence HIV-positive individuals' decisions to disclose information about their infection; they may wish to maintain their privacy (Derlega et al., 2002; Greene, Derlega, Yep, & Petronio, 2003; Herek & Glunt, 1988) and CPM might conceptualize this as a disclosure ramification.

Studies have also investigated HIV-positive individuals' motivations/reasons for disclosure or nondisclosure of HIV-positive status (Derlega & Winstead, 2001). When sharing HIV status, participants report different reasons for disclosure to partners, parents, siblings, and friends (Derlega & Winstead, 2001). Family members were often told because of a sense of "duty" or "loyalty" (Derlega & Winstead, 2001; see also Greene et al., 2003). Additionally, male respondents reported "duty to inform" and "to educate" as reasons for telling parents and intimate partners more than for friends. They attributed HIV disclosure to "testing reactions" more with intimate partners than with friends or parents. Individuals most often told their friends because of a "close or supportive relationship." It is not clear if "reasons" generalize across all relationships or contexts (e.g., "I didn't want to risk any health problems for me or my friend") and this

has yet to be tested. The next section explores ways in which these concepts relate to anticipated response.

Anticipated response in theory/framework. Similar to SPT, Derlega's research identifies a number of concepts that contribute to the understanding of anticipated response, response, and outcomes of disclosure. Derlega explains that sharing private information contributes to feelings of vulnerability (Derlega & Margulis, 1982), which is a factor in individuals' need to control private information. Disclosure makes individuals vulnerable to "influence, embarrassment . . . social invalidation" (Derlega & Margulis, 1982, p. 159), exploitation (Derlega & Margulis, 1982; Derlega, 1984), and rejection (Derlega, 1984), all of which could be conceptualized as potential "responses" to disclosure people seek to avoid. This idea predates and is similar to Petronio's description of balancing rewards and costs in CPM (1991, 2001).

Both reasons for disclosure and for nondisclosure may be related to anticipated response, but research has yet to isolate how they may be related. Instead, research has identified a number of other things that influence reasons, such as relationship type. Other research (e.g., RRM, Afifi & Steuber, 2009, explored later in this document) has measured anticipated response variables are similar to Derlega's reasons for and against disclosure. Derlega's reasons for nondisclosure may be especially important to the anticipated response variable. The same reasons that prohibit people from disclosing (reasons for nondisclosure) may also be negative anticipated responses, especially self-focused reasons for nondisclosure (that may also be relevant to identity concerns).

Privacy and disclosure theory comparison. This section discussed the Derlega tradition. The Derlega tradition is unlike the other frameworks that I review in this

section because it does not provide a model of a disclosure decision-making. It is also dissimilar to CPM and SPT as it identifies a set of variables (motivations, reasons for and against disclosure) that may offer insight into the responses to disclosure people may anticipate. The Derlega tradition is also not a theory like CPM but is similar to CPM and SPT because all three intensively investigate personal or private information including how sharing (or not sharing) that information affects relationships. Although not a theory, Derlega's program of self-disclosure research is comprised of a set of interlocking concepts or ideas founded in systematic explications of self-disclosure (Derlega & Margulis, 1982). This program of research contributed to the second model discussed in this section, the Model of Disclosure Decision Making in a Single Episode (Greene et al., 2006).

> ***Model of Disclosure Decision Making in a Single Episode.*** The Model of Disclosure Decision Making in a Single Episode (Greene, Derlega, & Mathews, 2006) marks a shift in disclosure research because it regards the decision to disclose personal/private information as the outcome of a model instead of highlighting disclosure as a factor within a model. That is, disclosure is the outcome in contrast to intimacy. However, this model is related to earlier theories because it still takes into consideration a structure of costs and rewards of disclosure and the dialectical tensions of disclosure.

> The Greene et al. (2006) disclosure decision model provides a diagram of different factors expected to affect the decision to disclose personal or private information. This model was developed based on the disclosure research programs of Greene and Derlega. The model incorporates a number of different concepts from the Derlega tradition (e.g., Derlega & Grzelak), the DDM (Omarzu, 2000), CPM (Petronio,

1991, 2002), and Greene's research (e.g., Greene & Faulkner, 2002; Greene et al., 2003, 1996). The model first highlights background factors, self, other, and relationship-linked factors, and situation assessment that may contribute to the decision to disclose. The next step is an assessment of the situation which may include (but is not limited to) consideration of the availability of the disclosure target, privacy for disclosure, flow of conversation, self-efficacy for disclosure, relational quality, and anticipated response (Greene et al., 2006, p. 414). If the individual makes the decision to disclose, the discloser decides to whom, how much, where, when, and by what channel to disclose the information. Following the disclosure are immediate behavioral, emotional, and cognitive reactions by the discloser and the receiver. Finally, the model ends with outcomes for both the discloser and the receiver, as well as relational outcomes and includes feedback loops.

Tests of theory/framework. Scholars have not yet tested the Model of Disclosure Decision Making in a Single Episode. Unlike CPM, however, few tests (quantitative or qualitative) have been conducted on the various components of the model. However, the model was developed based on empirical studies within the Derlega tradition, and early pieces of the model were supported empirically (such as the self-, other-, and relationship- focused reasons for disclosure, Derlega et al., 2001, see discussion in the previous section).

Anticipated response in theory/framework. The Model of Disclosure Decision Making in a Single Episode considers anticipated response as part of the third step of the disclosure decision-making process within the assessment of the current situation. The model lists anticipated response as one of six variables in this step. The potential

response is primarily considered in terms of valence: "is the response to the discloser likely to be positive or negative" (p. 415). The model also incorporates the recipient's actual response(s) (or reactions) to the disclosure. The types of reactions the model identifies give more depth to the potential array of anticipated responses to disclosure of personal/private information. The next few paragraphs discuss reactions to disclosure.

The model (Greene et al., 2006) lists three categories of reaction to disclosure: behavioral, emotional, and cognitive. It also identifies a few specific types of target reactions within these categories (e.g., inferring mutual trust or mistrust, co-ownership of sensitive information, feeling emotionally close, labeling one another "close friends"). Additionally, Greene et al. (2006) noted that recipient response or reaction might influence the outcome(s) of the disclosure for both the discloser and the receiver. The model incorporates the importance of response as a feedback loop:

> the immediate reactions of the discloser and the target (e.g., feeling emotionally close and labeling one another 'close friends') may affect antecedent variables in the model (including perceptions about 'who' in one's social network is a confidant, reweighing reasons for and against disclosure by the discloser as well as reassessing the suitability of the situation for enacting disclosure) that predict subsequent disclosure or nondisclosure in the same and future episodes. (p. 415)

Therefore, this model is more transactional than those I previously discussed. The following paragraph explores the examples of the reactions to disclosure provided in more detail.

Scholars might utilize the reactions identified in the Model of Disclosure Decision Making in a Single Episode (Greene et al., 2006) to augment conceptualization of anticipated response. The model identifies consideration of the anticipated response from the intended recipient as either positive or negative (anticipated positive response, in most cases, encouraging disclosure, anticipated negative response decreasing likelihood

of disclosure). The model also identifies potential reactions after disclosure, some of which may be interpreted as either positive or negative, depending on the individual. For example, the model identifies what CPM would term co-ownership of sensitive information as a possible reaction. Depending on the individual, this could be interpreted as either a positive or a negative response. For example, if the information shared were about a disease diagnosis, co-ownership may be interpreted more positively if the discloser wanted another manager of that information for a specific purpose such as to act as a third party messenger to family and friends. However, co-ownership of information comes with risks and could be construed more negatively if the recipient, as a co-owner, further disclosed the information without the discloser's approval (which CPM would term a boundary violation).

The same situation may exist with the reciprocity-like response identified in other models discussed in this project (see previous sections describing SPT, IPMI, and Derlega tradition). Reciprocity could be considered positive (in the traditional interpretation a facet of relationship building) or negative (perhaps the recipient is considered to be talking about him/herself instead of listening to the discloser) depending on the individual. Further, any of these reactions (co-ownership, reciprocity, inferring trust/mistrust, intimacy) may be considered inherently "positive" or "negative" but may be different from the particular response that the discloser expected, and thus not be perceived as "positive" or "negative" (which is how they would likely be coded by an independent observer or assessed when analyzing "types" of responses). That is, the reaction "labeling one another as 'close friends'" could be interpreted as positive, but if the discloser desired a more tangible form of support (e.g., babysitting children,

accompanying someone to the clinic) it still may not be perceived as positive. However, researchers might code this "type" of response positively in an analysis. I explore this "perception" phenomenon in more depth during the Cycle of Concealment Model's (Afifi & Steuber, 2010) discussion of expectancy violations.

The Model of Disclosure Decision Making in a Single Episode specifically identifies anticipated response to disclosure in the third "step" of consideration of the disclosure process. However, this model identifies "weighing self, other, and relationship-linked reasons for and against disclosure" (Greene et al., 2006, p. 414). I described these reasons and their potential relationship to anticipated response in the previous section.

Measurement of anticipated response in theory/framework. Consistent with the general theme of this review, there are no known measures for anticipated response as conceptualized in the Model of Disclosure Decision Making in a Single Episode (Greene et al., 2006). Additionally, there are no known measures of response or outcome as conceptualized by this model. No measurement exists for anticipated response as conceptualized by the frameworks discussed thus far (CPM, SPT, IPMI, Derlega tradition, the Model of Disclosure Decision Making in a Single Episode). Two models discussed thus far include measures for variables that may share conceptual overlap with anticipated response: responsiveness (IPMI, Reis & Shaver, 1988) and reasons for and against disclosure (Derlega et al., 2004).

This section reviewed the Model of Disclosure Decision Making in a Single Episode (Greene et al., 2006). This is the first model that explicitly delineates anticipated response as an important part of the disclosure process. Unfortunately, the model is

limited in that scholars have not yet tested the model as a whole, and existing

measurement is inadequate for some constructs as this model is more of a framework.

The next model reviewed, the Disclosure Decision-Making Model (Greene, 2009)

describes the process of coming to a disclosure decision in greater detail.

   Disclosure Decision-Making Model. The Disclosure Decision-Making Model

(DD-MM, Greene, 2009) was specifically developed to address some of the disclosure

research limitations discussed thus far (e.g., presentation of testable hypotheses and

operationalization of concepts) and as such is narrower in scope than CPM, SPT, or the

Model of Disclosure Decision Making in a Single Episode theories/frameworks. The DD-

MM is particularly relevant to the process of making health disclosure decisions

(especially disclosure of potentially negatively valenced information) that may relate to

physical or psychological health topics or "conditions" (Greene, 2009). Because

disclosure involves risk and contributes to disclosers' feelings of vulnerability (Afifi &

Olson, 2005), individuals make deliberate choices about how, when, and with whom they

choose to share their private/personal information. Like the *Model of Disclosure*

Decision-Making in a Single Episode (Greene et al., 2006), the DD-MM explicates how

numerous features are considered when a potential discloser assesses information and

recipients for possible sharing. In contrast to the Greene et al. (2006) model, the DD-MM

proposes propositions and testable hypotheses as well as measurement (see Checton &

Greene, 2012; Greene, Magsamen-Conrad, Venetis, Checton, Bagdasarov, & Banerjee, in

press).

   The DD-MM describes the process of coming to a disclosure enactment,

including both direct and indirect effects. One part of the disclosure process is to assess

the diagnosis or the information under consideration for disclosure, another is an evaluation of the potential receiver under consideration, and finally exploration of perceived disclosure efficacy in predicting willingness to disclose. The DD-MM argues that disclosures are encouraged or discouraged by the relative evaluation of these factors, similar to risk/reward balance or dialectical approaches mentioned throughout this review. The DD-MM also explains how message enactment includes the potential discloser planning the setting, timing, channel/mode, and the message features, which may also include practice or rehearsal. Other than the Model of Disclosure Decision Making in a Single Episode, few other theories/frameworks have explored the negative factors (see Greene et al., 2003; DDM, Omarzu, 2000; or DPM, Chaudoir & Fisher, 2010, for exceptions, but these models are untested). The DD-MM discusses interruptions (e.g., intentional third party disclosure and question asking) as well as feedback (e.g., reciprocity) that are more transactional in nature, yet the model is fundamentally linear.

According to the DD-MM, one step in the process of coming to a disclosure decision about health-related information is an assessment of the diagnosis. This assessment consists of the consideration of five factors. One factor is the stigma associated with the diagnosis; perceptions of stigma decrease intentions to disclose (Greene, 2009). However, the DD-MM (Greene, 2009) proposes that anticipated reaction mediates this association. As another facet of information assessment, the DD-MM (2009) addresses how potential disclosers' preparation for the diagnosis affects their disclosure intentions. Illness diagnoses may be somewhat expected (e.g., if there is a family history of illness, such as breast cancer) or may be completely unexpected (the result of a routine medical exam). Third, the discloser also evaluates the disease

prognosis. This includes consideration of the finality of the disease (e.g., treatable, chronic vs. terminal) and prognosis uncertainty. Fourth, people evaluate the symptoms of the disease, especially visibility of symptoms and disease progression. Finally, the information assessment component of disclosure decision-making involves consideration of the relevance of the diagnosis to others (e.g., whether others are directly or indirectly affected by the diagnosis). The assessment of information does not occur in any specific order. The next section discusses another step in the health disclosure decision-making process, receiver assessment.

Another part of the process is an assessment of the potential receiver (DD-MM, Greene, 2009). In this step, the discloser evaluates the quality of the relationship with and anticipated response (or reactions) of a specific disclosure target. The DD-MM discusses the associations most often represented in the literature (i.e., better relational quality and more positive anticipated reactions are related to increased disclosure intentions) as well as exceptions (i.e., when people disclose to others when they do not consider themselves close, or from whom they do not anticipate a positive reaction).

Finally, after potential disclosers have assessed both the information and the potential receivers and found the circumstances favorable for disclosure, they next evaluate their own efficacy for disclosing the information. The DD-MM clarifies that both confidence and skills are necessary to disclose health information. The DD-MM also explains that individuals may resort to alternative methods of disclosure (e.g., through Computer-Mediated Communication or using third party) if they do not feel they have the efficacy necessary to successfully disclose the information and produce the desired result.

Tests of theory/framework. Unlike many of the theories (e.g., CPM, SPT) the DD-MM provides propositions that can be tested. Like the IPMI, the original publication of the DD-MM did not include measurement information. However, also like the IPMI, subsequent studies have operationalized the concepts described in the DD-MM. There are currently two published tests of the DD-MM, which I describe below.

Greene et al. (in press) tested the DD-MM with both disclosed and undisclosed health information in a sample of 183 individuals with a non-visible health condition. Individuals were asked to report about disclosure scenarios, one where they had disclosed their non-visible health condition to another person and one where they had not yet disclosed that information. Authors tested a "disclosed" and "undisclosed" model of DD-MM. Both models supported the propositions of the DD-MM (Greene, 2009), and there was overlap in the process of disclosure (as explained by the DD-MM) in both decisions about disclosing health information not yet shared and in examining the process of that same information when it had already been shared. Specifically, in the undisclosed model, the perceived severity of the information significantly predicted anticipated outcome and disclosure efficacy. Perceived relevance of the information also predicted anticipated outcome. Relational quality predicted anticipated response, confidence in response, and disclosure efficacy (although the direction of this association was not in the expected direction). Anticipated response predicted anticipated outcome, and likelihood of disclosure. Anticipated outcome predicted confidence in response, which predicted disclosure efficacy, which predicted likelihood of disclosure.

Greene et al. (in press) found similar patterns of association in the disclosed DD-MM model. Specifically, the perceived severity of the information significantly predicted

disclosure efficacy and retroactive reports of anticipated response. Relational quality predicted anticipated response. Disclosure efficacy predicted likelihood of disclosure.

Checton and Greene (2012) also tested the DD-MM in a health context. Checton and Greene (2012) surveyed 203 cardiac patients from a private medical office. Individuals reported about sharing information about a heart-related condition with their partner. Participants had been in the relationship an average of 39 years (ranging from two to 70 years). In this investigation, the DD-MM was applicable to ongoing disclosure decisions between partners managing a heart condition. Their findings suggested that key mechanisms identified in the DD-MM (Greene, 2009; i.e., assessment of information, relational quality, anticipated/actual response, and efficacy) predict the depth, breadth, and frequency of disclosure to a partner about a heart-related condition. Specifically, patients' uncertainty about their heart condition and their perceptions of relational quality both predicted perceived partner support. Prognosis uncertainty also predicted the breadth of communication between partners (from the perception of the patient). Uncertainty about the symptoms of patients' heart condition and perceived partner support both predicted communication efficacy. Symptom uncertainty also predicted frequency of communication about the heart condition between partners (again, from the perspective of the patient). Finally, communication efficacy predicted patients' perspectives of the breadth, depth, and frequency of their communication with their partner about their heart condition.

There is one study to date testing the DD-MM in the context of general disclosure decision-making (compared to health-disclosure decision-making) using information valence instead of information assessment. Greene, Checton, Banerjee, Magsamen-

Conrad, Venetis, and Bagdasarov (2009) surveyed a group of 283 dyads who had known each other for an average of four years. Individuals were asked to think about information they had not yet shared with the person they brought with them to the study. Greene et al. (2009) tested paths of the DD-MM (Greene, 2009) and found basic support for the model. Authors tested the DD-MM propositions about how assessment of information and assessment of potential receiver affect disclosure efficacy, willingness to disclose, and actual disclosure decisions in a longitudinal dyadic study. Greene et al. (2009) found support (with modification) for several of the propositions of the DD-MM. They discovered that information valence predicted anticipated response (as well as relational quality and efficacy). Additionally, anticipated response was related to relational quality, efficacy, and likelihood of disclosure. Finally, efficacy predicted likelihood of disclosure. Contrary to the DD-MM's predictions, they did not find support for the effect of information valence on efficacy being partially mediated by anticipated response. They also did not find support for the proposition that better relational quality would be positively associated with increased efficacy. Despite this, this study provides initial support for the DD-MM's conceptualization of the disclosure decision-making process.

Anticipated response in theory/framework. Tests of the DD-MM (Checton & Greene, 2012; Greene et al., in press, 2009) demonstrate that anticipated response commands a central role in the disclosure decision process. Conceptualizations of anticipated response prior to these investigations had predominantly considered anticipated response in terms of valence (e.g., Caughlin et al., 2005; Greene et al., 2006). However, Greene and colleagues most frequently operationalized anticipated response as anticipated support.

Greene et al. (in press) determined that anticipated response is central in health disclosure decisions. Anticipated response strongly and directly predicted likelihood of disclosure in the undisclosed model. Checton and Greene (2012) demonstrated similar results, although this association was mediated by efficacy. In Checton and Greene's (2012) test of the DD-MM, perceived partner support predicted communication efficacy, which strongly predicted depth, breadth, and frequency of disclosure.

Greene et al. (2009) measured four types of anticipated response including *support* (e.g., instrumental, emotional, informational), *relational consequences*, *gossip,* and *confidence in response* and discovered strong interrelations among the four types of anticipated response. Anticipated relational consequence covaried with confidence in response. Anticipated support predicted relational consequences and gossip. In terms of model propositions, Greene et al. (2009) confirmed a positive association between relational quality and anticipated response (as hypothesized). Specifically, they found a positive association between the closeness subscale of relational quality and the support and gossip (but not relational consequences and confidence) types of anticipated response. The DD-MM (Greene, 2009) hypothesized that information valence would predict anticipated response, that is, that people would be more likely to disclose information perceived as negative as long as they anticipated a positive response to their disclosure. Greene et al., (2009) reported that information valence predicted one of the subscales of anticipated response, gossip, but did not significantly predict other anticipated response variables.

The anticipated response variables in Greene et al. (2009) predicted key disclosure outcomes. They discovered that if people anticipated positive relational

outcomes in response to their disclosure (relational consequences), then they felt they had

the skills necessary to disclose the information (efficacy). Additionally, if individuals

were confident that the recipient would respond in the way they anticipated (confidence

in response), then they also perceived themselves to be more efficacious.

Greene et al. (2009) also demonstrated how anticipated response is related to

likelihood of disclosure. Both gossip and support predicted likelihood of disclosure.

People were less likely to disclose when they felt the recipient would further share their

information (gossip). Gossip, or third party leakage, is considered a boundary violation

(see CPM, Petronio, 1991, 2002) and could also be considered a "disclosure

ramification." People were also more likely to disclose when they felt the recipient could

help them in some way (support). The next section discusses the measurement of

anticipated response in these studies.

Measurement of anticipated response in theory/framework. Greene et al. (in

press) measured participants' expectations of how the person to whom they had not

disclosed the health information might react with two latent variables: anticipated

response (which focused on *emotionally supportive anticipated responses*) and

anticipated outcome (which focused on *relationship outcomes)*. Anticipated support was

measured with four items adapted from Derlega et al. (2002), Greene and Faulkner

(2002), and Kelly and McKillop (1996) with responses ranging from 1 (*strongly*

disagree) to 7 *(strongly agree)*. A sample item included "This person would offer

emotional support." CFA revealed that the four items loaded onto one latent construct,

$\chi 2(8) = 6.51$, $p = .58$, *CFI* = .99, *RMSEA* = .01 and had good reliability (*M* = 4.57, *SD* =

1.25, $\alpha = .80$). Higher scores indicated greater anticipated supportive response.

Checton and Greene (2012) focused on ongoing disclosure between martial partners in the context of the management of a heart condition. They operationalized participants' perceptions about the extent to which their partner provides support with four Likert type items adapted from Greene et al. (2009; see also Greene & Faulkner, 2002) with responses ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A sample item included "My spouse supports me emotionally." CFA results revealed that the items loaded onto the latent construct, $\chi2(26) = 51.55$, $p <.01$; *relative $\chi2 = 1.98$, CFI = .97, RMSEA = .07* and had good reliability ($M = 4.24$, $SD = .71$, $\alpha = .80$). Higher scores indicated greater perceived partner support.

Greene et al. (2009) measured four dimensions of anticipated reaction including support (e.g., instrumental, emotional, informational), relational consequences, gossip, and confidence in response. They measured all four types of response with Likert-type items with responses ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). They measured <u>anticipated support</u> with six items. A sample item included "This person would offer emotional support." Reliability was good ($\alpha = .85$; $M = 3.96$, $SD = 1.33$). They measured <u>anticipated relational consequences</u> with four items. A sample item included "Telling the information to this person would hurt our relationship" (R). Reliability was good ($\alpha = .88$; $M = 5.19$, $SD = 1.62$). They measured <u>anticipated gossip</u> with two items. The sample item included "This person would tell other people the information" and "This person would be discreet" (R; $M = 4.98$, $SD = 1.58$; $r = .48$). Finally, they measured <u>anticipated confidence in response</u> was measured with four items. A sample item included "I am confident that I know how this person would respond." Reliability was good ($\alpha = .81$; $M = 4.73$, $SD = 1.45$).

Privacy and disclosure theory comparison. The DD-MM extends information management research and theory in important ways. First, it is one of the few (if only) disclosure models to provide propositions and rejectable hypotheses. Second, measurement exists to test those hypotheses. Third, this model has been tested as a whole. None of the theories previously reviewed (SPT, CPM, or the Derlega tradition) can boasts these three things. The only model discussed in this review of information management models thus far that can make similar claims is the IPMI. However, the IPMI is a model of intimacy, and the DD-MM is a model of the disclosure decision-making process.

There are also limitations to the DD-MM. Thus far, the model was designed only to explain *health-related* disclosure decision-making processes and may not be generalizable to all disclosure decision-making. Greene et al. (2009) provide support for the potential predictive power of the DD-MM within the context of general disclosure decision-making, however, this study is currently unpublished. Finally, scholars need to conduct more studies on the DD-MM in order to refine the measurement and explore model stability, especially studies that employ longitudinal designs.

Disclosure summary. This section reviewed theories of intimacy and disclosure. It first discussed Social Penetration Theory (Altman & Taylor, 1973) and the Interpersonal Process Model of Intimacy (Reis & Shaver, 1988), both of which are frameworks of intimacy that highlight self-disclosure in the process of relationship building. The IPMI (Reis & Shaver, 1988) provides more insight into the variable anticipated response than SPT (Altman & Taylor) with the contribution of the responsiveness and partner disclosure concepts and measurement. The section next

examined the Derlega tradition, a program of research that serves as a backdrop to several models subsequently discussed. The next framework discussed was the Model of Disclosure Decision Making in a Single Episode (Greene et al., 2006). This model is different from the frameworks discussed thus far, as it seeks to articulate steps in the process of coming to a disclosure decision. The Greene et al. (2006) model explicitly states and describes anticipated response (as positive or negative), in contrast to SPT (Altman & Taylor, 1973) and CPM (Petronio, 1991, 2002) that describe a limited conceptualization of anticipated response (i.e., primarily positive, as in SPT, or primarily negative, as in CPM). All the frameworks examined in this section have been limited in measurement, with the exception of the final model discussed, the Disclosure Decision-Making Model (Greene, 2009). The DD-MM shows how anticipated response is an important component in the process of coming to a decision to disclose personal/private *health* information and provides operationalization for concepts.

This concludes the discussion of the frameworks that are included under the information management strategy of disclosure (and related intimacy theories). Thus far, this review discussed privacy and disclosure. The next major section discusses a third information management strategy and research tradition, secrets. This section starts with a brief review of secrets including The Chilling Effect (Roloff & Cloven, 1990) and then explores two models of secrets, the Cycle of Concealment Model (Afifi & Steuber, 2010) and the Revelation Risk Model (Afifi & Steuber, 2009).

Secrets

The frameworks reviewed previously in this paper have focused on the disclosure of personal or private information. This section focuses on the revelation or continued

concealment of a specific type of personal information, a secret. The criteria that separate

what is "secret" information from what is "private" information are based on how

individuals label that information (Kelly, 2002). Thus, what is secret to one person may

not be to another, and one difference is in the potential negative outcome of revelation.

The following paragraphs explore concept of secrets in greater detail.

One of the ways secret information (when labeled as such by the individual) is

different from private information may be the degree of continuous awareness about the

information. Scholars postulate that keeping secrets is related to rumination. Rumination,

as defined by Rumination Theory (Nolen-Hoeksema, 1998), is "focusing passively and

repetitively on one's symptoms of distress and on the meaning of those symptoms without

taking action to correct the problems that one identifies" (p. 216). Rumination is

correlated with negative health outcomes such as worry, anxiety, and anger (Afifi &

Caughlin, 2006). In general, just as self-disclosure is related to positive health outcomes

(see Frattaroli, 2006, for meta-analysis), keeping secrets is related to negative health

outcomes.

Scholars have identified a number of different reasons people may choose to keep

information secret. Individuals might keep secrets to protect the self (for review see

Leary & Tangey, 2003), specifically for protection of identity and or impression

management (Afifi & Guerrero, 2000; Vangelisti & Caughlin 1997; see also Derlega et

al., 2002). The extent to which one is concerned about making a negative impression by

revealing a secret is inversely associated with the self-reported likelihood of divulging the

secret (Vangelisti & Caughlin, 1997). The need to keep secrets about identity-threatening

information is especially salient when that information is tied to central aspects of one's

identity as well as to the potential reactions (or responses) related to the possible

revelation of that identity threatening information (for review, see Schlenker, Britt, &

Pennington, 1996).

One phenomenon related to both secret keeping and potential reactions (i.e.,

anticipated responses) is "The Chilling Effect" (Cloven & Roloff, 1993; Roloff &

Cloven, 1990). The Chilling Effect is not a general relationship theory, per se, but instead

explains the use of coercive power in specific types of close relationships. In general,

when people fear their partner will utilize power advantages in confrontations then they

withhold information or avoid disclosing. For example, people conceal sensitive

information when they are afraid their partner will respond aggressively (Afifi & Olson,

2005). The Chilling Effect (Cloven & Roloff, 1993; Roloff & Cloven, 1990) has most

often been applied in romantic relationships regarding withholding complaints (e.g.,

Solomon & Samp, 1998). The Chilling Effect underlies the two models discussed next,

the Cycle of Concealment Model (CCM; see also Afifi & Olson, 2005) and the

Revelation Risk Model (RRM).

Recently (2009, 2010) Afifi and Steuber advanced two models predicting the

disclosure of secrets, the CCM (see also Afifi & Olson) and the RRM. These models are

similar and discuss similar variables that affect the continued concealment or revelation

of secrets. The main difference between the two models is that the RRM endeavors to

explain the secret disclosure decision-making process while the CCM examines the

concealment of secrets over time and the effects of concealment/revealment on

relationships. The following sections discuss these two models in detail. Each subsection

begins with a general description of the model. The following subsections examine how

the models have been tested, the way in which they incorporate anticipated response, and finally, how they measure anticipated response. The first model discussed is the Cycle of Concealment Model (Afifi & Steuber, 2010).

Cycle of Concealment Model. Afifi and Steuber (2010) maintain that the majority of the research conducted in secret keeping and topic avoidance examines the decision to or the consequences of one initial incident of secret revelation. In contrast, the CCM (Afifi & Steuber, 2010) is primarily interested in examining secrets (both the continued concealment of one particular secret as well as information that is generally kept secret) over a period of time (patterns of concealment). Their investigation also pays specific attention to the ways that secret keeping (or revelation) affects relationships, specifically familial relationships.

The CCM describes a number of different factors that may perpetuate the Cycle of Concealment and affect relationships. The CCM primarily highlights past responses to secret revelation, anticipated negative responses to future revelation, and violation of response expectations after secret disclosure (Afifi & Steuber, 2010). The CCM also examines how secret revelation affects family members' perceptions of closeness and willingness to reveal secrets in the future. Finally, the model analyzes other factors (i.e., strategies for revelation, negativity of the secret) that would affect family members' closeness after revelation of a negatively valenced secret (Afifi & Steuber, 2010).

The CCM is grounded in the secrets work of Vangelisti. Vangelisti has undertaken prolonged systematic research in secrets, especially family secrets, including the function of family secrets (Vangelisti, 1994) and criteria for disclosing family secrets (Vangelisti et al., 2001). Vangelisti described five reasons for keeping secrets: evaluation,

maintenance (with target and others), defense, communication problems (for target and self), and privacy. These reasons are incorporated into the measurement structure of the CCM's anticipated response variable (described in subsequent sections).

The CCM is similar to the DD-MM in many ways. Both the CCM and the DD-MM explore information management within a specific context (family communication about secrets, CCM, disclosure of health information, DD-MM). Both are testable, provide operationalization, and have few studies testing them thus far (in contrast to SPT and CPM). The following section describes the tests of the CCM to date.

Tests of theory/framework. There has been one test of the full CCM model to date. Afifi and Steuber (2010) conducted a longitudinal study of 594 college students with two data points (two months apart). Participants reported on a secret they had not yet shared at T1. At T2 participants returned ($N = 594$) and reported whether or not they had shared their secret. Twenty one percent of the participants ($N = 122$) reported that they had shared their secret. These figures are consistent with prior disclosure oriented longitudinal studies (see Afifi et al., 2005). In general, the study demonstrated support for the CCM (Afifi & Steuber, 2010); past aggression inversely predicted closeness at T1, which directly predicted closeness at T2. Past aggression also directly predicted expectation of negative response, which inversely predicted closeness at T1 and revealment or continued concealment at T2. Note that a major difference between the CCM and the DD-MM is that in the CCM "anticipated response" (expectation of negative response) predicts closeness, in contrast to the DD-MM where closeness predicts anticipated response. The following section explores in more detail the

associations between the CCM concepts most closely related to anticipated response (expectation of negative response) and other model variables.

Anticipated response in theory/framework. Unlike the DD-MM, the Model of Disclosure Decision Making in a Single Episode, and much of the disclosure work in the Derlega perspective, the CCM is principally concerned with the effect of secret revelation on the relationship (in this test, familial relationships) and not the process of coming to a decision to reveal or conceal a secret. This orientation is more similar to the intimacy frameworks (SPT & IPMI) which discussed how self-disclosure affects perceptions relationship building and closeness. Afifi and Steuber (2010) consider the important role anticipated response plays in secret disclosure. They hypothesize that if anticipated response is one of the determining factors in whether or not to disclose secrets, then the suppression or continued concealment of the secret may be perpetuated by actual or anticipated negative responses (Afifi & Olson, 2005; see also "The Chilling Effect", Cloven & Roloff, 1993; Roloff & Cloven, 1990). Afifi and Steuber (2010) discuss a number of specific, off-putting anticipated responses to disclosures, which they label negative responses and aggressive responses. These conceptual categories, which are described in the next paragraph, are a combination of valence (i.e., negative) and a specific type of response (i.e., both behavioral and communicative).

The CCM discusses how negative responses may engender continued secret concealment. Past negative responses from a particular person are related to future anticipated negative responses from that same person (Afifi et al., 2005, see also Greene, 2009). Afifi and Steuber (2010, see also Afifi & Olson, 2005) explain that negative anticipated responses to secret disclosure (e.g., rejection, disconfirmation, anger)

attenuate family relationships. Over time, continued negative responses to disclosure can result in the perception that negative responses are normative. That is, repeated exposure to negative reactions to secret disclosure can result in the belief that other individuals will always respond to secret information negatively.

The CCM also discusses one specific type of negative response, an aggressive response. People often conceal information when they anticipate an aggressive response (Afifi & Olson, 2005). Responses may be either verbally or physically aggressive (or both), but the CCM focuses on verbally aggressive responses because Afifi and Steuber (2010) reasoned that verbally aggressive responses most likely represented "typical" aggressive reactions to negative secrets more so than physical aggression (other information management research indicates that this may not be the case, especially considering the disclosure of stigmatized information, see Greene & Faulkner, 2002). When individuals have experienced aggressive reactions to prior disclosure of secret information, people may conceal out of fear of the reaction (Afifi et al., 2005; see also Derlega et al.'s, 2002, reasons for nondisclosure) or from the anticipation of an aggressive response (Afifi & Steuber, 2010). Responses need not be aggressive in order to perpetuate secret keeping. This perspective is not unlike that expressed in Derlega's conceptualization of reasons against disclosure, and a primary issue is magnitude of the potential negative reaction. Specifically, even if there is a slight chance of relationship dissolution, individuals may choose not to disclose. The anticipation of an aggressive response alone is enough to continue concealment (although this argument is somewhat circular). Afifi et al. (2005) demonstrated that the association between family members' past aggression toward the disclosure of negative secrets and the continued desire to

conceal those secrets was mediated by people's desire for self and other protection (these concepts share overlap with Derlega's reasons for and against disclosure, see Derlega et al., 2002). Additionally, aggression, as a prior response to secret disclosure in families, was related to decreased closeness among family members (Afifi & Olson, 2005).

Afifi and Steuber discovered several associations between past verbal aggression and key concepts already discussed in this project. Past verbal aggression was significantly associated with aggressive anticipated responses (future responses) as well as to less closeness at T2 (Afifi & Steuber, 2010). Anticipated aggressive responses were associated with decreased likelihood of secret disclosure (continued concealment of the secret). These findings are similar to what Greene et al. (in press) reported in DD-MM testing. In general, when people expect a negative response, they are less likely to disclose information. Further, people look to past behavior of a potential disclosure target to try to determine how that person will respond to potential current or future disclosure. Thus, disclosure is a transactional process where past responses contribute to the formation of anticipated responses (during the process of coming to a disclosure decision; discussed in more detail in Study II) and actual responses contribute to the perception of disclosure outcomes, both of which then affect future disclosure decisions (including the formation of anticipated response to future disclosure decision-making; for discussion see Greene, 2009; Greene et al., 2006).

The CCM also addresses how people's expectations of response may affect their appraisal of the actual response (as, for example, "negative" or "aggressive"). In general, people expect responses to be more negative than they actually are (see Caughlin et al., 2005; Greene & Faulkner, 2002) or they fear the worst. For this CCM study, Afifi and

Steuber (2010) only retained participants who reported their secret's valence as negative

or neutral[8] because the researchers reasoned that people with positively valenced secrets

would not experience negative or aggressive responses (although this is possible,

especially considering the implications of "positive" information for others, e.g., the

relational implications of a job promotion that is accompanied by a transfer).

Afifi and Steuber (2010) hypothesized that "people's expectations for negative

reactions and the extent to which those expectations are met or adversely violated are

likely to influence their closeness with the person and their willingness to reveal secrets

to this person in the future" (p. 5). Their interpretation of the expectancy violation, in this

particular scenario, is based on expectations of negative and positive violations (see also

Expectancy Violation Theory, EVT, Burgoon, 1978). In Afifi and Steuber's (2010)

conceptualization, negative expectancy violation occurs when: participant expects a

negative response and the recipient responds a) as expected (note that this is not

consistent with the original EVT), b) more negatively than expected, and, when

participant expects a positive response and recipient responds c) more negatively than

expected (or not as negatively as expected, also not consistent with the original

Expectancy Violation Theory, where this violation would be considered a positive

expectancy violation). Negative expectancy violations were hypothesized to result in a)

less willingness to reveal secrets to that particular person (in this case, family member) in

the future, and b) more participant perceptions of diminished closeness with the recipient.

A positive expectancy violation was conceptualized in the CCM as when: the participant

expected the recipient to react negatively to the disclosure and the recipient responded

more positively than expected. Positive expectancy violations were hypothesized to be associated with more willingness to reveal in the future and enhanced closeness.

In general, response expectancy violations functioned in the way Afifi and Steuber (2010) predicted. Negative expectancy violations (especially negative expectation and reaction that is even more negative) predicted less likelihood of future secret disclosure to that particular family member and diminished closeness between times one and two. Positive expectancy violations (positive expectation and reaction that is even more positive) predicted more willingness to reveal to that person in the future (although this association is weak). However, positive expectations did not result in a change in closeness, even when controlling for closeness at T1. Despite this, another type of expectancy violation (expectation of a negative response, receipt of a positive response) was associated with greater closeness at T2. There were no associations between neutral responses or responses that met expectations for either willingness to reveal to that person in the future or change in closeness. In sum, negative expectancy violations had more predictive power in the process of secret concealment than did positive or neutral expectancy violations. As stated earlier, like the DD-MM, the CCM also includes measurement information for the anticipated response variables, which the following section describes.

Measurement of anticipated response in theory/framework. Afifi and Steuber (2010) provided operationalization for variables used to measure anticipated response. They measured perceived negative reactions, aggressive reactions, and expectancy violations. The following paragraphs describe the operationalization of these concepts.

Perceived negative reactions (to the revelation of the secret) were measured with

six items on Likert-type scale ranging from 1 (*very unlikely*) to 7 (*very likely*) that the

person would react a certain way to the revelation. Items tapped disappointment,

judgment, and withdrawal. One item assessed the overall negativity of the reaction. The

items measured the degree to which the family member would respond with anger (e.g.,

"This person would get angry at me"), disappointment (e.g., "If this person found out

about the secret, it would disappoint him/her), judgment (e.g., "This person would react

to the secret by blaming me"), and withdrawal (e.g., "This person would react to the

secret by immediately withdrawing from me"). A seventh Likert-type item was also

averaged with these items that assessed the overall extent to which they thought the

family member would react negatively (ranging from 1 *extremely positively* to 7

extremely negatively). Confirmatory factor analysis revealed good fit and unidimensional

structure ($\chi 2(5) = 16.45$, $p = .06$, CFI = .99, RMSEA = .07) and reliability was good ($\alpha =$

.80).

Past aggressive responses were measured (at T1) with seven items from a

modified version of the Conflict Tactics Scales (CTS; Mason & Blankenship, 1987;

Straus, 1990) and eight items added by Afifi and Steuber (2010). Participants reported

whether the target family member responded with various verbally aggressive behaviors

in response to past secret revelations. Seven items measured symbolically aggressive

responses (e.g., verbally or psychologically abusive). The eight additional items

measured the psychological nature of aggression (e.g., ''gave me a disappointing look'').

A sample item included "Attacked my character." For each item, the participant was

asked to indicate either "yes" or "no" whether the person performed each behavior in

response to prior secret revelations. Summed scores ranged from zero (no aggression) to 15 (high aggression). Authors presented neither reliability nor validity information for this measure.

The concept of an expectancy violation phenomenon within anticipated response was also conceptualized (e.g., see Greene, 2009 for discussion). This study is the first known study to measure expectancy violations within this context. Afifi and Steuber (2010) conceptualized <u>expectation violation</u> as the extent to which the target family member's reaction to the disclosure of the secret violated expectations. They measured retrospective reports of expectation violation at T2 with two, 7-point semantic differential items adapted from Caughlin et al. (2005, e.g., ''this person reacted much more negatively (to much more positively) than I expected'' SIC, p. 1025). The items were averaged "given the strong correlation" between them ($r = .75$). Higher scores indicated more positive violations ($M = 2.79$)[9].

Privacy, disclosure, and secrets theory comparison. This section reviewed the first of the secrets models, the Cycle of Concealment Model (Afifi & Steuber, 2010). The CCM explicitly examines anticipated responses, past responses, and the extent to which actual responses violated expectations. Afifi and Steuber (2010) highlighted associations between anticipated response variables and relational closeness, willingness to disclose future secrets, and actual secret disclosure/concealment. In general, these results bear similarity to the function of anticipated response in the frameworks discussed thus far (i.e., that anticipated response directly predicts likelihood of disclosure and actual disclosure in DD-MM research).

The CCM conceptualization of positive and negative anticipated responses is similar to that of the Model of Disclosure Decision Making in a Single Episode (Greene et al., 2006). However, the CCM adds neutral responses as well as an expectancy violation component. The DD-MM (Greene, 2009) discusses expectancy violations in response, but these ideas are not yet tested. Further, CPM's (Petronio, 1991, 2002) disclosure ramifications were conceptualized as predominantly negative responses to disclosure and might overlap the types of negative responses described here (e.g., aggression). Also, when Greene and Faulkner (2002) used CPM as a framework to examine the differences between anticipated responses they discovered some of the same themes in the general trend toward negativity in responses (which is underscored by Afifi & Steuber only including the negative and neutral responses in their analyses). However, in contrast to other research discussed both in disclosure (see Greene & Faulkner, 2002) and secret revelation (see Caughlin et al., 2005) that demonstrated a trend toward actual responses being perceived as slightly more negative than anticipated responses, Afifi and Steuber (2010) found that, in general, violations of anticipated response expectations were more positive than participants expected. However, this finding may be a scoring artifact of how Afifi and Steuber measured response expectancy violation (they examined negative and neutral responses and not positive responses). It is possible that expectations are more likely to be perceived as negatively violated when expectations are positive.

Both the CCM and the DD-MM illustrate how anticipated responses affect the process of disclosure. Specifically, when people anticipate responses that they perceive as negative (e.g., aggression, CCM; lack of support, DD-MM) they are less likely to disclose private/secret information. However, both the CCM and the DD-MM are limited

in that there has only been one published test of the CCM and two of the DD-MM. Further, the CCM is limited to secrets and family communication, and the DD-MM is limited to health-related disclosure (although the DD-MM has been tested and supported in general disclosure decision-making). It is possible, for example, that the CCM would function differently in romantic or organizational relationships. The next section examines the second secrets model, the Risk Revelation Model (RRM, Afifi & Steuber, 2009).

Revelation Risk Model. The RRM (Afifi & Steuber, 2009) is based on the belief that individuals evaluate the risks and rewards associated with the disclosure of a particular secret, which is similar to dialectical perspectives of many theories and frameworks discussed previously. People evaluate these risks/rewards and then disclose or do not disclose based on this risk assessment (in conjunction with assessed communication efficacy, the valence of the secret and the individual's willingness to reveal the secret under certain conditions). The RRM (Afifi & Steuber, 2009) is similar to the Model of Disclosure Decision Making in a Single Episode (Greene et al., 2006) and the DD-MM (Greene, 2009) in that it is designed to explicate the variables that affect the process of reaching a decision about the disclosure of secret information.

The RRM focuses on the disclosure (or continued concealment) of a specific type of information, a secret. Afifi and Steuber (2009) also reference the problems in the disclosure literature that were identified earlier in this review, that "most of the current research . . . on secrecy, and much of the disclosure literature in general, rest on the assumption that people desire to purge themselves of the secrets that plague them" (p. 145). For example, according to the Fever Model (Stiles, 1987), the pressure of

concealing information builds to the point where the body must expunge it, similar to how a fever builds as the result of an infection. However, humans are rational beings who make conscious decisions and do not often "blurt out" personal, private, and/or secret information (for discussion see DD-MM, Greene, 2009).

The RRM seeks to identify factors that affect the process of secret disclosure as well as the strategies people use to reveal secrets after an affirmative decision is made to disclose secret information. One major component of the RRM is risk assessment (which shares conceptual overlap with the concept of anticipated response). Risk assessment is comprised of three types of feelings of risk to: a) the self (labeled self protection), b) the relationship (labeled relationship protection), and c) other people (labeled other protection). Both the valence of the secret and the closeness of the relationship with the potential recipient affect risk assessment. Risk assessment predicts the assessment of the conditions for revelation (willingness to reveal under certain conditions) and communication efficacy. The assessment of risk is directly related to people's fear of negative responses (negative anticipated responses). These negative anticipated responses are illustrated in the three types of risk assessment: self, other, and relationship protection. These categories are conceptually similar to the self-, other- and relationship-focused reasons for disclosure and nondisclosure explicated in the Derlega tradition and listed as factors in the Model of Disclosure Decision Making in a Single Episode (Greene et al., 2006).

The self protection component of risk assessment is directly associated with identity-related risks discussed earlier in the current project such as fear of judgment and threats to impression management (see also Afifi & Guerrero, 2000). These negative

anticipated responses may be influenced by prior responses to past revelations as illustrated in the CCM. Additionally, the concept of self protection parallels Derlega's discussion of reasons for and against disclosure of identity threatening information (e.g., stigmatized information such as HIV disclosure, see Derlega & Winstead, 2001). Derlega et al. (2004, 2008) identify fear of rejection or being misunderstood as a reason for nondisclosure.

Relationship protection is similar to the boundaries component of CPM (Petronio, 1991, 2002). Individuals tighten their privacy boundaries in order to protect their relationship, other relationships, or a cohesive bond (Afifi & Steuber, 2009). Derlega's (Derlega et al., 2004, 2008) relationship-focused reasons also identify fear of the loss of a relationship as a subjective reason for nondisclosure.

Finally, other protection is related to the concern for others' well-being. Specifically, people may be concerned that by revealing the secret they would somehow hurt the recipient or other family members. They may also be concerned that revealing the secret would more generally negatively affect the family dynamics. This facet of risk assessment is similar to Derlega's (Derlega et al., 2004, 2008) other-focused reasons for nondisclosure that focus on protecting the other person. However, in Derlega's conceptualization, the potential discloser is not necessarily concerned about threatening the other's identity or creating impression management dilemmas for the other person (or another person). Derlega's concern for other protection is more related to protecting the other from having to make sacrifices for or worry about the discloser.

Finally, in the RRM, after people have assessed the risks of disclosure, they consider criteria for revealing secrets (see Vangelisti et al., 2001). The RRM identifies

three primary criteria under which people might choose to disclose: a) they need

catharsis, b) the recipient has a right to know, and c) the recipient and/or others have

directly asked. These criteria also echo Derlega's reasons for disclosure. Catharsis is a

self-focused reason for disclosure, duty to inform is an other-focused reason (Derlega et

al., 2004, 2008), and direct question asking is a situational/environmentally-focused

reason (Derlega et al., 2004, 2008) as well as an interruption described in the DD-MM

(Greene, 2009). In particular, the RRM illustrates that there is significant conceptual

overlap among several of the measures discussed in this review.

Finally, similar to the DD-MM (Greene, 2009) the RRM incorporates an efficacy

component. However, the RRM examines communication efficacy, while the DD-MM

refers to a specific type of communication efficacy, disclosure efficacy. The general

proposition is the same: when people feel they have the confidence and skills to

communicate information (disclose) and reap the desired results, they are more willing to

disclose. Like the CCM, the RRM has been tested in one study to date, described in the

next section.

Tests of theory/framework. Afifi and Steuber (2009) tested the RRM using the

same data reported previously (a longitudinal study of 594 college students with two data

points separated by two months where 21% of the sample had disclosed the secret at T2;

see the tests of theory/framework section in CCM for more detail). In general, Afifi and

Steuber (2009) found support for all of the paths in the hypothesized model. The valence

of the secret predicted the assessment of risk associated with disclosure; the more

negative the secret, the more the perceived risk. Greater assessments of risk predicted

diminished feelings of efficacy as well as less willingness to disclose both of which en

predicted whether or not participants revealed. Closeness also predicted risk assessment (note that the direction of this association is similar to the DD-MM and opposite of the CCM) and willingness to reveal the secret under certain conditions; the closer participants perceived they were to their family member, the less likely they were to perceive risk, and the more likely they were to disclose. Steuber and Solomon (2011) used the RRM, DD-MM, and CPM to ground their investigation of disclosure decision-making in couples managing information about infertility and found similar associations between disclosure risk (operationalized as stigma), efficacy, and depth and breadth of disclosure. However, Steuber and Solomon's operationalization of risk more closely resembles the DD-MM's conceptualization of information assessment than it does anticipated response. Therefore, I do not discuss the article in detail in the current project. The next section explores role of anticipated response in the RRM.

Anticipated response in theory/framework. The RRM does not explicitly identify an "anticipated response" variable; however, the conceptualization of risk assessment in the RRM is quite similar to the concept of anticipated response. During risk assessment, people consider how the target may respond to the disclosure and the potential consequences of revealing the secret to that person. People are more likely to reveal if they anticipate the target will respond positively and less likely to reveal if they expect a negative response (Afifi & Steuber, 2009). The concepts of risk assessment and anticipated response are related. For example, an assessment of more self protection related risk (e.g., "judgment, ridicule, and . . . prodding", see Afifi & Steuber, 2009, p. 148) could be conceptualized as types of negative anticipated responses (e.g., judgment could be classified as a cognitive reaction to disclosure, if individuals anticipate they will

be judged, it is a negative anticipated response). Other examples in that same type of risk

assessment (self protection), such as "embarrassment… and general exposure of the self"

(p. 148) might be conceptualized as discloser-oriented outcomes, which come directly

after the reactions part of the Greene et al. (2006) model. Therefore, individuals may fear

(or anticipate) a particular *response* (judgment) or a particular *outcome* (being thought

less of or embarrassed, or a more common example: loss of relationship). That is, items

Afifi and Steuber (2009) used to measure risk assessment (specifically self protection in

this example) represent different aspects of anticipated reaction both in the interaction

where the discloser reveals the secret as well as in the period of time after the information

was revealed and both the discloser and receiver have assessed the interaction.

If risk assessment is related to anticipated response, then many of the paths in the

RRM are parallel to the DD-MM (Greene, 2009; Greene et al., in press) and the CCM

(Afifi & Steuber, 2010). For example, in the RRM, perceptions of less risk were related

to greater feelings of efficacy, which parallels Greene et al.'s (in press) finding that that if

people anticipated positive relational outcomes in response to their disclosure then they

felt they had the skills necessary to disclose the information (disclosure efficacy). Afifi

and Steuber (2009) also demonstrated how greater assessments of risk predicted less

willingness to disclose, which mirrors Greene et al.'s (in press) finding that more positive

anticipated responses, specifically support, predicted more likelihood of disclosure and

Afifi and Steuber's (2010) finding that expectation of negative reaction predicted less

willingness to reveal. Finally, anticipated response (risk assessment) was related to

closeness in all three models. In the RRM, the closer participants perceived they were to

their family member, the less likely they were to perceive risk and the more likely they

were to disclose, which is similar to what Greene et al. (in press) found. Closeness and "anticipated response" were also associated in the CCM, however, in the opposite direction (expectation of negative reaction predicted closeness). All of these associations (between anticipated response and closeness, efficacy, and disclosure) are conceptually similar to the tenants of other frameworks described in this review (e.g., SPT, CPM, the Derlega Perspective, and Vangelisti's research on secrets), which is not surprising considering that these frameworks were foundational in the development of the RRM, CCM, and DD-MM models. The following section discusses the operationalization of anticipated response in RRM.

Measurement of anticipated response in theory/framework. Afifi and Steuber (2009)'s concept risk assessment is conceptually related to anticipated response. Risk assessment was measured by three variables: self protection, relationship protection, and other protection. Items were adapted from Vangelisti's work on secrets (Vangelisti, 1994; Vangelisti & Caughlin, 1997; although some items are also very similar to Derlega's reasons items, see Derlega et al., 2002, 2004) and measured with Likert-type items ranging from 1 (*very unlikely*) to 7 (*very likely).* Participants were asked to consider how likely they thought a particular recipient would respond with certain behaviors or actions if they told their secret. Authors provided very limited psychometric information for these scales, only that "The alpha for these combined items was .91. These items loaded strongly onto one latent construct (loadings of .50-.89)" and later in a description of the model results that "all of the composite variables loaded highly onto their corresponding latent constructs (loadings of .93, .94, and .96)" p. 165. However, as only three latent concepts were indicated in the final model (closeness, risk assessment, and

communication efficacy) it would appear that the three protection scales were collapsed into one composite measurement for risk assessment.

Afifi and Steuber (2009) measured <u>self protection</u> with eight items; three items measured "evaluation" and five measured "defense." Evaluation items assessed the degree to which the participants feared they would be judged, ridiculed, disliked, or would disappoint the recipient if they disclosed the secret. Sample items included "this person would no longer like me if he/she knew the secret," and "this person would disapprove if he/she knew about the secret." Defense items measured the extent to which participants felt recipients could potentially use the secret against them if revealed. Sample items include "if I told this person the secret, he/she would tell other people the secret," and "this person would use the secret information against me." Authors did not present means and standard deviations.

Afifi and Steuber (2009) measured <u>other protection</u> using six items. These items assessed the degree to which participants feared disclosing the secret would create stress for the recipient or other family members, potentially harm or alter the nature of their relationship with other family members, or weaken the bonds between family members. A sample item includes "revealing the secret would create stress for other family members." Authors did not present means and standard deviations.

Afifi and Steuber (2009) measured <u>relationship protection</u> with five items that considered the extent to which participants felt that revealing the secret would weaken or change their relationship with the recipient. Sample items include "if I revealed the secret, my relationship with this person would never be as good as it is now" and

"revealing the secret would do nothing but harm the relationship we have now." Authors did not present means and standard deviations.

In sum, self, other, and relationship protection items were combined (it is not stated if they were summed and averaged) to create a single composite for the latent concept of risk assessment. Statistical information is presented for only the combined items ($\alpha = .91$). Although conceptualized as three factors with subdimensions, risk assessment items loaded strongly onto one latent construct (loadings between .50 - .89; individual loadings were not reported). This measurement strategy is dissimilar to other research (e.g., DD-MM) which describes and measures dimensions of anticipated response. Finally, authors did not present means and standard deviations for any of these measures.

   Privacy, disclosure, and secrets theory comparison. This section examined the final secrets model, the Revelation Risk Model (Afifi & Steuber, 2009). The RRM and CCM are grounded in the Chilling Effect (Roloff & Cloven, 1990) which highlights the substantial effect anticipated response (and past response) can have on the revelation or continued concealment of secrets. This section reviewed a third approach to information management, secret keeping/revealing. The section clearly diverges from the disclosure literature, focusing on a specific type of personal/private information that people label as "secret" instead of personal or private information more generally. This section described two models of secrets (RRM & CCM) that examine secret concealment (or revelation) and intimacy. This concludes the discussion of the frameworks that identify anticipated response (or variables closely related to anticipated response). The following section briefly examines isolated studies of anticipated response outside of these traditions.

Alternative Measures/Studies of Anticipated Response

There are studies of anticipated response that have been conducted outside of

theory and/or model development and testing, and these represent a variety of different

literatures (e.g., health communication, family communication, organizational

communication, see Munir, Leka, & Griffiths, 2005). These empirical studies of

anticipated response also represent different topics and relational contexts. For example,

there is a great deal of research on anticipated response in STI literature. The results of

these studies are consistent with different conceptualizations of anticipated response

discussed thus far.

One area of research is in individuals' disclosure of medical tests results within

the context of interpersonal relationships. For example, Hamilton, Bowers, and Williams

(2005) interviewed 29 participants two months to four years after receiving genetic test

results (including five who decided against testing) exploring the effects and meaning of

disclosing test results to their various family members (including selective disclosure).

They determined that type of disease and need to prepare influenced peoples' timing of

the sharing of their medical test results. The results most related to anticipated and actual

responses, disclosure planning, paralleled Derlega's reasons for disclosure, finding

similarities for self- (catharsis) and other- (felt recipient could not "handle" the

information) focused reasons for disclosure. In addition, participants reported risks (e.g.,

loss of connection with other family members) as a reason for non-disclosure (Hamilton

et al., 2005).

Another related context is in unplanned pregnancy disclosure. For example,

Peacock et al. (2001) determined that considering how others might react to the

disclosure of the pregnancy is part of the process of accepting an unplanned pregnancy, especially for unmarried white and Latina women. Similar to HIV disclosure discussed in the Derlega tradition, there is significant stigma associated with being pregnant and unmarried in some White and Latina cultures. In interviews, participants reported fears that were similar to the self protection component of risk assessment and Derlega's self-focused reasons for nondisclosure: fear of disapproval or rejection as a reason for nondisclosure to parents (Peacock et al., 2001). These fears functioned similarly to high-risk assessment in the RRM and delayed pregnancy disclosure.

This research (disclosure of test results or unplanned pregnancy) is different from an area commonly studied in physician-patient communication called "breaking bad news" (see Ptacek & Eberhardt, 1996, for meta-analysis). Investigations of "breaking bad news" primarily focus on strategies physicians may employ (e.g., deliver the news at the patient's pace, convey hope, be empathic when delivering bad news). Although recommendations for physicians may overlap with dimensions of response (both anticipated and actual, e.g., "being empathic"), the primary difference between "breaking bad news" studies and the studies described in this section is the relational context. The studies described in this section focus on sharing personal or private information in the context of a traditional interpersonal relationship, not in the context of a physician-patient interaction. This is not to say that the current project is not relevant to the physician-patient context. The implications section discusses the potential implications of anticipated response to physician-patient communication.

Existing research also includes reports of specific anticipated reactions. For example, individuals frequently report concern about a "gossip" or third party disclosure

oriented response (see Greene & Faulkner, 2002; Greene et al., 2009; Miller & Rubin, 2007). Additionally, Greene and Faulkner (2002) describe some extreme negative reactions such as family members "wanting to kill someone" (often times an ex-boyfriend or source of HIV infection). These examples represent only a sampling of the preponderance of literature available, much of it (unlike the examples here) conducted outside of a theoretical framework.

This section provides a very brief sampling of the many existing studies of specific, isolated, responses to disclosure in information management. There are far more of these types of studies than are described in this review. This section is not meant to be exhaustive but to instead offer an overview of the types of existing studies. I did not review these studies extensively because without a theoretical framework they are less useful in systematically developing meaningful categories of anticipated response, described in detail in the following chapter.

Chapter 3

Study I

Defining Anticipated Response

The frameworks described in this review describe or imply how anticipated response (and/or actual response) is a concept that functions with varying degrees of importance in the information management process. In some of the frameworks discussed (e.g., SPT), anticipated response has a minimal role in the process of disclosure or building intimacy. In other frameworks (e.g., CPM) anticipated response is more of an underlying concept. For example, anticipated response plays a role in CPM as "disclosure ramifications" that are part of rule development, but this conception is currently untested. Other perspectives discussed highlight anticipated response more prominently. *The Model of Disclosure Decision Making in a Single Episode* (Greene et al., 2006), DD-MM, CCM, and RRM all highlight an anticipated response variable that is integral to the disclosure decision-making process (see also DPM, Chaudoir & Fisher, 2010, although this model focuses more on actual responses and the function they serve as the disclosure is unfolding).

Anticipated response may be present or identified in the frameworks discussed previously, however, there are numerous unarticulated assumptions about both its nature and operationalization. Despite these differences in conceptualization, the anticipated response variable in each of the models is related to key disclosure outcomes (e.g., likelihood of or willingness to disclose personal, private, or secret information) and predicts likelihood of disclosure (Greene et al., 2009), willingness to reveal future secrets (Afifi & Steuber, 2010), and actual secret revealment (Afifi & Steuber, 2009). Clearly,

anticipated response plays an important role in the process of coming to a disclosure decision. However, as evidenced by this review, there is not one clear operationalization of anticipated response, and thus comparisons across models and studies are difficult or impossible. Additionally, all of the models that measured anticipated response are potentially tapping different facets of anticipated response, and it is unclear how these different conceptualizations function together. Formulating a clear conceptualization and measurement of anticipated response can augment existing frameworks of information management as well as future research in this area and extension into other contexts where anticipated response may be relevant (e.g., organizational communication, physician-patient interactions).

The dimensional structure of anticipated response and outcome. The terms anticipated response, reaction, effect, and outcome are used somewhat interchangeably throughout the information management literature. There is presently no clear distinction or conceptualization in the definition of these terms independently, conceptually or operationally. Many times, published research or conference papers present "anticipated response" (for example) as if it is a variable that has been thoroughly conceptualized and operationalized and a particular study is simply applying a previously validated scale. However, the examples provided for items measuring "anticipated response" seem to lack face validity and tap a different variable (e.g., anticipated response as "creating stress for other people"). The first step in augmenting existing scholarship that investigates the relationship between anticipated response (reaction, effect, and outcome) and information management is clearly defining and conceptually separating the related concepts of anticipated response, reaction, effect, and outcome. The following sections provide

conceptual clarification of these concepts, as guided by previous research, and finally propose a dimensional structure for both anticipated response and anticipated outcome.

Basic definitions. The primary goal of this paper is to separate the related concepts of anticipated response, reaction, effect, and outcome. Some research indicates that, especially in health disclosure, potential disclosers may perceive two distinct reaction-related variables, anticipated response and anticipated outcome (see Greene et al., 2009; Greene et al., in press; see also DPM Chaudoir & Fisher, 2010; although these terms are not used, the conceptual distinction is present in the model). DD-MM (Greene, 2009) captures both concepts of anticipated response and anticipated outcome under the umbrella of *anticipated reactions*. This review adopts these basic terms and, in the following sections, illustrates how the other widely used terms fall under the umbrella of this conceptualization.

One way to illustrate the subtle differences between anticipated response and outcome is to consider them causally or based on a progression (see Figure 1). Note that most studies are not longitudinal, thus many causal claims in literature are speculative at best. Further, response and outcome exist along a continuum of abstractness. That is, disclosers may consider any possible response (or outcome) in a very narrow, concrete way (e.g., "he gave me a ride to the doctor's office" or "she gave me a hug") as well as a very broad, abstract definition (e.g., "the effect was positive" or "we became closer"). At the most abstract level, there is a great deal of overlap among these variables, and the subtle nuances among the variables are much more difficult to distinguish. These nuances are much easier to identify at the most concrete level (e.g., *response* as "he said he would do whatever it took to support me" versus *outcome* as "our relationship was really

strengthened through this situation. Without his support, I would not have been able to cope with my disease"); however, this narrow level also affords the least potential for generalizability across contexts and various studies and thus has more limited utility to a wide range of scholars. For example, some specific types of information (e.g., disclosing "The child is yours" or "I'm worried that you'll get my HIV") may not be relevant to other contexts. Such topics might generate unique responses and outcomes that are unlikely to generalize across relationships or situations. Therefore, this project endeavors to identify the types (and examples) of responses and outcomes that exist toward the mid-range of this abstraction continuum to provide enough specificity to distinguish between variables yet remain general enough to apply to a variety of contexts. The following sections explore these dimensions in greater detail.

Disclosure responses. The recipient may respond immediately after the personal/private information is shared. *Response* is defined as the disclosure recipient's immediate communicative (both verbal and/or nonverbal, e.g., disappointment) and/or behavioral action, answer, or reply (e.g., a hug vs. "I'll loan you the money for tuition") to the disclosure. A response may be communicated in words ("I am angry with you"), actions (recipient stalks out of the room, slamming the door), or both (recipient screams "I am angry with you" while stalking out of the room and slamming the door). In order to conceptually clarify response from other related variables (e.g., outcome), I conceptualize response as immediate or short term following disclosure, and it is contextually related to a particular action (the disclosure) and person (the discloser). This conceptualization also includes silence or avoidance as an immediate response, which following paragraphs explore in greater detail.

In some cases, there may be no response or the lack of a response <u>is</u> the response. Examples of this response include silence, avoidance, or the receiver changing the subject. A lack of response may be especially relevant when people communicate personal/private information through non face-to-face (FtF) channels. For example, if the discloser leaves a phone message or sends an email and there is no "reply," this behavior may contribute to anxiety for the discloser. In many cases, the discloser would be unable to determine if the message was received or if the lack of a response was intentional. Non-FtF channels of communication also create a second circumstance that is important to information management and I discuss it next.

When disclosing through non-FtF channels the most immediate response (e.g., nonverbal/verbal communication, behavior) may be to another person. This scenario provides an example of why the definition of anticipated response (in this review) is limited to the most immediate response *to the discloser.* In non-FtF communication, it is possible that the most immediate response is not to the discloser but rather to another person. For example, an individual may disclose in an email that she is pregnant and the recipient immediately calls his best friend, or forwards the email to others, or posts the pregnancy as a Facebook status update. The receiver may not acknowledge the message to the discloser or may additionally respond to the discloser (e.g., a receiver emails the discloser in addition to forwarding the message, or calls the discloser after calling his best friend). It is the most immediate response *known to the discloser* that qualifies as anticipated response in the current conceptualization. For example, if the discloser emails the recipient to tell him that she is pregnant, and he reads his email and immediately tells his parents and secondarily calls the woman and yells at her, technically his "primary"

response (disclosure of that information to his parents) might be considered a boundary violation. However, in this conceptualization of anticipated response, the recipient's initial response *to the discloser* is what is central as the response (e.g., the emotional reaction of anger). Further, in this particular example, the discloser's perceptions of his/her other actions (the third party disclosure of the pregnancy to the recipient's parents), if discovered, would function as a relationship-oriented disclosure outcome (discussed in more detail in the following sections). On the other hand, if, in the previously described scenario, the receiver's first response was to post the information on a social networking site (e.g., Facebook) and the discloser sees the post, the primary response is considered boundary violation (even if the receiver also calls the discloser). In both scenarios, although primary and secondary responses are indicated to provide conceptual clarity, more broadly *all* responses perceived by the discloser will have potential outcomes. That is, both being yelled at and having personal information posted for public consumption will affect the discloser on multiple levels, regardless of the order in which these responses were enacted. The qualification "if discovered" is necessary because it would be difficult (and probably not consistent) to determine if and when disclosers were aware of disclosure targets' responses to others.

Responses to disclosure occur immediately after the information has been shared. A systematic review of prior literature indicates four major categories of anticipated response: *support* (emotional, instrumental, informational), *emotional reaction, avoidance,* and *reciprocity.* Subsequent sections provide more details about these categories of anticipated response. The following section discusses the second component of anticipated reaction, anticipated outcome.

Disclosure outcomes. *Disclosure outcomes* encompass both the more immediate effects and longer-term outcomes of sharing the particular piece of information with that particular person. Disclosure research is often cross-sectional, necessitating a broad view of potential disclosure outcomes that encompasses both the immediate and ongoing effects of the disclosure on the discloser, recipient, or relationship (and the discloser's other relationships), as well as more "final" outcomes that may represent the cumulative effects of the disclosure on a discloser, recipient, or relationship(s). In this conceptualization, disclosure outcomes are represented on the timeline in Figure 1 (from immediately following the recipient response to potentially after the dissolution of the relationship). This conceptualization accommodates the perception of disclosure outcomes simultaneously (cross-sectionally) but is still relevant to many different points in the relationship between the discloser and the receiver.

This section begins by explaining more immediate outcomes of disclosure (subsequent sections will detail outcomes that may emerge after the passage of time). The discloser may perceive the outcome of disclosure immediately after the discloser has shared the information and the receiver has initially responded to that information. These perceptions of outcome (still conceptualized as a perception of the discloser) directly emerge from the recipients' response(s) or absence of response(s). I define the more immediate outcomes of disclosure as the disclosers' perceptions of the influence of the disclosure on the discloser, the recipient, and/or the relationship, and include the effect of a feedback loop where the recipients' initial responses affect subsequent communication and/or behaviors of disclosers and receivers. In the prior example where the recipient screams "I am angry with you" while stalking out of the room and slamming the door

after the discloser shared the information, the recipient responded with a *negative emotional reaction*. The discloser could then race out the door after the recipient and subsequently "respond" to the recipient's response (e.g., "Don't you dare walk out on me"). Following this interaction, the two could have an argument or they could find common ground. The argument is an example of one of the more immediate outcomes of the disclosure (an anticipated outcome example parallel to this would be "we would have a fight"). Note that recipient *response* is constrained to include only the most immediate response to the information perceived by the discloser. When the response is defined more broadly, it becomes difficult to distinguish between what is a disclosure response and what is an outcome, and this is a limitation of this conceptualization. However, some research indicates that individuals tend to think about the disclosure process and the potential effects of disclosing a certain piece of information to a certain person in terms of how it will affect their evaluation of the receiver or the receiver's evaluation of them. The following section discusses this outcome.

Another potential result of the disclosure interaction (disclosure of the information and the recipient's initial response) is the evaluation of the receiver and/or the receiver's response. That is, the discloser may make character judgments about the receiver based on his/her response. For example, in the above illustration, the discloser may decide that the receiver "is a really angry person." These assessments are likely subject to fundamental attribution errors (Ross, 1977; see also Derlega & Winstead, 2001 for discussion of attributional approach to disclosure). People are likely to attribute the recipient's "negative" responses to a flaw in the receiver, whereas they might attribute their own equally negative feedback (to the response) to more situational or

environmental factors (e.g., "I'd received a lecture from my boss earlier that day and it put me on edge"). This is especially important to bear in mind considering the preponderance of empirical investigations that rely on retrospective reports of disclosure experience solely from the perspective of the discloser.

As time continues to pass after sharing, disclosure outcomes may also be defined as reflecting more of a final product, end result, or consequence of the disclosure. After more time has passed, the disclosure outcome may represent the sum of effects (e.g., repeated arguments about the initial disclosure) or consequences, and/or may also become more difficult to separate from other disclosures. These examples of disclosure outcomes occur in the long term and are more abstract. This form of outcome is broader in scope and represents an amalgamation of or the results of a pattern of interaction. Continuing with the previous example, after the recipient's angry outburst (response) and the argument (or repeated arguments) between the discloser and the disclosure recipient as time passes, ultimately the relationship between the discloser and the recipient dissolves. This particular facet of response may only be applicable to certain disclosure topics (e.g., infidelity, unexpected pregnancy, STI transmission, serious health condition). That is, it may be difficult to isolate the cumulative effect of one thing later in time for more innocuous disclosures or disclosures that may not directly affect the relationship between the discloser and the recipient (e.g., sexual abuse as a child). This concludes the discussion about the temporal distinction between responses to disclosure and outcomes of disclosure. The following section discusses how these two concepts are associated.

Causal association between response and outcome. Disclosure outcome may be linked causally to response. In general, responses that are perceived by the discloser as

more negative (e.g., judgment) may predict outcomes that are perceived as more negative in nature (e.g., relationship dissolution). However, these predictions may be more strongly rooted in the notion of self-fulfilling prophecy (see Merton, 1968) rather than accuracy in predicting the recipient's future behavior. That is, following a negative response, individuals may expect a negative outcome and behave in ways that actually facilitate that negative outcome. It is also important to note that when perceptions of anticipated response and anticipated outcome are measured simultaneously this may also affect causality (in that individuals may report expectation of negative outcomes *because* they expect negative responses). This may also be true of how potential disclosers think about the process of disclosure and the anticipated reactions of people to whom they might consider disclosing.

Anticipated outcomes may represent shorter-term disclosure consequences such as evaluations of the receiver or the relationship as well as longer-term effects. Prior literature suggests four types of disclosure outcomes: self (e.g., catharsis, identity threat), receiver (e.g., preparation/education, recipient suffering), relationship (e.g., increased intimacy, boundary violation), and other relationships (e.g., negative outcomes for the discloser's relationship with persons other than the receiver). Subsequent sections will explore these categories in greater detail.

Summary. The umbrella term *anticipated reactions* encompasses both concepts anticipated response and anticipated outcomes (to disclosure). I distinguished response and outcome from one another temporally. Response is the most immediate communicative and/or behavioral reaction (even if that reaction is silence) from the receiver perceived by the discloser about the information newly disclosed. I

conceptualized outcomes as occurring after some time has passed (or feedback has

occurred) and including the cumulative effects of the disclosure and initial response.

Outcomes may be perceived as early as directly after the recipient's response (e.g., the

discloser decides that the receiver is "an unsupportive person" based on his/her response)

or after much time has passed (e.g., relationship dissolution). Anticipated response is

directly related to the communication/actions of the receiver and can be broken down into

four subtypes (emotional reaction, support, reciprocity, and avoidance). Outcomes may

have implications (positive, negative, or neutral) for the discloser, the receiver, their

relationship, and/or the discloser's relationship with others. The following section

discusses the four categories of anticipated response.

Categories of anticipated response. This section presents the categories of

response (both actual and anticipated) near a mid-range level of abstraction. I derived and

created the dimensions of anticipated reaction from the systematic review of literature

detailed in the current project. The typology presented in this project exclusively

conceptualizes response in terms of the perception of the discloser, which is similar to

most theories. The categories were derived from reviewing information management

literature (theories, frameworks, perspectives, as well as empirical research conducted

absent theory), prior items used by other scholars to measure anticipated and actual

response (in both published and conference papers), and a previously developed coding

scheme (Greene & Magsamen-Conrad, 2010).

The response categories presented in this project are intended to be distinct from

one another but may share some overlap. Disclosure recipients may respond to a single

disclosure with a reaction that includes elements of multiple response categories (e.g.,

positive emotional reaction and support, "I am so happy you're pregnant! How can I help you during this time?"). That is, it is reasonable to anticipate more than one response and/or outcome to a single disclosure, especially if the shared information is particularly significant. Additionally, these categories do not represent the same levels of abstraction; some subtypes are broader than others are. However, these categories best capture the types of responses apparent in the literature. The project defines these categories by presence of particular features. The four categories identified below are loosely arranged in order from most abstract to most concrete (while still reflecting a general midrange level of abstraction of anticipated/actual response to disclosure). The categories of anticipated response derived from the systematic review of the literature are emotional reaction, support (emotional, instrumental, and informational), reciprocity, and avoidance. This section begins by discussing anticipated and actual emotional reaction to the disclosure of personal/private information.

   Emotional reaction. The valenced response *emotional reaction* is the broadest of the moderately abstract categories of response and was frequently present in prior literature (e.g., Greene & Faulkner, 2002). This category is only slightly more concrete than the most abstract general valence conceptualization of response as "positive, negative, or neutral" that has also frequently been utilized in prior literature. The fundamental difference is that this category emphasizes emotions. Emotions "arise when an individual attends to a situation and sees it as relevant to his or her goals" (Gross & Thompson, 2007, p. 4). Research provides numerous examples of negative emotional reactions to disclosure. The following paragraphs discuss these examples.

Many of the frameworks discussed in the rationale identify specific negative emotional reactions to disclosure. These types of responses are often listed as an example of why a potential discloser might decide not to share personal or private information with another person. For example, the CCM's (Afifi & Steuber, 2010) measures for anticipated response include items that address the disclosure recipients withdrawing, losing their temper, and/or sulking. Both the CCM and Vangelisti's functions of and criteria for revealing secrets (see Vangelisti & Caughlin, 1997; Vangelisti et al., 2001) include the recipient "getting angry" (see also Derlega et al., 2004; Greene & Faulkner, 2002). The CCM and the RRM (Afifi & Steuber, 2010, 2009) both list "disappointment" as a potential receiver response. The RRM, Derlega perspective, and Vangelisti's research also include judgment as a potential reaction, where the recipient "reacts by blaming the discloser." Finally, the RRM and the Derlega perspective (e.g., Derlega et al., 2002) both note potential negative emotional responses such as "disapproval" and "ridicule."

One narrower example of negative emotional responses present in the existing information management literature may be critical responses. Critical or judgmental responses to disclosure are also more concrete in their conceptualization. The CCM lists a number of critical responses to disclosure. The CCM conceptualizes these responses as "aggressive responses." Other CCM examples of critical responses to personal private information (specifically, secrets) include: insulting the discloser, criticizing the discloser's shortcomings, making the discloser feel stupid, and/or attacking the discloser's character (note that the last example is also present in Derlega's work, especially on stigma, see Derlega, Sherburne et al., 1998, and in Vangelisti's criteria for

revealing secrets, e.g., Vangelisti et al., 2001; see DDM, Omarzu, 2000, and the DPM, Chaudoir & Fisher, 2010, discussion of subjective risk). The CCM also discussed extreme critical responses such as physical or emotional abuse. Afifi and Steuber (2009, 2010) directly measured a variable similar to anticipated emotional reaction (labeled "past aggressive responses") in the CCM and the RRM as an example of a psychosocially aggressive response. Additionally, other frameworks indicate threat of physical violence as an extreme negative response (cf. Caughlin et al., 2005; Greene & Faulkner, 2002).

It would seem reasonable that because negative emotional reactions are well represented in the literature as both anticipated and actual responses, then positive emotional reactions would also be represented in the literature. However, examples of positive emotional reactions to disclosure are limited. This may be because most participants tend to report information or disclosure experiences that are negatively valenced information, stigmatized, or identity threatening (for exception, see Mathews, Derlega, Morrow, 2006). Despite this empirical absence, plausible positive emotional reactions might include "tears of joy" or a "holler" of excitement. For example, if a woman tells her best friend her boyfriend has just proposed, that friend might respond with a "screech" of excitement followed by the words "I'm so happy for you" (see Greene et al., 2003, p. 128). In contrast to the lack of illustration of positive *emotional reactions* to disclosure, other positive responses such as support are well represented in the literature and discussed next.

Support. The provision of support by relational partners and friends is represented in relational literature both broadly and specifically in the context of information management. For example, emotional support is a central variable in many contemporary

relational theories (e.g., Cunningham & Barbee, 2000; Reis, 2001). In general, support is considered a positive facet of relationships, often connected with positive outcomes such as effective coping, managing unpleasant emotions, and maintaining positively (e.g., Burleson, 1994; Stroebe & Strobe, 1996).

Disclosure recipients may respond to disclosure by offering or withdrawing some form of support. The literature illustrates several possible types of support that can be organized into the following subcategories: emotional (a "shoulder to cry on" or listening sympathetically, see also Burleson, 1984 for examples of support such as empathizing with, legitimizing, and actively exploring feelings), instrumental (accompany discloser to the doctor or offer to loan money), and informational ("I know this great cancer information resource online; let me show it to you"). The Derlega perspective, DD-MM, Vangelisti's secret functions as well as other work in secrets (e.g., Kelly & McKillop, 1990), and CPM all explicitly cite providing support, assistance, or help as a potential response that is fundamental in disclosure decision-making.

One of the models described previously used anticipated support to predict disclosure decisions. Greene et al. (in press) conceptualized anticipated response as support in their test of the DD-MM and found that more positive forms of support positively predicted both disclosure efficacy and likelihood of disclosure. Thus, positive forms of support in response to disclosure of personal or private information as a category of anticipated response are well represented in the literature. However, disclosure does not always result in positive forms of support, or support is not always helpful (e.g., see Barbee et al., 1998; Hays et al., 1994; Greene et al., 2003, p. 128).

Disclosure recipients may also respond by withdrawing support. For example, if someone shares with a friend that s/he is unfaithful, that friend might withdraw support (i.e., "I don't want to be friends with a cheater"). Similar to the dilemma surrounding positive emotional reactions, withdrawal of support is underrepresented in the literature. An exception to this may be found in the sexual orientation disclosure literature, where "being cut off from the family" has been widely reported as a response to disclosure or outing (see Limandri, 1989). Withdraw of support may be illustrated in conjunction with recipients' concern for themselves, which is discussed next.

Another example of unsupportive responses may be disclosure recipients' demonstration of concern for themselves instead of concern for the discloser. The Derlega perspective best articulates concern for self. Derlega et al. (2001) developed a scale that measures the reasons for and against disclosing one's HIV-positive status. In their measure, fearing that the recipient might focus on him/herself in response to the disclosure is a reason for nondisclosure. For example, if a person were to disclose information that could have health (or other) related ramifications for the recipient, it is plausible the recipient may respond with a concern for self ("how could you do this to me, what if I am infected?" or more general fears about how a diagnosis may create burden for a partner such as caregiver burden, the physical, emotional and/or financial toll of providing care, George & Gwyther, 1986). Although this response is not limited to HIV disclosure, it may be directly related to the type of information shared such as sharing infidelity or unwanted pregnancy or manifest as a more general concern of the recipient (e.g., parents' concern about what others would think about a child who is arrested or drops out of college).

Reciprocity/Partner disclosure. Another narrower category of disclosure response is recipient disclosure (also known as "reciprocity"). Reciprocity is an integral component of Social Penetration Theory (Altman & Taylor, 1973), where, in general, intimate disclosures are said to encourage the same (compared to superficial disclosures, which are expected to encourage superficial recipient disclosure). This reciprocity concept is also demonstrated in other frameworks, for example CPM's disclosure prerequisites indicate a proclivity to choose disclosure targets who are "open in return" (this concept is also addressed in Kelly & McKillop, 1996). In the CPM conceptualization, reciprocity is not limited to disclosure responses about the same topic but consists of general openness. That is, in order for the recipient response to be viewed as reciprocal, the response does not have to be a disclosure about the same type of information (at the same level of depth and breadth). Being open in general and sharing other types of personal and/or private information yet unknown to the discloser would also be considered a reciprocal response. For example, one person may disclose about a health condition and the receiver might then share about problems in a relationship. This broader conceptualization of reciprocity does not exclude topical reciprocal disclosures ("I had an affair" responded to by "I cheated on my wife"; or "I had an affair" responded to by "My husband and I are having problems") where the response is more closely related (topically) to the initial disclosure (i.e., both about infidelity or, more broadly, both about relational issues).

This conceptualization of reciprocity as used in this project is much broader than used in prior literature. This is especially true of health-information disclosure where the reciprocal disclosure is topically exact (e.g., when the discloser shares his/her breast

cancer, the receiver also shares his/her breast cancer diagnosis; see Greene et al., 2003).

Further, both Derlega and Vangelisti have one or two items that reflect the concept of

reciprocity (although in Vangelisti's conceptualization it is closer to reciprocity on the

part of the discloser in contrast to receiver reciprocity, that is "in order for me to share my

secret, this person would have to share like information *first"*).

The reason for this broader conceptualization is due to the narrowness of

reciprocity as a subtype when compared to the other categories of anticipated response.

Reciprocity, even when defined as being "open in return" instead of topically exact, is a

much more specific type of response than, for example, "emotional response" that

encompasses a much wider variety of potential responses. Further, some research

indicates that relational partners, for example, may assess reciprocal disclosure or

openness at a more global level than immediately following the disclosure (see Greene et

al., 2006). Indeed, reciprocity may actually be a type of another category of anticipated

response (e.g., support or emotional reaction). However, because it is often specifically

referenced in disclosure theory (e.g., SPT) it is retained as a subtype in the current

investigation. Finally, some disclosure-related models (e.g., the IPMI) also conceptualize

reciprocity more in terms of openness.

The IPMI also discusses "reciprocity" within the context of disclosure. In the

IPMI, reciprocity is represented by *partner disclosure*. In this framework, people are

asked to identify the degree to which the disclosure recipient shared thoughts, feelings,

and facts and information in response to the disclosure (see Manne et al., 2004a, 2004b).

Generally, reciprocal disclosure is conceptualized as sharing information that is also

personal or private. On the other hand, receivers may refuse to respond or avoid responding, which is discussed next.

    Avoidance. The most concrete potential category of response to disclosure is refusal, where recipients respond by *not* responding or avoiding responding. A large body of literature discusses individuals' tendency to avoid talking about certain topics within relationships (see Afifi & Guerrero, 2000; Afifi, McManus, Steuber, & Coho, 2009). Avoiding topics (e.g., politics, in-laws) in relationships may serve a number of functions (see Afifi et al., 2009) such as conflict avoidance (see Roloff & Wright, 2009). Topic avoidance is an important facet of information management and is conceptualized in this review to reflect avoidance as a response to disclosure (manifested, for example, as a change in subject or a statement about unwillingness to explore the topic) that is much more narrow than much of the existing literature. That is, in contrast to a known topic that is avoided for various reasons, this project reflects the conceptualization of information that was previously unknown to the receiver, and when disclosed, the receiver's reaction is avoidance. The CCM provides the example of recipients "refusing to discuss" the secret or private information. Other frameworks (e.g., Derlega perspective; Greene et al., 2006) note "silence" as a potential response to disclosure. If the disclosure is communicated through mediated channels (e.g., email, IM), the recipient may never acknowledge receipt of the message (see Greene & Magsamen-Conrad, 2010, for discussion). Once the topic is shared, one or both of the relational partners may strategically avoid "bringing up" that topic, a scenario that reflects the bulk of the "topic avoidance" literature. Avoidance as a response is conceptualized as a reaction (e.g., silence, topic change, simple refusal to discuss the disclosure) to the initial (previously

unknown, from the perception of the discloser) disclosure within the initial interaction (see also Caughlin et al., 2005, for discussion of "putative" secrets, or information that the discloser thinks is "unknown" to the receiver that the receiver actually knows).

Summary. This project presented a conceptualization of anticipated response and created measurement (categories presented here were derived from a systematic review of prior research highlighting anticipated response). For some concepts, this required creation of items. For the frameworks that provided measures, the project used available measures. In sum, the primary goal of this project was to develop conceptualization of and test the four categories of response (*emotional reaction, support, reciprocity/partner disclosure,* and *avoidance*) simultaneously so that one coherent measure of anticipated response could be generated. Therefore, the project asks:

RQ1: Does the proposed four category dimensional structure adequately represent anticipated response?

Alternative Response Variables

The previous sections describe four categories or types of anticipated response derived from existing literature. The following section will discuss another receiver related variable that may affect how individuals' anticipated response functions in the management of personal/private information, specifically the discloser's perception of how the recipient might respond. This variable is *responsiveness.* Although research indicates that this variable may affect disclosure decisions (see Greene, 2009; Magsamen-Conrad et al., 2010), the association between responsiveness and the categories of anticipated response is currently unclear. For example, responsiveness might be another example of a response type, responsiveness might share conceptual overlap with all other

categories of response (and therefore be a possible alternative to the four category dimensional structure, useful in some types of research), or responsiveness and anticipated response could be wholly unrelated. Responsiveness is discussed next.

Responsiveness. It is unclear in the literature if responsiveness is a category of response or if it is more closely aligned with, or an extension of, other variables such as relational quality or communicative competence. In previous studies, responsiveness has been equally correlated with both retrospective report of response expectancy violation and quality of relationship (i.e., closeness, see Magsamen-Conrad et al., 2010). One explanation for the lack of clarity may be related to the way responsiveness is operationalized. Responsiveness, as explained by the IPMI, is the degree to which the discloser perceives that the receiver makes him/her feel accepted, cared for, understood, and validated. Therefore, responsiveness is not necessarily a clear "type" of response that can be conceptualized in terms of words or actions that are exclusive from the four other categories of response discussed previously. Put another way, responsiveness is more abstract in conceptualization. That is, the recipient's response in each of the four prior described categories could be perceived by the discloser as higher or lower in "responsiveness."

Despite the uncertainty in the associations between responsiveness and types of response (specifically support, emotional reaction, reciprocity, and avoidance), responsiveness plays a clear role in the building of intimacy within the context of disclosure. The IPMI demonstrates that, in order for disclosure to contribute to the increased perceptions of closeness in relationships, the discloser must perceive that the recipient was responsive to his/her disclosure. This view leaves much room for how

individuals may differ in how they perceive the same behavior (or the same "type" of response). Responsiveness may be an important variable in how a type of response is perceived by the discloser. In previous research, responsiveness has only been considered after the disclosure (i.e., not in terms of anticipated responsiveness). However, because this project is primarily interested in clarifying the process of disclosure decision-making, responsiveness is considered in terms of anticipation because information has not been shared. Therefore, I ask:

RQ2: What is the association between anticipated responsiveness and the four proposed categories of anticipated response?

Establishing validity of anticipated response. Once a measure of anticipated response is created, it must be tested with variables and key outcomes of current and prior disclosure process research in order to demonstrate convergent validity. According to this review, anticipated response should be associated with relational quality, likelihood of disclosure (to a particular recipient), general and disclosure efficacy, and information valence. Therefore, I also ask:

RQ3: Does the anticipated response measure relate to key components in the same way that has been demonstrated in previous research?

Summary. This section described the categories of response that are at a midrange level of abstraction on a continuum from the most abstract or broadest conceptualization of response (e.g., valence) to the most narrow (e.g., "she punched me"). Within this mid-level of abstraction, these categories also vary in abstraction, from *emotional reaction* as most abstract to more concrete categories such as *avoidance*. The more abstract the category, the greater the potential for overlap between the categories of

response. This section also considered alternatives to the four category structure of anticipated response developed in this project. Responsiveness refers to the way in which the discloser perceives that the recipient responds to the discloser, and each of the four types of response outlined here may range from high to low in responsiveness. This section also explained how anticipated response and anticipated outcome function within the broader concept of anticipated reaction. Response is conceptualized as the communication (verbal or nonverbal) that occurs immediately after the disclosure. People may also anticipate outcomes that follow immediate responses. The following sections discuss the potential categories of outcome as they may relate to anticipated responses.

Dimensional Structure of Outcome vs. Anticipated Response

Another association that suffers from conceptual ambiguity is between anticipated response and anticipated outcome. The *Model Of Disclosure Decision-Making in a Single Episode* (Greene et al., 2006) is one of the few that clearly separates anticipated response from actual reaction (behavioral, emotional, cognitive) and from actual outcomes (for disclosure, recipient, and relationship). However, the distinction between the examples given for reaction and outcome are unclear. The model (Greene et al., 2006) indicates that *outcomes* for the discloser, disclosure target, and relationship are separate from reactions. They specify that:

> the personal reactions of the discloser and the recipient (e.g., inferring mutual trust or mistrust, co-ownership of sensitive information) may, in turn, influence the outcomes experienced by both individuals (e.g., the partners in the relationship may click as friends; they may decide to meet at a future time to talk again; they may feel intimate", p. 414)

That is, there is a clear temporal distinction between what is designated as a reaction and what is designated as an outcome (especially in the pictorial depiction of their model),

but the description provides no clear presentation of what makes something a reaction instead of an outcome.

The current project focuses specifically on individual responses to a specific disclosure to a particular person and not to overall disclosures or disclosure over time. Relationship dissolution (or breakup), in contrast, is a relational event and represents a relational effect (not an isolated "response"). The feedback "I am breaking up with you" is a communicative and enacted response that may follow a specific disclosure. However, this particular response is related to a series of relational events over the length of the relationship and is likely associated with more factors in the relationship than just the disclosure event (for example, relational turbulence: see Theiss & Solomon's research on how relational uncertainty affects perceptions of irritations). An example of an exception might be the disclosure "I had an affair" where sharing that particular information could be argued to precipitate the termination because of the content of the information itself. In other research (e.g., Zea et al., 2004), anticipated response is conceptualized as a way to avoid or achieve a particular response or effect. An example of this would be in HIV disclosure where the discloser references feeling unsure about how the recipient will respond but hopes "they will not break up with" them. Additionally, the disclosure may be used to "test" the receiver (or relationship), as indicated in the Derlega perspective (see Derlega et al., 2002). Instead of fearing a breakup, the information is disclosed for the purpose of determining if that would "cause" the breakup or ensure that the recipient is going to be supportive. In sum, individuals entertain multiple different types of goals for interactions, especially when considering sharing personal/private information (see

also Chaudoir & Fisher, 2010). It is imprudent to assume that all personal/private information is shared with the same goal (e.g., building relational intimacy).

This project conceptualizes disclosure outcomes as follows. The outcome of a disclosure is perceived by the discloser after the information has been shared (by the discloser) and responded to (initially, by the recipient). Disclosure outcomes directly emerge from the recipients' response(s) but are is still conceptualized as a perception of the discloser. *Outcome* may be defined as the discloser's perception of the impact of the disclosure on him or herself, on the disclosure recipient, on their relationship, and/or on the discloser's relationship(s) with other people. This includes the feedback (on the recipient response) that results from or is in reference to the disclosure (sharing the information) and the recipient's response. Another potential outcome of the disclosure interaction (disclosure of the information and the recipient's initial response) is the evaluation of the receiver. That is, the discloser may make character judgments about the receiver based on his/her reaction. For example, the discloser may decide that the receiver "is a really angry person." The following sections outline the organization of potential disclosure outcomes into four categories: self-, other-, and relationship-, and other relationship-oriented outcomes of disclosure.

Categories of Outcomes. This project's conceptualization of the outcome of disclosure is temporally influenced. Response is conceptualized as immediately following the disclosure and outcome following thereafter. In this view, the disclosure outcome variable encompasses a longer range of time than does the disclosure response variable. Specifically, the conceptualization presented in this review employs strict temporal parameters on disclosure response so that it may be distinguished from disclosure

outcome. Although this strategy has limitations (e.g., it may not translate well to non FtF disclosures where the very first communication the recipient has about the disclosure is with a person other than the discloser), it is one way to distinguish the related constructs of response and outcome. Studies have demonstrated that anticipated response and anticipated outcomes, although correlated as expected, are empirically distinct in the eyes of participants (e.g., Greene et al., in press). Additionally, this distinction is often not made clear in prior research and disclosure outcome may have been assessed at many points in time (especially when using cross-sectional design methods). That is, if participants are asked to fill out a survey about "a time when they disclosed personal or private information to another person," unless a specific time frame is indicated (e.g., "within the last two months"), the disclosure experience recollected could be at any point in the past. Some individuals may recall the most recent disclosure event (see primacy/recency effects) while others may recall the most vivid.

There is likely a degree overlap between outcome and response (especially depending on the point in time at which the perceptions are assessed and/or retrospective accounts of disclosure responses/outcomes), researchers would be better served by investigating anticipated and actual response primarily and outcome secondarily (and longitudinally). This phenomenon should be explored in detail in future studies but requires longitudinal data that is rare in the field. Finally, any disclosure may have multiple outcomes. That is, a single disclosure may have outcomes for the discloser, for the recipient, for the relationship between the discloser and the recipient, and/or for the discloser's relationship(s) with others.

The outcomes of disclosure may be broadly categorized in four ways derived from the Derlega perspective (see Derlega et al., 2000, 2001; Greene et al., 2003, 2006). These categories are outcomes for the *discloser,* outcomes for the *receiver,* outcomes for the *relationship* between the discloser and the recipient, and finally the relationship between the discloser and people *other than the receiver*. Illustrations of examples of outcomes within these categories are present in the literature (although often these examples have been conceptualized as responses) with varying degrees of abstraction. This section begins with a discussion of discloser-oriented outcomes.

Discloser-oriented outcomes. The potential psychological and/or tangible effects of the disclosure on the discloser are represented by discloser-oriented outcomes (cf. self-focused reasons for and against disclosure, Derlega et al., 2000, p. 54). These outcomes may be most broadly conceptualized on a continuum from positive to negative. Examples of potential discloser-oriented outcomes represented in the literature include catharsis, identity threat, and revenge. These examples are described in detail in the following paragraphs.

Catharsis. Catharsis is often touted as a benefit of self-disclosure for the discloser. It would be difficult to find a framework of disclosure that does not address catharsis, at least some degree. The catharsis perspective is often traced to the Fever Model (Stiles, 1987) which describes how the pressure of concealing the information builds up and "breaks" (like a fever) upon disclosure. Catharsis is also the crux of much of the Pennebaker tradition of research (e.g., Pennebaker, 1995). In addition, the Derlega perspective includes catharsis as one of the self-focused reasons for disclosure (see Derlega et al., 2001). The premise underlying the association between disclosure and

catharsis is related to the idea that concealing the information is burdensome, and disclosing the information releases individuals from their burden (see Kelly, 2002 for discussion of repressing secrets). Catharsis could be a more immediate outcome of disclosure, especially if the recipient's response is not negative (see Afifi & Caughlin, 2006) because of the relief the discloser might feel on "getting it out" (also, catharsis is commonly conceptualized in the literature as a more immediate outcome). Catharsis may also occur after a period of time and continued communication/interaction with the recipient. Another example of discloser-oriented disclosure outcomes present in the literature is differential treatment.

Differential treatment. Disclosers may perceive that the recipient treats them differently in response to the disclosure. *Differential treatment* (as well as "no differential treatment") has been cited as both an anticipated and actual response to HIV disclosure (Greene & Faulkner, 2002; see also Greene et al., 2003). Differential treatment may include distancing behaviors (these are considered a form of "aggressive" response in the CCM, e.g., the recipient "became cold, distant, or less affectionate" in response to the disclosure). The valence of differential treatment may be potentially confounded by perspective. For example, if a person discloses that he has cancer, the recipient may immediately start to treat him with extreme concern ("should you be on your feet? Won't you sit down? What can I get for you?"). From the recipient's perspective, this might be considered "positive" differential treatment. However, in this project's conceptualization, the focus is the discloser's perception. In the HIV literature this reaction may be considered unhelpful social support (e.g., Barbee et al., 1998), for example, "acting in a patronizing or overprotective manner." If the discloser does not want this type of

"support," s/he may consider this differential treatment "negative" or s/he might acknowledge that s/he is being treated differently but not necessarily perceive it as positive or negative ("neutral"). However, if the discloser welcomes the change in behavior then this difference in treatment is considered positive.

Altered perceptions about discloser's identity. Another theme that resonates throughout the disclosure literature is that disclosure is risky and fraught with potential for *identity threat* (e.g., Afifi & Caughlin, 2006). Disclosure makes individuals vulnerable to "influence, embarrassment . . . social invalidation" (Derlega & Margulis, 1982, p. 159; see also Vangelisti et al., 2001), exploitation (Derlega & Margulis, 1982, Derlega, 1984), and rejection (Derlega, 1984). Other research indicates that people are hesitant to disclose because it may affect how the recipient or others view them (see the CCM, DD-MM, RRM, and the Derlega perspective). For example, the CCM provides an example of one potential outcome of disclosure where the recipient makes the discloser "feel bad" about him/herself. The final example of discloser-oriented disclosure outcome is revenge, and although it is well-represented in the literature it is also the narrowest.

Revenge. Some information management frameworks discuss the concept of *revenge* as a potential outcome of disclosure. For example, the RRM's self-protection factor is made up of two sub-parts, evaluation (see *identity threat* above) and defense. The defense component of self protection articulates the extent to which participants feel recipients could potentially use the secret information against them if they revealed it. Vangelisti (see Vangelisti & Caughlin, 1997; Vangelisti et al., 2001) also includes "defense" as a function of secret keeping, referencing the fear that the recipient might "use the [information] against the discloser" if disclosed. Derlega (see Derlega et al.,

2002) articulates this concept as a privacy reason for non-disclosure. Although revenge is a very narrow example of discloser-oriented disclosure outcomes that may be highly contingent upon the evaluation of the information, it is noted in the literature and thus bears mentioning in this section.

Summary. The discloser-oriented outcomes reflect potential disclosure outcomes that are directly relevant to the psychological and/or tangible costs/benefits to the discloser. These types of outcomes dominate the literature under the label of self protection (and risk avoidance, but only in one model). The section described specific discloser-oriented outcome examples abundant in the literature such as catharsis, differential treatment, identity threat, and revenge. The next section discusses receiver-oriented outcomes.

Receiver-oriented outcomes. Psychological and/or tangible costs and benefits of the disclosure that predominantly affect the receiver (cf. other-focused reasons, Derlega et al., 2000, p. 54) are categorized as receiver-oriented outcomes. It is important to note that, in general, these outcomes are considered *from the perspective of the discloser.* That is, the perspective of the receiver (what the receiver perceives as outcomes of the disclosure) is represented in the literature far less frequently (for exception see Magsamen-Conrad et al., 2010). This project, consistent with other disclosure models (e.g., CCM, DD-MM, RRM), conceptualizes receiver-oriented outcomes through the interpretation of the discloser. Examples of other-oriented outcomes present in the literature are recipient preparation or education, sacrifices made by the recipient, and recipient suffering/experiencing pain. This section discusses recipient preparation or education first.

Preparation/education. One of the other-focused reasons for disclosure identified in Derlega's research is a desire to inform (see Derlega et al., 2001; Greene et al., 2003). In some examples (and with certain types of information, especially health-related information) the recipient may be better prepared for the future after disclosure. For example, with STI disclosure, disclosers may reduce the risk to recipients or may alert recipients that they need to get tested or use condoms. This other-focused reason has a "greater good" component in that disclosure of the information is for the "greater good" of someone other than the discloser. Even early disclosure research (e.g., Jourard, 1966) references disclosing for the purpose of educating or preparing the receiver.

Receiver sacrifices. A second example of a potential receiver-oriented disclosure outcome is *receiver makes sacrifices.* The concern that the recipient will have to make sacrifices as a result of the disclosure is also listed as a reason for nondisclosure (see Derlega et al., 2001, also called protecting others) and a criterion for keeping a secret (see Vangelisti et al., 2001). This example is especially relevant to the health disclosure context where disclosure of certain health diagnoses may necessitate the receiver sacrificing for the benefit of the discloser. For example, if a woman becomes ill and unable to care for herself, and sometimes a partner, child, or parent must stop working to take care of the woman. This is closely related to the final example of a potential receiver-oriented outcome, receiver suffering.

Receiver suffers/experiences pain. Receivers suffering or experiencing pain of some kind is also listed as a reason for nondisclosure/secret keeping. Potential disclosers express concern that recipients or others will be hurt or upset in knowing the information or that the recipients' relationship(s) with others will be affected by knowledge of the

disclosure (see Derlega et al., 2001; Greene et al., 2009; Vangelisti et al., 2001). For example, a man might tell one sibling but no other family members about his illness diagnosis and explicitly direct this sibling not to share the information with anyone else. Individuals also report withholding their HIV diagnosis to spare family members shame or embarrassment (see Greene et al., 2003, p. 61). The RRM (Afifi & Steuber, 2009) specifically describes other protection as a reason for continued information concealment; as sharing the information, for example, may create stress for the receiver. An example beyond HIV disclosure includes a thirteen year old girl's disclosure to her parents that she is pregnant, which could cause her family pain, embarrassment, or shame.

Summary. The receiver-oriented outcomes of disclosure reflect the potential disclosure outcomes that are directly relevant to the psychological and/or tangible costs/benefits to the receiver. The section described receiver-oriented outcome examples in the literature such as preparation/education, receiver sacrifices, and receiver suffering/experiencing pain. Relationship-oriented outcomes are discussed next.

Relationship-oriented outcomes. The potential benefits or costs to the relationship between the discloser and the receiver are represented by relationship-oriented outcomes (cf. Derlega et al., 2000, p. 54). This category is specifically limited to the effects of the disclosure on the relationship between *the discloser and the receiver.* Potential relationship-oriented disclosure outcomes between the discloser and the recipient include (but are not limited to) three examples discussed frequently in the literature: altered relationship, liking, and boundary violation. The discussion begins with the broadest of the examples.

Altered relationship. Some change in the relationship between the discloser and the receiver, like many of the other concepts discussed thus far, may be conceptualized in terms of valence. That is, the disclosure may have ramifications for the relationship ranging from positive to negative. Positive relationship outcomes, such as increased intimacy, are explicated in SPT and the IPMI. The *Model of Disclosure Decision-Making in a Single Episode* (Greene et al., 2006, p. 415) explicates outcomes such as "feeling emotionally close" and "labeling as 'close friends' ". Derlega et al. detail the outcome that "the partners have a close and satisfying emotional relationship or that they share a lot in common" (2001, p. 54). One of Vangelisti's criteria for revealing secrets is relational security (see Vangelisti et al., 2001). Negative relationship outcomes, such as loss of relationship, are also described in SPT. Additionally, the RRM indicates harmful relationship-oriented outcomes such as the deterioration of the relationship after the disclosure ("relationship will never be as good"). In another example, after the disclosure, the partners may realize that they do not know each other as well as previously thought (Derlega et al., 2000) and reevaluate their relationship. Other research indicates that after the disclosure the recipient may "be unable to accept" or "no longer like" the discloser (see Greene et al., 2003). The next section addresses the outcome of liking, which is frequently referenced in existing disclosure literature.

Liking. Liking is a more concrete outcome than relationship alteration. Previous research has identified three "types" of liking related to disclosure outcomes. First, as a result of the disclosure, general liking and relationship intimacy may increase (see Collins & Miller, 1999, for meta-analysis). Additionally, self-disclosure is also related to the receiver liking the discloser more and to the discloser liking the receiver more.

Although the last two outcomes may be conceptualized as discloser- and receiver-oriented outcomes, even if the discloser is more well-liked or the receiver is more well-liked, increased liking should ultimately affect the relationship. Another example of a relationship-oriented outcome that has repercussions for first self (and/or receiver) but ultimately for the relationship is boundary violations (although CPM may argue boundary violations are primarily concerns for the discloser).

Boundary violation. A boundary violation is the least abstract of the examples of relationship-oriented outcomes. The term boundary violation derives from CPM and represents the unwanted further sharing of personal information (see Petronio, 1991, 2003). The concept of a boundary violation is incorporated in several other information management frameworks, some of which predate CPM. For example, Vangelisti's criteria for revealing secrets (see Vangelisti et al., 2001), Derlega's privacy reason for nondisclosure (see Derlega et al., 2002), the RRM (Afifi & Steuber, 2009), and the DD-MM (Greene, 2009) all reference the potential discloser's concern that the recipient might "tell others" or "gossip." Indeed, potential disclosers report receiver qualities such as "discreet" and "trustworthy" as prerequisites for disclosure (see Petronio, 1991; cf. Greene, 2009; Kelly & McKillop, 1996). Again, a boundary violation, in this conceptualization of anticipated response, is considered from the perspective of the discloser. That is, receivers may not be aware that they have violated a boundary in further sharing the information (and this incongruence in interpretation may be especially salient when considering disclosure effects), especially if prior restraint phrases are not enacted (see Venetis et al., in press). Also relevant are the conditions under which the discloser discovers the recipient's violation of boundaries (i.e., it may come up in

conversation between the discloser and the receiver or the third party may address the information with the discloser). This is different from third party disclosure when someone directly asks about the information or a recipient is asked by the discloser to tell someone else (e.g., Miller & Rubin, 2007; see also Greene et al., 2003, Vangelisti et al., 2001).

Also relevant to the discussion of boundary violations and relational outcomes are prior restraint phrases (PRPs; see Venetis et al., in press) where the discloser specifically asks the recipient not to further share the information. Although a boundary violation may also have discloser-oriented outcomes, the primary consequence is more strongly associated with the relationship between the discloser and the receiver who has breached relational trust. This violation may be especially salient if the discloser utilized a PRP and clearly indicated preferences about information sharing (as, in this case, there would be no question about the boundaries of co-ownership of the information).

Summary. The relationship-oriented outcomes of disclosure reflect the potential disclosure outcomes that are directly relevant to the psychological and/or tangible costs and benefits to the relationship between the discloser and the receiver. This section described relationship-oriented outcome examples present in the literature such as altered relationship, liking, and boundary violation. The next section describes outcomes that may be relevant to the discloser's relationship with individuals other than the receiver.

Other relationship-oriented outcomes. In addition to outcomes that affect the relationship between the discloser and the receiver, disclosure may also present psychological and/or tangible risks and rewards to disclosers' relationships *with individuals other than the receiver* and receivers' relationships *with individuals other*

than the discloser (other-oriented outcomes). Because the specific focus of this project is on the discloser, the potential costs/benefits to receivers' relationships with other people are thought to be included in the receiver-oriented outcome category. That is, receivers may suffer/experience pain in the form of stress on relationships between receivers and individuals other than the discloser in addition to potentially being exposed to pain, suffering, embarrassment, shame, or other negative consequences because of the specific disclosure. However, the category Other Relationship-oriented outcomes is limited to the potential consequences to the disclosers' relationship with others in order to remain parallel to the discloser-oriented outcomes category. Although both categories (discloser- and other relationship-oriented outcomes) were associated with effects on the discloser (i.e., discloser-oriented outcomes), the potential effects of the disclosure on disclosers' relationship(s) with individuals other than or in addition to the receiver (i.e., other relationship-oriented outcomes) are a separate category because these outcomes are conceptually distinct from discloser- or relationship-oriented outcomes. The following sections explain this distinction in more detail.

Disclosure might affect disclosers' relationship(s) with others in several different ways. Several examples of this outcome category are evident in the secrets literature. For example, Vangelisti's reasons for not revealing secrets (see Vangelisti & Caughlin, 1997) include concerns about the disclosure affecting other relationships, for example, relationships with other friends or family members (i.e., "Telling the secret to my [relation] would hurt my relationship with my family members", as a *maintenance* function of secrets, Vangelisti & Caughlin, 1997). The RRM also specifically references a secret disclosure's potential to affect the disclosers' relationships with other family

members. Identity threat and boundary turbulence (also discussed in the discloser- and relationship-oriented outcomes) are also relevant to the other relationship-oriented category of disclosure outcomes. If the information is identity threatening or negative, disclosure of this information has the potential to negatively affect the disclosers' relationship with others. For example, if the discloser tells only one family member about a diagnosis but the information is later learned, the family members who were not told may be upset with the discloser (e.g., "why did you feel you could tell dad and not me? Don't you trust me?"). Other relationship-oriented outcomes may also be especially relevant when the content of the personal/private information is truly co-owned by the discloser and another individual (that is, specifically about the discloser and another person, e.g., "I have an STI and I got it from X" because it also makes known that X has an STI). Disclosure of this information could also affect the discloser's relationship with the other person (in the previous example, the person who has the STI).

Categories of disclosure outcomes summary. This section discussed four categories of disclosure outcomes. Disclosure response and outcome are clarified conceptually in time orientation. Response is defined as the words and/or actions of the recipient to the discloser immediately following disclosure. Outcomes reflect the more long-term effects of the disclosure and represent a greater length of time since the disclosure. Outcomes may be more short-term (e.g., distrust in the receiver) or more long term (e.g., end of the relationship). This section detailed four categories of outcomes: discloser-, receiver-, relationship-, and other relationship-oriented outcomes. Although the primary goal of this project is to clarify the concept of anticipated outcome, a secondary goal is to empirically validate the structure of these categories because the

empirical validation of the dimensional structure of anticipated outcome also serves to

further clarify the concept of anticipated response. Therefore I ask the following research

question:

RQ4: What is the dimensional structure of anticipated disclosure outcomes, and is

it separate from anticipated response?

Personality Traits

Self-concealment. Personality traits may influence how individuals manage

information especially individuals' disclosure decision-making processes. Although there

may be many factors that affect disclosure decision-making, this initial investigation

focuses on one personality trait that may be especially relevant to disclosure decision-

making, self-concealment. For example, CPM maintains that humans must manage the

tension between desire to disclose and desire for privacy (Petronio, 2002), and some

individuals may be predisposed to an increased desire for privacy. Further,

personal/private information is often intentionally withheld because the discloser

considers the information especially risky or negative (Afifi & Caughlin, 2007; Afifi &

Guerrero, 2000; Vangelisti & Caughlin, 1997). Self-concealment is a construct reflecting

an individual's predisposition to actively conceal personal information perceived as

distressing or negative (Larson & Chastain, 1990). Individuals can also conceal

information they perceive as positive (e.g., receiving a promotion at work, but concealing

it from an unemployed friend); however, self-concealment has been most commonly

conceptualized and measured as it pertains to negative and distressing information. Self-

concealment is the active process of inhibition (see Kelly & McKillop, 1996; Larson &

Chastain, 1990; Pennebaker, 1989, 1997), and "actively concealing personal information

appears to be more pathological than the more passive failure to disclose" (Kawamura &

Frost, 2004, p. 190). The process of coming to a disclosure decision as well as the

anticipation of response and/or outcome may be affected by this disclosure-related

personality trait. Therefore, I propose that:

> H1 & H2: People who are more likely to conceal personal/private information are
>
> more likely to perceive the potential responses to (H1) and outcomes of (H2) their
>
> disclosure as more negative.

Summary

The overall goal of Study I is to provide clear conceptualization and measurement

of the related concepts anticipated response and anticipated outcome and confirm that these

concepts are conceptually separate so that they can be used in future research for a variety

of purposes. Study I seeks to ascertain the dimensional structure of an anticipated response

variable and an anticipated outcome variable that may be utilized in information

management. The proposed method through which these dimensional structures were tested

is described next.

Method – Study I

Participants provided self-report data about a piece of personal/private and/or secret information that a) they consider *negatively valenced* and b) that they had not yet shared with a specific other person (romantic partner or one specific friend; see Appendices G & H). This design feature was implemented to account for the general frequency of the types of self-disclosure where people might have heightened anxiety (and therefore a more defined perception of the anticipated response and outcome). Additionally, although disclosure of personal information in a work setting is an important topic, the focus of this investigation is interpersonal relationships (which is why the project limited the person with whom participants had not shared to "romantic partner" or "friend"). Participants were recruited from communication courses at a large university in the northeastern United States (see Appendix A).

Procedure. After participants were consented (see Appendix E), the researcher determined if each person was in a committed relationship of at least three months duration. Participants were given a single sheet of paper and asked to describe "a piece of personal/private and/or secret information" that they had not yet shared with either their romantic partner (see Appendix H), or, if they were not in a committed long term relationship, a friend (see Appendix G). All participants were instructed (both verbally and in the written instructions) that the information should be about them (or related to them), specific, something their romantic partner/friend would not know if they never decided to share, and, finally, somewhat negative. Participants were asked to describe this information in detail (without revealing identities), and put the initials of the romantic partner/friend with whom they had not shared this information on their sheet. Desks were set up in the

collection area for participants to use while filling out this preliminary information. After completing the initial sheet, participants went to a second researcher where they received a survey for either a friend or romantic partner (note that these surveys were identical except for the term "friend" or "partner" used in question stems) and again a researcher confirmed that they had written about personal/private information, about themselves, that they had not yet shared the information described on their sheet with a specific friend/their partner. In another room with desks placed at least three feet from each other, participants completed self-report measures about the information, revealing the information in the future, their relationship with the other person, and demographics. When they finished (~ 30-45 minutes), participants were instructed to insert their initial sheet into the survey, then they were debriefed (see Appendix J). See Table 1 for disclosure topics.

      Participants. The total sample included 698 participants. Of these, 13 were removed because of incomplete data (four partner, nine friend); four were removed because they indicated there was nothing they had not shared with their romantic partner/friend (two partner, two friend). Six additional surveys were removed from the friend sample for various reasons: four listed too many topics (not specific), one was illegible, and one was removed because the truth of the statement was suspect. Finally, after CFAs were conducted and composites were created, several regression analyses were conducted with casewise diagnostics to screen for outliers. In the partner sample 10 total multivariate outliers were identified and deleted. In the friend, sample 15 total multivariate outliers were identified and deleted.

      The final sample included 650 individuals. Of these participants, 368 (57%) were female and 256 (39%) were male (4% did not report sex). Individuals ranged from 18 to 31

years of age (*M* = 19.48 years, *SD* = 1.43 years). Participants were predominantly

Caucasian (56%); others were Asian (16%), Hispanic (8%), African-American (8%),

Bi/multiracial (4%), Indian (3%), and other (5%). At the start of the study, participants

reported that they had known the person to whom they had not disclosed an average of 4.71

years (*SD* = 4.56, range = .5 to 28 years). They characterized the status of their relationship

as friend (58%) or dating partner/spouse (42%). Romantic partners had been in the

relationship for an average of 1.50 years (*SD* = 1.38, range = .25 to 9 years) and friends for

an average of 5.53 years (*SD* = 4.95, range = a few months to 27 years).

Measures. Variables measured include *information valence*, *relational quality,
anticipated response* (emotional reaction, avoidance, reciprocity, and support- emotional,
informational, and instrumental), *anticipated responsiveness, anticipated outcome*
(discloser-, receiver-, relationship-, and other relationship-oriented), *general
communication efficacy, disclosure efficacy, likelihood of disclosure,* and finally, *self-
concealment* (see Appendix K).

Confirmatory factor analyses were conducted on multi-item scales to ensure that

they met the criteria of face validity, internal consistency, and parallelism (Hunter &

Gerbing, 1982). Three goodness-of-fit indices estimated the fit of the CFA models. The

relative χ^2 (χ^2/df) adjusts the χ^2 statistic for sample size (Kline, 1998). The CFI calculates

the ratio of the noncentrality parameter estimate of the hypothesized model to the

noncentrality parameter estimate of a baseline model (Bentler, 1990). The RMSEA

accounts for errors of approximation in the population (Browne & Cudeck, 1993). I

determined that the model fit the data if the *relative χ^2* was less than 3, CFI was greater

than .90, and RMSEA was less than .10 (Browne & Cudeck, 1993; Kline, 1998).

Reliability was calculated for composite measures. Finally, measurement statistics were calculated within both sets of data (friend, F; romantic partner, RP).

Information valence. Participants' perceptions of the information not yet shared with the other specific person were measured with four semantic differential items with responses ranging from 1 to 7. Two items were from Vangelisti and Caughlin (1997) good/bad and negative/positive (R). In Vangelisti and Caughlin's (1997) study, these two items were part of a three factor structure tested using principal component analysis using Varimax rotation including identification, valence, and intimacy. The factor loadings for both items was .94, eigenvalue was 1.82, $\alpha = .87$. These two items were also used in Afifi and Steuber (2009, RRM, $\alpha = .87$; 2010, CCM, $\alpha = .70$). Two additional items were created for the project to facilitate measure testing with confirmatory factor analysis. See Appendix L and Table 5 for more details about these items. A CFA revealed that four items loaded onto one latent construct, $\chi^2(5) = 14.62$, *relative* $\chi^2 = 2.92$, $p = .01$, $CFI = .99$, $RMSEA = .07$ (F); $\chi^2(4) = 10.70$, *relative* $\chi^2 = 2.68$, $p = .03$, $CFI = .99$, $RMSEA = .08$ (RP). The items had good reliability ($M = 4.50$, $SD = 1.17$, $\alpha = .84$ F; $M = 4.60$, $SD = 1.23$, $\alpha = .85$ RP). The items were summed and averaged to form a scale with a higher score indicating the information was more negatively valenced (see Appendix L & Table 5).

Relationship assessment. This project measured participants assessment of their relationship in two ways (see Appendix M & Table 6).

Overall relational quality. First, I measured overall relational quality with four Likert-type items selected and adapted from Vangelisti and Caughlin (1997) with responses ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Original items were

part of a 15 item three factor structure tested with PCA using Varimax rotation. Original items were selected from the "Psychological Closeness" factor (Vangelisti & Caughlin, 1997, seven items total, eigenvalue = 6.72 in Study I and 7.62 in Study II; α = .93 in Study I, not reported in Study II). The items selected for the current project include "How much do you enjoy spending time with your [relation]?" (item loading = .82 in Study I, .80 in Study II), "How close are you to your [relation]" (item loading = .83 in Study I, .78 in Study II), "How important is your [relation's] opinion to you?" (item loading = .79 in Study I, .82 in Study II), and "How satisfied are you with your relationship with your [relation]" (item loading = .76 in Study I, .47 in Study II). [Relation] represented the specific relationship type about which participants reported (boy/girlfriend, best friend, friend, classmate/coworker, and acquaintance). Item anchors were not stated. These items were adapted to reflect the types of relationships assessed in the current study ("friend" or "partner"). Similar adapted items were also used in Checton and Greene (2012), who used five 5-point Likert type items adapted from Vangelisti and Caughlin (1997; Vangelisti et al., 2001) with responses ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items from Checton and Greene (2012) included, "I enjoy spending time with my spouse" and "This relationship is satisfying." Checton and Greene (2012) used CFA instead of PCA and found that five items loaded onto the latent construct, $\chi2(26) = 46.48$, $p = .01$; *relative* $\chi2 = 1.78$, *CFI* = .97, *RMSEA* = .07 and were reliable ($M = 4.33$, $SD = .62$, α = .82, higher scores indicated greater relational quality). Greene et al., (in press) also adapted these items and tested the measure using CFA. Greene et al.'s (in press) measure included responses ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). A sample item includes "I am close to this person." In the Greene et

al. (in press) study, four items loaded onto one latent construct in each of two sets of data, $\chi2(2)$ = 2.35, p = .31, *CFI* = .99, *RMSEA* = .03 (in relationships where participants reported on information they had not yet shared with another); $\chi2(2)$ = 4.22, p = .12, *CFI* = .99, *RMSEA* = .08 (in relationships where participants reported on information they had already shared with another) and had good reliability (*M* = 4.79, *SD* = 1.39, α = .82, undisclosed; *M* = 6.31, *SD* = .79, α = .76, disclosed; higher scores indicated greater relational quality).

The current project measured overall relational quality with four Likert-type items selected and adapted from the above sources with responses ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). One sample item from the current study included "I enjoy spending time with my friend/partner." A CFA revealed that four items loaded onto one latent construct, $\chi^2(2)$ = 4.46, *relative* χ^2 = 2.23, p = .11, *CFI* = .99, *RMSEA* = .05 (F); $\chi^2(2)$ = 4.37, *relative* χ^2 = 2.19, p = .11, *CFI* = .99, *RMSEA* = .06 (RP). The items had good reliability (*M* = 4.21, *SD* = .76, α = .82 F; *M* = 4.63, *SD* = .47, α = .72 RP). The items were averaged to form a scale with a higher score indicating perceptions of more overall relational quality.

Relational love. Second, I measured relational love with nine items selected from Rubin's (1970) Love Scale and adapted for the current study. Although the name of the scale implies a narrow focus on love, this measure actually assesses important components of relational quality of both friendships and romantic relationships such as feelings of affiliative need and willingness to help. Rubin (1970) demonstrated high internal consistency for the scale (coefficient α = .84 for females and .86 for males). Other researchers (e.g., Theiss & Nagy, 2010) demonstrated similar reliability scores (*M*

= 6.31, *SD* = 1.49, *α* = .84). Previous research (Rubin, 1970; Theiss & Nagy, 2010) used a Likert-type scale with responses ranging from 1 (*not at all true*) to 9 (*definitely true*), however, in the current study participants responded on a Likert-type scale with responses ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) to maintain consistency with other relational quality measures. One sample item included "I enjoy spending time with my friend/partner." Appendix M and Table 6 provide additional information. A CFA revealed that seven items loaded onto one latent construct, $\chi^2(9) =$ 28.08, *relative* χ^2 = 3.12, *p* = .01, *CFI* = .98, *RMSEA* = .07 (F); $\chi^2(14)$ = 43.30, *relative* χ^2 = 3.09, *p* < .001, *CFI* = .96, *RMSEA* = .09 (RP). The items had good reliability (*M* = 4.87, *SD* = 1.24, α = .87 F; *M* = 5.62, *SD* = 1.05, α = .85 RP). The items were averaged to form a scale with a higher score indicating more relational love.

  Anticipated response. This project endeavors to provide measurement for the four categories of anticipated response derived from various conceptualizations of anticipated response provided in the frameworks discussed previously (e.g., Afifi & Steuber, 2009, 2010; Altman & Taylor 1973; Checton & Greene, 2012; Derlega et al., 2002; Greene, 2009; Greene & Faulkner, 2002; Greene et al., 2009, in press; Petronio, 1991, 2002; Vangelisti & Caughlin, 1997,;Vangelisti et al., 2001). The four subtypes include support (emotional, informational, and instrumental), emotional reaction, avoidance, and reciprocity/partner disclosure. All subtypes are measured with Likert-type items with anchors 1 (*strongly disagree*) to 7 (*strongly agree*). The factor structure of the four anticipated response subtypes was tested initially in first order CFAs (described in more detail in subsections below) and then in a second order CFA. It is also important to note here the instructions that preceded these scales. In order to help participants orient to the

temporal distinctions between anticipated response and anticipated outcomes, these two

concepts were separated into two sections; one labeled "your friend/partner's initial

reactions" and one labeled "the long term effects[10] of sharing this information." The

instructions for anticipated response read "These items ask about what you think would

initially happen if you decided to share this information with your friend/partner. If you

were to share this information, how do you think your friend/partner would

immediately[11] respond?" Temporal cues were also utilized within each question stem.

Appendix N provides more details about these instructions.

Two different second order CFAs were conducted (with items individually and

composites). First, the CFA was arranged so items were assigned to their relative

subfactors, subfactors were assigned to the latent anticipated response. Four items were

assigned to emotional support, four to instrumental support, four to informational

support, four to emotional reaction, four to reciprocity, and five to avoidance. The initial

model did not fit in either sample (F, $\chi^2(269) = 1250.81$, *relative* $\chi^2 = 4.65$, $p < .001$, *CFI*

$= .84$, *RMSEA = .10*; RP, $\chi^2(269) = 977.85$, *relative* $\chi^2 = 3.64$, $p < .001$, *CFI = .85*,

RMSEA = .10). After removing one item from the emotional reaction scale (item 16),

removing one item from the informational support scale (item 8), and correlating two

items on the instrumental support scale (items 11 & 12), the RP model fit ($\chi^2(223) =$

654.01, *relative* $\chi^2 = 2.93$, $p < .001$, *CFI = .90*, *RMSEA = .08*), however, the *relative* χ^2

for the friend data still was not acceptable $\chi^2(223) = 810.51$, *relative* $\chi^2 = 3.63$, $p < .001$,

CFI = .90, *RMSEA = .08*). In order to reduce the size of the *relative* χ^2, five more pairs of

items within subscales were correlated (one additional on instrumental support, items 11

& 13, one on reciprocity, items 26 & 28, one on emotional support, items 1 & 3, and two

on avoidance, items 21 & 23, 22 & 25), $\chi^2(218) = 676.49$, *relative* $\chi^2 = 3.10$, $p < .001$,

CFI = .92, *RMSEA* = .08 (see Figures 2 & 3).

A second strategy was employed to test the second order structure of the

anticipated response subscales. After creating composites based on the single order CFAs

(reported below), the **composites** were tested in a second order factor structure. The first

model did not fit in either sample (F, $\chi^2(9) = 66.47$, *relative* $\chi^2 = 7.39$, $p = .001$, *CFI* =

.95, *RMSEA* = .13; RP, $\chi^2(9) = 29.40$, *relative* $\chi^2 = 3.27$, $p = .001$, *CFI* = .98, *RMSEA* =

.09. Correlations were added between emotional reaction and avoidance, and reciprocity

and informational support (but no other subscales). These models adequately fit the data

($\chi^2(7) = 19.50$, *relative* $\chi^2 = 2.79$, $p = .001$, *CFI* = .99, *RMSEA* = .07 F; $\chi^2(7) = 20.65$,

relative $\chi^2 = 2.95$, $p = .004$, *CFI* = .98, *RMSEA* = .09 RP[12]). The next sections detail the

results of the single order anticipated response CFAs. All anticipated response subscales

were coded to reflect higher numbers indicative of more negative anticipated responses in

order to reflect a general trend in the literature that more frequently emphasizes negative

anticipated and actual responses to disclosure.

Anticipated support. Three types of anticipated support were measured,

emotional, informational, and instrumental. Emotional support was measured with four

items. One sample item includes "My friend/partner would immediately offer emotional

support" (R). A CFA revealed that four items loaded onto one latent construct, $\chi^2(18) =$

40.66, *relative* $\chi^2 = 2.26$, $p = .002$, *CFI* = .98, *RMSEA* = .06 (F); $\chi^2(19) = 42.38$, *relative*

$\chi^2 = 2.23$, $p = .002$, *CFI* = .97, *RMSEA* = .07 (RP). The items had good reliability (*M* =

3.67, *SD* = 1.42, α = .80 F; *M* = 3.67, *SD* = 1.63, α = .85 RP) (see Table 7).

Informational support was measured with four items. One sample item includes "Initially, my friend/partner would help me look for information" (R). A CFA revealed that four items loaded onto one latent construct, $\chi^2(19) = 25.79$, *relative χ^2* = 1.36, *p* = .13, *CFI* = .99, *RMSEA* = .03 (F); $\chi^2(19) = 25.44$, *relative χ^2* = 1.34, *p* = .15, *CFI* = .99, *RMSEA* = .04 (RP). The items had good reliability (*M* = 4.17, *SD* = 1.39, α = .86 F; *M* = 4.48, *SD* = 1.39, α = .82 RP) (see Table 8).

Instrumental support was measured with three items. One sample item includes "My friend/partner would initially offer instrumental support (accompany to doctor, loan money)" (R). A CFA revealed that three items loaded onto one latent construct, $\chi^2 (13) = 28.39$, *relative χ^2* = 2.18, *p* = .008, *CFI* = .98, *RMSEA* = .05 (F); $\chi^2(13) = 23.44$, *relative χ^2* = 1.80, *p* = .12, *CFI* = .98, *RMSEA* = .05 (RP). The items had good reliability (*M* = 3.32, *SD* = 1.48, α = .78 F; *M* = 3.32, *SD* = 1.61, α = .81 RP) (see Table 9). Items were averaged for each subscale to form scales with a higher score indicating higher expectations for a <u>less</u> supportive response.

Anticipated emotional reactions. Anticipated emotional reactions were measured with four items. One sample item includes, "At first, my friend/partner would have a negative emotional reaction." A CFA revealed that four items loaded onto one latent construct, $\chi^2(26) = 64.56$, *relative χ^2* = 2.48, *p* = .001, *CFI* = .98, *RMSEA* = .06 (F); $\chi^2(26) = 71.62$, *relative χ^2* = 2.75, *p* = .001, *CFI* = .96, *RMSEA* = .08 (RP). The items had good reliability (*M* = 3.88, *SD* = 1.57, α = .89 F; *M* = 4.17, *SD* = 1.73, α = .91 RP) (see Table 10). Items were averaged to form a scale with a higher score indicating more expectations for a negative emotional response.

Anticipated avoidance. Anticipated avoidance was measured with five items. One sample item includes "At first, my friend/partner would refuse to discuss the information." A CFA revealed that five items loaded onto one latent construct, $\chi^2(25) =$ 53.20, *relative χ^2* = 2.13, *p* = .001, *CFI* = .98, *RMSEA* = .05 (F); $\chi^2(25)$ = 28.51, *relative χ^2* = 1.14, *p* = .29, *CFI* = .99, *RMSEA* = .02 (RP). The items had good reliability (*M* = 3.11, *SD* = 1.43, α = .89 F; *M* = 2.92, *SD* = 1.44, α = .86 RP) (see Table 11). Items were averaged to form a scale with higher scores indicating more anticipation of avoidant responses.

Reciprocity. Reciprocity was measured with four items. A sample item includes "Initially, my friend/partner would also share personal or private information." A CFA revealed that four items loaded onto one latent construct, $\chi^2(19)$ = 42.75, *relative χ^2* = 2.25, *p* = .001, *CFI* = .98, *RMSEA* = .06 (F); $\chi^2(19)$ = 19.64, *relative χ^2* = 1.03, *p* = .42, *CFI* = .99, *RMSEA* = .01 (RP). The items had good reliability (*M* = 3.62, *SD* = 1.39, α = .88 F; *M* = 4.01, *SD* = 1.46, α = .87 RP) (see Table 12). Items were averaged to form a scale with a higher score indicating lower expectations for reciprocity/partner disclosure.

Anticipated responsiveness. Anticipated responsiveness was measured by four Likert-type items adapted from scales assessing the responsiveness variable utilized primarily in IPMI research. Using a daily diary methodology, Laurenceau et al. (1998) measured responsiveness using three items and having participants rate the degree to which they felt accepted, understood, and cared for by their interaction partner during each social interaction. A summary variable was created using the average of these three items. In Manne et al. (2004a, 2004b) participants also rated three items with responses ranging from 1 (*not at all)* to 7 (*very much)*. These items included "To what degree did

you feel accepted by your partner?", "To what degree did you feel understood by your partner?", and "To what degree did you feel cared for by your partner during this discussion?". Laurenceau et al. (2005) also used a daily diary methodology and identical items to assess responsiveness in spousal relationships. This is the only study for which alphas are reported (Day 1 alphas for husbands and wives were .86 and .88, respectively). None of these studies report any other psychometric information on the responsiveness scale.

The current study adapted items to indicate a "before disclosure" temporal orientation. One sample item from the current study included: "I would feel accepted by my friend/partner." A CFA revealed that four items loaded onto one latent construct, $\chi^2(2) = 10.93$, *relative χ^2* = 5.47, $p = .004$, *CFI* = .99, *RMSEA* = .10 (F); $\chi^2(2) = 2.81$, *relative χ^2* = 1.41, $p = .24$, *CFI* = .99, *RMSEA* = .04 (RP). The items had good reliability ($M = 4.29$, $SD = 1.65$, $\alpha = .92$ F; $M = 4.01$, $SD = 1.46$, $\alpha = .87$ RP) (see Table 13 & Appendix O). Although the other response oriented scales are configured so that higher scores indicate more negative responses, all previous published studies utilizing the responsiveness variable use this orientation. Therefore, items were averaged to form a scale with a higher score indicating more anticipated responsiveness in order to maintain consistency with the existing literature.

Anticipated outcomes. This paper also endeavors to provide operationalization for the four categories of anticipated outcome derived from the various conceptualizations discussed in this review (e.g., Afifi & Steuber, 2009, 2010; Greene & Faulkner, 2002; Greene et al., 2009). That is, the current project does not test the three more narrow subtypes that are also present in the literature: differential treatment (see Derlega et al.,

2000), revenge (see Afifi & Steuber, defense), and boundary violations (see CPM, Petronio, 2002). The main categories (which are strongly influenced by Derlega et al. 2000's conceptualization of self-, other-, and relationship- focused reasons for and against disclosure) include anticipated discloser-, receiver-, relationship-, and other relationship-oriented outcomes of disclosure (see Appendix P). All categories were measured with Likert-type items with responses ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The factor structure of the four anticipated outcome subtypes were tested with first order CFAs and in a second order composite-based CFA. The composite CFA did not fit initially in either sample ($\chi^2(2) = 13.37$, *relative χ^2* $= 6.69$ $p = .001$, *CFI =* .98, *RMSEA = .12* F; $\chi^2(2) = 9.58$, *relative χ^2* $= 4.79$, $p = .008$, *CFI =* .99, *RMSEA = .12* RP), however, adequate fit was achieved after one correlation was added between receiver-oriented outcomes and other relationship-oriented outcomes in the friend data ($\chi^2(7) = 19.5$, *relative χ^2* $= 2.79$, $p = .001$, *CFI =* .99, *RMSEA = .07* F). The model fit in the romantic partner data when a correlation was added instead between discloser-oriented outcomes and receiver-oriented outcomes ($\chi^2(1) = 1.30$, *relative χ^2* $= 1.30$, $p = .26$, *CFI =* .99, *RMSEA = .03* RP) (see Figures 2 & 3). See Appendix N for instructions and full list of items.

Anticipated discloser-oriented outcomes. Anticipated discloser-oriented outcomes were measured with four items adapted from Derlega et al.'s (2002) reasons against disclosure (privacy and fear of rejection), Afifi and Steuber's (2010) perceived negative reactions, Afifi and Steuber's (2009) self protection motivations of risk assessment, Vangelisti et al.'s (2001) acceptance criteria for revealing secrets, and Vangelisti and Caughlin's (1997) evaluation function of secrets. One sample item includes, "In the end,

revealing the information would really harm my [friend/partner's] perception of the person I truly am." A CFA revealed that four items loaded onto one latent construct, $\chi^2(13) = 39.48$, *relative χ^2* = 3.03, *p* = .001, *CFI* = .98, *RMSEA* = .07 (F); $\chi^2(13) = 15.71$, *relative χ^2* = 1.21, *p* = .27, *CFI* = .99, *RMSEA* = .03 (RP). The items had good reliability (*M* = 3.56, *SD* = 1.70, α = .93 F; *M* = 3.74, *SD* = 1.90, α = .95 RP) (see Table 14). Items were averaged to form a scale with a higher score indicating higher expectations for a more negative discloser-oriented outcome.

     Anticipated receiver-oriented outcomes. Anticipated receiver-oriented outcomes were measured with four items adapted from Derlega et al.'s (2002) reasons against disclosure (protecting the other), Afifi and Steuber's (2009) other protection motivations of risk assessment, and Vangelisti and Caughlin's (1997) evaluation function of secrets. One sample item includes "It would ultimately hurt my [friend/partner's] feelings if s/he knew the information." A CFA revealed that three items loaded onto one latent construct, $\chi^2(13) = 30.08$, *relative χ^2* = 2.31, *p* = .01, *CFI* = .98, *RMSEA* = .05 (F); $\chi^2(13) = 16.30$, *relative χ^2* = 5.43, *p* = .23, *CFI* = .99, *RMSEA* = .03 (RP). The items had good reliability (*M* = 3.53, *SD* = 1.08, α = .71 F; *M* = 3.98, *SD* = 1.26, α = .66 RP) (see Table 15). Items were averaged to form a scale with a higher score indicating expectations for more negative outcomes for the receiver.

     Anticipated relationship-oriented outcomes. Anticipated relationship-oriented outcomes were measured with four items adapted from Derlega et al.'s (2002) reasons for and against disclosure (fear of rejection, test other's reaction), and Afifi and Steuber's (2009) relationship protection motivations of risk assessment. A sample item includes "Telling the information to my [friend/partner] would ultimately hurt our relationship." A

CFA revealed that four items loaded onto one latent construct, $\chi^2(2) = 8.33$, *relative* $\chi^2 =$ 4.17, $p = .02$, *CFI* = .99, *RMSEA* = .09 (F); $\chi^2(2) = 6.90$, *relative* $\chi^2 = 3.45$, $p = .03$, *CFI* = .99, *RMSEA* = .10 (RP). The items had good reliability ($M = 2.93$, $SD = 1.72$, $\alpha = .93$ F; $M = 3.34$, $SD = 1.92$, $\alpha = .94$ RP) (see Table 16). Items were averaged to form a scale with a higher score indicating expectations for more negative outcomes for the relationship.

Anticipated other relationship-oriented outcomes. Anticipated other relationship-oriented outcomes were measured with four items adapted from Vangelisti and Caughlin's (1997) maintenance function of secrets. One sample item includes "Telling the information to my [friend/partner] would ultimately hurt my relationship with others." A CFA revealed that four items loaded onto one latent construct, $\chi^2(2) = 7.55$, *relative* χ^2 = 3.78, $p = .02$, *CFI* = .99, *RMSEA* = .08 (F); $\chi^2(2) = 2.90$, *relative* $\chi^2 = 2.90$, $p = .09$, *CFI* = .99, *RMSEA* = .08 (RP). The items had good reliability ($M = 2.49$, $SD = 1.34$, $\alpha = .86$ F; $M = 2.19$, $SD = 1.38$, $\alpha = .91$ RP) (see Table 17). Items were averaged to form a scale with higher scores indicating expectations for more negative outcomes for the discloser's relationship with other people (people other than the receiver).

Efficacy. This project measured two types of efficacy (see Appendices Q & R).

General communication efficacy. Participants' perceptions of their general ability to communicate about potentially difficult issues with their friend/partner was measured by four Likert-type items ranging from 1 (*strongly disagree)* to 5 (*strongly agree)* selected from Makoul and Roloff (1998)'s confrontation self-efficacy measure and Steuber and Solomon's (2011) communication efficacy measure. Items were adapted for the relationship types in the current study. Original items in Makoul and Roloff (1998)

include: "It would be very easy for me to initiate a discussion with my partner about something that he or she did that irritated me" (item loading = .72); "I would have no trouble expressing my feelings about our relationship" (item loading = .72); "It would be very easy for me to ask my partner to change his or her behavior" (item loading = .84); and "I would have no trouble reminding my partner that something he or she did irritated* me" (item loading = .74, the current project utilized Steuber and Solomon's item in its place used said "bothered" instead of "irritated"). These items were part of a two factor structure tested using principal component analysis including confrontational efficacy (eigenvalue = 4.16, α = .87) and outcome expectations (eigenvalue = 2.10, α = .75). Makoul and Roloff's original six item composite reported on the extent to which participants agreed that confronting their partner would be "very easy" or "no trouble" with Likert-type items ranging from 1 (*very strongly disagree)* to 6 (*very strongly agree).*

Steuber and Solomon (2011) adjusted items from Makoul and Roloff's (1998) measure of confrontation self-efficacy to measure *communication efficacy* with five items ranging from 1 (*very strongly disagree)* to 6 (*very strongly agree).* Sample items included "It would be very easy for me to tell this person about things he or she did that concerned me related to my infertility" and "It would be very easy for me to ask this person to change his or her behavior in reference to my infertility" (α = .91).

One sample item from the current study includes "I would have no trouble reminding my friend/partner that something he or she did bothered me." Although previous studies assessed this type of efficacy using a scale from 1 – 6, the current project intentionally assessed general communication efficacy on a scale from 1 – 5 to retain consistency with disclosure efficacy (which has been measured more frequently in

disclosure decision-making research). A CFA revealed that four items loaded onto one latent construct, $\chi^2(13) = 37.00$, *relative* $\chi^2 = 2.84$, $p = .001$, *CFI* = .98, *RMSEA* = .07 (F); $\chi^2(18) = 23.97$, *relative* $\chi^2 = 1.33$, $p = .16$, *CFI* = .99, *RMSEA* = .04 (RP). The items had good reliability ($M = 3.56$, $SD = .82$, $\alpha = .84$ F; $M = 3.81$, $SD = .85$, $\alpha = .84$ RP) (see Table 18 & Appendix Q). Items were averaged to form a scale with higher scores indicating more general communication efficacy.

Disclosure efficacy. Participants' perceptions of their ability to disclose this personal information to this person were measured with two Likert-type items adapted from Derlega et al. (2002) and two Likert-type items selected from Checton and Greene (2012). The two items adapted from Derlega et al. (2002) were selected from the communication difficulties scale of the reasons for non-disclosure. Original items read, "I would get tongue-tied when I tried to say what happened" and "I don't know how to put into words what happened to me." Alpha reliabilities for the original full scale (four items) were good (Friend, $\alpha = .87$; Intimate Partner, $\alpha = .88$; Parent, $\alpha = .83$). The remaining two items were selected and adapted from Checton and Greene (in press) ($\chi^2(26) = 44.54$, $p = .01$; *relative* $\chi2 = 1.71$, *CFI* = .98, *RMSEA* = .06, $\alpha = .84$ for full four item scale).

All four items in the current study were measured with responses ranging from 1 (*strongly disagree)* to 5 (*strongly agree)*. A sample item includes "I would get tongue-tied if I tried to share this information with my [friend/partner]" (R). A CFA revealed that three items loaded onto one latent construct, $\chi^2(13) = 34.45$, *relative* $\chi^2 = 2.65$, $p = .001$, *CFI* = .98, *RMSEA* = .06 (F); $\chi^2(13) = 16.84$, *relative* $\chi^2 = 1.30$, $p = .21$, *CFI* = .99, *RMSEA* = .03 (RP). The items had good reliability ($M = 3.13$, $SD = 1.15$, $\alpha = .91$ F; $M =$

2.88, *SD* = 1.15, α = .90 RP) (see Table 19 & Appendix R). Items were averaged to form

a scale with higher scores indicating more disclosure efficacy.

     Likelihood of disclosure. Participants' likelihood of sharing the specific

information in the near future with this person was measured with four Likert-type items

adapted from Vangelisti et al. (2001), Caughlin et al. (2005), and Greene et al. (in press)

with responses ranging from 1 (*strongly disagree)* to 5 (*strongly agree)*. Two of these

items were used in Greene et al. (in press) and demonstrated good reliability (α = .86).

One sample item included "I doubt that I will share this information with my

[friend/partner] in the near future" (R). A CFA revealed that four items loaded onto one

latent construct, $\chi^2(18) = 44.89$, *relative* χ^2 2.49, *p* = .001, *CFI* = .99, *RMSEA* = .06 (F);

$\chi^2(12) = 8.60$, *relative* χ^2 = .72, *p* = .73, *CFI* = .99, *RMSEA* = .03 (RP). The items had

good reliability (*M* = 3.16, *SD* = 1.08, α = .91 F; *M* = 3.21, *SD* = 1.28, α = .95 RP) (see

Table 20 & Appendix S). Items were averaged to form a scale with higher scores

indicating higher likelihood of disclosure of the specific information to the specific

person.

     Self-concealment. The extent to which individuals conceal personal or private

information was measured with Larson and Chastain's (1990) Self-Concealment Scale

consisting of 10 Likert-type items (α = .83, means for items ranged from 2.33 to 3.00

with an overall summed mean of 25.92) with responses ranging from 1 (*strongly*

disagree) to 5 (*strongly agree*). A sample item includes "I have an important secret that I

haven't shared with anyone." A CFA revealed that eight items loaded onto one latent

construct, $\chi^2(20) = 48.09$, *relative* χ^2 = 2.40, *p* = .001, *CFI* = .96, *RMSEA* = .06 (F); $\chi^2(20)$

= 47.64, *relative* χ^2 = 2.38, *p* = .001, *CFI* = .95, *RMSEA* = .07 (RP). The items had good

reliability ($M = 2.98$, $SD = .74$, $\alpha = .80$ F; $M = 2.82$, $SD = .80$, $\alpha = .83$ RP) (see Table 21 & Appendix T). Items were averaged to form a scale with higher scores indicating more self-concealment (or more predisposition to keep information private/concealed).

Study I Summary

One goal of Study I was to clarify the conceptualization and operationalization of anticipated reaction. The current project endeavored to identify dimensions of anticipated response and anticipated outcome that are conceptually separate and can be used in future research for a variety of purposes. Study I seeks to ascertain the dimensional structure of an anticipated response variable and an outcome variable (each comprised of multiple subscales) that may be used in information management research, keeping in mind that a more parsimonious alternative to the four category anticipated response structure may be one finding. This study also aims to assess the degree to which personality traits may affect anticipated response and outcome. Finally, Study I will empirically validate measures created by testing the associations between the anticipated response measures created in this project and variables with which anticipated response has been associated in past research (e.g., relational quality, efficacy) for validation purposes. Study I results are described next.

Study I Results

Tables 2-3 present the zero-order correlation matrices for all Study I variables. Data were analyzed by correlations and maximum likelihood structural equation modeling (AMOS 18.0). Results are presented by research question and hypothesis next.

Dimensional structure of anticipated response. The first research question asked if the four category dimensional structure represented anticipated response. Both first and second order CFAs performed on the four categories of anticipated response (emotional reaction, avoidance, reciprocity, and support - emotional, informational, and instrumental) collectively referred to hereafter as the *Disclosure Anticipated Response Scale,* DARS, suggest that the dimensional structure presented in this project does adequately represent anticipated response. Both the fit statistics and the reliabilities are strong for all DARS subscales in both sets of data, providing a replication. For first order CFAs in the friend data, CFIs for all DARS subscales were .98 or above, RMSEAs were .06 or below. For first order CFAs in the romantic partner data, CFIs for most DARS scales were .98 or above (emotional reaction was .96, emotional support was .97), and RMSEAs were .08 or below. Cronbach's alphas ranged from .78 to .90 in the friend data and from .81 to .91 in the romantic partner data and reliabilities were relatively consistent across the two sets of data.

Fit statistics for the second order factor structure were good and also suggest that the dimension structure of the DARS represents anticipated response. The second order factor structure fit similarly in the Friend data and the Romantic Partner data, both demonstrating fit at the highest standards (CFI > .95, RMSEA < .08). Although the *p* value was significant in both models, this is not surprising because of the sample sizes

and is acceptable because the relative χ^2 was less than 3. Beyond that, the DARS measure face validity is good, has been confirmed by disclosure experts, and is consistent with prior research reviewed. Details of related psychometric analyses are reported in the measures section. In sum, RQ1 indicated that the measures created in this project do represent the dimensional structure of anticipated response as proposed.

As expected, the individual DARS subscales are correlated with each other in the expected direction. The strongest correlations were between anticipated instrumental support and anticipated emotional support ($r = .83$ RP, $p < .001$; $r = .81$ F, $p < .001$), anticipated emotional reaction and anticipated emotional support($r = .81$ RP, $p < .001$; $r = .76$ F, $p < .001$), and anticipated emotional reaction and anticipated instrumental support ($r = .75$ RP, $p < .001$; $r = .71$ F, $p < .001$). Correlations were also strong between anticipated instrumental support and anticipated informational support ($r = .55$ RP, $p < .001$; $r = .58$ F, $p < .001$), anticipated emotional support and anticipated informational support ($r = .57$ RP, $p < .001$; $r = .58$ F, $p < .001$), anticipated emotional reaction and avoidance ($r = .49$ RP, $p < .001$; $r = .56$ F, $p < .001$), anticipated emotional support and reciprocity ($r = .50$ RP, $p < .001$; $r = .53$ F, $p < .001$), and anticipated emotional reaction and reciprocity ($r = .52$ RP, $p < .001$; $r = .43$ F, $p < .001$). Correlations were weakest between anticipated avoidance and anticipated informational support ($r = .20$ RP, $p < .001$; $r = .23$ F, $p < .001$), and anticipated reciprocity and anticipated avoidance ($r = .24$ RP, $p < .001$; $r = .26$ F, $p < .001$) (see Tables 2 & 3).

Associations between anticipated response dimensions and anticipated responsiveness. The second research question asked about the association between anticipated responsiveness and the four categories of anticipated response. Correlations

between anticipated responsiveness and the DARS subscales are strong ($p < .001$ for all

correlations in both friend, F, and romantic partner, RP, data) and in the expected

directions. That is, these correlations are inverse, however anticipated responsiveness was

coded as higher numbers indicating more responsiveness, to retain consistency with

previous research, and anticipated response was coded as higher numbers indicated more

negative anticipated responses, to reflect the general theme in the information

management literature (see Tables 2 & 3). When people expected their friends/partners to

be more responsive they also expected more emotionally ($r = -.75$ RP, $p < .001$; $r = -.72$

F, $p < .001$), informationally ($r = -.51$ RP, $p < .001$; $r = -.49$ F, $p < .001$), and

instrumentally ($r = -.75$ RP, $p < .001$; $r = -.67$, $p < .001$) supportive responses.

Responsiveness was also correlated with more positive emotional reactions ($r = -.74$ RP,

$p < .001$; $r = -.63$ F, $p < .001$), less avoidance ($r = -.36$ RP, $p < .001$; $r = -.34$ F, $p <$

.001), and more reciprocity ($r = -.55$ RP, $p < .001$; $r = -.54$ F, $p < .001$). In sum, findings

for RQ2 indicated strong associations between responsiveness and the DARS subscales

such that more positive anticipated responses were correlated with more responsiveness.

Emotional support, instrumental support, and emotional reaction were most

strongly associated with responsiveness, at similar strengths across and between sets of

data (see Tables 2 & 3). That is, the strength of the correlation between emotional support

and responsiveness, for example, is similar in both the romantic partner and the friend

sets of data (-.75 and -.72), as well as between responsiveness and emotional support,

instrumental support and emotional reaction in the romantic partner data (-.75, -.75, -.74),

and in the friend data (-.72, -. 67, -.63). Reciprocity was not as strongly correlated with

responsiveness, but the strength of correlation was similar across sets of data (-.55 RP, -

.54 F). The correlations between responsiveness and avoidance were the weakest, but still

consistent across sets of data (-.36 RP, -.34 F). Together, these results indicate that the

DARS subscales are consistently related to responsiveness in a manner that is consistent

with theory and prior research. These associations may have implications for the

usefulness of anticipated responsiveness in disclosure decision-making process model

research, and these are explored in the overall discussion.

Dimensional structure of anticipated outcome. The fourth research question

asked about (a) the dimensional structure of anticipated disclosure outcome, and (b) if

anticipated outcome is separate from anticipated response. Both first and second order

CFAs conducted on the four categories of anticipated outcome suggest that the

dimensional structure developed in this project adequately represents anticipated outcome

(hereafter referred to as the *Disclosure Anticipated Outcome Scale*, DAOS). Both the fit

statistics and the reliabilities are strong for three of four categories in both sets of data.

Similar to the DARS scales, the DOAS subscales (discloser-, receiver-, relationship-

oriented outcomes, as well as other relationship-oriented outcomes) had good fit statistics

(CFI > .95, RMSEA < .08), relative χ^2 less than three, although χ^2 was significant, likely

due to the sample sizes. With the exception of receiver-oriented outcomes (only three

items were retained, and the scale was modified for future research), the DAOS measure

face validity is good, has been confirmed by disclosure experts, and is consistent with

prior research. Details of other psychometric analyses were reported in the measures

section. In sum, RQ4 indicated that the measures created in this project do represent the

dimensional structure of anticipated outcome, although the receiver-oriented outcomes

subscale needs further refinement.

Dimensional integrity of anticipated response and outcome. This project also
seeks to verify empirically that anticipated response and anticipated outcome are two
separate latent concepts (see Figures 2-3). The project utilized SEM to determine if the
40 items (roughly 4 items per factor, six factors for anticipated response including the
three types of support, four factors for anticipated outcome) were empirically unique to
their ten respective factors. This CFA was arranged so that of the 40 items, four loaded
onto emotional support, four onto instrumental support, three onto informational support,
four onto emotional reaction, four onto reciprocity, and five onto avoidance (anticipated
response); four each loaded onto discloser-, receiver-, relationship-, and other
relationship- outcomes (anticipated outcome). Finally, the anticipated response latent
variable was correlated with the anticipated outcome latent. This model did not fit in
either romantic partner ($\chi^2(768) = 2033.64$, *relative* $\chi^2 = 2.64$, $p > .001$, *CFI* = 0.86,
RMSEA = 0.08) or the friend data ($\chi^2(768) = 2508.37$, *relative* $\chi^2 = 3.27$, $p > .001$, *CFI* =
0.85, *RMSEA* = 0.08). After deleting three items (one item based on non-significant
factor loading, item 3 from anticipated receiver-oriented outcomes, see Table 15, three
items based on modification indices, item 3 from anticipated informational support, F,
see Table 8, item 3 from anticipated instrumental support, see Table 9, and item 3 from
anticipated reciprocity, see Table 12), and adding five correlations between items on the
same scale (between items 1 & 2, 2 & 4 on anticipated emotional reaction, F; between
items 1 & 3, 2 & 4 on anticipated emotional reaction, RP, see Table 10; between items 2
& 4, 3 & 5 on anticipated avoidance, F; between items 2 & 4 on anticipated avoidance,
RP, see Table 11; between items 1 & 3 on anticipated emotional support, F, see Table 7;
between items 1 & 2 on anticipated instrumental avoidance, RP, see Table 9; between

items 1 & 3 on anticipated relationship-oriented outcomes, RP, see Table 16), acceptable

fit statistics for the 37 item model were achieved in both the romantic partner (χ^2(686) =

1558.66, *relative* χ^2 = 2.27, *p* > .001, *CFI* = 0.90, *RMSEA* = 0.07) and the friend (χ^2(613)

= 1691.60, *relative* χ^2 = 2.76, *p* > .001, *CFI* = 0.90, *RMSEA* = 0.07) sets of data. These

results generally confirm RQ4, and the model representing the anticipated response and

anticipated outcome scales created in this project was consistent with the data. Further,

these results generally confirm that anticipated response and anticipated outcome as

measured by the DARS and DAOS were separate, yet correlated, constructs.

Figures 2 and 3 present the final DARS and DAOS. The data are consistent with a

second-order factor model, confirming that the anticipated response and anticipated

outcome scales can be measured as conceptualized. These results suggest that the overall

DARS and DAOS are sufficiently reliable, and the ten subscales can also be reasonably

considered to be subcomponents of the overall scales.

Anticipated response as related to key components in previous research. The

third research question asked if the anticipated response measures relate to key outcomes

in the same ways as has been demonstrated in previous research. According to previous

research (e.g., Afifi & Steuber, 2009, 2010; Greene, 2009; Greene et al., in press),

anticipated response should be related to relational quality, likelihood of disclosure (to a

particular recipient), efficacy, and information valence. These associations were tested

with correlations and are described next.

Relationship assessment. First, this section describes the associations between

assessments of the relationship between the discloser and the receiver and the DARS

subscales. Relational quality was measured with two different scales in the current

project, an overall measure of relational quality and a measure adapted from Rubin's

Love scale.

   Relational quality. Emotional support ($r = -.32$, $p < .001$ F; $r = -.20$, $p < .001$

RP), instrumental support ($r = -.39$, $p < .001$ F; $r = -.20$, $p < .001$ RP), and avoidance (r

$= -.25$, $p < .001$ F; $r = -.14$, $p < .01$ RP) were significantly associated with overall

relational quality in both sets of data in the expected direction (relational quality is coded

such that higher numbers indicate more quality, anticipated response is coded such that

higher numbers indicate anticipation of more negative responses). That is, when

participants perceived they were closer to their friend or partner, they were more likely to

anticipate more emotionally and instrumentally supportive, and less avoidant responses.

Informational support ($r = -.23$, $p < .001$ F; $r = -.01$, $p > .05$ RP), emotional reaction ($r =$

$-.23$ F; $r = -.12$, $p < .05$ RP), and reciprocity ($r = -.15$, $p < .01$ F; $r = -.07$, $p > .05$ RP)

were only significantly associated with overall relational quality in the friend data.

Specifically, when participants perceived they were closer to their friend, they were more

likely to anticipate more informationally supportive responses, more positive emotional

reactions, and more reciprocal sharing. In sum, the overall relational quality measure was

significantly correlated with all the DARS subscales in at least one set of data (friend) in

the expected direction. In general, more relational quality was associated with more

positive anticipated responses.

   Relational love. The measure of relationship assessment based on Rubin's Love

scale was significantly related to several anticipated response subscales in the expected

direction (more relational love associated with anticipated responses that are less

negative). Relational love was associated with instrumental support ($r = -.29$, $p < .001$ F;

$r = -.17, p < .01$ RP) in both sets of data. Relational love was significantly associated

with emotional support ($r = -.28, p < .001$ F; $r = -.13, p < .05$ RP), informational support

($r = -.21, p < .001$ F; $r = -.07, p > .05$ RP), emotional reaction ($r = -.13, p < .01$ F; $r = -.04, p > .05$ RP), as well as reciprocity ($r = -.25, p < .001$ F; $r = -.07, p > .05$ RP) in the

friend data only. Avoidance ($r = -.08, p > .05$ F; $r = -.12, p < .05$ RP) was not

significantly associated with love/relational quality in either set of data.

In sum, relational love was significantly correlated with five of six DARS

subscales in at least one set of data (friend) in the expected direction; in general, more

love based relational quality was associated with more positive anticipated responses.

Further, both measures of relational quality were significantly associated with

instrumental support in both sets of data. Finally, in general, there were more significant

associations between the DARS subscales and the overall measure of relational quality

than between the DARS subscales and the love based measure of relational quality.

Information valence. This section will describe associations between information

valence and the DARS subscales. All associations were in the expected direction

(information valence is coded such that higher numbers indicate more negative

perception of information, anticipated response is coded such that higher numbers

indicate anticipation of more negative responses). Information valence was significantly

associated with informational support ($r = -.16, p > .05$ F; $r = .16, p < .01$ RP) in the

romantic partner dataset only. Information valence was not significantly associated with

any of the remaining DARS subscales: emotional ($r = -.02, p > .05$ F; $r = .05, p > .05$

RP), or instrumental support ($r = .01, p > .05$ F; $r = .11, p > .05$ RP), emotional reaction

($r = .09, p > .05$ F; $r = .12, p < .05$ RP), avoidance ($r = -.01, p > .05$ F; $r = .06, p > .05$

RP), or reciprocity ($r = -.05$, $p > .05$ F; $r = .08$, $p > .05$ RP). Thus, the associations between information valence and anticipated response were not as expected. However, the study was designed so that individuals were asked to consider information they perceived as "somewhat negative," which may have truncated the variance of information valence and affected these associations.

Efficacy. This section describes the associations between the DARS subscales and efficacy. The current project measured two different kinds of efficacy to reflect the different ways efficacy previous research has assessed efficacy. The two types of efficacy are general communication efficacy (not specific to any topic or person) and disclosure efficacy (confidence in communicating the specific information to the specific friend or romantic partner). Both types of efficacy were coded such that higher numbers indicate more efficacy and anticipated response was coded such that higher numbers indicate anticipation of more negative responses.

Disclosure efficacy. Disclosure efficacy was significantly associated with emotional ($r = -.23$, $p < .001$ F; $r = -.32$, $p < .001$ RP) and instrumental support ($r = -.25$, $p < .001$ F; $r = -.34$, $p < .001$ RP), emotional reaction ($r = -.31$, $p < .001$ F; $r = -.48$, $p < .001$ RP), reciprocity ($r = -.16$ F, $p < .01$; $r = -.27$, $p < .001$ RP), and avoidance ($r = -.36$, $p < .001$ F; $r = -.24$, $p < .001$ RP) in the expected direction in both sets of data. Disclosure efficacy was not significantly associated with informational support ($r = -.11$, $p < .05$ F; $r = -.08$, $p < .05$ RP) in either set of data. Thus, disclosure efficacy was significantly associated with five of six DARS subscales (more efficacy was associated with expectation of more positive responses), and in the expected direction.

General communication efficacy. General communication efficacy was significantly associated with avoidance ($r = -.05$, $p > .05$ F; $r = -.16$, $p < .01$ RP) in the expected direction in the romantic partner data only. General communication efficacy was not significantly associated with any of the remaining DARS subscales: emotional ($r = -.09$, $p > .05$ F; $r = -.07$, $p > .05$ RP), informational ($r = -.07$, $p > .05$ F; $r = .02$, $p > .05$ RP), or instrumental support ($r = -.06$, $p > .05$ F; $r = -.04$, $p > .05$ RP), emotional reaction ($r = -.02$, $p > .05$ F; $r = -.02$, $p > .05$ RP), or reciprocity ($r = -.13$, $p < .05$ F; $r = -.01$, $p > .05$ RP). Thus, general communication efficacy was only significantly associated with one DARS subscale (avoidance) and only in one set of data (romantic partner). Overall, disclosure efficacy more frequently associated with anticipated response than general communication efficacy.

Likelihood of disclosure. The next section describes the associations between the likelihood of disclosing the information (that disclosers have not yet shared) to the particular person. Likelihood of disclosure was coded such that higher numbers indicate more participant intentions to share the specific information with the specific person, anticipated response is coded such that higher numbers indicate anticipation of more negative responses. Likelihood of disclosure was significantly associated with all the DARS subscales in both sets of data: emotional ($r = -.41$ F; $r = -.58$ RP), informational ($r = -.29$ F; $r = -.33$ RP), and instrumental support ($r = -.44$ F; $r = -.59$ RP), emotional reaction ($r = -.34$ F; $r = -.58$ RP), avoidance ($r = -.27$ F; $r = -.36$ RP), and reciprocity ($r = -.31$ F; $r = -.46$ RP). All associations are significant at the $p < .001$ level and in expected direction (anticipation of more negative responses was associated with less likelihood of disclosure).

Summary. This concludes the sections reporting correlations between the DARS subscales and components present in other disclosure decision-making research. These results demonstrate support for the four research questions posed in Study I. First, the four category dimensional structure adequately represented anticipated response. Second, the DARS subscales were significantly associated with responsiveness in the expected directions. Third, the DARS subscales related to key disclosure components in expected ways. Fourth, the four category dimensional structure adequately represented anticipated outcome, and anticipated outcome was separate from anticipated response. The next section discusses the final two hypotheses exploring the associations between the DARS and DAOS and personality traits.

Anticipated response and outcome as related to self-concealment. The first two hypotheses suggested that individuals who are more likely to conceal personal/private information are more likely to perceive the potential responses (as measured by the DARS) and outcomes (as measured by the DAOS) of their disclosure as more negative (see Tables 2 & 3). Many of the categories of anticipated response were significantly associated with self-concealment in the expected direction (variables were coded such that higher numbers indicate more self-concealment and more anticipation of negative responses), however, in the romantic partner data only. People who were more likely to conceal personal/private information were also more likely to anticipate less emotional support ($r = .01$, $p > .05$ F; $r = .21$, $p < .001$ RP), less instrumental support ($r = -.07$, $p > .05$ F; $r = .19$, $p < .001$ RP), more avoidance ($r = .12$, $p > .05$ F; $r = .18$, $p < .001$ RP), and more negative emotional reactions ($r = .05$, $p > .05$ F; $r = .19$; $p < .001$ RP) from their <u>romantic partners</u> but not their friends. Self-concealment was not significantly

associated with informational support ($r = .02$, $p > .05$ F; $r = .01$; $p > .05$ RP), or reciprocity ($r = .12$, $p > .05$ F; $r = .10$, $p > .05$ RP) in either set of data.

Those predisposed to conceal also anticipated more negative outcomes for themselves (discloser-oriented outcomes, $r = .16$, $p < .01$ F; $r = .35$, $p < .001$ RP) and for their relationships with others (other relationship-oriented outcomes, $r = .22$, $p < .001$ F; $r = .25$, $p < .001$ RP), as well as more negative outcomes for their romantic partner (receiver-oriented outcomes, $r = .11$, $p > .05$ F; $r = .29$, $p < .001$ RP), and more negative outcomes for their relationship with their romantic partner (relationship-oriented outcomes, $r = .08$, $p > .05$ F; $r = .30$, $p < .001$ RP). Therefore, there was moderate support for H1 in the romantic partner data, moderate support for H2 in the friend data, and full support for H2 in the romantic partner data. The next section explores the broad implications of Study I and introduces Study II. These results are explored in greater detail in the overall discussion, which incorporates discussion of both Studies I and II because many of the analyses undertaken in both studies are for the purpose of replication.

Initial Discussion

In general, Study I results support the validity of the dimensional structures of the DARS and the DAOS. The reliability of all DARS and DAOS subscales was above the acceptable level of .70 (Nunnally, 1978), with the exception of the DAOS receiver-oriented outcomes scale in the romantic partner data. CFA confirmed good fit between the DARS, and DAOS subscales in both the romantic partner and friend data.

The associations between the DARS subscales and key disclosure components demonstrate acceptable convergent validity. To establish convergent validity, the project expected that the DARS subscales would be significantly associated with disclosure and intimacy process components such as relational quality, information valence, efficacy, and likelihood of disclosure. Results indicated that most of the DARS subscales were significantly associated with at least half of the disclosure measures in both friend and romantic partner data. Some individual DARS subscales (emotional support, instrumental support, and reciprocity) were associated with most disclosure components in both friend and romantic partner data. Overall, the results demonstrated initial evidence for DARS subscales' convergent validity, however, validity should be further developed in subsequent studies (and is one of the goals of Study II).

Associations between DARS subscales and information valence were the least consistent with prior research. One explanation offered for this phenomenon was the design of Study I potentially truncating the variance in information valence (because participants were asked to think of information they considered "somewhat negative"). Asking participants to consider information that is "somewhat negative" was an intentional design feature intended to encourage participants to think about disclosure

decisions surrounding information that may be more salient to anticipated response. Therefore, alteration of the design is not ideal. Instead, Study II will consider alternative measures of information assessment.

The project also anticipated significant associations between DARS and DAOS subscales and a personality trait associated with disclosure, self-concealment. Results indicated that most of the DARS and DAOS subscales were significantly associated with self-concealment in the romantic partner data. Associations between the DARS subscales and disclosure and personality components were sometimes inconsistent between the different relationship types, specifically friend and romantic partner. Not only were several associations significant in one set of data (romantic partner) but not in another (e.g., disclosure efficacy, self-concealment in friend data), but the models generally fit the romantic partner data better. Research often attempts to examine disclosure patterns or decisions across different types of relationships with limited success. One issue lies in the assumption that all individuals have a certain type of relationship with their mother, best friend, or partner (e.g., assume close relationship with a mother, simply because she is the mother). In disclosure in general, with few marked exceptions, individuals do not often willingly share personal and or private information with individuals not considered "close" (examples of exceptions include medical professionals and the "stranger on the train" phenomenon, see Thibaut & Kelley, 1959; cited in Altman & Taylor, 1973). Instead of "relational quality" or "closeness," researchers might consider features of different types of relationships that may affect the process of disclosure and the formation of anticipated response. One of these features may be the uncertainty or stability of the relationship (see Relational Turbulence Model, Solomon & Knobloch, 2004). Individuals

may have many friends but only one romantic partner (in the current study partnership was defined as a committed relationship of at least three months exclusively with one person), and subsequently the consequences of disclosure of personal/private and negative information to a romantic partner may be more salient. Future research should continue to explore measurable facets of different types of relationships that may affect communicative processes instead of assuming homogeneity within certain relationship types. Specifically, Study II introduces the relationship uncertainty variable and explores the potential effects of this variable on anticipated response to disclosure of personal/private information. Overall Study II goals are described next.

Study II will continue to validate the DARS measures created in Study I. Study II will also explore alternative methods of relational evaluation by adding measures of relationship uncertainty and other variables (e.g., a more sophisticated assessment of information and past responses) that may affect not only the process of disclosure but also the formation of anticipated response.

Chapter 4

Study II

The first study in this project proposed conceptual and measurement structures for the related concepts of anticipated response and anticipated outcome to disclosure. The overall goal of Study II is to continue to develop the conceptualization and operationalization of anticipated response. Study II seeks to confirm the dimensional structure the anticipated response variable proposed and tested in Study I (comprised of multiple subscales) that may be useful to continue to move information management research forward. Finally, because anticipated response variables have traditionally played an important role in disclosure decision-making, Study II also aims to identify variables that might predict anticipated response. These variables include information attributes (e.g., information valence, stigma, identity threat), relationship attributes (e.g., relational quality, relationship uncertainty), and response attributes (e.g., prior responsiveness of the receiver to the discloser, prior responsiveness of the receiver to other individuals' personal/private disclosures, and prior responsiveness to this information from other people).

Introduction

Scholars continue build models, theories, and frameworks that explain and/or predict individuals' management of their personal/private information. Many of these efforts have been directed at creating theory about the management of personal, private, or secret information. More recently, scholars have endeavored to create models that explicate the process of decision-making in information management (e.g., to disclose or continue to conceal). Four existing models specifically relate to disclosing or concealing

personal, private, or secret information and also explicate variables, paths, and testable

hypotheses. These models are the Model of Disclosure Decision Making in a Single

Episode (Greene et al., 2006), the Cycle of Concealment Model (Afifi & Steuber, 2010),

Disclosure Decision-Making Model (Greene, 2009), and the Revelation Risk Model

(Afifi & Steuber, 2009). One variable that is conceptually included but measured

differently across all four models is anticipated response.

As the initial literature review illustrates, although the variable "anticipated

response" appears in all four models, it is conceptualized and operationalized in different

ways. Despite these different conceptualizations, "anticipated response" was consistently

related to the same types of key components (i.e., closeness, efficacy, likelihood of

disclosure). Additionally, the concept of anticipate response, although different in each

model, was a critical factor in the disclosure decision-making process.

The goal of the first study in this project was to clearly and consistently categorize

and operationalize the concept of anticipated response. A systematic review of the

literature identified four subtypes of anticipated response: support (emotional support,

informational support, instrumental support), emotional reaction, avoidance, and

reciprocity. Study I developed measures for the four subtypes and validated these

measures by examining their associations with components frequently identified in

existing disclosure research.

Developing the conceptualization of anticipated response is a significant

contribution to disclosure theory specifically, and to information management more

broadly. What is still unknown at this point are the factors that influence individuals'

formation of an anticipated response to disclosure. As Greene et al. (2009, in press)

demonstrated, anticipated response is a complex variable (e.g., complex relations with other variables), and scholars do not yet fully understand what factors influence the formation of anticipated response. Understanding how individuals form their perceptions of anticipated response will provide further insight into the information management process, especially the disclosure decision-making process.

Study II endeavors to further clarify the concept of anticipated response by a) continuing to validate the measures developed in Study I, and b) identifying and testing factors that might predict anticipated response. Study II identifies three factors that might affect the formation of anticipated response: information attributes (e.g., information valence, stigma, identity threat), relationship attributes (e.g., relational quality, relationship uncertainty), and response attributes (e.g., prior responsiveness of the receiver to the discloser's personal/private information, prior responsiveness of the receiver to other individuals' personal/private disclosures, prior responsiveness to this information from other people). The Study II rationale will review previous research related to the three attributes and offer hypotheses about how these attributes are related to anticipated response to disclosure.

Information Attributes Affecting Formation of Anticipated Response

The first factor that may affect the formation of anticipated response is how the potential discloser assesses the information. Research has conceptualized information assessment in multiple ways, most often as information valence (e.g., Afifi & Steuber, 2009; Caughlin et al., 2005; Vangelisti & Caughlin, 1997; Vangelisti et al., 2001), but also as the extent to which the information is identity threatening (e.g., Afifi & Guerrero, 2000; Vangelisti & Caughlin, 1997; Vangelisti et al., 2001) and the extent to which the discloser

perceives that others stigmatize the information (e.g., Greene, 2009; Greene et al., in press). These variables are interrelated; that is, negatively valenced information, particularly if also identity threatening, may be considered especially stigmatized (see Greene, 2009; cf. Kelly, 2002 and other secrets research). In general, individuals are less likely to disclose information that is negatively valenced, stigmatized, or poses a threat to their identity. Therefore, the project similarly proposes that assessments of information that are more negative are associated with appraisals of anticipated response that are more negative.

In sum, Study II proposes that as individuals process (and assess) their personal/private information and receivers' potential response to that disclosure, when disclosers perceive information as more negative, stigmatized, or identity threatening then they are more likely to anticipate responses that are more negative. This leads to the following hypotheses:

H1a-c: When disclosers perceive information as more (a) negative, (b) stigmatized, or (c) identity threatening they are more likely to anticipate responses that are more negative (less emotional, informational, and instrumental support, less reciprocity, more negative emotional reaction, and more avoidance).

The next section explores how relationship attributes might the formation of anticipated response.

Relationship Attributes Affecting Formation of Anticipated Response

In general, individuals are selective about the people with whom they choose to share their personal, private, or secret information, often because of the risks associated with disclosure (Afifi & Olson, 2005). The risks of disclosure are especially relevant to perceptions of anticipated response, as negative responses are one of the potential

disclosure risks that people seek to avoid. In fact, people often choose to disclose to others from whom they anticipate positive responses, with whom they have a "close" relationship, and who they feel they can trust (e.g., Afifi & Olson, 2005; Afifi & Steuber, 2009; Derlega et al., 2000; Greene & Faulkner, 2002; Vangelisti et al., 2001). There are several variables related to the relationship between the discloser and the intended receiver that might influence the development of anticipated response. The following sections explore two of these potential variables, relational quality and relationship uncertainty.

Relational quality. People may evaluate their relationship with an intended receiver in terms of "closeness" or "relational quality" and trust (for discussion see Greene, 2009). Indeed, early research may have conceptually and operationally confounded these concepts (disclosure and relational quality, also known as closeness or intimacy; for discussion see Greene, 2009; Morr & Petronio, 2004). For example, the definition of intimacy in Social Penetration Theory (Altman & Taylor, 1973) includes the willingness to reveal personal or private information. Although the concepts of disclosure and relational quality are clearly not synonymous, they are related. Information management and relational quality are associated in several ways. Communicating about personal or private topics increases perceptions of closeness (Derlega et al., 1993), and the type of relationship people have with each other (close, casual, acquaintance, etc.) is affected, in part, by the content of communication, especially disclosure (Greene et al., 2006; Harvey & Omarzu, 1997; Prager, 1995). Self-disclosure specifically, as well as reactions to self-disclosure by both the recipient and the discloser, "may be used to infer how much partners like and trust one another" (Derlega, Winstead, & Greene, 2009, p.

153). That is, this specific part of the disclosure process, the actual disclosure followed by the response of each communicator, may as act an indicator of the relationship between partners.

Relational quality is positively related to anticipated response (Afifi & Olson, 2005; Afifi & Steuber, 2009, 2010; Checton & Greene, 2012; Greene et al., in press). Individuals expect to receive a positive response to their personal or private information when they disclose to people with whom they consider themselves "close" (Afifi & Steuber, 2009). This review suggests that people generally expect to receive responses that are more positive from the people with whom they perceive themselves to be close. Therefore, I suggest that:

> H2: There is a positive association between relational quality and each subtype of anticipated response such that individuals who are in relationships they perceive as closer will anticipate more positive responses (more emotional, informational, and instrumental support, more reciprocity, more positive emotional reactions, and less avoidance).

Relationship uncertainty. Uncertainty Reduction Theory (Berger & Calabrese, 1975) theorizes about the amount of uncertainty people have in relationships. The theory was developed to apply to initial interactions in close relationships (Berger & Calabrese, 1975). Knobloch and Solomon (1999, 2002) proposed a reconceptualization of "uncertainty" to include different types or sources of uncertainty in romantic relationships: self, partner, and relationship uncertainty (these three concepts captured under the umbrella of relational uncertainty). This reconceptualization led to the development of the Relational Turbulence Model (RTM, Solomon & Knobloch, 2004) which focuses more narrowly on a

particular period in developing relationships (the transition from casual to intimate) or on periods of turbulence in relationships.

The Relational Turbulence Model (RTM; Solomon & Knobloch, 2004) was founded on the observation that relational periods of moderate intimacy are characterized by higher levels of uncertainty. According to the RTM (Solomon & Knobloch, 2004), relational uncertainty (defined as individuals' confidence in their perceptions of relationship involvement) is comprised of three interrelated types of uncertainty: *self* uncertainty (questions individuals have about their own involvement in the relationship), *partner* uncertainty (questions/doubts about their partner's involvement), and *relationship* uncertainty (more abstract questions about the relationship itself).

The RTM has most often been tested with a college sample population. Knobloch and Solomon (2002) discovered a curvilinear association between the types of uncertainty and the relational transition period from casual to intimate and postulated that cessation of relational turbulence is a marker of relationship progression. In another study, using 80 note cards describing potential relational irritations with a sample of 209 undergraduate students, Solomon and Knobloch (2004) found a positive association between intimacy and influence from partners as well as gradual increases in interference and facilitation from partners as couples moved toward interdependence (although facilitation overrode interference as relationships evolved). In addition, participants perceived the highest degree of interference during moderate intimacy. Knobloch and Solomon (2004) confirmed that partner influence is most strongly associated with partner interference at low levels of intimacy. Unexpectedly, however, they also discovered that during this period of relational development (e.g., low levels of intimacy, independent

relating) partner influence also contributes to partner facilitation. In a sample of 268 undergraduate students, Knobloch (2007) determined that perceptions of turmoil were highest during moderate levels of intimacy. She also discovered that interference from partners mediated the convex curvilinear association between intimacy and perceptions of turmoil but not relational uncertainty.

To date, the RTM has predominantly been applied in romantic relationships (for exceptions see Theiss & Nagy, 2010 for application in cross-cultural contexts and other work of Theiss and colleagues in family applications). However, the concepts of relational uncertainty (or in contrast, stability) may also be relevant in non-romantic relationships (e.g., friendships, familial relationships, work relationships). The application of relational uncertainty (specifically, relationship uncertainty) to non-romantic relationships may be especially useful in the study of disclosure, especially within college student samples. Disclosure research has traditionally relied on relational quality as an important predictive variable. However, because most often people choose to share personal and/or private information with individuals with whom they feel close, this research often reflects limited variance and distinct ceiling effects in reported perceptions of relational quality, especially in study designs where participants are asked to bring a second individual with them to a study. It is not hard to imagine that it would be more difficult to convince casual relations to sacrifice time and effort to attend a research study with no immediate benefit to themselves. Mean scores on relational quality within college student samples tend to be high (indicating "higher quality" relationships) and characterized by little variance. In addition, there may be higher "turnover" of both friends and romantic partners in college relationships compared to

many other samples. Determining, instead, whether or not individuals believe that their

friendship will be intact in a certain period of time (e.g., five years), and if they believe

their friendship is stable/will last, may present a more useful conceptualization of

relationship caliber than the traditionally measured relational quality. Considering this, an

important RTM research finding to the function of anticipated and actual responses to

disclosure decisions in the context of relationship uncertainty is that Theiss and Solomon

(2006) suggest that relational instability (broadly) can magnify reactions to a variety of

phenomena. Therefore, the project suggests that:

> H3: There is a positive association between relationship uncertainty and
>
> anticipated response; that is, individuals who characterize their relationships as
>
> more unstable/uncertain are more likely to anticipate responses that are more
>
> negative in nature (less emotional, informational, and instrumental support, less
>
> reciprocity, more negative emotional reaction, and more avoidance).

Response Attributes Affecting the Formation of Anticipated Response

Potential disclosers also consider recipients' past responses during the disclosure

decision-making process (Afifi & Caughlin, 2006; Afifi & Steuber, 2010, 2009; Greene,

2009). The DD-MM (Greene, 2009) suggests that expectations about future responses,

both positive and negative, may be formed from past experiences with a particular target.

Afifi and Steuber (2010) also demonstrate how past negative responses and past

aggressive responses are directly related to expectations for future negative and

aggressive responses. The current project will expand the CCM's conceptualization of

past responses to three types of prior responses: a) prior responses in the relationship

between the discloser and a specific receiver, b) prior responses that the discloser has

observed the specific receiver enacted other people's disclosure, and c) prior responses

from others (not the receiver) to the specific information that the discloser is

contemplating disclosing to the specific receiver (note that this third type of prior

response may only be measured in scenarios where the discloser has shared the

information with at least one other). Further, in order to capture a broader range of

responses (vs. a specific type of response), the three types of prior responses are

considered in terms of responsiveness (see Reis & Shaver, 1988). The disclosure process

is also relevant to information that people have never disclosed, but this variable cannot

be measured in this way. The following sections will explore the three types of prior

responses/responsiveness in more detail and introduce hypotheses.

     Prior responsiveness: Receiver to discloser. The first type of prior

responsiveness that may influence the formation of anticipated response is the collective

evaluations of a disclosure target's responsiveness to the discloser's previous disclosures.

This type of potential recipient prior response has received the most scholarly attention.

However, this attention has primarily focused on negative prior responses.

     The CCM (Afifi & Steuber, 2010) conceptualized and measured past responses as

past aggressive responses. In a test of the CCM, participants were asked to consider if the

disclosure target (a family member in their project) had responded to secrets the discloser

had previously revealed with various kinds of verbally aggressive responses (e.g.,

symbolic or psychological aggression). Past verbal aggression was strongly associated

with negative anticipated responses to secret revelation, which then predicted

participants' decisions to continue to conceal (not reveal) the secret to that person (family

member). This phenomenon was also demonstrated within marital conflict (see

Finkenauer, Kerkhof, Righetti, & Branje, 2009) and in research on the "chilling effect" where anticipation of negative reactions (such as aggressive behavior) was significantly associated with withholding of complaints about controlling behaviors (Roloff & Cloven, 1993).

Previous research (although limited) suggests that the prior responses of the disclosure target within that specific relationship (between the discloser and the potential receiver) may affect the potential discloser's anticipated response to a different piece of personal/private information to that same receiver. Said another way, if someone considering sharing information with a friend knows that this friend has previously withdrawn support perhaps the potential discloser will choose not to share. This association has predominantly been explored with negative and aggressive past responses (see CCM) such that when people perceive prior responses from a particular receiver as negative or aggressive they are more likely to anticipate negative responses from that person. To date, there is no research that examines how positive or neutral perceptions, or past responsiveness, may influence anticipated response. Despite this absence, this project proposes that the association between past responsiveness and anticipated response will function in a similar capacity as negative prior responses and negative anticipated responses. Therefore, this project poses the following hypothesis:

> H4: People anticipate that disclosure targets will respond in ways similar to how they have responded to other disclosures in the past; that is, individuals anticipate responses to disclosure that are more negative when they evaluate targets' prior responsiveness to their personal/private information as negative (less responsive).

Prior responsiveness: Receiver to others. The previous section discussed how the prior responses/responsiveness of one particular target might affect perceptions of anticipated response. According to Social Learning Theory (Bandura, 1977), people make assessments about outcomes by observing others; the current study additionally explores the observing targets' reactions to other people's personal/private information sharing can affect disclosure decision-making. This section will discuss how targets' prior responses/responsiveness to others (not the discloser) may affect disclosers' formation of anticipated response.

Individuals might consider how the selected target has responded to other people's disclosures, especially if the topic is similar. To date, there is no research on this particular conceptualization of prior response. However, it is suspected that the consideration of targets' responses (or as conceptualized in this project, responsiveness) to others will be similar to the consideration of targets' prior responsiveness to the discloser. That is, is it likely that if the discloser perceives that the target was responsive to others' disclosures in the past (especially if the topic is similar) then the discloser will anticipate a similar level of responsiveness to their own personal/private information disclosure. This may be especially true if, for example, the intended target has gossiped to the discloser about other people's private information or complained about a mutual friend's request for instrumental support ("I'm so tired of watching her kid!"). Further, direct observation is not necessary. For example, the discloser might be made aware of the receiver's response through a mutual friend ("I told XX about my infection and she was totally unsupportive!"). Observation or knowledge of lack of prior responsiveness to

others is likely to make the discloser hesitant to make this person a co-owner of sensitive

information. Despite the dearth of prior research, I suggest the following hypothesis:

> H5: People will expect targets to respond to information in the same way they
>
> have seen those targets respond to others' information; that is, individuals will
>
> anticipate responses to disclosure that are more negative in nature (less emotional,
>
> informational, and instrumental support, less reciprocity, more negative emotional
>
> reaction, and more avoidance) when they evaluate targets' prior responsiveness to
>
> others' personal/private information as negative (less responsive).

Prior responsiveness: Others to this information. Thus far, this study has

proposed two possible ways that prior responses may affect anticipated responses: prior

responsiveness of the receiver to the discloser's personal/private information sharing, and

prior responsiveness of the receiver to others' personal/private information disclosures.

The final way that prior responses may affect anticipated response focuses not on

responses from the specific potential receiver but instead emphasizes the responsiveness

of other people to the specific piece of personal, private, or secret information that the

discloser is considering sharing. The following sections discuss prior responses to

disclosure of the information from other people.

Anticipated response formation may be affected by other individuals' prior

responsiveness to the same topic or similar topics. Some people may only disclose a

certain piece of information once to one person (or at least to very few people), especially

if the first response to the disclosure is negative. For example, individuals are hesitant to

further disclose their sexual orientation when their first experience disclosing is negative

(see Limandri, 1989).

Depending on the type of information, sometimes people must disclose the same piece of information (e.g., STI, pregnancy – either unwanted or planned) multiple times to different people over the course of time. It is likely that the prior initial responsiveness, whether considered selectively (perhaps some responses that are more or the most salient) or as a whole, affect perceptions of how others will respond to that information. That is, if a person is considering disclosing HIV status to a friend, s/he may also consider how others previously responded to the same information. If the discloser's partner and parents, for example, were responsive to the disclosure (or more responsive than anticipated), then the discloser might be more likely to anticipate responsiveness from other individuals. The same may be true of disclosure of similar topics, for example, disclosure of illnesses or experiences that are similarly valenced and stigmatized may be viewed similarly (e.g., lung cancer with breast cancer, rape with molestation). Therefore, the project suggests that:

H6: Individuals will anticipate responses from a recipient that are more positive in nature when others have been responsive to the same information or similar information in the past.

Response attributes summary. In sum, during the disclosure decision-making process, individuals may consider three types of prior responses/responsiveness. The preceding sections explored how prior responsiveness to disclosure within a particular relationship (between the discloser and the receiver), prior responsiveness of that same receiver to other people, and prior responsiveness of other people (not the particular target) to the same piece of information may predict anticipated response. The next section considers how the three attributes may affect anticipated response collectively.

Predictive Power of Relationship, Information, and Response Attributes

The three factors identified in this review (information attributes, relationship attributes, and response attributes) in combination may affect the development of anticipated response. Collectively, these factors (information attributes of information valence, stigma, and identity threat; relationship attributes of relational quality and relationship uncertainty; and response attributes of prior responsiveness in the relationship between the discloser and the target, the target's prior responsiveness to other people, and others' prior responsiveness to this information) may predict the individual subtypes of anticipated response (emotional, informational, and instrumental support, emotional reaction, avoidance, and reciprocity). However, there is limited theoretical support to predict which factors will affect this process most strongly. Therefore, this project asks:

RQ1: How is anticipated response predicted by information attributes (stigma, valence, identity threat), relationship attributes (relational quality, relationship uncertainty), and response attributes (prior responsiveness: receiver to discloser, receiver to others, and others to the information)?

Method – Study II

In contrast to Study I which used both friend and romantic partner contexts, Study II focused on sharing with friends. Hypotheses were tested in a study where participants provided self-report data about personal information that they had not yet shared with one specific *friend* (see Appendix I). In contrast to Study I, which used both friends and romantic partner context, Study II focused on information sharing with friends. Individuals ($N = 386$) were recruited from communication courses at a large university in the northeastern United States (see Appendices B-D). Students earned a small amount of extra course credit for participation. Procedures were approved by the University IRB.

Procedure. When they arrived, after providing consent (see Appendix F) participants were given a piece of paper and asked to describe on that sheet "a piece of personal/private and/or secret information" that they had not yet shared with one specific friend (see Appendix I). All participants were instructed (both verbally and in the written instructions on the sheet of paper) that the information should be personal and/or private, about them (or related to them), specific (not a series of topics), something their friend would not know if they never decided to share, and finally, somewhat negative. Participants were asked to describe this information in detail (without revealing identities), and then write the initials of the friend with whom they had not shared this information on their sheet. Desks were set up in the collection area for participants to use while filing out this sheet. After completing the preliminary sheet, participants proceeded to a second area where a researcher confirmed that they had written about personal/private information about themselves that they had not shared with a specific friend and other criteria. Researchers instructed participants to keep the specific information and the specific friend

with whom they had not shared the information in mind while completing the survey. In another room with desks placed at least three feet apart, participants completed self-report measures about the information, revealing the information in the future, their relationship with the other person, and demographics. When they finished (~15-20 minutes), participants were instructed to insert their preliminary sheet into the survey. Finally, researchers thanked and debriefed each participant (see Appendix J). See Table 1 for disclosure topics.

Participants. The initial sample included 386 participants. Of these, 13 were removed because of incomplete data[13]. Finally, after CFAs were conducted and composites were created, data were screened for outliers and three total multivariate outliers were removed.

The final sample included 370 individuals. Of these participants, 266 (72%) were female and 103 (28%) were male. Individuals ranged from 18 to 38 years of age ($M = 20.38$ years, $SD = 2.20$ years). Participants were predominantly Caucasian (57%); others were Asian (17%), Hispanic (8%), African-American (7%), Indian (5%), Bi/multiracial (4%), and other (5%). At the start of the study, participants reported that they had been friends with the person to whom they had not disclosed an average of 5.41 years ($SD = 4.62$, range = .5 to 34 years).

Measurement instruments. Variables measured include *information attributes* (valence, identity threat, stigma), *relationship attributes* (relational quality, relationship uncertainty), *anticipated response* (support- emotional, informational, and instrumental, emotional reaction, avoidance, and reciprocity), and *prior responsiveness* (receiver to the discloser, receiver to others, and others to the information; see Appendix K). With the

exception of stigma and relationship uncertainty, modification of scales utilized in Study I was limited to using fewer items selected based on Study I item loadings.

Confirmatory factor analyses were conducted on multi-item scales to ensure that they meet the criteria of face validity, internal consistency, and parallelism (Hunter & Gerbing, 1982). Three goodness-of-fit indices estimated the fit of the CFA models. The *relative* χ^2 (χ^2/df) adjusts the χ^2 statistic for sample size (Kline, 1998). The CFI calculates the ratio of the noncentrality parameter estimate of the hypothesized model to the noncentrality parameter estimate of a baseline model (Bentler, 1990). The RMSEA accounts for errors of approximation in the population (Browne & Cudeck, 1993). The project determined that the model fit the data if the *relative* χ^2 was less than 3, CFI was greater than .90, and RMSEA was less than .10 (Browne & Cudeck, 1993; Kline, 1998). Reliability was calculated for composite measures.

Information attributes. This project measured three attributes of information: valence, identity threat, and stigma (see Appendix L).

Information valence. Participants' perceptions of the valence of the information not yet shared with the other person were measured with four semantic differential items with responses ranging from 1 to 7. Two items were from Vangelisti and Caughlin (1997) good/bad and negative/positive (R). In Vangelisti and Caughlin (1997), these two items were part of a three factor structure tested with principal component analysis using Varimax rotation including identification, valence, and intimacy. The factor loadings for both items was .94, eigenvalue was 1.82, α = .87. These two items were also used in Afifi and Steuber (2009, RRM, α = .87; 2010, CCM, α = .70). Study II used these two items in addition to the two items created in Study I to facilitate testing with confirmatory factor

analysis. A CFA revealed that four items loaded onto one latent construct, $\chi^2(2) = 4.46$, *relative* $\chi^2 = 2.23$, *p* = .11, *CFI* = .99, *RMSEA* = .06. The items had moderate reliability (*M* = 4.70, *SD* = 1.12, α = .68). The items were averaged to form a scale with a higher score indicating the information was more negatively valenced (see Appendix L & Table 5).

Identity threat. Participants' perceptions of the *identity threat* of the information was measured with three semantic differential items selected from Vangelisti and Caughlin's (1997) identification factor (detailed above) with responses ranging from 1 to 7. The factor loadings for original items was .84, .80, and .72, eigenvalue was 2.31, α = .73. For example, participants rated whether the information was essential/not essential to my identity (R) and very much/not at all part of me (R). In the current study, the items had good reliability (*M* = 3.68, *SD* = 1.53, α = .80). The items were averaged to form a scale with a higher score indicating the information was more identity threatening (see Appendix L & Table 5).

Stigma. Stigma was measured with five Likert-type items adapted from Greene et al. (in press; α = .82), with responses ranging from 1 *(strongly disagree)* to 5 *(strongly agree)*. In the Greene et al. (in press) study, stigma and prognosis loaded together on a second order factor labeled *information severity* ($\chi^2(19) = 43.51$, *p* = .01, *CFI* = .92, *RMSEA* = .08; α for the eight item latent factor *information severity* = .70). One sample item included "I enjoy spending time with my friend/partner." In the current study, CFA revealed that four items loaded onto one latent construct, $\chi^2(2) = 2.31$, *relative* $\chi^2 = 1.16$, *p* = .31, *CFI* = .99, *RMSEA* = .02. The items had good reliability (*M* = 3.40, *SD* = .84, α = .80). The items were averaged to form a scale with a higher score indicating more

perceptions that others' stigmatize the information (more perceptions of stigma) (see

Appendix L & Table 5).

　　　　Relationship attributes. This study explored two proxies of relationship

evaluation: relational quality and relationship uncertainty (see Appendix M & Table 6).

　　　　Relational quality. Overall relational quality was measured with four Likert-type

items selected and adapted from Vangelisti and Caughlin (1997) with responses ranging

from 1 (*strongly disagree*) to 5 (*strongly agree*). Original items were part of a 15 item

three factor structure tested with PCA using Varimax rotation from the "Psychological

Closeness" factor (seven items total, eigenvalue = 6.72 in Study I and 7.62 in Study II; α

= .93 in Study I, not reported in Study II). Items adapted include "How much do you

enjoy spending time with your [relation]?" (item loading = .82 in Study I, .80 in Study II)

"How close are you to your [relation]" (item loading = .83 in Study I, .78 in Study II),

"How important is your [relation's] opinion to you?" (item loading = .79 in Study I, .82

in Study II), and "How satisfied are you with your relationship with your [relation]" (item

loading = .76 in Study I, .47 in Study II). [Relation] represented the specific relationship

type about which participants reported (boy/girlfriend, best friend, friend,

classmate/coworker, and acquaintance). Item anchors were not stated. These items were

also used in Checton and Greene (2012) who used five 5-point Likert type questions

adapted from Vangelisti and Caughlin (1997; Vangelisti et al., 2001) with responses

ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items included, "I enjoy

spending time with my spouse" and "This relationship is satisfying." Checton and

Greene's (2012) CFA found that five items loaded onto the latent construct, $\chi2(26) =$

46.48, $p = .01$; *relative $\chi2$* = 1.78, *CFI* = .97, *RMSEA* = .07, and were reliable (*M* = 4.33,

SD = .62, α = .82, higher scores indicated greater relational quality). Greene et al. (in

press) also adapted these items and tested the measure using CFA. Greene et al.'s (in

press) measure included responses ranging from 1 (*strongly disagree)* to 7 (*strongly*

agree) with a sample item "I am close to this person." Four items loaded onto one latent

construct in each of two sets of data, $\chi^2(2)$ = 2.35, *relative χ2* = 1.18, *p* = .31, *CFI* = .99,

RMSEA = .03 (in relationships where participants reported on information they had not

yet shared with another); $\chi^2(2)$ = 4.22, *relative χ2* = 2.11, *p* = .12, *CFI* = .99, *RMSEA* =

.08 (in relationships where participants reported on information they had already shared

with another) and had good reliability (*M* = 4.79, *SD* = 1.39, α = .82, undisclosed; *M* =

6.31, *SD* = .79, α = .76, disclosed; higher scores indicated greater relational quality). One

sample item from Study II included "I enjoy spending time with my friend/partner." CFA

from Study II revealed that four items loaded onto one latent construct, $\chi^2(1)$ = 1.38,

relative χ^2 = 1.38, *p* = .24, *CFI* = .99, *RMSEA* = .03. The items had good reliability (*M* =

4.27, *SD* = .65, α = .82). The items were averaged to form a scale with a higher score

indicating more overall relational quality.

  Relationship uncertainty. Relationship uncertainty was measured with three

Likert-type items adapted from measures developed by Knobloch and Solomon (1999)

with responses ranging from 1 *(very uncertain)* to 7 *(very certain).* Relationship

uncertainty measures have been consistently reliable across a number of studies

(Knobloch & Solomon, 2002; Knobloch, 2007; Solomon & Knobloch, 2004; Theiss &

Solomon, 2006). For example, Theiss and Solomon (2006) measured relationship

uncertainty using eight items (e.g., whether or not the relationship will work out in the

long run; CFI = .99, RMSEA = .03, α = .94). The current project is the first known study

to adapt the concept to a friendship-based relationship (cf. romantic relationship).

Consistent with prior research, questions were preceded by the stem "The next set of

questions asks about **how <u>certain</u> or <u>uncertain</u>** you are about the general **stability** of

your relationship with this friend. *How certain are you about...*" One sample item

included "whether or not you will still be friends in five years." The items had good

reliability ($M = 5.33$, $SD = 1.50$, $\alpha = .93$). The items were averaged to form a scale with a

higher score indicating more certainty about the stability of this friendship. Prior research

has coded relationship uncertainty such that higher numbers indicate more relationship

uncertainty, however, this project coded relationship uncertainty to be congruent with

relational quality in order to facilitate comparisons between the two measures of

relationship attributes.

     Response attributes. This study conceptualized response attributes as prior

responsiveness and measured three types of prior responsiveness: receiver to discloser,

receiver to others, and others to information. All three types of prior responsiveness were

measured with Likert-type items adapted from Laurenceau et al.'s (1998) IPMI

responsiveness measure with responses ranging from 1 *(strongly disagree)* to 7 *(strongly*

agree). The measure was utilized across a number of studies (however, psychometric

information was not often reported). For example, using a daily diary methodology,

Laurenceau et al. (1998) measured responsiveness using three items having participants

rate the degree to which they felt accepted, understood, and cared for by their interaction

partner during each social interaction. A summary variable was created using the average

of these three items. In Manne et al. (2004a, 2004b) participants also rated three items

with responses ranging from 1 *(not at all)* to 7 *(very much)*: To what degree did you feel

accepted by your partner?", "To what degree did you feel understood by your partner?",

"To what degree did you feel cared for by your partner during this discussion?".

Laurenceau et al. (2005) also used a daily diary methodology and identical items to

assess responsiveness in spousal relationships. This is the only study for which alphas are

reported (Day 1 alphas for husbands and wives were .86 and .88, respectively). The

current project chose to adapt the reliable measure of responsiveness because of the

consistency demonstrated in past research and because this adaptation allowed

participants to consider a broader range of past responses than measures used in other

research (e.g., CCM, Afifi & Steuber, 2010, past verbally aggressive responses). Further,

although in the current project anticipated responses are measured such that higher

numbers indicate more *negative* responses, prior responsiveness measures were averaged

to create scales were higher numbers indicate more *responsiveness* (i.e., positive

responses) to maintain consistency with previous responsiveness research (see Appendix

U).

   Prior responsiveness (receiver to discloser). Prior responsiveness (receiver to

discloser) of other personal/private information was measured with four items. All items

were preceded by the stem "Think about **other times** when you have shared

personal/private information with this friend. In general, how has s/he responded?" One

sample item included "My friend made me feel understood." CFA revealed that the four

items loaded onto one latent construct, $\chi^2(13) = 30.30$, *relative* $\chi^2 = 2.33$, $p = .004$, $CFI = .99$, $RMSEA = .06$. The items had good reliability ($M = 5.49$, $SD = 1.31$, $\alpha = .95$). The

items were averaged to form a scale with a higher score indicating more perceptions that

the receiver was responsive to previous disclosures of personal/private information from the discloser (see Appendix U & Table 22).

Prior responsiveness (receiver to others). Perceptions of prior responsiveness of the receiver to others' disclosure of personal/private information was measured with four items. All items were preceded by the stem "Now, consider situations in which you may have seen or heard how this friend responded to **other people** (<u>not you</u>) who shared personal/private information with him/her. Generally:" One sample item included "My friend makes others feel cared for." CFA revealed that the four items loaded onto one latent construct, $\chi^2(13) = 34.02$, *relative* $\chi^2 = 2.62$, $p = .001$, *CFI* $= .99$, *RMSEA* $= .07$. The items had good reliability ($M = 5.06$, $SD = 1.38$, $\alpha = .95$). The items were averaged to form a scale with a higher score indicating more perceptions that the receiver was responsive to *other individuals'* disclosures of personal/private information (see Appendix U & Table 22).

Prior responsiveness (others to information). Perceptions of prior responsiveness of other individuals (not the receiver) to the specific information was measured with four items. One sample item included "When I've shared this information with other people, in general, they made me feel accepted." CFA revealed that the four items loaded onto one latent construct, $\chi^2(19) = 23.6$, *relative* $\chi^2 = 1.24$, $p = .21$, *CFI* $= .99$, *RMSEA* $= .03$. The items had good reliability ($M = 4.57$, $SD = 1.44$, $\alpha = .89$). The items were averaged to form a scale with a higher score indicating perceptions that *other individuals* were responsive to the discloser when s/he shared this same information. Only 277 (75%) had shared the information before. 92 (25%) had never disclosed this particular piece of

information to anyone else and thus could not complete this measure (see Appendix U &

Table 22).

Anticipated response (DARS). Study I of this project created measures of

anticipated response and tested four subtypes of anticipated response (the DARS) derived

from various conceptualizations of anticipated response provided in the frameworks

reviewed previously. The four subtypes include support (emotional, informational,

instrumental), emotional reaction, avoidance, and reciprocity/partner disclosure. All

subtypes were measured with Likert-type items with responses ranging from 1 *(strongly*

disagree) to 7 *(strongly agree).* Appendix N provides details about instructions. Table 7

presents CFA data indicating good model fit. The factor structure of the four anticipated

response subtypes was tested in a second order CFA that is described first.

A second order CFAs was conducted. First the CFA was arranged so items were

assigned to their relative subfactors, subfactors were assigned to the latent anticipated

response. Four items were assigned to emotional support, four to instrumental support,

four to informational support, four to emotional reaction, four to reciprocity, and four to

avoidance. The initial model did not fit ($\chi^2(246) = 1061.19$, *relative χ^2 = 4.31, p < .001*,

CFI = .85, RMSEA = .10. After removing one item from the emotional reaction scale

(item 2, see Table 10), two items from the avoidance subscale (items 2 & 3, see Table 11)

and one item from the reciprocity scale (item 3, see Table 12), correlating two items

within the instrumental support scale (items 2 & 3, see Table 9), and correlating two

items within the emotional support scale (items 1 & 3, see Table 7), the model fit ($\chi^2(201)$

$= 609.05$, *relative χ^2 = 3.03, p < .001, CFI = .91, RMSEA = .08*) (see Figure 4).

Anticipated support. Three types of anticipated support were measured: emotional, informational, and instrumental. Anticipated emotional support was measured with four items. One sample item includes "My friend would immediately offer emotional support" (R). The items had good reliability ($M = 4.00$, $SD = 1.53$, $\alpha = .86$) (see Table 7).

Anticipated informational support was measured with four items. One sample item includes "Initially, my friend would help me look for information" (R). The items had adequate reliability ($M = 4.14$, $SD = 1.24$, $\alpha = .77$) (see Table 8).

Anticipated instrumental support was measured four three items. One sample item includes "My friend would initially offer instrumental support (accompany to doctor, loan money)" (R). The items had moderate reliability ($M = 4.32$, $SD = 1.43$, $\alpha = .74$) (see Table 9). The items were averaged for each subscale to form scales with a higher score indicating higher expectations for a less supportive response.

Anticipated emotional reactions. Anticipated emotional reactions were measured with three items. One sample item includes "At first, my friend would have a negative emotional reaction." The items had good reliability ($M = 4.44$, $SD = 1.77$, $\alpha = .87$) (see Table 10). The items were averaged to form a scale with a higher score indicating greater expectations for a negative emotional response.

Anticipated avoidance. Anticipated avoidance was measured with three items. One sample item includes "At first, my friend would refuse to discuss the information." The items had good reliability ($M = 2.77$, $SD = 1.37$, $\alpha = .81$) (see Table 11). The items were averaged to form a scale with higher scores indicating more avoidant responses.

Anticipated reciprocity. Anticipated reciprocity/ partner disclosure was measured with three items. A sample item includes "Initially, my friend would also share personal or private information." The items had good reliability ($M = 3.96$, $SD = 1.53$, $\alpha = .88$) (see Table 12). Items were averaged to form a scale with a higher score indicating lower expectations for reciprocity/partner disclosure. The next section describes the dimensional structure of anticipated response.

Dimensional structure of anticipated response. One of the primary goals of Study II was to continue to confirm the four category dimensional structure of anticipated response developed in Study I. The CFAs performed on the four categories of anticipated response (support - emotional, informational, and instrumental-, emotional reaction, avoidance, and reciprocity/partner disclosure, the *Disclosure Anticipated Response Scale, DARS*) suggest that the developed dimensional structure adequately represents anticipated response. Both the fit statistics and the reliabilities are strong for all DARS subscales. The second order CFA fit statistics were good (see Figure 4), and Cronbach's alphas ranged from .74 to .88. Details of analyses are reported in the measures section previously. In sum, both Study I and Study II support the proposed operationalization of the concept of anticipated response.

Results – Study II

Table 4 presents the zero-order correlation matrices for all Study II variables. Data were analyzed by correlations and regressions. Reliability was estimated by Cronbach's alphas, and the alpha level was set at $p < .01$ for correlations and $p < .05$ for all other analyses. Results are presented by research question and hypothesis next.

Associations between the DARS and response-related variables. The second primary goal of Study II was to explore variables that may predict anticipated response. Hypotheses 1-6 predicted associations between DARS (anticipated emotional, informational, and instrumental support, anticipated emotional reaction, anticipated avoidance, and anticipated reciprocity) and information attributes (information valence, stigma, identity threat), relationship attributes (relational quality, relationship uncertainty), and response attributes (prior responsiveness: receiver to discloser, receiver to others, others to the information). The following sections describe and summarize these associations.

Information attributes. This section describes the associations between information assessment (information valence, stigma, and identity threat) and the DARS.

Information valence. Information valence was only significantly associated with one of the DARS subscales, anticipated emotional reaction ($r = .27, p < .001$) and in the expected direction, such that more negative perceptions of the information were associated with more anticipation of negative emotional reactions. Information valence was not significantly associated with any of the other DARS subscales: anticipated emotional ($r = .09, p > .05$), informational ($r = .07, p > .05$), or instrumental support ($r = .03, p > .05$), anticipated avoidance ($r = .09, p > .05$), or anticipated reciprocity ($r = .05$,

$p > .05$). This is largely consistent with Study I where there were no significant associations between information valence and DARS in the friend data. Thus, there do not appear to be strong associations between information valence and anticipated response, and information valence is not likely to affect the formation of anticipated response. H1a was not supported. However, the information valence variable has truncated variance in both Studies I and II because participants were asked to report on information that was somewhat negative. The implications of this design feature are explored in the discussion.

Stigma. The second type of information assessment explored was perceptions of stigmatization of the information. Stigma was significantly correlated with four of the six DARS subscales in the expected direction: emotional support ($r = .32$, $p < .001$), informational support ($r = .21$, $p < .001$), instrumental support ($r = .22$, $p < .001$), and emotional reaction ($r = .28$, $p < .001$). Stigma was not significantly correlated with avoidance ($r = .01$, $p > .05$), or reciprocity ($r = .09$, $p > .05$). Thus, perceptions of more stigma were associated with anticipation of less emotional, informational, and instrumental support, and anticipation of more negative emotional reactions. However, perceptions of more stigma were not associated with anticipation of more avoidance, or anticipation of less reciprocal sharing. Therefore, H1b was partially supported.

Identity threat. The final type of information assessment explored was perceptions of the level of identity threat of the information. Identity threat was significantly associated with five of six DARS subscales in the expected direction: anticipated emotional ($r = .27$, $p < .001$), informational ($r = .24$, $p < .001$), and instrumental support ($r = .20$, $p < .001$), anticipated emotional reaction ($r = .20$, $p < .001$), and anticipated

reciprocity ($r = .17$, $p < .001$). Thus, perceptions that the information was more threatening to participants' identity were significantly associated with anticipation of less emotional, informational, and instrumental support, anticipation of more negative emotional reactions, and anticipation of less reciprocal sharing. Identity threat was not significantly associated with anticipated avoidance ($r = .10$, $p > .01$). Therefore, H1c was generally supported.

Summary. In sum, H1 was generally supported. Of the three types of information assessment, stigma and identity threat were consistently associated with the DARS subscales (four of six and five of six respectively) in the expected direction. Finally, associations between information valences and the DARS subscales were in the expected direction, but only one association was significant (anticipated emotional reaction). The dearth of significant associations between information valence and DARS subscales may be explained by the truncated variance of information valence (further explored in the overall discussion section). Therefore, information attributes were associated with anticipated response. The next section describes the associations between relationship attributes and the DARS.

Relationship attributes. Beyond information attributes, Study II explored two types of relationship attributes, relational quality and relationship uncertainty. This section discusses relational quality first.

Relational quality. Overall relational quality was significantly associated with anticipated emotional ($r = -.23$, $p < .001$), informational ($r = -.18$, $p < .001$), and instrumental support ($r = -.22$, $p < .001$), anticipated avoidance ($r = -.15$, $p < .01$), and anticipated reciprocity ($r = -.21$, $p < .001$) in the expected direction. Relational quality

was not significantly associated with anticipated emotional reaction ($r = -.03$, $p < .05$).

Perceptions of more relational quality were significantly associated with anticipation of

more emotionally, informationally, and instrumentally supportive responses, anticipation

of less avoidance, and anticipation of more reciprocal sharing. Thus, H2 was largely

supported. Additionally, this is consistent with Study I, where relational quality was

significantly associated with anticipated emotional and instrumental support (in both sets

of data), anticipated informational support (in the friend data only), and anticipated

avoidance (in the romantic partner data only). These results are inconsistent with Study I

in that anticipated emotional reaction was not significantly associated with relational

quality in Study II, but this association was significant in Study I in the friend data only.

Finally, anticipated reciprocity was not significantly associated with overall relational

quality in either set of data in Study I, but this association was significant in Study II.

Despite these differences, the associations between relational quality and the DARS

subscales are generally consistent across individual subscales and sets of data (Study I

friend and romantic partner, Study II friend).

     Relationship uncertainty. The second type of relationship attribute measured in

Study II was relationship uncertainty. Relationship uncertainty was significantly

associated with all six DARS subscales in the expected direction. When people reported

being more certain of the stability of their relationship, they also anticipated more

emotional ($r = -.31$, $p < .001$), informational ($r = -.25$, $p < .001$), and instrumental

support ($r = -.31$, $p < .001$), more positive emotional reactions ($r = -.16$, $p < .01$), less

avoidance ($r = -.17$, $p < .001$), and more reciprocal sharing ($r = -.18$, $p < .001$).

Therefore, H3 was supported.

Summary. In sum, both relational quality and relationship uncertainty were significantly associated with DARS subscales: H2 and H3 were supported. Therefore, relational attributes are likely to be related to anticipated response. The final section describes the associations between response attributes and the DARS.

Response attributes. Finally, Study II investigated three types of response attributes: prior responsiveness to personal/private information from this friend (receiver to discloser), this friend's prior responsiveness to other individuals' personal/private information disclosures (receiver to others), and prior responsiveness to this information from other people (not this friend but others to the same information).

Prior responsiveness (receiver to discloser). Prior responsiveness (receiver to discloser) was significantly associated with four of six DARS subscales in the expected direction: anticipated emotional ($r = -.23$, $p < .001$), informational ($r = -.19$, $p < .001$), and instrumental support ($r = -.15$, $p < .01$), and anticipated reciprocity ($r = -.23$, $p < .001$). Prior responsiveness (receiver to discloser) was not significantly associated with anticipated emotional reaction ($r = -.05$, $p > .01$) or anticipated avoidance ($r = -.11$, $p > .01$). That is, when disclosers felt that receivers had been more responsive to other personal/private information they had shared in the past, they also anticipated more emotional, instrumental, and informational support, and more openness in return from that receiver. The next section discusses the second type of response attributes, the receiver's past responsiveness to others' disclosure of personal/private information.

Prior responsiveness (receiver to others). Prior responsiveness (receiver to others) was significantly associated with five of six DARS subscales in the expected direction: anticipated emotional ($r = -.25$, $p < .001$), informational ($r = -.21$, $p < .001$), and

instrumental support ($r = -.25$, $p < .001$), anticipated avoidance ($r = -.16$, $p < .01$), and anticipated reciprocity ($r = -.23$, $p < .001$). Prior responsiveness (receiver to others) was not significantly associated with anticipated emotional reaction ($r = -.10$, $p > .01$). That is, when disclosers felt that receivers had been more responsive to other' personal/private information disclosure, they also anticipated more emotional, instrumental, and informational support, less avoidance, and more openness in return from that receiver. This is the only measure of prior responsiveness in which the correlation with anticipated avoidance is significant (although for both prior responsiveness receiver to discloser and others to information $p < .05$ but not $< .01$). The next section discusses the final response attribute, prior responsiveness of others to this specific information.

Prior responsiveness (others to information). Prior responsiveness (others to information) was significantly associated with five of six DARS subscales in the expected direction: anticipated emotional ($r = -.28$, $p < .001$), informational ($r = -.19$, $p < .001$), and instrumental support ($r = -.20$, $p < .001$), anticipated emotional reaction ($r = -.15$, $p < .01$), and anticipated reciprocity ($r = -.28$, $p < .001$). Prior responsiveness (others to information) was not significantly associated with anticipated avoidance ($r = -.14$, $p > .01$). Specifically, when disclosers felt that other individuals (not this specific receiver) had been more responsive to this specific information, they also anticipated more emotional, instrumental, and informational support, more positive emotional reactions, and more openness in return from that receiver. This is the only measure of prior responsiveness in which anticipated emotional reaction is significant. Also, roughly 25% of the sample had never shared this information with another person and therefore had no context for this response attribute. These data are missing.

All three types of prior responsiveness were significantly associated with emotional, informational, and instrumental support, and reciprocity in the expected direction. That is, when participants perceived that people had been more responsive to disclosure in the past, they were more likely to anticipate support (emotional, informational, and instrumental) and reciprocal sharing. Considering prior responsiveness from this friend, neither this friend's responsiveness to participant's prior disclosures, nor this friend's responsiveness to others' disclosures were significantly associated with anticipated emotional reactions to future disclosure of this information. Finally, neither prior responsiveness from this friend to other personal/private information, nor prior responsiveness of others to this information were significantly associated with anticipated avoidance (although both associations were in the expected directions). Thus, H4 was largely supported.

Summary. In sum, all three types of prior responsiveness were significantly associated with DARS subscales: H4- H6 were supported. Therefore, response attributes were associated with anticipated response. The next section explores how information, relationship, and response attributes *together* might predict anticipated response.

Predicting anticipated response. The second primary goal of Study II was to explore variables that may influence the formation of anticipated response. The previous section explored these associations in the form of bivariate correlations. The first research question seeks to understand how the formation of anticipated response is affected by information attributes (stigma, relevance, valence, identity threat), relationship attributes (relational quality, relationship uncertainty), and response attributes (prior responsiveness: receiver to discloser, receiver to others, others to the information). This

section will present a series of regression analyses to examine the combination of predictors. For each regression, information attributes (information valence, stigma, identity threat), relationship attributes (relational quality, relationship uncertainty) and response attributes (prior responsiveness: receiver to discloser, receiver to others, others to the information) are the predictors with one of the six DARS subscales (anticipated emotional, informational, and instrumental support, anticipated emotional reaction, anticipated avoidance, and anticipated reciprocity) as the criterion variable.

Anticipated support. There are three types of anticipated support: emotional, instrumental, and informational. This section begins with predicting emotional support.

Emotional support. First, a stepwise regression analysis was conducted with anticipated emotional support as the criterion and information attributes (information valence, stigma, identity threat), relationship attributes (relational quality, relationship uncertainty) and response attributes (prior responsiveness: receiver to discloser, receiver to others, others to the information) as the eight predictors. The first step was significant (Adj. R^2 = .092, F(1,286) = 30.15, p < .001), stigma positively (β = .56, t = 5.49, p < .001) predicted anticipated emotional support. The second step produced a significant change, ΔR^2 = .10, F(2,285) = 33.63, p < .001, with relationship uncertainty negatively predicting anticipated emotional support (β = -.31, t = -5.80, p < .001). The third step produced a significant change, ΔR^2 = .05, F(3,284) = 30.52, p < .001, with identity positively predicting anticipated emotional support (β = .24, t = 4.46, p < .01). The fourth step produced a significant change, ΔR^2 = .06, F(4,283) = 30.46, p < .001, with prior responsiveness (receiver to others) negatively predicting anticipated emotional support (β = -.27, t = -4.81, p < .001). The final step produced a significant change, ΔR^2 = .02,

$F(5,282) = 26.14$, $p = .001$, with prior responsiveness (others to this information) negatively predicting anticipated emotional support ($\beta = -.15$, $t = -2.55$, $p < .001$). Information valence, relational quality, and prior responsiveness (receiver to discloser) were not significant in the final model. In the final model, stigma positively, relationship uncertainty, prior responsiveness (receiver to others), prior responsiveness (others to this information) negatively, and identity positively predicted 33% of the variance in anticipated emotional support to disclosure (at least one variable from each of the three attributes, information, relationship, and response).

Informational support. Next, a stepwise regression analysis was conducted with anticipated informational support as the criterion and information attributes (information valence, stigma, identity threat), relationship attributes (relational quality, relationship uncertainty) and response attributes (prior responsiveness: receiver to discloser, receiver to others, others to the information) as the eight predictors. The first step was significant (Adj. $R^2 = .05$, $F(1,283) = 16.63$, $p < .001$), relationship uncertainty negatively ($\beta = -.24$, $t = -4.08$, $p < .001$) predicted anticipated informational support. The second step produced a significant change, $\Delta R^2 = .05$, $F(2,282) = 17.14$, $p < .001$, with identity threat positively predicting anticipated informational support ($\beta = .23$, $t = -4.09$, $p < .001$). The third step produced a significant change, $\Delta R^2 = .04$, $F(3,281) = 15.08$, $p < .001$, with prior responsiveness (receiver to others) positively predicting anticipated informational support ($\beta = -.19$, $t = -3.44$, $p < .01$). The final step produced a significant change, $\Delta R^2 = .03$, $F(4,280) = 14.30$, $p < .001$, with stigma negatively predicting anticipated informational support ($\beta = -.19$, $t = 2.92$, $p < .001$). Information valence, relational quality, and prior responsiveness (receiver to discloser), and prior responsiveness (others

to this information) were not significant in the final model. In the final model,

perceptions of relationship uncertainty, identity threat of information, prior

responsiveness of the receiver to others, and stigmatization of information (at least one

variable from each of the three attributes, information, relationship, and response)

predicted 16% of the variance in anticipated informational support to disclosure.

   Instrumental support. Third, a stepwise regression analysis was conducted with

anticipated instrumental support as the criterion and information attributes (information

valence, stigma, identity threat), relationship attributes (relational quality, relationship

uncertainty) and response attributes (prior responsiveness: receiver to discloser, receiver

to others, others to the information) as the eight predictors. The first step was significant

(Adj. R² = .10, F(1,283) = 32.36, p < .001), relationship uncertainty negatively (β = -.32, t

= 5.69, p < .001) predicted anticipated instrumental support. The second step produced a

significant change, ΔR^2 = .05, F(2,282) = 24.87, p < .001, with prior responsiveness

(receiver to others) negatively predicting anticipated instrumental support (β = -.22, t = -

3.93, p < .001). The third step produced a significant change, ΔR^2 = .04, F(3,281) =

22.59, p < .001, with identity threat positively predicting anticipated instrumental

support (β = .21, t = -3.93, p < .01). The final step produced a significant change, ΔR^2 =

.02, F(5,280) = 19.59, p = .001, with stigma positively predicting anticipated instrumental

support (β = .16, t = 2.99, p < .01). Information valence, relational quality, and prior

responsiveness (receiver to discloser), and prior responsiveness (others to this

information) were not significant in the final model. In the final model, perceptions of

relationship uncertainty, prior responsiveness of the receiver to others, identity threat of

information, and stigmatization of information (at least one variable from each of the

three attributes, information, relationship, and response) predicted 21% of the variance in anticipated instrumental support to disclosure.

   Anticipated emotional reaction. Fourth, a stepwise regression analysis was conducted with anticipated emotional reaction as the criterion and information attributes (information valence, stigma, identity threat), relationship attributes (relational quality, relationship uncertainty) and response attributes (prior responsiveness: receiver to discloser, receiver to others, others to the information) as the eight predictors. The first step was significant (Adj. R^2 = .06, $F(1,286)$ = 19.29, $p < .001$), stigma positively (β = .25, t = 4.39, $p < .001$) predicted anticipated emotional reaction. The second step produced a significant change, ΔR^2 = .09, $F(2,285)$ = 14.69, $p < .001$, with identity threat positively predicting anticipated emotional reaction (β = .18, t = -3.09, $p < .001$). The third step produced a significant change, ΔR^2 = .11, $F(3,284)$ = 12.63, $p < .001$, with information valence positively predicting anticipated emotional reaction (β = .18, t = 2.79, $p < .001$). The final step produced a significant change, ΔR^2 = .13, $F(5,283)$ = 11.60, $p < .001$, with relationship uncertainty negatively predicting anticipated emotional reaction (β = -.15, t = -2.78, $p < .001$). Relational quality, and prior responsiveness (receiver to discloser, receiver to others, others to this information) were not significant in the final model. In the final model, stigma, identity threat of information, information valence, and relationship uncertainty (at least one variable from each of the three attributes, information, relationship, and response) predicted 14% of the variance in anticipated emotional reaction to disclosure.

   Anticipated avoidance. Fifth, a stepwise regression analysis was conducted with anticipated avoidance as the criterion and information attributes (information valence,

stigma, identity threat), relationship attributes (relational quality, relationship uncertainty) and response attributes (prior responsiveness: receiver to discloser, receiver to others, others to the information) as the eight predictors. The first step was significant (Adj. R^2 = .03, $F(1,286) = 8.39$, $p < .001$), relationship uncertainty negatively (β = -.16, t = -2.90, $p < .01$) predicted anticipated avoidance. The second step produced a significant change, ΔR^2 = .02, $F(2,285) = -2.28$, $p < .05$, with prior responsiveness (receiver to others) negatively predicting anticipated avoidance (β = -.16, t = -5.80, $p < .001$). The final step produced a significant change, ΔR^2 = .02, $F(5,284) = 6.32$, $p = .001$, with information valence positively predicting anticipated avoidance (β = .13, t = 2.25, $p < .05$). Relational quality, prior responsiveness (receiver to discloser), prior responsiveness (others to this information), identity threat, and stigma were not significant in the final model. In the final model, perceptions of relationship uncertainty, information valence, and prior responsiveness of the receiver to others (at least one variable from each of the three attributes, information, relationship, and response) predicted 5% of the variance in anticipated avoidance to disclosure.

Anticipated reciprocity. Sixth, a stepwise regression analysis was conducted with anticipated reciprocity as the criterion and information attributes (information valence, stigma, identity threat), relationship attributes (relational quality, relationship uncertainty) and response attributes (prior responsiveness: receiver to discloser, receiver to others, others to the information) as the eight predictors. The first step was significant (Adj. R^2 = .08 $F(1,286) = 24.75$, $p < .001$), prior responsiveness (others to this information) negatively (β = -.28, t = -4.97, $p < .001$) predicted anticipated reciprocity. The second step produced a significant change, ΔR^2 = .05, $F(2,285) = 21.57$, $p < .001$, with prior

responsiveness (receiver to discloser) positively predicting anticipated reciprocity (β = .23, t = -4.13, p < .001). The third step produced a significant change, ΔR^2 = .05, F(3,284) = 19.13, p < .001, with identity threat positively predicting anticipated reciprocity (β = .19, t = -3.54, p < .01). The final step produced a significant change, ΔR^2 = .02, F(5,282) = 15.85, p = .001, with relational quality negatively predicting anticipated reciprocity (β = -.14, t = -2.27, p < .001). Information valence, relationship uncertainty, and prior responsiveness (receiver to other), and stigma were not significant in the final model. In the final model, perceptions of prior responsiveness (receiver to discloser, others to this information), identity threat of information, and relational quality (at least one variable from each of the three attributes, information, relationship, and response) predicted 17% of the variance in anticipated reciprocity to disclosure.

Summary. There are several similarities across these models. First, relationship uncertainty and identity threat of information were predictors for five of the six DARS subscales and primary predictors in four of six subscales (anticipated emotional, instrumental, and informational support, and anticipated emotional reaction). Stigma and receivers' prior responsiveness to others' disclosure of personal/private information were consistent predictors in four of six DARS subscales, and primary predictors in three of six subscales (anticipated emotional, instrumental, and informational support). Information valence and others' prior responsiveness to the disclosure of this information were significant predictors in two of six models. Relational quality and receivers' prior responsiveness to participants' other disclosures of personal/private information were significant in one model (and in the same model, predicting anticipated reciprocity). In five of six models, at least one variable from each of the three proposed attributes

(information, relationship, response) significantly predicted the DARS subscale (anticipated emotional, informational, and instrumental support, anticipated avoidance, and anticipated reciprocity). The only model that did not include at least one variable from each of the attributes was anticipated emotional reaction (which did not include a response attribute). In general, relationship uncertainty, identity threat of the information, perceived stigmatization of the information, and prior responsiveness (receiver to others) emerged as the best overall predictors of the anticipated response (as measured by the DARS). Prior responsiveness (others to information; although not applicable in 25% of the sample) and information valence emerged as more secondary predictors of anticipated response. Relational quality and prior responsiveness (receiver to discloser) may be less salient in anticipated response formation because both only emerge as predictors in one model, anticipated reciprocity. Taken together, these results suggest that information, relationship, and response attributes, in conjunction, may be useful in predicting anticipated response. The overall discussion explores the implications of these associations in further detail.

Chapter 5

Overall Discussion

Introduction

Over the past several decades, scholars have worked to better understand how individuals manage information. Some of this work has focused on understanding the process of coming to a decision to disclose or continue to conceal, personal or private information (e.g., CCM, Afifi & Steuber, 2010; DD-MM, Greene, 2009; RRM, Afifi & Steuber, 2009). A primary factor in this process is potential disclosers' perceptions of how another might respond to the information. Many information management models incorporate an anticipated reaction variable that consistently demonstrates predictive power in decisions to disclose information (see Afifi & Steuber, 2009, 2010; Greene et al., in press). Some research has indicated that anticipated response is a complicated and multi-faceted construct (see Greene et al., 2010). However, despite its appearance in multiple theories, models, and programs of research within information management (e.g., CCM, CPM, and DD-MM, as well as Derlega's and Vangelisti's programs of research in disclosure and in secrets) the concept of anticipated response has not been clearly or consistently articulated. This absence of clarity is problematic for several reasons. First, the lack of a cohesive disclosure component makes it difficult to pinpoint what aspects of anticipated response drive information management. Second, ambiguity surrounding the conceptualization and operationalization of anticipated response to disclosure decision-making inhibits full explanation and prediction of information management decisions. Further, due to the significance of the concept anticipated response in disclosure decisions (as demonstrated in existing research), a unified and

clearly articulated conceptualization of anticipated response would allow for more targeted interventions in applied settings. Thus, this project developed categories of anticipated response as an effort to fill these gaps in information management research.

The present project consisted of two studies. Study I sought to systematically review the existing literature in order to develop a clear and consistent conceptualization of anticipated response, to operationalize the conceptualization of anticipated response, and, finally, to confirm and validate the measures developed to reflect subdimensions of anticipated response and related constructs. Study II continued to validate the dimensional structure of anticipated response and additionally sought to identify factors that may influence the formation of anticipated response. Overall, the results of Study I and Study II support the validity of the anticipated response categorization developed. Additionally, the results of Study II indicate that informational, relationship, and response attributes are important factors in understanding how individuals formulate their perceptions of anticipated response. The sections that follow will discuss the validation of the anticipated response subscales (both conceptual and operational) and interpret the findings regarding the role of informational, relationship, and response attributes in anticipated response formation. Subsequent sections will discuss the implications of the clarification of anticipated response (both conceptual and operational) and the potential value added when the anticipated response typology developed in the current project is integrated with existing information management theory broadly. Final sections will identify strengths and weaknesses of the current project and propose areas for future research. The next section begins with an overview of the project.

The Dimensional Structure of Anticipated Response

This section discusses the overall dimensional structure of the conceptualization of anticipated response developed in this project. Results from Study I and Study II suggest that the proposed Disclosure Anticipated Response Scale (DARS), although yet a work in progress, represent the different dimensions of anticipated response with adequate psychometric properties. The fit statistics were good for all DARS subscales, and Cronbach's alphas were above the acceptable level of .70 (Nunnally, 1978) across two studies and three different sets of data providing replication, although within similar datasets.

Although more research is necessary to establish the DARS as a reliable and valid measure of anticipated response, all DARS subscales demonstrated generally acceptable validity. In order to establish convergent validity, this project analyzed the associations between the DARS and disclosure process components (relational quality, efficacy, information valence, and likelihood of disclosure). The project also tested predictive models of anticipated response and determined that information, relationship, and response attributes are integral in predicting anticipated response. Thus, results supported the anticipated response typology and the proposed measurement structure developed in this project. The next section discusses the four individual types of anticipated response identified in the review of the literature.

Categories of anticipated response. The overall goal of the current project was to clarify the conceptualization of anticipated response as it pertains to disclosure decision-making. This project determined that there are four broad dimensions of anticipated response and developed measurement for the subtypes. The anticipated response subscales were tested across two studies and three separate sets of data. The

instructions for the anticipated response questions (29 total items in Study I, 24 total items in Study II) were similar across studies (see Tables 7-12). The following sections discuss the individual subscales, starting with emotional reaction.

Anticipated emotional reaction. This section discusses anticipated emotional reaction first because the information management literature review most frequently highlighted elements of emotional reaction as an anticipated and/or actual response to disclosure. Emotional reaction is also the broadest category of anticipated response, which the review cautioned might make the emotional reaction subscale more prone to overlap with other DARS subscales. Despite these caveats, the emotional reaction subscale of the DARS demonstrated good reliability and validity.

The emotional reaction subscale demonstrated good fit to the data for perceptions of emotional reaction as an anticipated response to disclosure decisions between friends (both Study I and Study II) and romantic partners (Study I) and reliability was good across all three sets of data. The anticipated emotional reaction subscale also demonstrated good convergent validity with the other anticipated response subscales (across both Study I and Study II). Theoretically, the anticipated response subscales should be associated with each other (both as theoretically related concepts and as subscales of the same latent concept – anticipated response). The emotional reaction subscale of anticipated response is consistently and strongly correlated (in the expected direction) with the remaining three DARS subscales, support (emotional, informational, and instrumental), avoidance, and reciprocity across both sets of data in Study I and in Study II, providing evidence for the validity of this measure (validity is further established in the section describing the correlations with key disclosure components).

The final items for anticipated emotional reaction (see Table 10 and Appendix N) also demonstrate face validity and represent prior literature (e.g., Afifi & Steuber, 2010; Derlega et al., 2004; Greene & Faulkner, 2002; Vangelisti et al., 2001).

Some of the correlations between the anticipated emotional reaction subscale and other DARS subscales may be considered strong enough that researchers may be concerned about multicollinearity (for discussion, see Tabachnick & Fidell, 2007). In both sets of Study I data (friend and romantic partner), anticipated emotional reaction was consistently correlated with two of the anticipated support subscales ($r > .70$) anticipated emotional support, and anticipated instrumental support. This finding is not surprising, as anticipated emotional reaction and anticipated support are the two broadest categories of anticipated response. Therefore, as explicated in the review, overlap between concepts (anticipated emotional reaction and anticipated support) was expected. However, future researchers should use caution when using anticipated emotional reaction with other DARS subscales simultaneously in multivariate analyses.

Anticipated emotional reaction was correlated with several of the other disclosure-related components examined in this project. Information management theory is consistent in identifying components important to the disclosure process including: aspects of the relationship (e.g., relational quality) and the information (e.g., information valence), disclosers' perceived confidence in their ability to communicate (e.g., efficacy), and individuals' perceptions of the probability they will share that information with a specific other (e.g., likelihood of disclosure). Anticipated emotional reaction was correlated with all of these components in at least one of the sets of data. Anticipated emotional reaction was not correlated with as many of these components as some

dimensions of anticipated response (i.e., instrumental support, emotional support, or reciprocity), but anticipated emotional reaction was correlated with a greater number of other variables than other anticipated response dimensions (i.e., anticipated avoidance or anticipated informational support; to be discussed later in this section). A more detailed discussion of how these findings compare to, and are consistent with, prior research is provided later in the key components and responsiveness sections.

Emotional reaction in information management theory. Clarity surrounding the concept of anticipated emotional reaction to disclosures may be useful in information management theory. One way that clarity about anticipated emotional reaction would augment existing information management theory is because it would enable researchers to examine the associations between anticipated emotional reaction and relational evaluation as it pertains to disclosure decision-making. All of the information management theories and perspectives discussed in the rationale (CCM, CPM, DD-MM, RRM, Derlega, and Vangelisti perspectives) incorporate some element of relational quality or evaluation, and they indicate that relational quality is central to the process of disclosure decision-making. Of the DARS subscales, it is the anticipated emotional reaction dimension of anticipated response that is the least consistently associated with proxies for relational quality commonly used in existing research (i.e., anticipated emotional reaction is not correlated with overall relational quality or relational love in the romantic partner data of Study I, or with overall relational quality in Study II). However, anticipated emotional reaction is consistently associated with information assessment, efficacy, likelihood of disclosure, and relationship *uncertainty*. This finding highlights the argument that there are elements of the disclosure process that are less affected by the

quality of the relationship between the discloser and the intended recipient, and these elements may be uncovered through further examination of anticipated emotional reactions to disclosure.

One contribution of the current project is the consideration of how anticipated emotional reaction in particular (in contrast to anticipated response generally) may affect the management of information. In examining anticipated emotional reaction specifically, future research might further explore disclosure concerns that are less closely related to the relative degree of "closeness" between the discloser and the intended target. For example, a loved one might initially have a negative emotional reaction to very bad news regardless of the quality of the relationship between receiver and discloser (e.g., a wife might be expected to start crying when her husband tells her that he has terminal cancer and only a few months to live regardless of the current status of the relationship). This phenomenon may also be true in situations where the information is positively valenced but has potentially negative implications for the receiver. For example, a romantic partner might have a negative emotional reaction to the "good news" of a promotion if the promotion also means family relocation. Thus, emotional reactions to disclosure may be more strongly associated with implications for the receiver than with the "valence" of the information itself. This should be explored further in future research.

The lack of consistent association between anticipated emotional reaction and relational evaluation does not suggest an absence of association between anticipated emotional reaction to disclosure and relational evaluation. Instead, this finding suggests that the concept of anticipated response, especially anticipated emotional reaction, has predictive power in disclosure decision-making that is unexplained by relational quality.

One direction for future research is to examine the disclosure process from the perspective of receiver implications or effects (e.g., see Derlega et al., 2002 reasons for and against disclosure of HIV status pertaining to "duty"). Another possible direction includes utilizing evaluations of relationship uncertainty in information management research more broadly instead of evaluations of relational quality. Incorporating the concept of relationship uncertainty in information management research also has the potential to further elucidate the function of relational evaluation in disclosure decision-making. The implications section explores this possibility in further detail.

An assumption in relationship research is that although individuals sometimes struggle to manage the tension between privacy and openness (see CPM, see also Derlega), there is a general expectation for openness in close relationships. The current findings related to the anticipated emotional reaction dimension of anticipated response illustrate that, despite how "close" disclosers may feel to particular potential receivers, disclosers might be reticent to share certain information with others because of fear of the specific reaction in that moment (or the intensity of the reaction). Even if disclosers *also* anticipate support or openness in response to disclosure, the potential of an intense emotional reaction (especially an intensely negative emotional reaction) may inhibit the disclosure process. For example, a young girl who is very close to her parents may anticipate that her parents will fully support her but, she also knows that initially her father will yell and her mother will cry when she tells them she is pregnant (even though both parents will calm down soon after the disclosure). Despite the expectation of emotional, instrumental, and informational support, the decision to disclose the information has the potential to be sidetracked by the anticipated emotional reaction.

The associations between anticipated emotional reaction and prior responsiveness also have implications for information management theory. Anticipated emotional reaction was only associated with one of the three types of prior responsiveness, prior responsiveness of others to the information. When people perceive that others have been responsive to this information when disclosed in the past, they anticipate more positive emotional reactions currently. This pattern is inconsistent with four other DARS dimensions (emotional, informational, and instrumental support, and reciprocity) that are all associated with all three types of prior responsiveness, however, the broader pattern of associations between prior responsiveness and anticipated response dimensions is consistent. The following section proposes an explanation for why the emotional reaction dimension may have fewer significant associations with the other types of prior responsiveness.

In general, the patterns of associations between the dimensions of anticipated response presented in the current project and the types of prior responsiveness are expected. Humans learn to predict the behaviors of others based on past behavior (see Social Judgment Theory, Sherif & Hovland, 1961; Social Learning Theory, Bandura, 1977). Anticipated emotional reaction, as conceptualized in this project, may be the most behaviorally oriented type of anticipated response because it is perceived as being accompanied by a behavioral reaction (e.g., crying, yelling, hugging). The association between anticipated emotional reaction and only one of the types of prior responsiveness (others to information) may have important implications for disclosure decision-making. That anticipated emotional reaction was associated with prior responses related to the *information* but not associated with prior responsiveness of the *receiver* suggests that

perceptions related to anticipated emotional reaction may be more closely associated with the information than relationships. Indeed, in Study II, anticipated emotional reaction was the only DARS subtype that was correlated with all three information assessment proxies (information valence, stigma, and identity threat). Further, emotional reaction is the only DARS subtype *not* associated with overall relational quality (see Table 4; this suggestion is also supported by the relative lack of association between anticipated emotional reaction and other measures of relational assessment, discussed earlier). Therefore, the deviation in association of anticipated emotional reaction from the general pattern of association between related variables (e.g., other types of prior responsiveness) and other anticipated response categories does not necessarily indicate a conceptual weakness in the dimensional structure. Instead, this bolsters the argument for the contribution of the anticipated response typology because it explicates how different types of anticipated response may be associated with different facets of information management or different parts of the disclosure decision-making process. The implications of this particular contribution are especially important to information management research in applied contexts, for example in the design of disclosure decision-making interventions. These implications (i.e., the relative weight of anticipated emotional reaction in the disclosure decision-making process, especially as it applies to decisions about stigmatized or health-related information) should be explored in future research.

Previous research demonstrates how anticipated response is salient in disclosure decision-making (e.g., Afifi & Steuber, 2010; Checton & Greene, 2012; Greene et al., in press). What is less obvious is how individuals form their perceptions of anticipated

response. The following section discusses the variables that may predict anticipated emotional reaction.

Modeling anticipated emotional reaction. A primary goal of Study II was to identify and test variables likely to predict anticipated response to better understand a variable that is so salient to the disclosure process. The following sections discuss the individual predictors of anticipated emotional reaction. Later, a Modeling the Formations of Anticipated Response section provides a broader of overview of the components that predict anticipated response collectively. I begin with the predictors of anticipated emotional reaction.

The present study examined three different attributes related to the disclosure process (information, relationship, and responsiveness attributes) and their relative power to predict the six dimensions of anticipated response (support – comprised of emotional, informational, and instrumental support, emotional reaction, avoidance, and reciprocity). These three attributes were successful in predicting some of the variance across all dimensions of anticipated response. However, the anticipated emotional reaction dimension was the only anticipated response subtype predicted by only two of the three attributes (information and relationship attributes but not responsiveness attributes).

Four key components emerged as predictors of anticipated emotional reaction. Stigma, identity threat, valence, and relationship uncertainty predicted a moderate amount of the variance in anticipated emotional reaction. Anticipated emotional reaction was the only anticipated response dimension for which all three information attributes entered the model (identity threat, stigma, and information valence). This pattern of association between emotional reaction and elements of information assessment is

consistent with the earlier presented argument that emotional reaction may be more strongly related to information assessment than the other subtypes of anticipated response.

Informational elements may boast greater capacity to predict the formation of anticipated emotional reaction than other predictors (e.g., relationship or response). From this finding, researchers may focus future exploration of emotional reaction on information assessment. Clarity about these associations may enable greater precision in predicting disclosure decision-making about certain types of information (e.g., health-related information) and perhaps bypassing inclusion of additional disclosure-process components (e.g., relational evaluation) for the sake of parsimony. More parsimonious disclosure process models may be especially useful in designing disclosure-related interventions.

Summary of emotional reaction. The emotional reaction dimension of anticipated response presented in the current project exhibits psychometric integrity. Further, emotional reactions to disclosure are well represented in the literature, thus understanding how anticipated emotional reaction is affected by other constructs (e.g., informational attributes) has the potential to clarify and inform our knowledge of the disclosure decision-making process in addition to our ability to better predict disclosure decisions. The associations between anticipated emotional reactions and key disclosure process components will be further discussed in subsequent sections (see "Key Disclosure Components"). The following section describes the next dimension of anticipated response, support.

Anticipated support. The literature review identified anticipated emotional reaction as the broadest and most prevalent category of anticipated response in the literature, however, studies of anticipated support are also abundant in the literature. In contrast to emotional reaction which was most frequently measured as a reaction to disclosure after the information was shared (as opposed to *anticipated* emotional reactions), existing literature frequently indicates anticipated support (e.g., expecting support, assistance, or help) as a key component that individuals consider when making decisions about disclosing personal/private information (Derlega perspective, DD-MM, Vangelisti's secret functions as well as other work in secrets, e.g., Kelly & McKillop, 1990, and CPM). Further, anticipated support was one of the few anticipated response categories for which researchers had developed prior measurement (see Derlega et al., 2002; Greene et al., in press).

The anticipated support dimension of anticipated response is comprised of three related subcategories: emotional support, instrumental support, and informational support. These subscales were generally stable and psychometrically sound in both Study I and Study II, demonstrating good fit with the data and reliability in the context of disclosure decision-making to friends (both Study I and Study II) and romantic partners and the measurement was generally stable. Reliabilities for all three dimensions of anticipated support were the strongest in the romantic partner data suggesting that expectations of support as a response to disclosure may be especially relevant in romantic relationships as compared to friendships.

The anticipated support subscales also demonstrated good convergent validity with the other anticipated response subscales (across both Study I and Study II).

Theoretically, the anticipated response subscales should be associated with each other (both as theoretically related concepts and as subscales of the same latent concept – anticipated response). The anticipated support subscales of anticipated response are consistently and strongly correlated (in the expected direction) with the remaining three DARS subscales, anticipated emotional reaction, anticipated avoidance, and anticipated reciprocity across both sets of data in Study I and in Study II, providing evidence for the validity of this measure (the validity of the anticipated support subscales is further established in the section describing the correlations with key disclosure components). The final items (see Tables 7-9) also demonstrate face validity and represent prior literature (e.g., Burleson, 1984; Derlega et al., 2002; Greene et al., in press; Kelly & McKillop, 1990; Vangelisti & Caughlin, 1997).

As expected, correlations among the anticipated support subscales (emotional and instrumental specifically) are especially strong and may present issues of multicollinearity similar to prior discussion for emotional reaction. Although conceptually distinct, correlations between anticipated emotional support and anticipated instrumental support are strong across all three sets of data, and between anticipated instrumental support and anticipated informational support in Study II. Again, consistent with the goals of this project and the presentation of these concepts in the literature, the current project retained the proposed dimensional structure of the three individual subscales for Study I and Study II analyses.

Future research may wish to consider two alternatives to retaining the dimensional structure of anticipated support presented in this project. First, the purpose of this project was to identify and evaluate all relevant anticipated response categories. Yet,

not all categories may be relevant for all types of disclosure, and future researchers may

adapt the measure as needed. For example, informational support, although consistently

noted in disclosure research (e.g., Greene et al., 2003) and highly relevant in health-

related disclosure-related, may not be relevant in other contexts such as organizational or

an individual struggling through the disintegration of a relationship. In these situations,

measurement of anticipated informational support may not add value. Future researchers

should carefully consider how individuals may evaluate the information that they are

considering disclosing as well as the context for disclosure (i.e., disclosing a medical

condition to a boss compared to disclosing to a partner) to evaluate if all anticipated

support subcategories are relevant to the disclosure of that information. Second, future

researchers may consider assessing anticipated support as one 12-item scale instead of

three separate scales. The project also tested a 12-item unidimensional measure of

support and found that it fit the data and was reliable ($\alpha = .91$ Study I F, Study I RP, and

Study II). However, patterns of associations and conceptual framework lead to retention

of separate factors for the current study.

  Support in information management theory. Anticipated support was correlated

with all of the measured disclosure process components in at least one of the sets of data.

Looking across the types of support individually, anticipated <u>instrumental</u> support was

the most frequently correlated with disclosure components (such as both proxies for

relational quality, disclosure efficacy, and likelihood of disclosure). <u>Emotional</u> support

was next (with relational love, disclosure efficacy, and likelihood of disclosure), followed

by <u>informational</u> support (such as both proxies for relational quality in Friend data only

and likelihood of disclosure). The key components and responsiveness sections discuss in more detail how these findings compare to, and are consistent with, prior research.

Consideration of anticipated support may serve several functions in existing information management theory. First, although the DD-MM (Greene, 2009) references the broader concept of anticipated response, tests of the model to date have only included one type of anticipated response, emotional support (Checton & Greene, 2012; Greene et al., in press). From these studies, we know that anticipated emotional support (or partner support, Checton & Greene, 2012) predicts decisions to disclose (Greene et al., in press) as well as efficacy which then predicts breadth, depth, and frequency of ongoing health disclosure (Checton & Greene, 2012). However, other types of anticipated response are likely relevant in disclosure decision-making, such as informational and instrumental support that were unmeasured in those studies. Future research may benefit from models comparing the disclosure process for the three different types of anticipated support, especially as they relate to the disclosure of a variety of topics. Exploration of how the different types of support influence the disclosure process may be especially relevant to research utilizing the DD-MM, as it applies specifically to health information disclosure, discussed next.

The DD-MM specifically predicts information management decisions surrounding the disclosure of health-related information. This context is especially relevant to both instrumental support and informational support because individuals may need help, for example, finding information about a medical condition, remembering to take medication, getting to a doctor's office, or having childcare while at appointments. Future research should continue to test the DD-MM and assess if anticipated instrumental

support (or informational support) functions in disclosure decision-making in a similar capacity as anticipated emotional support. Further, future research could design studies that allow researchers to determine how the types of anticipated support function simultaneously or are weighted in disclosure decisions, as well as how different types of support may be more useful for certain types of disclosure or within certain populations (e.g., elderly populations may need more informational support or assistance with electronic searching than "generation X").

Anticipated emotional support may also be relevant in the management of secret information. The need for support (especially emotional or instrumental support) may be especially heightened in the context of secret information management because of the nature of the information itself and the mental/physiological toll of keeping a secret (e.g., see research on Rumination, Afifi & Caughlin, 2006; Nolen-Hoeksema, 1998; see also Kelly, 2002). One explanation for this relates to the types of information frequently kept (or considered) secret. That is, the types of secrets most frequently reported include activities considered taboo by family members and/or the larger society (e.g., information perceived as stigmatized, about 75% across two studies; Vangelisti & Caughlin, 1997). People might especially need support to cope with information considered taboo or stigmatized by others. Further, believing that a receiver would support and not condemn a potential discloser despite the perception that family members or society finds the information "unacceptable" may be a salient motivating factor for disclosure. The next section describes the variables that predict anticipated support.

Modeling anticipated support. Overall, the models predicting support were consistent across the three types of anticipated support. Information, relationship, and

response attributes predicted the greatest amount of variance in the three types of anticipated support (compared to models predicting other dimensions of anticipated response): anticipated emotional support, anticipated instrumental support, and anticipated informational support. Relationship uncertainty, stigma, identity threat, and prior responsiveness (receiver to others) consistently predicted all three types of anticipated support (although these variables sometimes entered on different steps). Prior responsiveness (others to the information) also predicted anticipated emotional support but not anticipated instrumental or informational support. The consistency of these associations supports the convergent validity of the support measure. These variables also predicted other dimensions of anticipated response: relationship uncertainty also predicts avoidance and emotional reaction, identity threat also predicts reciprocity and emotional reaction, prior responsiveness – receiver to others also predicts reciprocity and avoidance, and stigma also predicts emotional reaction. However, these predictions are not as consistent across dimensions of anticipated response as they are among anticipated support subtypes. This may indicate the possibility of creating a single measure of anticipated support (combining items representing each type), and this is discussed in the implications section.

Understanding the elements underlying individuals' perceptions of anticipated support is important to information management for a variety of reasons. Emotional reactions are frequently cited as responses to disclosure, but anticipation of support is the anticipated response dimension reported most frequently in information management research (e.g., Checton & Greene, 2012; Greene et al., in press). Some of the consistency of the presence of anticipated support in existing literature (e.g., in disclosure decision-

making literature Checton & Greene, 2012; Greene et al., in press; in the broader

relationship literature Cunningham & Barbee, 2000; Reis, 2001) may be attributed to the

lack (until the present study) of a theoretically constructed anticipated response variable

(i.e., researchers continued to utilize what was present in the literature). Existing research

also consistently indicates support an outcome of some types of disclosure.

Understanding how elements of relationship uncertainty, information appraisals

(especially perceived stigmatization of the information and perceived identity threat), and

perceptions of how the intended target has responded to others' private information has

important implications for predicting disclosure decisions and disclosure outcomes. For

example, consider a scenario where one person is contemplating disclosing a certain

piece of information to a certain target. The present project suggests that the if the

potential discloser is uncertain about the stability of their relationship with the intended

target, perceives that the potential target has not been responsive to others' private

information disclosures in the past, and believes the information itself to be stigmatized

and threatening to his/her identity, then the discloser is not likely to expect support

(emotional, informational, or instrumental) from that particular target and perhaps not

disclose. Further, existing information management research (e.g., Afifi & Steuber, 2009,

2010; Greene et al., in press) suggests that without anticipation of support, the discloser is

less likely to share that information with that person. Future researchers may find

clarification of these issues especially useful in designing interventions intended to

increase disclosure frequency. Although elements of the information itself (e.g., the

degree of stigmatization and identity threat) may be located in others' perceptions and not

able to be influenced by the discloser, counselors, for example, might be able to guide

potential disclosers to appropriate targets by having them consider their relational

stability with members of their social network and particular network members' prior

demonstrations of responsiveness. This idea of training, particularly in reactions,

responsiveness, and information assessment, should be explored in future research.

Summary of support. The support dimensions of anticipated response presented in

the current project exhibit psychometric integrity and validity. The present project

proposed three subtypes of anticipated support: emotional, informational, and

instrumental. Anticipated support is an important component of the disclosure process

and understanding how individuals form their perceptions of anticipated support has

potential to augment our understanding of how individuals' manage their personal/private

information as well as to enable better intervention design. The associations between

anticipated support and key disclosure process components will be further discussed in

subsequent sections. The next section discusses another dimension of anticipated

response, anticipated avoidance.

Anticipated avoidance. The next two categories of anticipated response,

avoidance and reciprocity, are much narrower in conceptualization than either emotional

response or support. The category of anticipated avoidance is included in the DARS

partially due to the large body of literature on topic avoidance as an information

management strategy. Further, avoidance may be especially relevant in contexts where

individuals share information through mediated-communication, especially email or text

messaging.

The avoidance subscale was psychometrically sound in both Study I and Study II,

demonstrating good fit with the data and reliability, with avoidance as an anticipated

response to disclosure decisions between friends (both Study I and Study II) and romantic partners. The measurement was generally consistent.

The avoidance subscale also demonstrated good convergent validity with the other anticipated response subscales (across both Study I and Study II). Theoretically, the anticipated response subscales should be associated with each other, both as theoretically related concepts and as subscales of the same latent concept – anticipated response. The anticipated avoidance subscale of anticipated response is consistently correlated in the expected direction with the remaining three DARS subscales: anticipated emotional reaction, anticipated support (emotional, informational, and instrumental), and anticipated reciprocity across both sets of data in Study I and in Study II (validity is further established in the section describing the correlations with key disclosure components). The final items (see Table 11 and Appendix N) have face validity and represent prior literature (e.g., Afifi et al., 2009; Afifi & Steuber, 2010; Greene et al., 2006). There are no multicollinearity concerns with the anticipated avoidance subscale and other DARS subscales.

There is one notable difference between the anticipated avoidance subscale and the other DARS subscales. The means for avoidance, although close to neutral, are significantly lower than the means for all other DARS subscales. That is, while participants tended to agree or strongly agree that their friends or romantic partners would have negative emotional reactions to disclosing negative information, would not be supportive, and would not be open in return, for the most part, they neither agreed nor disagreed that the disclosure target would avoid discussing the information in question.

Avoidance in information management theory. The patterns of association between the avoidance dimension of anticipated response and other variables measured in the current project were somewhat different from the patterns of association among other anticipated response dimensions. Of all the DARS subscales, anticipated avoidance was the least frequently correlated with other disclosure-related components (although it was correlated about 2/3 of the time). Anticipated avoidance was consistently positively correlated with most DARS and DOAS subscales. One possible explanation for the difference in mean scores and correlational patterns is that individuals may have an ability to consider more "traditional" responses to disclosure (such as support or emotional reaction) to information that is currently undisclosed but have difficulty imagining a "non-response" that constitutes avoidance. This phenomenon may be due in part to study design where participants reported on unshared information that they considered "somewhat negative."

Existing research explores the function of topic avoidance in relationships in ongoing communication between individuals in relationships (e.g., Caughlin & Afifi, 2004; Caughlin & Golish, 2002) but offers little insight into the function of *anticipated* topic avoidance in disclosure decision-making. Thus, although individuals experience avoidance they may not be able to expect or conceive of avoidance as a response to disclosure. Future research could integrate the concepts of anticipated and actual topic avoidance in order to further clarify the process of information management and determine how findings related to topic avoidance also apply to anticipated avoidance, especially as it pertains to information management.

A second explanation for the avoidance findings is that anticipated avoidance may actually be an example of another type of anticipated response. In general, the strength of correlation between anticipated avoidance and other DARS and DAOS subscales was weaker than the correlations between the other DARS subscales. Anticipated avoidance was most strongly correlated with anticipated emotional support and anticipated emotional reaction. It is possible that avoidance could be construed as an example of either emotional support or emotional reaction. That is, an actively avoidant response (e.g., leaving the room, walking away from the discloser following the disclosure) might be considered more broadly as a negative emotional reaction. Or a more subtle avoidant response (e.g., not responding to or acknowledging a mediated disclosure, responding with silence or tactfully changing the subject) might be considered emotionally unsupportive. It is also possible that anticipated response and reciprocity represent a continuum of openness, with reciprocity (openness) marking one anchor and avoidance the other. Future research should explore the possibility that avoidance is part of another dimension of anticipated response.

Future research should conduct more studies that focus on avoidance in order to fully determine the function of anticipated avoidance in anticipated response and in disclosure decision-making, and confirm or dismiss the possibility that anticipated avoidance is a subpart of another DARS dimension (e.g., an example of an emotionally unsupportive response or a negative emotional reaction). A second key question to answer would be if anticipated avoidance is perceived as "negative" in the same way as a negative emotional reaction (for example) or if there may be situations where avoidance is a desired response (as some topic avoidance research indicates that topic avoidance

may be functional in relationships, see Caughlin & Afifi, 2004; Caughlin & Golish, 2002; see also Roloff & Ifert, 2000).

Speculating about the potential function of anticipated avoidance in existing information management theory is difficult. Like informational and instrumental support, avoidance may only be relevant with certain types of disclosure or in certain contexts. For example, in an organizational context, an individual might disclose to a superior about a gambling problem and ask for permission to start a work based support group; the superior could respond with "I'll get back to you" but s/he never does (thus enacting perceived avoidant behaviors that may influence the outcome of that particular disclosure; the boss could have simply forgotten the matter but it is the discloser's perceptions that will influence future communication). Another possibility is that anticipated avoidance might be much more relevant with disclosure decisions that are enacted through mediated communication (i.e., through email, chat, or text message) where a complete lack of response (or message acknowledgement) is easier for receivers to enact.

The difficulty in determining the precise function of anticipated avoidance in disclosure decisions is not unlike the dilemma in identifying the function of *topic* avoidance in relationships (as well as in secrets research). Topic avoidance research is also somewhat inconclusive about the effect of topic avoidance in relationships, with some studies indicating negative effects between topic avoidance and relationship outcomes (e.g., Afifi & Guerrero, 1998; Afifi et al., 2009; Afifi & Olson, 2005), and other studies indicating that topic avoidance may be functional (e.g., Caughlin & Afifi, 2004; Caughlin & Golish, 2002; see also Roloff & Ifert, 2000). Thus, although evidence

generally points to the association between topic avoidance in relationships and dissatisfaction, some research indicates that topic avoidance might serve an important function in relationships such as to avoid unnecessary conflict (see Caughlin & Afifi, 2004; Donovan-Kicken & Caughlin, 2010). Future research might design studies that specifically explore anticipated avoidance in organizational or mediated contexts to determine if avoidance is a more salient predictor in disclosure decision-making within certain types of disclosure or situations with valid outcomes. Future research should continue to investigate anticipated avoidance, especially with different designs. For example, a study that assesses the DARS subtypes to *disclosed* information would help elucidate if individuals perceive avoidance as a response to certain types of disclosure. This proposed study could be similar in design to previous research in this area conducted by Caughlin et al. (2005) and Greene and Faulkner (2002). However, in contrast to those studies, the DARS measures presented in the present study could be adapted and used at multiple data points to allow for the calculation of difference scores (compared to retrospective reports of response).

  Modeling anticipated avoidance. Results of the regression model for anticipated avoidance were somewhat inconsistent with the other DARS subscales. Although all three attributes entered the model, information, relationship, and response attributes predicted the least amount of variance in anticipated avoidance (compared to higher variance explained in other models such as anticipated emotional support, anticipated instrumental support, anticipated reciprocity, and anticipated informational support). Relationship uncertainty, prior responsiveness (receiver to others), and information valence predicted anticipated avoidance. This model is consistent with several other

DARS predictive models in that relationship uncertainty and prior responsiveness (receiver to others) emerge as predictors. Prior research in *topic* avoidance suggests that one of the reasons that individuals avoid specific topics is because they believe their partner will avoid talking about the issue (e.g., Afifi & Caughlin, 2004). Afifi and Caughlin (2004) conceptualize this perception as partner responsiveness, or an absence of responsiveness specifically. Therefore, it is not surprising that prior responsiveness (receiver to others) emerged as a predictor. Future research should consider other possible predictors related to partner "responsiveness" and how it relates to avoidance as a response to disclosure.

Anticipated avoidance was also one of only two models in which information valence emerged as a predictor of anticipated response (anticipated avoidance and anticipated emotional reaction). This pattern may indicate that anticipated avoidance recognizes a different facet of anticipated response than do the other DARS dimensions, perhaps one that is less sensitive to information nuances and relies on positive/negative assessments. These results highlight the need for future research about individuals' perceptions of anticipated avoidance and how *anticipated* avoidance functions in the process of information management (in contrast to the wealth of research that examines enacted avoidance and the effect it has on communication and relationships). Specifically, future research might explore other variables not considered in the present project such as power dimensions (e.g., influence power) and relational conflict.

Summary of avoidance. The avoidance dimension of anticipated response presented in the current project exhibits psychometric integrity. Incorporation of an avoidance dimension of response is an important contribution of the anticipated response

typology presented in the current project because although avoidance is present in the literature, there is no evidence to date of how avoidance, especially anticipated avoidance, may function in disclosure decision-making. However, existing research suggests that understanding anticipated avoidance is important to information management theory and research because of the potential for avoidance to halt the disclosure process (e.g., past research indicates lack of partner responsiveness or "getting what I need" from the communicative interaction as a reason for topic avoidance, see Afifi & Guerrero, 1998). Additionally, avoidance (both actual and anticipated) may be more closely related to power dimensions in relationships and conflict. The associations between anticipated avoidance and key disclosure process components assessed in the current project will be further discussed in subsequent sections. The following section discusses the final DARS subscale, anticipated reciprocity or partner disclosure.

Anticipated reciprocity/partner disclosure. Anticipated reciprocity may be the narrowest category of anticipated response proposed in the present study. However, the conceptualization in the current study was intentionally defined more broadly as "open in return" compared to other conceptualizations which include more topically exact reciprocal disclosures (that is, in situations where there is conversational demand for topically relevant reciprocal self-disclosures, such as reciprocal disclosure of homosexuality or family dysfunction, see Dindia, 2002). Although the review suggested that anticipated reciprocity might actually be a subtype of a broader category (e.g., anticipated emotional reaction or support), analyses demonstrated that, like anticipated avoidance, anticipated reciprocity is both conceptually and methodologically distinct

from other subtypes of anticipated response. Further, this measure is reliable and demonstrates good convergent validity.

The reciprocity subscale was psychometrically sound in both Study I and Study II, demonstrating good fit with the data and reliability, with reciprocity as an anticipated response to disclosure decisions between friends (both Study I and Study II) and romantic partners. The anticipated reciprocity subscale also demonstrated good convergent validity with the other anticipated response subscales (across both Study I and Study II). Theoretically, the anticipated response subscales should be associated with each other both as theoretically related concepts and as subscales of the same latent concept – anticipated response. The reciprocity subscale of anticipated response is consistently positively correlated with the remaining three DARS subscales, anticipated emotional reaction, anticipated support (emotional, informational, and instrumental), and anticipated avoidance across both sets of data in Study I and in Study II, providing evidence for the validity of this measure (validity is further established in the section describing the correlations with key disclosure components). The final items (see Table 12 & Appendix N) have face validity and represent the prior literature (e.g., Altman & Taylor, 1973; Kelly & McKillop, 1996; Manne et al., 2004a, 2004b). There are no multicollinearity concerns with the anticipated reciprocity subscale and other DARS subscales.

Reciprocity in information management. Numerous disclosure studies investigate the concept of reciprocity or "partner disclosure" (as labeled in the IPMI), although not with the same purpose as the current study. That is, experimental research has manipulated reciprocity (e.g., confederate reciprocity) to determine the effect on participants' (both discloser and receiver) self-disclosure. However, generalizing across

these studies is difficult because of inconsistent operationalization (see Dindia, 2002, for review). Researchers have also attempted to assess the effect of reciprocity (reciprocal disclosure) on disclosure using sequential analysis, social relations analysis, and correlational analyses. Taking into consideration multiple concerns for validity, meta-analyses cautiously suggest that, in general, self-disclosure is reciprocal (Dindia, 2002). However, research often investigated this association with strangers or confederates, and data about reciprocal disclosures in conversations between partners is often correlational or retrospective (for exceptions see Manne et al., 2004a, 2004b, for "partner disclosure" as conceptualized in the IPMI).

Investigations of the IPMI examine the concept of partner disclosure (defined similarly to reciprocity in the current project) as it relates to the process of building intimacy in relationships. This research somewhat diverges from the original postulates of SPT which indicate that reciprocity of self-disclosure will decrease as partners become more intimate (see Altman, 1973). Research on the IPMI concludes that partner disclosures are associated with the process of building intimacy in relationships, however, only when in the context of a *responsive* partner (see Laurenceau et al., 1998). This condition brings to focus the contribution of this project by incorporating and considering the multifaceted dimensions of response and responsiveness, and the findings of the present project suggests that this project's conceptualization of reciprocity (which is broader than how reciprocity is conceptualized in SPT, Altman, 1973) is more similar to the IPMI's conceptualization of partner disclosure.

The primary contribution of the concept of anticipated reciprocity to existing information management research is its inclusion and broader conceptualization ("open in

return" compared to topically reciprocal disclosures) in the present study. Existing disclosure and relationship research both focus on reciprocity as more of an outcome of disclosure, or even as an expectation of communication between intimates, in contrast to anticipated reciprocity serving as an impetus for disclosure. This may be especially important within the context of existing relationships, as reciprocal exchanges of disclosure are more frequent in the early stages of relationships (e.g., Altman & Taylor, 1973; Derlega et al., 2008). An exception to this is in Vangelisti's criteria for revealing secrets, which includes "equivalent disclosure" as a criterion (see Vangelisti et al., 2001). However, Vangelisti's criterion conceptualizes reciprocity more narrowly than being open in return (e.g., "they would need to disclose something along the same lines," p. 8) and first requires a disclosure from the recipient. In Vangelisti et al.'s (2001) conceptualization of reciprocity, the recipient enacts open communication that then predicts disclosure. In contrast, the present project proposes that anticipation of openly communicative responses may predict disclosure and does not require initial personal/private information sharing by the intended target. Anticipated reciprocity is also somewhat similar to Derlega's similarity reason for disclosure (see Derlega et al., 2002) which indicates that tending to think alike and sharing similar types of experiences are reasons to disclose an individual's HIV status. Derlega's conceptualization of reciprocity is more closely related to elements that predict perceptions of anticipated responsiveness, which are described in subsequent sections. The information, relationship, and response attributes that predict reciprocity are described next.

Modeling anticipated reciprocity. Information, relationship, and response attributes predicted a moderate amount of variance in anticipated reciprocity. Two types

of prior responsiveness (others to the information and receiver to others), identity threat, and relational quality predict anticipated reciprocity. The anticipated reciprocity model is the only model in which prior responsiveness (of any type) accounts for the most variance. Further, perceptions of prior responsiveness predict more of the variance in anticipated reciprocity than relationship uncertainty which enters as a primary predictor for anticipated emotional, information, and instrumental support, as well as anticipated avoidance. The predictive power of prior responsiveness variables in explaining anticipated reciprocity may indicate that actual past experiences either with the receiver or with the information itself may be more salient in forming individuals' perceptions of anticipated reciprocity as compared to primary predictors in other dimensions of anticipated response where, for example, "present" or "future" elements of information or relationship appraisal are more salient.

In addition to actual past behaviors or communicative interactions emerging as primary predictors of anticipated reciprocity, the patterns of association between anticipated reciprocity and relationship attributes also diverge from those apparent for other anticipated response dimensions. Anticipated reciprocity is the only dimension of anticipated response predicted by relational quality (in contrast, all other subtypes are predicted by relationship uncertainty) and the only model in which relationship uncertainty is not a predictor. This difference may indicate that expectations of openness in relationships align more closely with the degree of "closeness" people feel with one another rather than the perceived degree of stability in the relationship. This echoes the research on the IPMI and the associations between intimacy and partner disclosure (that is, that reciprocity in relationships contributes to increasing perceptions of relational

quality, see Altman & Taylor, 1973). Future research in anticipated reciprocity and predictors of anticipated reciprocity may enable researchers to suggest ways for receivers in a variety of contexts to foster a communicatively open climate, that may then, in turn, encourage disclosure. Examples of such potential contexts include among relational partners, within friendships, physician-patient relationships, counselor/therapist-relationship, or between social workers and clients.

Summary of reciprocity. The reciprocity dimension of anticipated response presented in the current project exhibits psychometric integrity. Anticipated reciprocity, like anticipated avoidance, is a dimension of anticipated response that has not frequently been considered as a predictor of the disclosure process, and this is a contribution of the present project. Deviations in the patterns of association between anticipated reciprocity and disclosure process components that are further discussed in subsequent sections suggest that continued exploration of the concept of anticipated reciprocity as a dimension of anticipated response to disclosure may augment existing information management theory. For example, future research about the function of anticipated reciprocity in disclosure decision-making may illuminate how past behaviors (e.g., prior responsiveness of an intended target) and relational quality affect the decision to disclose personal/private information.

Overall anticipated response summary. In sum, all four of the DARS subscales of emotional reaction, support (emotional, instrumental, and informational), avoidance, and reciprocity demonstrated consistent psychometric properties across three sets of data. This section demonstrated initial convergent validity in the associations among the subscales and offered caveats to future researchers using these scales. This section also

suggested how different dimensions of anticipated response may provide clarity to and augment theoretical understanding of information management, specifically theories of and research about the disclosure decision-making process. The next section will continue to explore the potential theoretical contributions of the dimensions of anticipated response introduced in the present study as well as the convergent validity of the DARS subscales by discussing the associations between the DARS subscales and other theoretically related variables such as responsiveness, beginning with anticipated responsiveness.

Anticipated Response and Responsiveness

The rationale reviewed the responsiveness variable from the IPMI that may be theoretically related to anticipated response but has not yet been utilized in disclosure decision-making process research. Examining the concept of responsiveness may contribute to better understanding the nature of anticipated response in disclosure decision-making because researchers have investigated the concept of responsiveness in existing relationships as it relates to intimacy and disclosure. Further, the concept of anticipated responsiveness may provide a useful, more parsimonious, alternate to the multi-dimension substructure of response created in the current project. The present project created four responsiveness-related variables: anticipated responsiveness (tested in Study I), prior responsiveness (receiver to discloser, receiver to others, and others to information; tested in Study II). Other researchers have not tested associations between responsiveness and anticipated response (or other components of information management), which limits the comparisons that may be drawn to the present findings.

Anticipated responsiveness is a much broader concept than the dimensions of anticipated response and might represent a more global assessment disclosers' perceptions of types of specific anticipated responses. That is, the individual categories of anticipated response at the broadest, abstract level, may be captured collectively by anticipated responsiveness. For example, emotionally, instrumentally, and informationally supportive, and reciprocal (open) responses might make disclosers feel accepted, cared for, and understood (i.e., those responses may be considered "responsive"). Avoidant responses and responses that are negatively emotive may be considered "unresponsive." The following sections consider these possibilities. Anticipated responsiveness is discussed first, followed by prior responsiveness.

Anticipated responsiveness. Research has not explored the concept of responsiveness as it relates to disclosure decision-making or as it focuses on individuals' anticipated perceptions. Prior studies of responsiveness (e.g., Laurenceau et al., 1998, 2005; Laurenceau & Bolger, 2005; Manne et al., 2004a, 2004b) assessed responses after the communication episode, or information sharing, but not prior to disclosure. Despite this limitation, the concept of perceived anticipated responsiveness may be relevant to disclosure decision-making research. Previous studies have demonstrated the role of responsiveness in the process of building intimacy (see Laurenceau et al., 1998, 2005; Manne et al., 2004a, 2004b), and we know that intimacy and disclosure are closely related (for discussion see Derlega et al., 1993; Greene, 2009; Morr & Petronio, 2004). Further, Reis and Shaver (1988) developed the concept of responsiveness to facilitate studying the process of building intimacy in relationships (IPMI, see Reis & Shaver, 1988). The IPMI also incorporates partner disclosure, which is parallels the anticipated

response category of reciprocity. Due to these overlaps, the current project created and used a measure of *anticipated* responsiveness for people who had not disclosed the specific information.

In general, anticipated responsiveness and anticipated response to disclosure appear to be strongly and consistently related, with anticipated responses that are more positive expected in conjunction with more anticipated responsiveness. Responsiveness is most strongly associated with anticipated emotional support, anticipated instrumental support, and anticipated emotional reaction, followed by anticipated reciprocity, and then least with anticipated avoidance. All correlations between individual DARS subscales and anticipated responsiveness were similar across sets of data (see Tables 2 & 3).

There is a degree of conceptual overlap between anticipated response and anticipated responsiveness, and this overlap may be stronger in certain categories of anticipated response. *Partner responsiveness* (Reis & Shaver, 1988) describes the degree to which the discloser felt understood (i.e., perceives that the receiver accurately captured the discloser's needs, feeling, and the situation), accepted (i.e., the discloser feels accepted and valued as an individual), and cared for (i.e., the discloser perceives that the receiver is affectionate and demonstrates concern), although these perceptions are only captured *after* the receiver has responded to the disclosure. Therefore, it is not surprising that the strongest associations among anticipated responsiveness and the DARS subscales are between anticipated responsiveness and anticipated emotional support, anticipated instrumental support, and anticipated emotional reaction because of the overlapping dimensions of emotional concern and demonstrative forms of helping (i.e., instrumental

support). For example, a response of support (emotional or instrumental) or a positive emotional reaction might make a discloser feel accepted, cared for, and understood.

There are a variety of potential ways that responsiveness may be incorporated into the broader concept of anticipated response as it applies to disclosure decision-making. Theoretically, scholars might consider responsiveness may as a form of supportive response. The DPM (Chaudoir & Fisher, 2010) suggests that responsiveness is an example of supportive response; however, the DPM model is untested to date (and contextualized as specifically applicable to disclosure of stigmatized information, such as HIV, e.g., Chaudoir, Fisher, & Simoni, 2011). Several DARS subtypes were negatively correlated with responsiveness: more anticipated responsiveness was associated with less anticipated emotional, instrumental, and informational support. However, anticipated emotional reaction was also strongly negatively correlated with anticipated responsiveness, more so than anticipated informational support. Further, reciprocity is also strongly negatively correlated with responsiveness and also more strongly correlated with responsiveness than is informational support. Avoidance is the only anticipated response subscale that was moderately correlated with responsiveness. Thus, the pattern of correlations between anticipated responsiveness and all DARS subscales is sufficient to demonstrate a relationship between these concepts (although the exact relationship is unclear at this time, and should be investigated in future research). These findings confirm the role of responsiveness in the context of disclosure (as introduced in the IPMI) provides an extension of the IPMI to consider anticipated responsiveness as it pertains to disclosure decision-making instead of perceptions of disclosure enactment.

One important distinction between the concepts of anticipated response and anticipated responsiveness is in time orientation of the variables. Anticipated response as captured by the dimensional structure presented in the current project (and the corresponding DARS measurement provided) represents the range of types of responses to disclosure, whereas the original concept of responsiveness is intended to measure disclosers' perceptions of how the actual response (i.e., the support, emotional reaction, avoidance, or reciprocity) *made the discloser feel.* Thus, anticipated responsiveness and the DARS subscales are theoretically related concepts that should be strongly associated, and these associations contribute to the DARS' convergent validity. Future research should continue to explore how (and if) these two conceptualizations of recipient response may be integrated, as well as how the dimensions of anticipated response presented here may relate to the process of building intimacy in relationships. The next section explores one possible way to integrate anticipated responsiveness and the anticipated response subscales in information management theory.

Responsiveness in disclosure process models. Responsiveness is not currently incorporated in any known disclosure models or the larger body of information management theory (for exception see the DPM, Chaudoir & Fisher, 2010, which references responsiveness as an example of a supportive response but does not test this association, see also Chaudoir et al., 2011 for application to HIV but also untested). The most extensive utilization of the responsiveness variable is in reports tests of the IPMI (e.g., Laurenceau et al., 1998, 2005; Manne et al., 2004a, 2004b). The main differences between responsiveness as it is incorporated in the IPMI and responsiveness as it might be incorporated in information management are temporal (actual responsiveness vs.

anticipated). For example, the current project assesses if participants thought their intended target would be responsive to unshared information whereas prior research on the IPMI assessed perceptions of responsiveness to information they had shared (e.g., Laurenceau et al., 1998; Manne et al., 2004a, 2004b). Additionally, the primary goal of the IPMI is to understand how communication might affect the process of building intimacy as compared to understanding the process of disclosure decision-making or uncertainty reduction regarding information management.

The concept of responsiveness has much to offer if incorporated into disclosure models. It is likely that the associations between anticipated responsiveness and disclosure process components are similar to the associations between anticipated response (and dimensions) and disclosure process components such as information and relationship assessment. For example, people may be unlikely to anticipate responsiveness from disclosure recipients when the information is assessed more negatively. People may be more likely to expect to feel accepted, cared for, and understood when they disclose within a relationship that they assess as "close" or "stable." When people anticipate that their intended target will be responsive, they may feel more efficacious in their abilities to disclose and report that they are more likely to share the information with that particular target.

One of the major contributions of understanding the different dimensions of anticipated response is the way that it facilitates clarification of existing research. Conceptual clarity about the different and varied dimensions of anticipated response allows researchers to consider, for example, the implications to disclosure decision-making for models tested with different types of anticipated response as a predictor of

disclosure/concealment decisions (e.g., DD-MM with anticipated support, see Greene et al., in press vs. CCM with expectations for negative reaction, which includes elements of emotional reaction and avoidance, see Afifi & Steuber, 2010). A second contribution the anticipated response typology explicated in the present study is that this conceptualization and clarification of the concept of anticipated response offers insight into the different ways receiver actions (both past and current) may affect information management (e.g., individuals could expect both an initial negative emotional reaction as well as instrumental support, but the expectation of support when considered in conjunction with the negative emotional reaction may reduce disclosure efficacy and likelihood of disclosure). However, the four category structure provided in the current project lacks parsimony and would be difficult to incorporate as proposed into disclosure decision-making model testing (e.g., using SEM).

Anticipated responsiveness may provide a useful alternate proxy for the concept of anticipated response, especially in disclosure process modeling where parsimonious measures are ideal. The anticipated responsiveness variable was associated with all DARS subtypes and may represent one concept that could act as a parsimonious proxy for overall perceptions of anticipated response, and this alternative should be explored in future research. The next section discusses another issue surrounding the nature of anticipated response, the predisposition to assume valence of response.

A further issue inherent in evaluating anticipated response as it applies to disclosure decision-making as well as assessing the dimensions of anticipated response made manifest in the current project are the assumptions about the valence of anticipated response. One assumption apparent in the literature is that disclosers desire "positive"

responses and that certain types of responses are inherently positive. For example, one might assume that positive manifestations of support (emotional, instrumental, or informational) directly predict affirmative disclosure decisions. Another assumption is that people disclose only in the context of "positive" responses (see Serovich et al., 1998 for discussion). However, any given type of anticipated response may not always be perceived as positive (e.g., the literature is ripe with examples of "unhelpful" social support, see Barbee et al., 1998, such as people feeling "smothered" by offers of assistance), and other research demonstrates that people may disclose even though they are certain that the response will be "negative" (e.g., in the context of HIV disclosure for "reasons" related to duty, see Derlega et al., 2002; Greene et al., 2003). Prior to the current project, teasing out the facts underlying these assumptions would have been very difficult due to the general lack of clarity surrounding the concept of anticipated response. The conceptual clarity the anticipated response typology developed in the current project provides will enable future researchers to challenge these assumptions and not to make assumptions based on the valence of response and how valence predicts disclosure decision-making. Further, the concept of responsiveness may offer a useful alternative in the interim because responsiveness focuses on the discloser (or potential discloser's) appraisal of response instead of researchers' assumptions about the appraisal of response.

Assessing anticipated responsiveness instead of one or several types of anticipated response may bypass some of the concern created by the assumptions and findings from prior research discussed above because anticipated responsiveness assesses disclosers' *evaluation* of the anticipated response in contrast to the type of anticipated response

itself. This is not to say that the types of anticipated response are useless in disclosure research. One of the contributions of the categorization presented in this project is that it illustrates the narrow portion of potential anticipated responses captured and measured in previous research and enables researchers to better contextualize the predictive power of disclosure models (i.e., the DD-MM successfully predicts disclosure/concealment decisions in the context of supportive types of anticipated responses, however, other types of anticipated responses may affect the process differently. The CCM (Afifi & Steuber, 2010) successfully predicts continued conceal in the context of an anticipated response variable that appears to assess multiple dimensions of anticipated response including emotional reaction and avoidance but not support or reciprocity). Further, the types of anticipated response may be more useful in applied research, especially in cases where researchers are making proscriptions about how to be a "good" receiver of personal/private information. Specifically, is it less abstract to describe ways to offer emotional support than it is to describe "being responsive." Future research should consider how to incorporate the types of anticipated response into disclosure decision-making, comparing and contrasting anticipated responsiveness as an alternative as well as the usefulness of these different anticipated proxies in information management and in different contexts.

Besides examining valence, another possibility to consider when pondering usefulness of different anticipated response proxies to information management, such as anticipated responsiveness, is response expectancy violations (Burgoon, 1978). It is possible to imagine scenarios where disclosers need/want a specific type of response and although the receiver responds "positively" the discloser *evaluates* it negatively or as not

"positive enough." For example, when someone really needs money, receiving a hug and not money, although positive, may not be interpreted positively. These implications may be especially salient when researchers consider the disclosure process as a whole and also examine message features and the effects of the disclosure. Expectancy violation theory (Burgoon, 1978; see also Afifi & Steuber, 2010, Caughlin et al., 2005) might be especially relevant in this context, and future researchers should explore this idea in longitudinal designs because it requires measures of response both before (anticipated response) and after (actual response) information sharing.

Summary of anticipated responsiveness. Analyses in this project demonstrate initial support for the use of anticipated responsiveness as an alternative to DARS subtypes. Disclosure decision-making models (e.g., DD-MM, RRM; see also CCM) demonstrate that people anticipate more positive responses within close relationships. For example, Greene et al. (in press) found that more relational closeness was associated with more supportive anticipated responses. In validating the RRM (Afifi & Steuber, 2009), more relational closeness predicted less perceived likelihood of risk/negative receiver reactions. The findings of the present study were consistent with this prior research: there was a significant positive correlation between anticipated responsiveness and overall relational quality in Study I (between both friends and romantic partners) and between anticipated responsiveness and relational love in Study I romantic partner data. People who anticipated their intended disclosure target would make them feel more accepted, cared for, and understood also reported more confidence in their ability to share the information with that person (efficacy) and greater likelihood of sharing. These associations are similar to those between these disclosure components and the DARS

subscales (described in more detail in the key components section) and suggest that anticipated responsiveness may be a useful proxy for anticipated response in disclosure decision-making models. The potential contribution of response variables in predicting disclosure decisions in discussed in detail in the implications section. Now I move from a discussion of anticipated response to a related variable, prior responsiveness.

Prior responsiveness. To help clarify the role of responsiveness in disclosure decision-making, as well as to clarify how individuals create their perceptions of anticipated response, Study II also explored three types of prior responses: prior responsiveness of a) receiver to discloser, b) receiver to others, and c) others to the information. Prior responsiveness measures were created with the intention of identifying variables that may predict anticipated response. In the CCM (Afifi & Steuber, 2010) past aggressive responses significantly predict expectations of negative responses (a general variant of anticipated response). Afifi and Steuber used a modified version of the Conflict Tactics Scales (Mason & Blankenship, 1987; Straus, 1990) to measure past responses and focused on prior verbally aggressive responses. In order to capture a wider range of past responses beyond verbal aggression, this project adapted prior validated and reliable responsiveness scales (see Laurenceau et al., 1998, 2005; Manne et al., 2004a, 2004b). The items used to assess these concepts are very similar to the items used by Laurenceau, Manne, and other researchers, with modifications to the instructions (see Appendix U & Table 22).

The three prior responsiveness scales were psychometrically sound. All scales demonstrated good fit to the Study II data and good reliability. As expected, perceptions of past responsiveness of the receiver (receiver to discloser and receiver to others) were

significantly correlated, and this was the only significant correlation between subscales, demonstrating both convergent and discriminant validity. That is, we would expect receivers to be relatively consistent in their responses, but we would not necessarily expect parallelism between the receiver's responses to this information and others' responses to this information, or between the receiver's response to others' personal/private information and others' responses to this information. For example, people might not necessarily expect their relational partners to be as responsive to a disclosure "I am unhappy in our relationship," but they might expect a best friend to be very responsive. Further, it is unlikely that individuals would expect parallel responsiveness from different individuals about different information. For example, an individual is not likely to anticipate responsiveness from one particular person based on other individuals' responsiveness to disclosures of different information. That is, just because one person was responsive to the disclosure of private information (e.g., an unwanted pregnancy) people may not expect different people to be responsive to the disclosure of other private information (e.g., an infidelity). Thus, the responsiveness scales performed in ways consistent with conceptual distinctions.

There was also consistency in the associations between the three types of prior responsiveness and the DARS subscales. All three types of prior responsiveness were significantly associated with the three anticipated support subscales (emotional, informational, and instrumental support) as well as with anticipated reciprocity. Further, at least one type of prior responsiveness emerged as a significant predictor for every DARS subscale except anticipated emotional reaction where no response type was a

predictor. The consistency of associations contributes the validity of the DARS, in addition to largely supporting the fourth Study II Hypothesis.

The main inconsistent associations are between types of prior responsiveness and the DARS subscales anticipated emotional reaction and anticipated avoidance. Only prior responsiveness (receiver to others) was significantly associated with anticipated avoidance. This type of prior responsiveness (receiver to others) emerged most frequently as a predictor of the DARS subscales, predicting all subscales except anticipated emotional reaction. Only prior responsiveness (others to information) was significantly associated with anticipated emotional reaction (although recall that 25% of the sample had never shared this information with others and individuals may orient to information that they have never shared with another person in fundamentally different ways). Additionally, prior responsiveness (others to information) emerged as a predictor in only two DARS models, anticipated emotional support and anticipated reciprocity. Neither anticipated avoidance nor anticipated emotional reaction was associated with prior responsiveness (receiver to discloser). Further, prior responsiveness (receiver to discloser) did not emerge as a significant predictor in any DARS models.

These results serve to bolster previous arguments made about the contribution of DARS subscales to existing theory especially considering anticipated avoidance and anticipated emotional reaction. Thus far, existing research has examined anticipated response in the context of disclosure decision-making measuring concepts most similar to support (e.g., Greene et al., in press measured emotional support, 2012 measured partner support). Other prior research has examined emotional reaction but primarily in the context of retrospective reports of shared information (e.g., Greene & Faulkner, 2002), in

contrast to considering emotional reaction in the process of disclosure decision-making. The present study identifies types of anticipated reactions that might affect the disclosure process differently. Based on the present findings, it may be that anticipated avoidance or anticipated emotional reaction affect the disclosure process in ways different from how anticipated support affects this process. However, what we know about how anticipated response affects the process of disclosure to date is limited to perceptions of anticipated support. The DARS modeling section provides a more detailed discussion of how relationship, information, and response attributes predict anticipated response.

Anticipated avoidance was only associated with one of the three types of prior responsiveness, prior responsiveness of the intended receiver to others' personal/private information disclosures. This is inconsistent with four other DARS subtypes (emotional, informational, and instrumental support, and reciprocity) that were each associated with all three types of prior responsiveness. In general, across this project anticipated avoidance performs in patterns inconsistent with the other anticipated response subtypes, and these inconsistencies should be explored in future research. One explanation for this finding is that individuals may have difficulty in conceptualizing avoidance as a response to disclosure, especially in the current design where participants are asked to think about information they have not disclosed to another individual. If avoidance were an example of another type of anticipated response, the patterns of associations between avoidance and that subtype would be consistent rather than inconsistent. Additionally, anticipated avoidance may be easier for individuals to conceptualize if they have witnessed evidence of avoidance to personal/private disclosures by the receiver in the past (e.g., if the potential receiver or target had shared an email from a third party with them saying "I'm

just going to ignore this, maybe she'll think I never got it"). However, the associations between anticipated avoidance and prior responsiveness are not sufficient to explain how anticipated avoidance functions as a category of anticipated response or in information management more generally.

Within the context of disclosure decision-making, prior responsiveness most closely relates to Afifi and Steuber's (2010) conceptualization of past aggressive responses. In the CCM, past aggressive responses (e.g., verbally or psychologically abusive, sulked or refused to talk about it, insulted the person, became cold or less affectionate) predicted expectations of negative reactions (anticipated response), which then predicted whether or not the participant revealed the secret or continued to conceal the secret (note that this concept is frequently used in conflict research and "The Chilling Effect", e.g., Cloven & Roloff, 1993; Roloff & Cloven, 1990). The contribution of the prior responsiveness conceptualization in the current study is the broader range of types of prior responses captured by prior responsiveness variables (in comparison to Afifi & Steuber's more limited conceptualization focused solely on past verbally aggressive responses). Further, in the CCM, the narrower conceptualization of prior responses predicts a narrower conceptualization of anticipated response (negative reaction, measured by six items that overlap with several different types of anticipated response and anticipated outcome but are most closely related to the emotional reaction category presented here.). That is, the prior responsiveness conceptualization presented in this project contributes to theory because it is a) broader in scope, and b) predicts a wider range of anticipated responses.

The introduction and inclusion of the prior responsiveness variables in this investigation are an important contribution of the current project. In general, the DARS subtypes and the three types of prior responsiveness are consistently associated such that when people anticipated more positive responses (e.g., more support) they also reported more responsive past behaviors (i.e., that people had been responsive to the information in previous disclosure episodes, that the potential target had been responsive to others' private disclosure and/or to the discloser). Prior responsiveness was also related to other key variables in expected ways (e.g., prior responsiveness was associated with "closer" relationships, less relationship uncertainty, less stigma, more efficacy, and more likelihood of disclosure). However, unlike other key components of information management, prior responsiveness is more likely to reflect actual past behaviors in comparison to the other key variables that are more closely related to present perceptions (e.g., assessment of the relationship between the potential discloser and receiver) or future projections (e.g., likelihood of disclosure).

Overall summary of responsiveness. This concludes the section discussing responsiveness (anticipated responsiveness, and prior responsiveness of a) receiver to discloser, b) receiver to others, and c) others to the information) as it relates to anticipated response specifically and disclosure theory more broadly. Prior responsiveness, especially perceptions of the receiver's prior responsiveness to others' private information, may be important to how individuals formulate their perceptions of anticipated response, which then affects their decisions about whether or not to share their information with a particular target. Research in the field of persuasion indicates that individuals make predictions based on past behaviors (as described in Social

Judgment Theory, Sherif & Hovland, 1961; Social Learning Theory, Bandura, 1977; Theory of Planned Behavior, Fishbein & Ajzen, 1975; Theory of Reasoned Action, Ajzen & Fishbein, 1980). The findings for prior responsiveness and anticipated response are consistent with this previous research: individuals may use receivers' prior behaviors (responses) to others' private information and others' responses to their private information to determine how a particular person might respond to their information. The next section discusses the associations between the categories of anticipated response and variables that have been measured in existing information management models. The section following key disclosure model components further explicates the contribution to information management theory provided by the clarity of anticipated response and serves to augment the validity of the DARS typology developed in the present project.

Anticipated Response and Key Disclosure Model Components

When a new measure is developed, researchers seek to establish sound psychometric properties. This project establishes the convergent validity of the DARS typology in two main ways. First, the subscales of the DARS should all be significantly associated with each other because they are subscales of the same latent variable (and form a latent variable, see Figures 2-4). The previous section demonstrated how all DARS subscales were strongly correlated with each of the other subscales. Second, the DARS subscales should all be significantly associated with variables in ways consistent with theory, such as responsiveness as well as other variables used in information management research. The previous section discussed the associations between four types of responsiveness (anticipated responsiveness, prior responsiveness of the receiver to the discloser, prior responsiveness of the receiver to others, and prior responsiveness of

others to the information). The following section continues to provide evidence of convergent validity of the DARS by analyzing the associations between the DARS subscales and other variables to which anticipated response should be theoretically related (as demonstrated in past research). These variables include relational assessment, information assessment, efficacy, and likelihood of disclosure.

This section will explore the associations between the DARS subscales and four variables frequently used in prior information management research: relational quality, likelihood of disclosure (or willingness to disclose), information assessment, and efficacy (disclosure efficacy and general communication efficacy), as well as one variable likely related to disclosure but not yet tested consistently in disclosure research, relationship uncertainty. This section focuses on disclosure-related components derived from previous research that quantitatively tested the associations between some information management process and anticipated response-like variables. That is, across the literature one may find many hypothesized associations between disclosure variables and other related variables (e.g., see Petronio, 1991, 2000). However, this review focuses on only those that a) quantitatively measure a variable that is conceptually consistent with anticipated response; and b) quantitatively test the associations between the anticipated response-like variable and other disclosure process variables. This section is further limited primarily to work that is published or in press. Model testing that meets these criteria includes the CCM, DD-MM, and the RRM as well as research by Vangelisti, Caughlin, W. Afifi, and Derlega. The next section begins with a discussion of relational assessment.

Relationship assessment. Most information management research includes reference to a variable that endeavors to conceptually evaluate the quality of a relationship. Existing research measures relational quality in numerous ways including closeness, intimacy, and love. Due to these subtle differences in the assessment of a relational quality variable, Study I of this project measured relational quality in two ways. The first includes an overall assessment of relational quality that was selected because of its appropriateness for assessing overall relational quality across different types of relationships (e.g., friendships, romantic partnerships, familial relationships). The second measure of relational quality was selected because it assesses a somewhat different aspect of relational quality, love. Not surprisingly, these measures were strongly correlated. Study II focused on friendships only; thus, to reduce survey fatigue, only overall relational quality was measured in Study II because it was considered a more appropriate proxy for relational evaluation in friendships. The first section focuses on the relational quality proxy for relational assessment.

Relational quality. In general, the DARS was significantly associated with both proxies for relational evaluation. Across both measures of relational evaluation and all types of anticipated response, more positively evaluated relationships ("closer", more "stable") were associated with anticipated responses that are more positive (e.g., more supportive, more open) consistent with prior research (described in more detail in the next paragraph). In Study I, there were more significant associations between DARS subscales in the friend data than in the romantic partner data. Relational evaluation (as measured by overall relational quality and relational love) was associated with a greater number of DARS subscales in the friend data compared to romantic partner data. In

addition, in Study I there were a greater number of associations across both sets of data between the DARS subscales and overall relational quality than between the DARS subscales and the love-based relational evaluation. Further, the overall relational quality measure was significantly correlated with all the DARS subscales in the friend data in Study I, and with all DARS subscales *except* anticipated emotional reaction in Study II (although a limitation of this project is the lack of variance on measures of overall relational quality in romantic relationships. 43% of the romantic partner sample rated the overall quality of their relationship as "5" out of five (95% of the sample rated the quality of their romantic relationship as at least 3.75 out of 5) in contrast to the ratings in the friend sample where only of the sample rated their relational quality as 5 out of 5).

When people expected less emotional, instrumental, and informational support, less reciprocity, more avoidance, and more negative emotional reactions, they also reported lower "closeness" or "quality" in their relationship with the potential target. Overall relational quality was associated with anticipated emotional and instrumental support, followed by anticipated avoidance. Associations between informational support and relational quality were consistent across two sets of friend data, but this association was not significant in the romantic partner data. This is also true for anticipated reciprocity. Emotional reaction is only significantly correlated with overall relational quality in the Study I friend data. Therefore, overall relational quality was correlated with all DARS subscales in at least one set of data (as expected). However, relational quality emerged as a predictor of only one DARS subtype, anticipated reciprocity. These associations are explored in greater detail in the DARS modeling section.

Relational love. In contrast to relational quality, relational love was consistently associated with anticipated instrumental support in this project. Relational love was not significantly associated with any of the other DARS subscales in the romantic partner data. However, relational love was also associated with anticipated emotional support, anticipated informational support, more negative emotional reactions, and less reciprocity in the Study I Friend data. Therefore, relational love was significantly correlated with four of six DARS subscales (in contrast to six of six in overall relational quality) in at least one set of data. The significant association between relational love and only instrumental support in the romantic partner data might highlight expectations that individuals have about romantic relationships compared to friendships, especially when the content of information is considered. For example, depending on the type of friendship, individuals may not expect a casual or new friend to drive them to the doctor's office. However, they might consider this type of support normative from a romantic partner. Berscheid (1983) suggest that the process of partners' activities becoming dependent on each other is an important part of relationship development. This possibility is discussed later in the current project (in the Modeling the Formation of Anticipated Response section) in the context of determining the best proxies for relational evaluation. Future research might also wish to incorporate the concept of interdependence ("the coordination of mutually beneficial systems of behavior between partners", Theiss & Solomon, 2006b, p. 396) from the Relational Turbulence Model (see also Solomon & Knobloch, 2004) to examine how the level of perceived interdependence affects expectations for dimensions of anticipated response, particularly types of support.

Prior relational quality in information management research. These findings of association between the evaluation of relationships and anticipated response are generally consistent with prior research. DD-MM model testing utilizes an anticipated response variable that is most like the anticipated emotional support variable presented in this project. In testing the DD-MM, Greene et al. (in press) found that perceptions of "closer" relationships are associated with more supportive anticipated responses, and Checton and Greene (2012) reported that more relational quality is associated with more perceived partner support. The DARS anticipated emotional support subscale was similarly correlated in the present project, with greater reports of relational quality or love associated with more supportive anticipated responses, however, the associations reported in DD-MM testing are stronger than those reported in the current project. The strength of associations between relational evaluation and anticipated response in the current project more closely mirrors those reported in secrets model testing, described next.

The two known models of secret concealment also report associations between an anticipated response variable and a relational evaluation variable labeled closeness. In CCM testing, Afifi and Steuber (2010) reported a moderate negative correlation between expected negative reaction and closeness at both Time I and Time II; less closeness was associated with more expectation of negative reactions. Finally, Afifi and Steuber (2010) reported a similar moderate negative correlation in the RRM between risk assessment and closeness; less closeness predicted more perceived risk in disclosure. Across all of these studies (including DD-MM and secrets) associations between relational evaluation and anticipated response were in the same direction: anticipated responses that are more

positive were associated with higher relational quality (or more closeness) at similar strengths, supporting the same general patterns of association in the current project.

Speculating about the implications for the pattern of association of individuals DARS subscales is more difficult because of the conceptual overlap within the "anticipated response" measured employed by Afifi and Steuber (2009, 2010). Expected negative reactions (CCM) and the self-protection component of risk assessment (RRM) most closely resemble anticipated emotional reactions, however, these variables (as described by Afifi & Steuber, 2009, 2010) also include elements of discloser- and relationship- oriented outcomes (such as "became cold or less affectionate") and thus complicate the comparison. The relationship-protection component of risk assessment (RRM) mostly closely resembles relationship-oriented outcomes, and the other-protection component most closely resembles receiver-oriented outcomes. These associations are also consistent between CCM and RRM research and the dimensions of anticipated outcome created in the current project (see Tables 2-4).

In sum, the associations between the dimensions of anticipated response and relational evaluation were consistent with prior existing research that modeled the information management process, although varying in strength. The DARS modeling section also discusses the role of relational quality and relationship uncertainty in disclosure decision-making research. The next section discusses another measure of relational evaluation created for the project based on prior research in the Relational Turbulence Model (see Knobloch & Solomon, 1999), relationship uncertainty.

Relationship uncertainty. There are multiple ways to assess relationships. Study II included a measure of relationship evaluation, relationship uncertainty, that was included

based on the context sampled and the limited variance anticipated in traditional relational assessment measures (e.g., relational quality). Despite the consistency of relational quality in predicting anticipated response in Study I, the relational quality (or closeness) variable was inconsistent in predicting disclosure decisions (or likelihood of disclosure) across a number of DD-MM studies (e.g., Checton et al., 2009; Greene et al., 2009, in press; Magsamen-Conrad et al., 2010). The concept of relationship uncertainty was also explored as an alternative because of the predictive value in research in the Relational Turbulence Model (e.g., Knobloch & Solomon, 1999, 2005; Theiss & Solomon, 2006). Greene et al. and others report consistently high ratings of relational quality among college students in dating relationships and friendships, and this project speculated that relationship uncertainty might offer a more relevant assessment of college relationships.

In general, the DARS was significantly associated with perceptions of relationship uncertainty in the expected directions. That is, relationships with less uncertainty or more stability were associated with anticipated responses that were more positive. In Study II, relationship uncertainty was associated with all DARS subscales, providing support for the third Hypothesis of Study II. More anticipated emotional, instrumental, and informational support, less avoidance, and more openness are all associated with relationships that are characterized by less uncertainty. However, relationship uncertainty but not relational quality was associated with anticipated emotional reactions. Further, correlations are stronger between relationship uncertainty and all DARS subscales except anticipated reciprocity; anticipated reciprocity is the only DARS subscale for which relational quality was more strongly associated than with relationship uncertainty. Anticipated reciprocity was also the only DARS subscale for

which relational quality emerged as a predictor, in contrast to relationship uncertainty, that predicted anticipated emotional support, anticipated instrumental support, anticipated informational support, anticipated emotional reaction, and anticipated avoidance (i.e., every subscale *except* anticipated reciprocity). A more detailed discussion of these associations and relationship uncertainty as it relates to disclosure processes is offered in the later section that discusses the results of regression models (Modeling the Formation of Anticipated Response). The next section discusses a variable frequently measured in disclosure process and information management research, likelihood of disclosure.

   Likelihood of disclosure. A primary goal of the information management models described in this review is the ability to identify variables or processes that may predict disclosure or concealment decisions. In disclosure research, likelihood of disclosure is described as a person's estimated probability of sharing the information (generally with one specific person). In secrets research, this variable is described as one's willingness to reveal the secret information (e.g., Afifi & Steuber, 2009, 2010; see also Vangelisti, 1994, Vangelisti & Caughlin, 1997). Because "secret" information is a specific type of personal/private information (related to how it is perceived by the individual, see Kelly, 2002), this project measured the broader concept of likelihood of disclosure (of the specific information, to the specific person identified by the participant) capturing both private and secret information.

   In general, the DARS subtypes were associated with likelihood of disclosure in the expected direction with more positive anticipated responses were associated with a higher likelihood of disclosure in all sets of data (see Tables 2-4). Likelihood of disclosure was significantly correlated with all of the DARS subscales in both the friend

data and the romantic partner data in Study I, and with all DARS subscales *except*

anticipated avoidance in Study II. The lack of significant association with avoidance in

Study II (in contrast to Study I) is perplexing. This finding could be a product of study

design or relationship context (anticipated avoidance was more strongly positively

correlated with likelihood of disclosure between romantic partners than between friends,),

although this is unlikely considering that procedure and sample were nearly identical for

Study I F and Study II. It could also be related to the argument presented previously that

participants may have difficulty in their ability to anticipate "avoidance." It could also be

error given the number of associations. As stated earlier, researchers have not yet been

able to definitively pinpoint the function of avoidance in relationships, and this

phenomenon warrants continued future research.

Likelihood of disclosure was negatively associated with anticipated emotional and

instrumental support, and anticipated emotional reaction and moderately negatively

associated with informational support, avoidance, and reciprocity. In general,

associations between likelihood of disclosure and DARS subscales were stronger in the

romantic partner data.

One explanation for the minor differences in disclosure-related associations

between the friend data and the romantic partner data is the general expectation for

openness in romantic relationships in US culture. As argued elsewhere in this project,

although individuals in relationships feel the dialectic pull of the needs for both privacy

and openness in relationships, in Western culture there is a preference for complete

openness in romantic relationships that may differentially affect the function of

anticipated response in information management. However, some research suggests that a

"norm of reciprocity" or openness is more characteristic of relationships in the early stages of development and within the context of nonintimate disclosures (see Altman, 1973). These contextual differences should be explored further in future research, as few studies sample multiple relationship contexts. Despite these subtle differences, associations between likelihood of disclosure and DARS subscales are consistent with the previous empirical research described next.

Prior likelihood of disclosure in information management research. The associations between likelihood of disclosure and anticipated response are consistent with prior research. In testing the DD-MM, Greene et al. (in press) found a correlation between anticipated support and likelihood of disclosure. Checton and Greene (2012) assess ongoing disclosure decisions in contrast to one disclosure decision that is the focus of most information management research. The variables most closely associated with likelihood of disclosure in this context (depth, breadth, and frequency of disclosure) are all positively correlated with perceived partner support, which is consistent with the findings in the current study between anticipated support (emotional, instrumental, and informational) and likelihood of disclosure. In CCM testing, Afifi and Steuber (2010) reported a correlation between expected negative reaction and willingness to reveal the secret information in the future. Finally, Afifi and Steuber (2009) reported a similar correlation in the RRM between risk assessment and willingness to reveal the secret information in the future. All of these associations are in the same direction: anticipated responses that are more positive were associated with likelihood of disclosure of or more willingness to reveal the information. This research supports the present findings and

adds to convergent validity. The next section discusses the associations between the DARS and information assessment.

Information assessment. Many theories and models of disclosure include some type assessment of the information under consideration for sharing or withholding. Some theories refer to the "privateness" or "riskiness" of the information (e.g., CPM, Petronio, 2002), yet other perspectives reference the level of threat to the discloser's identity (e.g., Afifi & Guerrero, 2000; Vangelisti & Caughlin, 1997; Vangelisti et al., 2001). Most often, models of disclosure (e.g., DD-MM, Greene, 2009) and concealment refer to the valence of the information, especially in the research on secrets (e.g., CCM; RRM; see also Caughlin et al., 2005). Despite a general tendency to assess information valence as positive or negative in information management research, the DD-MM argues that measurement of information valence is insufficient for predicting disclosure decisions and suggests more sophisticated assessment of information, especially for health information disclosure. Therefore, information is assessed in multiple ways in the current project to explore these multiple perspectives on information assessment.

Information valence. At the time of this project's development, information was assessed in prior published disclosure and secrets research predominantly as information valence. Thus, information valence was measured in Study I. Information valence was only associated with one DARS subscale in Study I (anticipated informational support, Romantic Partner data only) and one DARS subscale in Study II (anticipated emotional reaction). Further, information valence emerged as a predictor in only one DARS model (anticipated avoidance).

Information valence in prior information management research. The associations

between information valence and anticipated response in the current project are not

consistent with RRM model testing that found a correlation between risk assessment and

secret valence (Afifi & Steuber, 2009). That is, more "negative" assessments of anticipate

response (risk assessment) were associated with perceptions of more negatively valenced

secrets. However, this is not necessarily unexpected because not all prior <u>disclosure</u>

research found significant correlations between response-related variables and

information valence (note the distinction in disclosure research, as the CCM and RRM

are specifically relevant to the narrower concept of secret information). For example,

Greene, et al. (2009) also found no significant association between anticipated support

and information valence. Further, a feature of the present study's design asked

participants to report about information that they considered "somewhat negative," which

may limit the strength of the association by reducing variance. This is similar to a

strategy that Afifi and Steuber (2010) employed where instead of testing the association

between expected negative reaction and secret valence, they retained only participants

who reporting neutral or negative secrets, rationalizing that negative/aggressive responses

to positive secrets are unlikely.

Stigma and identity threat. Taking these results into consideration, Study II also

assessed the perceived stigma of the information and the level of identity threat of the

information in addition to information valence. The DARS subscales were not

consistently associated with information valence, however, they were consistently

associated with stigma and identity threat. All DARS subscales except anticipated

avoidance and anticipated reciprocity were moderately correlated with stigma (more

negative appraisals of response were associated with more perceptions the information under consideration was stigmatized), and all DARS subscales except anticipated avoidance were correlated with identity threat (see Table 4). Additionally, both identity threat and stigma emerged as primary predictors in the DARS models with identity threat emerging as a predictor in five models (anticipated emotional, instrumental, and informational support, anticipated emotional reaction, and anticipated reciprocity) and stigma emerging as a predictor in four models (anticipated emotional, instrumental, and informational support, and anticipated emotional reaction). Thus, in Study II, stigma and identity threat were better predictors of anticipated response than information valence. These findings indicate that elements of information assessment such as identity threat and stigma have the potential to be very useful in predicting anticipated response to disclosure. However, there are many other potential ways to assess information (such as risk of information; see also DD-MM, Greene, 2009, for multiple ways to assess health-related information including symptoms, prognosis, preparation, and relevance), and the present study could not measure all of them. These results indicate that information assessment is important to the formation of anticipated response, and future research should continue to explore other proxies of information assessment as well as how they relate to anticipated response. In the current study, identity threat and stigma were the best information assessment predictors of anticipated response and performed consistently better than valence.

Stigma and identity threat in prior information management research. In prior published DD-MM research, anticipated support was not correlated with any of the information assessment subscales: stigma, prognosis, symptoms, preparation, or

relevance (Greene et al., in press). However, the current project considers all personal/private information disclosures, whereas Greene, et al. (in press) only considered nonvisible health-related information disclosures. In the current project, participants most frequently reported not telling friends about sexual relations (e.g., losing virginity), about dating partners/romantic relationships (e.g., thinking about breaking up) and about infidelity/affairs. Only about 10% of topics not shared had to do with mental or physical health issues among friends. Participants reporting on something that they had not yet told their romantic partner described physical or mental health issues in less than 3% of the sample. One explanation for the association in the present project compared to the lack of significant association between anticipated support and information assessment in prior disclosure studies could be that identity threat is tapping into a different aspect of information assessment (as it relates to disclosure decision-making) than stigma, prognosis, relevance, symptoms, or preparation. Indeed, preparation, prognosis, relevance, and symptoms are aspects of information assessment likely applicable to a very narrow subset of information such as health-related information. However, this does not explain why stigma and support were unrelated in Greene et al.'s (in press) health-related disclosure study and why they were related in the current project. It is possible that the inconsistency in association across these studies is due to the sample. The current study sampled college students in relationships whereas the Checton and Greene (2012) study sampled older adults in long-term ongoing relationships (primarily married couples) where one person had one specific health condition (heart condition).

In sum, although the DARS subscales were not consistently associated with information valence, they were consistently associated with other information assessment variables stigma and identity threat. Further, anticipated response variables were also not consistently associated with information valence across previous research, and the general pattern of association between information assessment and the DARS demonstrated in Studies I and II mirrors the pattern of consistency between anticipated response and information assessment reported in previous research. Therefore, this still makes a case for the validity of the DARS subscales. These results also have implications for information assessment as it relates to the study of information management as described below.

Limitations of assessing valence only. Much of the prior disclosure research asked individuals to assess information in terms of valence (for exception see the DD-MM; Checton & Greene, 2012, Greene et al., in press). Although researchers and theorists *suggest* other avenues of information assessment or hypothesize about other methods of information assessment, the tendency in information management research is the assess information valence alone, often with one or two items. However, both the current study and research using the DD-MM indicate that information valence may not be the best way to assess information as it pertains to disclosure decisions. Notably, the variance of the information valence variable was truncated due to a design feature in this project (discussed in the limitations section), however, this variable was neither skewed nor kurtoted.

There is a gap in information management research because it tends to exclusively evaluate information in terms of whether it is "positive/negative." That is, theories

describe multiple ways through which individuals may evaluate information; however, researchers tend to primarily study only one method of assessment (valence). Based on present findings, researchers should also include identity threat and stigma, or measure stigma instead of valence. The current project illustrates that ignoring alternative paths of information assessment may result in inaccurate conclusions drawn about the effect of "information" on the disclosure process. Future research should continue to explore different ways to measure information perceptions and the assumptions related to information assessment, as assessment of the information has implications for the disclosure process. Another concept frequently assessed in information management research is efficacy.

Efficacy. Research in information management has taken two general approaches to the study of efficacy. The first approach (most often seen in disclosure models) is the evaluation of disclosure or communication efficacy. This variable assesses potential disclosers' confidence in their ability to share the specific information (or secret) with the specific intended receiver. The second approach assesses individuals' confidence in their general ability to communicate about potentially difficult issues with a specific other (the anticipated receiver). Disclosure/communication efficacy is the only type of efficacy measured in the disclosure/secrets process models (CCM, DD-MM, and RRM) and is discussed first.

Disclosure efficacy. In general, the DARS was significantly associated with disclosure efficacy in the expected directions. Specifically, more disclosure efficacy was associated with more positive anticipated responses. Disclosure efficacy was significantly

correlated with all DARS subscales in Study II and with all subscales *except* anticipated

informational support in Study I for both friend and romantic partner data.

In general, when individuals reported anticipating more "positive" responses they

also reported more confidence in their ability to share the information with their friend or

their romantic partner. Disclosure efficacy was most strongly associated with anticipated

emotional reaction in the Study I RP data and the Study II data, but with anticipated

avoidance in the Study I F data. Disclosure efficacy was also moderately associated with

emotional and instrumental support, avoidance, and reciprocity. Disclosure efficacy was

only associated with informational support in Study II, although this finding is not

necessarily surprising because it is logical that anticipation of help finding information

may not be as central to confidence in one's ability to share difficult information (in

addition to previously stated arguments about how informational support may only be

relevant to certain topics and in certain contexts). Unless potential disclosers are in need

of informational support, the anticipation of receiving or not receiving this type of

support is unlikely to strongly affect their disclosure efficacy. In general, correlation

coefficients were stronger in Study I RP data and Study II F data than in Study I F data

(see Tables 2-4).

Disclosure efficacy in prior information management research. The correlational

findings between anticipated response and efficacy are largely consistent with prior

research. In testing the DD-MM, Checton and Greene (2012) reported a significant

correlation between perceived partner support and communication efficacy such that

anticipation of more positive reactions – support – was associated with more confidence

in disclosure abilities. In RRM testing, Afifi and Steuber (2011) similarly reported a

correlation between risk assessment and communication efficacy, with anticipation of more negative reactions - risk assessment - associated with less confidence in disclosure abilities. Overall, anticipated responses that are more positive were associated with more confidence in one's ability to share the specific information with the specific person. In testing the DD-MM, Greene et al. (in press) found no significant correlation between anticipated support and efficacy. However, that paper measured confidence in sharing a specific piece of health-related information generally and not specifically to one person. Finally, Afifi and Steuber (2010) did not report the correlation between expected negative reaction and efficacy in CCM testing (Afifi & Steuber, 2010). These patterns of association are consistent with the findings in the present study where disclosure efficacy was consistently associated with five of six DARS subscales. Thus, individuals may feel more efficacious in sharing their personal/private information when they feel targets' responses will be more emotionally or instrumentally supportive, more reciprocal/open, less avoidant, and less negatively emotive. The next section discusses a second way to conceptualize efficacy, general communication efficacy.

General communication efficacy. The second evaluation of efficacy in information management research uses more general communication efficacy. In contrast to disclosure efficacy, general communication efficacy was only significantly associated with one DARS subscale (anticipated avoidance) in only one set of data (romantic partner; general communication efficacy was not measured in Study II), and this correlation was weaker than the correlations with disclosure efficacy (see Tables 2-4). This supports the arguments made by Greene (2009) that individuals may be confident about disclosure in general except when it comes to telling a certain person a certain

piece of information. The reason(s) why it may be more difficult to tell a certain person certain information are likely related to how that person will respond to the particular information and how the discloser thinks that the information sharing will affect their relationship in the future (e.g., a person disclosing infidelity to a best friend vs. a romantic partner).

General communication efficacy was also not significantly associated with likelihood of disclosure (in Study I), whereas disclosure efficacy was strongly associated with likelihood of disclosure in both Studies I and II. These findings help validity for the DARS and indicate that future researchers may find disclosure or communication efficacy more relevant to disclosure decision-making research than general communication efficacy (although disclosure efficacy is already used more frequently).

General communication efficacy in prior information management research .The type of efficacy assessed in disclosure decision-making models is more closely related to disclosure efficacy than to general communication efficacy. One exception to this trend is research in fertility-information management (although not necessarily in disclosure process). For example, Steuber and Solomon (2011) adapted items from Makoul and Roloff's (1998) measure of confrontation self-efficacy to measure *communication efficacy* (items from the same measure were used for the current project, e.g., general efficacy scale). Steuber and Solomon's adaptations primarily centered on the addition of a statement to orient the participant to the topic of infertility (e.g., "It would be very easy for me to tell this person about things he or she did that concerned me related to my infertility," emphasis added). Steuber and Solomon (2011) indicated that they chose to measure General Communication Efficacy (efficacy at being confrontative) in particular

because the nature of infertility often has individuals managing information not just about the initial diagnosis but also about details of the diagnosis and treatment for the duration of the process. Accordingly, it was important to measure the discloser's ability to follow-up with a person if the receiver is not managing pieces of information well. Although they did not examine anticipated reaction, Steuber and Solomon (2011) reported that "communication efficacy was positively associated with the tendency to disclose information" (p. 262). Thus, what Steuber and Solomon (2011) termed general communication efficacy was associated with "likelihood of disclosure" in the context of infertility in contrast to the current study which demonstrated no significant associations between general communication efficacy and likelihood of disclosure.

In the context of this inconsistency, several points should be highlighted. First, although the efficacy variable in the Steuber and Solomon (2011) study is labeled general communication efficacy, it more strongly resembles disclosure efficacy as the sample items ask participants to consider disclosure of one particular topic (infertility) to one particular person (their partner). In fact, this measure is similar to the communication efficacy measure utilized by Checton and Greene (2012) that also asked participants to consider disclosure of one particular topic (in that study a heart condition) to one particular person (their partner). Therefore, the significant correlation between efficacy and disclosure in Steuber and Solomon (2011) is more consistent with the associations between disclosure efficacy and disclosure found in previous research (described) and with the current study. The second inconsistency of the Steuber and Solomon (2011) study is that the association seems to be between a variable measured as confidence in communicating (about infertility) with one's partner and actual disclosure to friends and

family. That is, Steuber and Solomon asked individuals to assess their confidence in communicating with their partner and use that variable to predict disclosure to others (rather than assessing efficacy in disclosure to others and predicting actual disclosure to others), however, it is not likely that an individuals' disclosure patterns with their partner, for example, would predict how they share information with their friends or family members.

Implications of disclosure vs. general communication efficacy. The implications of these observations are as follows. First, the tendency in existing research emphasizes the superior predictive power of disclosure efficacy compared to general communication efficacy in disclosure decision-making, whether in a single disclosure decision, as seen in Afifi and Steuber (2009, 2010) and Greene et al. (2009) or in ongoing disclosure as seen in Checton and Greene (2012) and Steuber and Solomon (2011). Research in the management of information would benefit from consistently measuring *disclosure efficacy* so that conclusions can be drawn across theories, models, and empirical studies. Second, information management researchers must be careful about making assumptions that confidence in disclosure *to a particular individual* is applicable to disclosure decisions to *people other than that individual.* For example, Greene (2009) argued against this practice and recommended conceptualizing disclosure efficacy to a particular person about a specific piece of information. The original conceptualization of confrontation self-efficacy (Makoul & Roloff, 1998), although was designed to be more topically general (confrontational communication compared to more topically central personal/private information), can be applied to an individuals' efficacy *with a specific other.*

Further, the inconsistency in terminology is confusing and makes cross study comparison difficult. Instead, perhaps *general communication efficacy* should describe general confidence in communication with others, while *general disclosure efficacy* should describe general confidence in topically-specific communication with others. *Communication efficacy* should describe general confidence in communication with one specific person, and *disclosure efficacy* should describe general confidence in topically-specific communication with one specific person. More precision would allow for comparison across studies as well as greater ability to predict disclosure decision-making.

Summary of anticipated response and key disclosure components. In sum, this section described the patterns of association between key disclosure research components and the dimensions of anticipated response created in the current project and presents evidence for the validity of the DARS measure created in this project. The associations between important disclosure process components and the DARS subscales are consistent with prior research, and these results are replicated in different sets of data and across two different types of relationships. In contrast to prior research, the categories and measurement of anticipated response presented here are more exhaustive and robust than previous conceptualizations of anticipated response. One of the issues of information management research highlighted in this section is how limited prior research is in conceptualization and measurement of anticipated response (e.g., measuring support only, or assessing multiple dimensions of anticipated response within a single measure). The DD-MM research (see Greene et al., in press) is straightforward and concise in its conceptualization of anticipated response but only measures anticipated support in that study. Therefore, we know more about how anticipated (emotional)

support affects the process of disclosing health-related information, but we do not know how other types of support, anticipated avoidance, or anticipated reciprocity affect the process. Both the CCM (Afifi & Steuber, 2010) and the RRM (Afifi & Steuber, 2009) assess the anticipated response concept with a variety of dimensions from both anticipated response and anticipated outcome. Therefore, we may be somewhat confident that anticipated response/outcome affect revelation or continued concealment of secrets but not which dimensions or how. The following sections discuss the dimensions of anticipated outcome and how they relate to the process of information management.

Dimensional Integrity of Anticipated Outcome

Results from Study I and Study II suggest that the newly constructed Disclosure Anticipated Outcome Scale (DAOS), although currently in refinement, represents the different dimensions of anticipated outcome with adequate internal consistency and validity. Both the fit statistics and the reliabilities are acceptable for all DAOS subscales in both Study I datasets, providing a replication, as well as in Study II. First and second order fit statistics were good across both studies. In both Studies I and II, Cronbach's alphas were strong and relatively consistent across the three sets of data.

The creation and operationalization of anticipated outcome was secondary to the main goal of this project (to conceptually and operationally clarify the concept of anticipated <u>response</u>, as well as to discuss the potential contributions of the provided conceptualization to existing theory). The presentation of anticipated outcome conceptualization and measurement was primarily undertaken to further clarify the concept of anticipated response as it pertains to information management and disclosure decision-making. That is, the primary goal of this project was to focus on the anticipated

response variable; however, clarification of the concept of anticipated outcome was necessary in order to refine the concept of anticipated response. Therefore, the DAOS is a secondary focus of this project, and this role is reflected in a more limited discussion. Further, anticipated outcomes have been explored far less frequently in existing disclosure research, although these findings are highlighted when relevant to the discussion of anticipated response. The next section discusses the dimensional integrity of anticipated response and anticipated outcome.

Dimensional integrity of anticipated response and anticipated outcome. The rationale highlighted that one existing gap in disclosure process research is the lack of clarity of the concept of anticipated response. Prior research and theory include multiple orientations to anticipated response with little conceptual or temporal clarity. Following the review of literature, this project suggested that the disclosure process is influenced by two related concepts that are temporally distinct, *anticipated response* and *anticipated outcome* (together captured under the heading *anticipated reactions*). This project created a typology for both anticipated response and anticipated outcome and developed measures for each of the subscales associated with the concepts of anticipated response (anticipated support, anticipated emotional reaction, anticipated avoidance, anticipated reciprocity; DARS) and anticipated outcome (discloser-, receiver-, relationship-, and other relationship- outcomes; DAOS). Although the review demonstrates that anticipated response and anticipated outcome are conceptually distinct, one research question in Study I asked about the relationship between the two concepts. The following paragraphs discuss the relationship between anticipated response and anticipated outcome as well as directions for future research.

Through a series of first and second order confirmatory factor analyses, the current project demonstrated that the DARS and DAOS subscales fit the data and are separate yet correlated constructs (see Figures 2-4). The second-order factor model was tested with all items for all subscales each assigned to the subscale (in contrast to using composites for subscales), providing confidence of the absence of overlap between items across subscales. Thus, anticipated response appears to be distinct from anticipated outcomes, which answers the fourth research question.

It should be noted that the second-order factor model did not fit the Study I data (for either romantic partner or friend data) when the latent concepts anticipated response and anticipated outcome were not correlated. This is not surprising because anticipated response and anticipated outcome are both dimensions of anticipated reactions to disclosure that are separated primarily by an undetermined span of time, thus I would expect these concepts to be related. The current project originally conceived of anticipated response and anticipated outcome as two factors of a broader variable anticipated reaction and expected the reported correlation. The current project proposes that anticipated reaction is comprised of two related concepts, anticipated response (what the potential discloser expects will happen in the initial interaction after sharing the information) and anticipated outcome (what the potential discloser expects will happen in the future after sharing the information). Further, as a necessary feature of the study design, perceptions of anticipated response and anticipated outcome were assessed by participants *at the same time* (within the same survey). Although the instructions were very clear in their temporal separation of the concepts (see Appendices N & P), it is

possible that this distinction was more difficult for participants to consider the questions within the same data collection session rather than longitudinally.

Future research may consider designs to better assess the different dimensions of anticipated reaction. For example, a longitudinal design similar to that employed by Caughlin et al. (2005) and Greene et al. (2009) might help clarify this issue. Researchers might then compare anticipated response and outcome to and actual responses and outcomes to disclosure, as well as to identify the frequency of different dimensions of response and outcome to actual disclosure. This type of design may also serve to answer some of the lingering questions about specific types of anticipated response (e.g., anticipated avoidance). Such a design would also allow researchers to examine the effects of anticipated reactions on *actual* disclosure decisions (compared to participants' assessments of the probability of disclosure). Researchers have investigated this issue in narrower samples, for example in secret disclosure (see Caughlin et al., 2005) and in HIV disclosure of adolescent girls (see Greene & Faulkner, 2002). Some studies (see Greene et al., 2009) have indicated that the association between perceptions of likelihood of disclosure and actual disclosure is not as strong as those between intention to change or alter behavior and actual behavior change in broader persuasion literature (see Ajzen, 1985; Ajzen, & Fishbein, 1977; Fishbein & Ajzen, 1975; Hale, Householder, Greene, 2002). Few studies, however, actually employ longitudinal designs to investigate disclosure decision-making, and it may not be prudent to draw conclusions from one isolated longitudinal study of disclosure (especially when compared to the wealth of research on behavior change in the broader persuasion literature). In short, information management theory would benefit from more research utilizing longitudinal designs.

Overall Summary of Anticipated Reaction

In sum, this project presented reasonable evidence for the psychometric properties of the proposed anticipated reaction (comprised of anticipated response and anticipated outcome) as conceptualized and operationalized in this project. Further, analyses demonstrated initial support for the dimensional integrity of the DARS and DAOS, although future research is needed in this area. The present study created the anticipated outcome dimensional structure in order to conceptually clarify anticipated response, especially the temporal distinction proposed in this project (i.e., considering reactions in the initial interaction and in the long term). This section provides reasonable evidence for the temporal distinctions in anticipated reaction proposed in the present project, although future research should continue to test these distinctions. The next section turns to a discussion of the potential associations between personality traits and anticipated response.

Personality Traits

Personality traits may play an important role in information management. Models of disclosure decision-making (see the RRM, Afifi & Steuber, 2010; DD-MM, Greene, 2009; Greene et al., 2006) propose that disclosure decisions are influenced by an assessment of several factors. For example, Greene et al. (2006) illustrate how background factors, self, other, and relationship-linked factors, and situation assessment contribute to individuals' decisions to disclose. The following section considers how general predisposition toward a certain level of privacy, self-concealment, was associated with the anticipated reaction typology in contrast to the more situational, relational, and process variables discussed thus far.

Self-concealment. In order to further establish validity, this project considered the potential effect of personality traits on disclosure decisions in general and anticipated reactions to potential disclosure specifically. The project investigates the personality trait self-concealment because research suggests that individuals may be predisposed to desire different levels of privacy (see CPM, Petronio, 2002) that may affect decisions about whether or not to share private information. Therefore, one's predisposition to actively conceal personal information perceived as distressing or negative (self-concealment, Larson & Chastain, 1990) may be relevant to information management.

Hypotheses One and Two in Study I suggested that people who are more likely to conceal personal/private information are more likely to perceive the potential responses and outcomes of their disclosure as more negative. Scholars discuss motivations for concealment that are related to self-protection or self-preservation. Withholding certain pieces of information may be related to protection of self-identity or impression management (Afifi & Guerrero, 2000; Vangelisti & Caughlin, 1997). Tendency to self-protect is especially high when information presents a threat to identity (Leary & Kowalski, 1990; Ogilvie, 1987), is tied to central aspects of individuals' identity, and people expect identity-relevant reactions stemming from disclosure (for review, see Schlenker, Britt, & Pennington, 1996). In the present project, self-concealment was modestly correlated with four DARS subscales in Study I data, but in the romantic partner data only. Individuals who were predisposed to concealment of personal/private information also expected less emotional and instrumental support, more negative emotional reactions, and more avoidance from their romantic partners.

Associations between self-concealment and the DAOS were more consistent across Study I data and these correlations were varied, especially in the romantic partner data. People who are predisposed to conceal also anticipated more negative outcomes for themselves and for their relationships with others (in both friend and romantic partner data), as well as more negative outcomes for their romantic partner and more negative outcomes for their relationship with their romantic partner. Therefore, there was partial support for Hypothesis one in the romantic partner data, partial support for Hypothesis two in the friend data, and full support for Hypothesis two in the romantic partner data. However, elements of information assessment (such as identity threat) emerged as primary predictors of anticipated response in Study II. Self-concealment was not assessed in Study II and identity threat was not assessed in Study I. Future research should examine the associations between self-concealment and anticipated response within the context of identity threat because elements of information assessment may moderate the associations between self-concealment and anticipated response, particularly identity threat.

In the present project, there was greater support for the second Hypothesis (the association between self-concealment and anticipated outcome) than for the first Hypothesis (the association between self-concealment and anticipated response). Further, there was greater support for both hypotheses when considering disclosure decisions to *romantic partners* as opposed to consideration of disclosure decisions to friends. This finding is perplexing considering that, as a personality trait, one would think that tendency toward self-concealment would affect relationships in the same ways. However, self-concealment has been associated with the degree of risk connected with the

information (Larson & Chastain, 1990), especially the potential identity threat of the information in prior research (for review, see Schlenker, Britt, & Pennington, 1996), and it is possible that there is more risk involved in disclosing certain types of information to a romantic partner than in disclosing that information to a friend. The reason there may be more risk involved in disclosing identity threatening information to romantic partners is because people generally have more friends compared to the number of romantic partners, making potential negative outcomes especially paramount within romantic partnerships. In Western culture, people generally have multiple friends but only one romantic partner. Further, the potential outcomes of disclosure may be more salient to individuals in romantic relationships who are prone to self-conceal. This seems plausible considering the types of topics most often reported in the romantic partner data concerned infidelity and thoughts/feelings about the partner/relationship (e.g., contemplation of ending the relationship). In contrast, individuals who reported about information they had not yet shared with a *friend* reported information related to sexual relations (e.g., losing virginity) and dating partners/romantic relationships (e.g., thinking about breaking up with significant other) that would not generally directly affect the friend (target). Presumably, there would be less consequence (to the discloser, receiver, and relationship) in telling a friend about thoughts of breaking up with a significant other in contrast to telling the significant other about those same thoughts. Therefore, it does not detract from the validity of the DARS and DAOS that self-concealment is not consistently related to anticipated reaction across sets of Study I data. It is plausible that the effect of self-concealment on anticipated responses and anticipated outcomes may be more salient in romantic relationships. It is also plausible that those predisposed to conceal may be more

preoccupied with the longer term consequences of disclosure than the more immediate responses, and future research should consider other disclosure-related personality traits such as Distress Disclosure (Kahn & Hessling, 2002) or cognitively complexity, especially as it is applicable to person-centeredness (e.g., Burleson & Samter, 1996).

Summary of self-concealment. Individuals' personality traits may affect the way they manage their personal and private information. This may be especially true of communication relevant traits such as self-concealment. Study I hypothesized that people who are predisposed to concealing information may also anticipate reactions that are more negative in nature. Self-concealment was not significantly associated with anticipated response in the friend data, however, it was generally associated with anticipated response in the romantic partner data. Therefore, Hypothesis one of Study I was supported in the context of romantic relationships but not in friendships, in the present project. In contrast, self-concealment was associated with most dimensions of anticipated outcomes in both sets of data. The following section turns from a discussion of variables that are associated with anticipated response to a discussion of variables that predict different dimensions of anticipated response.

Modeling the formation of anticipated response. A primary goal of Study II was to identify and test variables likely to predict anticipated response to better understand the process of disclosure decision-making and enable researchers to make predictions about disclosure likelihood. Variables were identified and adapted based on prior research in disclosure and concealment decisions. Information valence, perceived stigma of information, and relational quality were included based on a review of the CCM, DD-MM, and RRM. Beyond these variables, the author proposed and tested

several other variables not yet widely utilized in disclosure research: identity threat of information, relationship uncertainty, and prior responsiveness. This part of the project examined variables that may predict anticipated response through a series of regressions because one regression was necessary to test each individual type of anticipated response. Earlier sections in the current project described and discussed the predictors for each individual dimension of anticipated response. This section looks at the patterns of predictors across different types of anticipated response and the implications for the concept of anticipated response broadly. This section first describes the overall pattern of associations across dimensions of anticipated response. The discussion then explores in greater detail the potential contributions of relational uncertainty, information assessment, and prior responsiveness. This section begins with a discussion of the overall patterns of association across regression models.

Overall patterns of association. Across regression models, relationship uncertainty, identity threat of the information, perceived stigmatization of the information, and prior responsiveness of the receiver to others emerged as the best overall predictors of each dimension of anticipated response. Prior responsiveness (others to information; although not applicable in 25% of the sample who had never disclosed to anyone else) and information valence emerged as secondary predictors (each predicting two of six DARS categories). Relational quality and prior responsiveness (receiver to discloser) may be less salient in anticipated response formation (as both only emerged as predictors in one model that did not perform in the same ways as the other subscales, anticipated reciprocity). At least one variable from each of the three proposed attributes (information, relationship, response) significantly predicted the DARS subscales

(emotional, informational, and instrumental support, avoidance, and reciprocity) in five of the six models tested. The exception to this was the model for anticipated emotional reaction that did not contain a response attribute.

The concepts and models explored in the present study were successful in predicting a range of variance. Information, relationship, and response attributes predicted the greatest amount of variance in anticipated emotional support, followed by anticipated instrumental support, anticipated reciprocity, anticipated informational support, and anticipated avoidance. Information and relationship attributes predicted the least variance in anticipated emotional reaction. Thus, information, relationship, and response attributes were mostly successful explaining anticipated emotional and instrumental support, moderately successful explaining anticipated reciprocity, informational support, and emotional reaction, and had limited success in explaining avoidance.

The present project considered predictive variables of anticipated response that are related to the disclosure process. Future research may also consider personality traits as predictors of anticipated response such as self-concealment (see Larson & Chastain, 1990), distress-disclosure (see Kahn & Hessling, 2001), self-disclosure in conversation (see Miller, Berg, & Archer, 1983), or elements of boundary orientation (see CPM, Petronio 2001). Personality traits that are especially relevant to individuals' orientation to information and information sharing may affect how they determine others will respond to their personal or private information. Personality traits might also moderate the associations between other variables and anticipated response, and the relationship between these variables may be further complicated by the type of relationship or the

goals for sharing the information. For example, in the present study, self-concealment was related to anticipated response only in the romantic partner data. Consequences for sharing personal or private information within a romantic partnership may be especially salient when people only have one romantic partner (compared to any number of friends). This may be further moderated by individuals' proclivity to conceal information or by their goals for sharing the information (see Chaudoir & Fisher, 2011 for a discussion of goals as they relate to disclosure of stigmatized information). Interaction goals may be related to reasons for and against disclosure (see Derlega et al., 2002).

What is especially noteworthy about the consistency in the patterns of prediction are the variables that emerged consistently. Relationship uncertainty, prior responsiveness, stigma, and identity threat are all variables that emerged as primary predictors across anticipated response dimensions. They are also all variables that, with few exceptions (e.g., see Greene, 2010; Greene et al., in press) have not been widely considered in disclosure research before the present study. Another important contribution of the present study to information management research is the consideration variables not yet frequently utilized in information management research(e.g., relationship uncertainty, responsiveness, identity threat) and how they may affect the process of managing information.

The present study was more successful at explaining the variance in some dimensions of anticipated response (e.g., emotional support) than in others (e.g., avoidance), and future research should continue to explore potential predictors of anticipated response. These predictors may be proxies for information (e.g., riskiness, see Petronio, 2001), relationship (e.g., centrality, see Caughlin et al., 2001, see also Derlega

et al., 2002), and response (e.g., past aggressive responses, see Afifi & Steuber, 2010)

attributes not specifically considered in the present study. For example, the DD-MM

(Greene, 2009) proposes five dimensions of assessment of health information: stigma (as

measured in the current project), relevance, preparation, symptoms, and prognosis. Other

potential predictors are discussed in more detail in the limitations section. The following

sections consider the previous conclusions drawn from the patterns of findings for

information, relationship, and response attributes, and explore in greater detail the

potential contributions of relational uncertainty, information assessment, and prior

responsiveness to information management research. The section begins with a

discussion of relationship uncertainty.

     Relationship uncertainty. Relationship uncertainty may play a role in predicting

anticipated response to disclosure decisions. The potential role of relationship uncertainty

is important when considered in contrast to the less salient role of relational quality in the

models. The pattern of more robust associations between relationship uncertainty

compared to similar associations for relational quality is also visible in the general

associations between relationship uncertainty and key disclosure components (and the

DARS) discussed previously in the *relationship uncertainty* section. In these analyses,

relationship uncertainty was distinctly more strongly associated with the disclosure

process (with both DARS subscales and disclosure process components such as efficacy

and likelihood of disclosure) than was relational quality. Evidence of more robust

associations between relationship uncertainty and disclosure process components is

noteworthy because a) relationship uncertainty has not yet been considered/tested in

existing disclosure models (e.g., CCM, DD-MM, RRM) and b) there is a general

tendency in information management research to consider only relational quality (or closeness) as a proxy for the evaluation of relationships. Both consideration of past research (where relational quality did not consistently predict disclosure decisions in the DD-MM, Greene et al., in press) and the associations presented in the current project indicate that relationship uncertainty may be a better proxy for relational evaluation and how relational evaluation relates to disclosure decisions. The current sample is limited to college students, which may explain this phenomenon, in part, due to the tendency for college aged participants to report very "high quality" relationships. Future research should continue to investigate the effect of relationship uncertainty on disclosure decisions, especially within different populations, and should include proxies for relationship evaluation rather than making assumptions about closeness based on role (e.g., assuming that mothers and daughters are very close). The following section discusses the potential contributions of alternative information attributes to understanding of the process of information management.

Information attributes. Attributes of the information itself may be very central to anticipated response formation (and therefore likelihood of disclosure), especially the perceived identity threat and stigmatization of information (see also Greene, 2009, for detailed discussion of information assessment as it relates to health-disclosure decision-making). The perceived threat of the information to one's identity emerged as a primary predictor of anticipated response. Perceived stigmatization of the information emerged as secondary. This is consistent with previous studies where information assessment (stigma, prognosis, relevance, symptoms, and preparation) significantly predicted anticipated outcomes (relational) but not anticipated responses (emotional support;

Greene et al., in press) in the process of health disclosure decision-making. This is also consistent with secrets research where secret valence significantly predicted risk assessment (most similar to anticipated outcomes for disclosure presented in this project; Afifi & Steuber, 2009). However, future researchers should take into consideration that in prior research information valence significantly predicted disclosure process components in secrets research (e.g., Afifi & Steuber, 2009) but demonstrated more limited success in predicting disclosure decisions (see Greene et al., 2009 and the current study). Careful consideration of information assessment proxies is necessary, as is discussed in detail in the key disclosure components section.

Response attributes. Attributes of prior response may also be salient in predicting anticipated response, as the perceived prior responsiveness of the intended receiver *to others' personal/private information* emerged as a secondary predictor. The two other types of prior responsiveness (others to the information, receiver to discloser) appear to remain less central in the formation of anticipated response (and potentially to disclosure/concealment decisions). The less central role of prior responsiveness others to the information and receiver to discloser is inconsistent with research by Afifi and Steuber (2010), where past aggression significantly predicted expectations of negative reaction. Afifi and Steuber's operationalization of prior response is much narrower than the one tested here. Additionally, Afifi and Steuber did not assess receivers' past responses (aggressive or otherwise) to others or others' past responses to the secret. Prior responsiveness of the intended receiver to others' personal/private information may be a superior variable in general information management research than past aggression because it is broader in scope.

Summary of response attributes. The results of the current project have implications for disclosure research in general and anticipated response specifically. Consistent with previous research, relationship, information, and response attributes are important to disclosure processes. However, information management theorists should consider, and continue to investigate in future research, the proxies for these assessments offered in this project (relationship uncertainty, stigma, identity threat, and prior responsiveness). The present study demonstrates the potential predictive power of these concepts and their potential usefulness in future information management theory and research. The following sections describe these potential implications in greater detail.

Implications

There are a number of implications that can be drawn from the current project. Two primary implications are discussed next: theoretical implications for disclosure research (including anticipated response, information management, and disclosure in relationships), and practical implications. The next section discusses implications for disclosure research.

Theoretical implications for disclosure research. This section explores the implications of the Study I and Study II results for the concept of anticipated reaction (dimensional structure and measurement) proposed in this project and information management research generally. Previous sections detailed the potential contributions of DARS subtypes individually, whereas this section focuses on the contributions of the typology as a whole. This section is divided into two major subsections: theoretical implications for anticipated response and information management, and theoretical

implications for disclosure in relationships. The implications for anticipated response and information management are addressed first.

Theoretical implications for anticipated response and information management. The goals of theory are to explain, predict, and control (see Littlejohn, 1996). The capacity of existing information management theories/models is limited in the pursuit of these goals by the conceptual and methodological inconsistency surrounding anticipated response. Although most, if not all, information management theories agree that anticipated response is important in information management (see rationale), there is limited consistency in the conceptualization and measurement of this concept within and across perspectives. The formulation of clear conceptualization and measurement of anticipated reaction (as presented in this project) can augment both existing frameworks of information management as well as future research in this area. The clarity surrounding the concept of anticipated response provided by the present study also enables extension of the anticipated response concept into other contexts where anticipated response may be especially relevant (e.g., organizational communication, physician-patient interactions, and/or counseling).

First, the anticipated response categorization and proposed measurement (the DARS) has the potential to contribute to disclosure process models by clarifying predictors of key disclosure outcomes. Anticipated support previously predicted likelihood of disclosure (DD-MM, Greene et al., in press), and efficacy (which then predicted depth breadth and frequency of disclosure, Checton & Greene, 2012), expectation of negative response directly predicted revealment or continued concealment (CCM, Afifi & Steuber, 2010), and risk assessment directly predicted willingness to

reveal the secret under certain conditions (RRM, Afifi & Steuber, 2009). Therefore, in three different disclosure models, some version of anticipated response predicted disclosure. However, there is little overlap in the anticipate response variable measured across these studies, which limits generalizability.

Further, inconsistency in prior anticipated response conceptualization limits our ability to understand *how* or even *why* anticipated response predicts disclosure decision-making. The current project contributes to the understanding of both the "how" and the "why" of the current findings. Consistency of anticipated response across disclosure/secret models would allow better understanding of what types of anticipated responses are relevant in disclosure decision-making. The multi-scale typology presented in this project contributes to clarifying the dimensions of anticipated response tested in past research. The dimensional structure of anticipated response introduced in the present study may be useful in understanding of how different subtypes of anticipated response have predicted disclosure decisions in existing research. For example, instead of claiming that the overall concept of anticipated response predicted likelihood of disclosure or secret revelation, the typology presented here enables researchers to express how, in past research, anticipated *support* predicted disclosure decisions. Based on these findings, we can speculate about how the process may have unfolded differently if a different subtype of anticipated response had been tested. That is, it allows us to pinpoint what drives disclosure decisions and answer questions such as: Does anticipated emotional support drive disclosure decision-making, as tested in the DD-MM? Do negative emotional reactions or fear of perceived negative anticipated outcomes result in continued secret concealment (similar to what was demonstrated in the CCM and RRM)? Are some

responses or outcomes more salient to disclosure decisions than others are? Why are sub components of anticipated response performing differently?

This project also addressed the possibility that, for the sake of parsimony, researchers may consider using other response-related variables in research to predict. For example, this project suggested incorporation of anticipated responsiveness into existing information management models and theories as an alternative to the multi-scale structure of the anticipated response typology presented. Anticipated responsiveness was related to all types of anticipated response generated in the project (i.e., all the varied conceptualizations of anticipated response presented across information management literature) as well as other important disclosure process components (e.g., efficacy, likelihood of disclosure). The concept of responsiveness is not as robust or comprehensive as the anticipated response typology developed in this project, however, there are limitations to utilizing the multi-dimension structure of anticipated response such as complications presented by having multiple dimensions of a latent concept in structural equation modeling and potential survey fatigue. A superior strategy to using the multi-dimension structure of anticipated response created in this project may be to utilize anticipated responsiveness in disclosure process models rather than, for example, attempting to incorporate all four subtypes, measuring only one or two subtypes in disclosure models, or measuring general response valence (due to the assumptions inherent in *valence* of response described earlier).

Both anticipated responsiveness and anticipated response (as conceptualized in the present project) may inform information management research. However, the breadth of responsiveness limits understanding of exactly how individual dimensions of

anticipated response affect the disclosure process. Conceptually, anticipated support

maybe more salient in health-related disclosure contexts, whereas emotional reaction

might be more salient in others (e.g., disclosure of stigmatized information). As well,

anticipated reciprocity may be more important in the early stages of a relationship, where

avoidance may be more central in the context of a relationship with differential power.

Therefore, future research should design studies that allow for comparison of the

different conceptualizations of anticipated response, responsiveness, and general response

valence and comparing predictive models of disclosure decision-making (e.g., the DD-

MM or RRM).

The concept of anticipated response itself has implications for the broader

spectrum of information management research, especially considering the greater clarity

in dimensional structure provided by the present project,. There is overlap between

criteria for revealing secrets, functions of secrets (see the work of Vangelisti, Caughlin,

and colleagues), reasons for and against HIV disclosure (see the work of Derlega,

Greene, and colleagues), and some dimensions of anticipated response.

The DARS anticipated reaction typology offers systematic description and

measurement that brings together the response elements of criteria, functions, and

reasons. For example, the criteria of "they would need to disclose something similar"

would fall under the DARS subscale of anticipated reciprocity, both the secret function of

"protect others" and the disclosure reason "protecting the other" would fall under the

DAOS subscale of anticipated receiver-oriented outcomes. In Derlega's reasons for and

against HIV disclosure (Derlega et al., 2002), catharsis may be considered an anticipated

discloser-oriented outcome of disclosure. Derlega's fear of rejection may manifest as

anticipated emotional reaction or lack of anticipated support. Duty to inform and protecting the other may manifest as anticipated receiver-oriented outcomes of disclosure. The current project anticipated reaction typology (DARS & DAOS) systematically integrates some aspects of these multiple perspectives and allows greater precision in explanation and prediction of disclosure decision-making (with valid and reliable measures).

Anticipated reaction, relationship attributes, and efficacy explain some elements of existing "reasons/criteria" disclosure research. However, some dimensions do not overlap with either anticipated reaction or other disclosure process elements explored in the current project. For example, it is unclear how testing other's reactions, self-blame and self-concept difficulties integrate with anticipated response, but it is possible that the explanation lies in the specificity of these reasons as they relate to *HIV* disclosure in this line of Derlega's research. Future research should continue to explore the integration of these overlapping typologies: criteria for and functions of revealing secrets, reasons for and against disclosure, and anticipated reaction to disclosure. Through further analysis and study, researchers may develop one coherent structure that explains how all of the components identified in these different typologies work together to affect disclosure decisions and in what contexts. Clarity surround the structure and overlap of these related typologies would inform information management research and provide insight into the disclosure decision-making process. Future research should also consider individuals' process of determining how others may respond to their personal/private information.

Study II of this project contributes to information management theory by identifying variables that are salient in the formation of anticipated response. Assessment

of information, relationship attributes, and prior responsiveness all underlie individuals'

perceptions of the four types of anticipated response. Theoretically, this is consistent with

impression management frameworks (see research by T. Afifi, Caughlin, and colleagues),

potential turbulence in relationships (see Knobloch, Solomon, Theiss, and colleagues),

and predicting future behavior from past behavior (as described in Social Learning

Theory, Bandura, 1977; Theory of Planned Behavior, Fishbein & Ajzen, 1975; Theory of

Reasoned Action, Ajzen & Fishbein, 1980). Future research might also consider

examining additional variables (based both on theory and past research) that should be

included in the model (e.g., discloser's gender, disclosure target's gender, length of

relationship, interactional goals, power, conflict, etc.) in addition to other potential

predictors described earlier (e.g., personality traits). The study of anticipated response

also has theoretical implications for understanding management of information in

relationships, which I discuss next.

   Theoretical implications for disclosure in relationships. Beyond the broader

contributions of anticipated response to information management theory, anticipated and

actual reactions to disclosure (whether response, outcome, or responsiveness) may have

theoretical implications for the relational outcomes of disclosure. In many respects,

communication and the sharing of information between partners shapes relationships, and

"the most important effects of acquaintance stem from what the receiver *does* with such

information" (Duck, 1976, p. 130, see also Greene et al., 2003). As explained in the

Relationship Filtering Model (Duck, 1999), the relationship development process is built

through partners' interpretation of events, not necessarily the events themselves (note the

focus is on disclosers' perceptions and not on receiver behaviors, similar to IPMI

conceptualization of variables). Specifically, relationships develop (or dissolve) based on how partners make sense of or "go beyond" the information shared (Duck, 2007). It is not simply the act of disclosing that affects relationships but the iterative process that unfolds after the disclosure, including the receiver's response (and perceptions of responsiveness) or the outcomes of the disclosure (to the discloser, the relationship, the receiver, and to the discloser's relationships with others). This notion is confirmed in research related to the IPMI that demonstrates that disclosure behavior (the act of communicating personal/private information with a partner) is insufficient to build intimacy unless the information is shared with a partner perceived as responsive. That is, relational intimacy through interpretation of communication is not limited to disclosure behaviors alone.

Disclosure may have a number of effects on relationships, one example of which is increased intimacy. In general, relationships that are "strong" or "close" may be less affected by a single disclosure (regardless of the negativity of the information) due to the cumulative nature of the relationship (with potential exceptions, such as the disclosure of infidelity or illegal behavior). However, the way that a receiver responds to the discloser may significantly alter perceptions of relational effects, even in the context of "close" relationships. In tests of the IPMI, although partner responsiveness and partner response are both related to increased perceived intimacy (Laurenceau et al., 1998, 2005; Manne et al., 2004a, 2004b; Reis & Shaver, 1988), partner-disclosure is only associated with relational intimacy when the process occurs in the presence of a "responsive" partner (Laurenceau et al., 1998, 2005). Although increased perceptions of intimacy represent only one of several potential outcomes (classified as relationship-oriented outcomes in the current project), these findings support the view that disclosure effects on

relationships may only be perceived as positive when responses/outcomes are also perceived as positive (see also Greene & Serovich, 1996). The realization that there are multiple potential effects of disclosure of personal/private information in relationships has important theoretical implications for information management in relationships. Specifically, that there are other outcomes of disclosure scholars have not yet considered, and future research should continue to explore multiple effects.

Future researchers may design studies that facilitate examination of the disclosure process from multiple perspectives and assesses disclosure effects for both partners. One possible design would be to invite people to disclose information in an interaction lab. Researchers might sample people in relationships (friendship, romantic partnership, family members) where one person has personal/private information to share with the other (their friend, partner, family member, etc.). Researchers might record a face to face interaction and code communication and behaviors in addition to other measures (e.g., surveys or cortisol collection, see Heinrichs, Baumgartner, Kirschbaum, Ehlert, 2003; Nagy & Theiss, 2011, 2012). Another design might have individuals communicate through mediated mechanisms in separate areas and also have each participant voice their thoughts (see Vangelisti, Middleton, & Schroeder, 2008). Researchers might also consider adding measures that asses both disclosers' and receivers' assessments of the other (e.g., character judgments) using attributional approaches to disclosure as a framework (e.g., Ross, 1977; see also Derlega & Winstead, 2001). There are practical and moral constraints for a study that necessitates the disclosure of "difficult" information in a laboratory environment. One possible alternative design to explore this concept would be to record an interaction where a confederate discloses "difficult"

information to a receiver. Receivers may then review the recording and offer feedback on their thoughts and feelings during the process. Receivers could identify types of responses, levels of responsiveness, and the general valence of their responses. These interactions could then be reviewed by independent coders to assess recipients' responsiveness, response types, and response valence.

Receivers of personal/private information have not been the focus of most disclosure research. However, we know that disclosure affects both the discloser and receiver in both the process (demand on receiver) and in the management of that information (co-ownership, e.g., CPM, Petronio, 2002). Disclosure may have both long- and short-term outcomes for receivers as well. People may not know how to respond "responsively" to difficult disclosure (e.g., terminal diagnosis, a friend's infidelity, a dying child).

Clarification what types of responses disclosers want from receivers (or what types of responses are considered "responsive") may reduce receiver burden and allow individuals to send more person-centered and comforting messages (see Burleson, 1982, 1983, 1989, 2003) that are more cognitively complex (Burleson & Samter, 1996). For example, messages that are emotionally supportive may be considered more comforting. Senders and receivers do not always agree on what is "helpful," especially in terms of support (see Barbee et al., 1998; Hays et al., 1994; Greene et al., 2003, p. 128), and more research is necessary to determine responses that might be considered universally "helpful." This same argument offers many opportunities for potential utilization of the anticipated reaction typology in practical settings for training of everyone from relational

partners to counselors to physicians. The practical implications of conceptualizing and measuring anticipated reaction are discussed next.

Practical implications. Understanding how and why anticipated and actual reactions affect disclosure of personal or private information is relevant to a number of practical contexts. These contexts include, but are not limited to, medical contexts for health care professionals (physicians, nurses, therapists) and other caseworkers (e.g., social workers, child abuse investigators), and organizational contexts. Implications of the anticipated reaction typology for medical contexts are described first.

Disclosure in medical and mental health contexts. Anticipated response is central to the process of disclosure (see DD-MM, CCM, RRM, CPM). Therefore, clarity about the different dimensions of anticipated response and how individuals form their concept of anticipated response is useful in context where people frequently share personal and or private information. The following sections describe two broad ways in which the dimensions of anticipated response created in the present project may be useful in the health context: for clarifying the process of disclosure in medical contexts and for designing disclosure interventions. The first section describes practical implications for information management in contexts that are not traditionally "interpersonal," and focuses specifically, physician-patient interactions.

"Disclosure" in medical contexts. People are often the receivers of personal/private information that may or may not be related to health. Some of this information is shared within the context of a relationship such as between friends, romantic partners, or family members. Other times, this type of information is shared in practical contexts where the "relationship" between communicative partners is less

"interpersonal." For example, personal/private information shared with physicians or nurses, or social workers. The section focuses on one of these contexts, specifically, disclosure of personal or private information from patients to physicians. The first part focuses on defining disclosure within this context.

The information shared within the physician-patient relationship is often inherently personal/private or at least is perceived as personal/private (e.g., see Petronio et al., 2004 for discussion of "privacy dilemmas" within this context). One example of this is disclosure of a sexually transmitted infection (STI), such as HIV. Other examples are centered on issues or concerns patients may have that may or may not be associated with their medical condition (e.g., sexual dysfunction), but are related to patients' feelings about their medical condition and/or how it affects their life. The literature also includes evidence of physician behaviors or responses that may encourage patient disclosure.

There are many examples of patients' disclosure of personal and/or private information within the physician-patient context. Because part of the current project focuses on information assessment, this section first provides a detailed description of the types of information shared in this context that would be considered personal/private and relevant to anticipated response. For example, Robinson and Roter (1999) defined *psychosocial problem disclosure* as distressing feelings or moods (e.g., depression, loss of interest or pleasure, anxiety, panic, etc.), problems, concerns, or losses involving important relationships (e.g., with family members, intimate friends or partners, roommates, work associates, or employers), and evaluation/treatment for mental health problems. Street and Millay (2001) examined patients' expressions of concerns, which

were defined as communicative acts that express "worry, anxiety, fear, anger, frustration, and other forms of negative affect or emotions" (e.g., *I just have a fear of the operation*; *I'm even scared to play with my own granddaughter*, p. 63). Duggan and Parrott (2001) defined self-disclosure as information about "self and difficulties" (i.e., talk about self beyond diagnostic information, talk about effects of illness, talk about limitations due to illness, and talk about difficulties due to illness), "family complications" (i.e., talk about family and talk about difficulties in relationships), and "life beyond symptoms" (e.g., talk about life beyond illness and talk about illness-related problems in relationships). Thus, research provides empirical evidence of patients' disclosure of personal/private information in medical contexts (as well as physicians, but the current focus is patient disclosure).

Research in this context explores a variety of associations between patient "self-disclosure" and other outcomes (e.g., physician behaviors). Further, the ability to encourage patients' disclosure of personal/private information (or to disclose in depth) may have important implications for individual health. Anticipated response is an important part of the disclosure process. Anticipated response is consistently associated with individuals' confidence in their ability to share personal/private *health-related* information within interpersonal relationships (e.g., efficacy, see Checton & Greene, 2012 or Greene et al., in press). Further, deeper disclosures may allow physicians to make more accurate diagnoses (see Dupre, 2001; see also Maguire et al., 1996), develop more appropriate treatment plans, and save time and resources by increasing efficiency in diagnosis. Checton and Greene (2012) demonstrated how anticipated partner support encourages more confidence in disclosure, which then positively affects the breadth,

depth, and frequency of ongoing disclosure with a spouse. What is yet unclear is if the

process of disclosure in the medical context unfolds in the same manner as it does in

interpersonal contexts. In deciding to disclose, do patients consider the relationship with

their physician, both patients' and physicians' assessment of the information itself (i.e.,

would physicians consider an STI "stigmatized" information?), patients' efficacy for

disclosure, and most importantly for the purposes of the present study anticipated

reaction? Research about specific physician behaviors offers some clarity.

At this time, we know very little about anticipated response in the context of

physician-patient interactions. However, scholars have investigated actual responses to

patient disclosure. Parallel to the steps undertaken in the current project to examine

research on actual responses to disclosure in order to inform the construction of the

dimensions of anticipated response, I defer to physician-patient research about physician

response to patient disclosure in order to inform the discussion of anticipated response

within this context.

Physician behaviors, specifically their *responses* to patient communication, may

affect the depth and breadth of patients' disclosures. Several studies have examined the

association between patients' self-disclosure and physicians' communicative behaviors.

Robinson and Roter (1999) found that psychosocial problem disclosure significantly

increased with relational familiarity (i.e., the relationship between the physician and the

patient), and if physicians directly asked about psychosocial problems. Maguire et al.

(1996) coded patients' disclosures for their level of emotional expression in terms of

feelings and found that patients' mentions of feelings were associated with physician

"empathy." Street and Millay (2001) determined that patients' expressions of concerns

were associated with physicians' patient-centered utterances (which included partnership-building and supportive talk). Duggan and Parrott (2001) found that patient self-disclosure is with physicians' use of nonverbal facial reinforcers (e.g., nodding). When asked what providers could do to promote disclosure of patients' HIV- status, the most frequent answer was related to was "relational factors" (59%), such as providers' being friendly and trustworthy (Agne et al., 2000). These behaviors generally are consistent with positive aspects of anticipated and actual reactions and responsiveness, as well as relationship related factors of the disclosure process.

Studies also indicate physician behaviors. Specifically, physician *responses* that discourage patient self-disclosure. Maguire et al. (1996) found that patients' disclosures were negatively associated with "leading questions," "physically focused clarifications of patients' utterances," "physically focused questions," (i.e., focusing on the "body" issues instead of the more emotive or psychosocial issues) "giving advice," and "premature advice." Patients' mentions of feelings were negatively associated with "physically focused questions," "physically focused clarifications of patients' utterances," and "giving advice." Duggan and Parrott (2001) reported that patient self-disclosure is negatively associated with physicians' negative facial behaviors such as indirect eye contact. These behaviors relate to negative aspects of anticipated and actual reactions and responsiveness, such as negative emotional reaction and avoidance.

This section reported on existing research about physician behaviors that both encourage and discourage disclosure of personal or private information within the context of physician-patient communication. Evidence of these behaviors and their effect on patient disclosure suggests that *anticipation of* these behaviors may affect patients'

disclosure decision-making with their doctor. What is less clear is how patients form their impressions of anticipated response within this context. Variables consistently represented in the disclosure process include some form of information assessment, relational assessment, individuals' confidence in their ability to share this information (efficacy), and how people think their target recipient will respond (e.g., CCM, DD-MM, RRM). Of these variables, information assessment, efficacy, and reaction are likely to remain key components in the physician-patient disclosure process. Relational attributes, especially relational "quality", may be less central in this context, depending on the nature of the relationship between the physician and the patient. For example, relational attributes may affect the disclosure process differently in the context of an interaction with a family physician whom the patient has visited for many years and with who the patient has multiple shared associations (i.e., both relational partners visit this physician, as well as family friends) compared to a physician at a clinic that the patient may only see one time. Further, dynamics of "relational assessment" between physicians and patients may be overshadowed by anticipated response in this context. For example, a high "quality" relationship with a physician may not "encourage" disclosure in the same way that it might in an interpersonal relationship because the patient is worried that the physician might also tell his/her partner (e.g., patient discloses thoughts of suicide, physician tells partner "for the good of the patient").

In the present project, relationship uncertainty, identity threat of the information, perceived stigmatization of the information, and prior responsiveness of the receiver to others emerged as the best overall predictors of anticipated response. Of these predictors, elements of information assessment may function in the same way in this physician-

patient disclosure context such that information is perceived as more stigmatizing and identity threatening is also perceived to initiate more negative anticipated responses. Relational uncertainty and prior responsiveness of receiver to others are two additional variables presented in the current project that may provide insight in this context. It is possible that one particular physician may be recommended by friends because of his or her responsiveness (e.g., "she was so understanding when I told her about my HIV"), which might parallel receiver responsiveness to others. It is also possible that receiver responsiveness to discloser might be salient in this context, if the patient has visited this physician previously. Future research should continue to investigate the process of disclosure in this context and to encourage effective physician-patient interactions.

Patient disclosure of personal/private information in this context may be affected by the same components as disclosure within the context of interpersonal relationships, at least in terms of response and relationship. Existing literature focuses on actual physician behaviors (i.e., responses). This research would also be applicable in other medical contexts, such as within the context of mental health and disclosure to therapists. Another potential avenue for future research that is disclosure-focused interventions, described next.

Disclosure-focused interventions. Clarity considering anticipated response may be especially useful in disclosure-focused interventions. Consistent with existing literature, the present project indicates that information appraisal, especially perceived stigmatization and identity threat of the information, are central to perceptions of anticipated response. Additionally, existing research also suggests that anticipated response is central in the disclosure decision-making process (e.g., DD-MM, Greene,

2009, see also Greene et al., in press). Researchers might create response based interventions specifically designed to help individuals with difficult or stigmatized disclosures. For example, researchers might design interventions for HIV disclosure.

One issue plaguing existing disclosure training in this context is the amount of time it takes to complete the training (about six weeks, for example the "healthy relationships" program, see CDC, 2012; similar disclosure interventions for individuals "coming out" take around 10 weeks, e.g., Coming Out Issues Group, see Morrow, 1996). Some researchers (e.g., Greene, Magsamen-Conrad, & Catona, 2011) have begun to investigate the utility of a brief disclosure intervention in the context of HIV disclosure. This intervention utilizes the tenants of Brief Motivational Interviews (e.g., Neighbors, Larimer, & Lewis, 2004) to create an intervention that helps HIV-positive individuals more thoroughly and strategically assess their disclosure decisions. The intervention can be used by trained caseworkers or social workers and takes about 15 minutes.

The Brief Disclosure Intervention (BDI; Greene et al., 2011) focuses on increasing individuals' disclosure efficacy in the HIV context. As a supplement, the dimensions of anticipated response outlined in the current project may be used to create an intervention that focuses on identifying appropriate targets for disclosure. Caseworkers could ask patients to consider their social network and how individuals who do not know the patient's HIV status might react using the typology to guide the questions (e.g., "you mentioned that your mother doesn't know. Do you think your mother would support you emotionally? Do you think your mother might help you remember to take your medicine or take you to the doctor? What response is most important to you?"). Caseworkers could use the intervention to help individuals evaluate disclosure decisions. That is, caseworkers could be trained to

guide individuals in identifying which individuals might be able to offer them emotional support, instrumental support, and informational support. Using the anticipated response dimensions outlined in the current project, caseworkers could also encourage patients to consider which potential recipients might have a negative emotional reaction and which might avoid the discussion in comparison to receivers who might be open or supportive. Finally, caseworkers could guide individuals in evaluating the potential aspects of outcomes for disclosers (the HIV-positive individuals), for the receiver of the information, for the patient's relationship with the receiver, and for their relationship with others. This intervention could be adapted to a number of other difficult disclosure contexts such as other stigmatized health conditions (e.g., STIs, lung cancer, chronic fatigue or restless leg syndrome), disclosure of sexual orientation, or disclosure of abuse.

In sum, anticipated response and analysis of the disclosure process may be applicable in other related contexts, such as for physicians, therapists, nurses, and other mental health counselors, in addition to social workers, all with the goal of encouraging better disclosure outcomes. Response-focused research would also be useful to design support training for spouses/partners of patients and for disclosure interventions (e.g., HIV, sexual abuse, sexual orientation). Response-focused research may also be useful to managers and other organizational professionals, described next.

Disclosure in organizational contexts. Employees must also sometimes disclose potentially distressing information in the workplace (e.g., sexual orientation, chronic illness, family issues; see Higgins & Miller, 2003; Munir, Leka, & Griffiths, 2005). There are several empirical examinations of disclosure in organizations (e.g., Southall, Jennings, & Gagn, 2011); disclosure research in organizational contexts often focuses on

potentially risky personal or private information such as disclosure of mental illness (e.g.,

Peterson, Currey, & Collings, 2011).

Disclosures in the workplace may be related to positive outcomes. For example,

disclosure of sexual orientation in the workplace is positively related to varying levels of

both job satisfaction and organizational commitment (e.g., Higgins & Miller, 2003).

Other studies examined levels of self-management of chronic illness in the workplace

(e.g., Munir et al., 2005; 2006) and found that the degree of disclosure was related to both

the physical presence of the illness. For example, people argue that they will wait until

symptoms appear in an effort to avoid disclosure (see Greene et al., 2001 for related

research in HIV disclosure). Research also discusses the perceived or received *support*

from co-workers and line managers, which is directly relevant to anticipated response, as

support is one of the types of responses people anticipate.

Disclosure process research identifies information and relationship assessments

and efficacy as affecting the process of disclosure decision-making (e.g., Greene, 2009).

Information management process research identifies anticipated response as central to the

process (e.g., CCM, DD-MM, RRM). The current project identifies predictors that are

consistent across most types of anticipated response: relationship uncertainty, identity

threat of information, perceived stigma of the information, and prior responsiveness of

the target to others' disclosures. These variables are likely to be applicable in the

organizational context where individuals may have relationships with supervisors and

may feel uncertain about that relationship or other elements of their work. Employees are

also likely to consider the confidence they that have to share the information with their

supervisor or with an EAP, and that confidence is affected by anticipated response (e.g.,

Checton & Greene, 2012; Greene et al., in press). Employees are also very likely to consider how a potential work target (supervisor, HR Manager, EAP employee) has responded to others' disclosure (responsiveness of target to others) as they consider whether or not to disclose the information at work. Disclosure of the private information in the organizational context may allow employees to obtain both formal and informal assistance and support. The incidence of mental and emotional difficulties (e.g., divorce, substance abuse, single parenthood, stress, depression) among the workforce in the United States has risen considerably in the last few decades (Dickman & Emener, 1982; Gabriel, 2000). In 1984, Masi estimated that 10-18% of employees experience such difficulties.

Although employees may have the ability to recognize the potential benefits to disclosure of private information in the workplace (i.e., receiving assistance through an employee assistance program, EAP, or workplace accommodation), employees may view disclosure as threatening to their impression management. In order to benefit from EAP programs, employees generally self-identify as having a problem. By disclosing this information to EAPs to receive help, employees must disclose, threatening their impression management and potentially exposing themselves to negative reactions/consequences. Further, any workplace disclosure of personal/private information has the potential to be identity threatening, even if the information is not necessarily stigmatized because disclosing personal information makes other individuals "co-owners" of the information who may not respect the discloser's "boundary orientations" (see CPM, Petronio, 2002). This phenomenon parallels research investigating reasons against disclosure such as fear of rejection as a reason for

nondisclosure of stigmatized information (see Derlega et al., 2002). One of the reasons that individuals report as a reason why they do not disclose their HIV status is because they are concerned that others will not understand what they are going through, will not be supportive, will no longer like them, and will change their impressions of them (see Derlega et al., 2002; Greene et al., 2003).

Nondisclosure of personal issues in an organizational context may be costly on a number of levels. Employees are exposed to potential harm to their physical and psychological well-being. Employers face potential cost of replacing employees or decreased productivity. Employees' work performance may be compromised, or at the very least affected, by mental and emotional problems (Gerstin & Bayer, 1988). Mental (e.g., mental illness), medical (e.g., alcoholism), and emotional (e.g., death in the family) problems have been linked to a number of dysfunctional work behaviors (e.g., assault, lower productivity, poor attendance, and impaired collegial and supervisory relationships; Bayer & Gerstein, 1988). When left untreated, these dysfunctional work behaviors may contribute to both personal (e.g., job loss) and organizational (e.g., firing employees and filling their positions, health care) cost increases.

The categorization of anticipated response provided by this project may be useful in this context to provide organizations with an idea of what types of responses might be helpful to their employees. Disclosure literature often points to the importance of target reaction in the decision to disclose, especially within the context of negatively stigmatized identity threatening information (e.g., research on disclosure of HIV-positive status; Derlega et al., 1998; Greene & Faulkner, 2002; Greene & Serovich, 1996; Greene et al., 2009). Target reaction may be especially salient in the workplace where there are

heightened concerns for protection of self-identity or impression management (see Afifi
& Guerrero, 2000; Vangelisti & Caughlin, 1997). Specifically target reaction may also
weigh heavily on the disclosure decision-making process because disclosure of such
information, especially in the workplace, may impede achievement of goals, such as
maintaining the image that an individual "has everything under control". Therefore,
knowledge and training in acceptable reactions for both supervisors and EAP workers
might facilitate positive disclosure outcomes and a climate encouraging appropriate
disclosure in the workplace.

The anticipated reaction categorization presented in this project may be used to
supplement skills training or workshops for managers and co-workers. Further, many
organizations provide EAPs that offer direct service delivery to employees (e.g.,
treatment, referral services, follow-up) and system maintenance activities (e.g., program
evaluation, training). These programs often focus on substance abuse; however, some
organizations' EAPs assist with a number of other concerns such as depression. EAP
employees might also benefit from response training as guided by the anticipated reaction
typology because it would give individuals such as HR managers concrete strategies that
are easier to implement than trying to "be understanding."

Summary of disclosure in organizational contexts. The dimensions of anticipated
response (and outcome) created in this project have important implications for
organizational situations. Individuals sometimes consider disclosing personal/private
information within an organizational context. The dimensions of anticipated response
identified in the current project could be used to educate supervisors and EAP employees

about employees' concerns regarding disclosure and provide examples of appropriate responses. The next section discusses the limitations of this project.

Limitations

This project was limited in several ways, including sampling limitations, procedural limitations, and design limitations. Sampling limitations are discussed first.

Sampling. One strength of this project was that it tested the anticipated reaction typology across multiple sets of data. However, a limitation of this study was that the samples are very similar. All three samples are comprised of college students participating in communication classes at a large northeastern university. However, some of the classes sampled for the current project are general education requirements, and thus the sample represents more than just communication majors. Although the sample was more diverse in ethnicity than other college samples, it is still a limited age group, overrepresented Caucasians (56-57%), predominantly female (57-72%), and only generalizable to other similar college samples. Other limitations include length of friendships/partnerships compared to other types of samples (average of 1.5 years for romantic partners and 5.41-5.53 years for friendships).

A second sampling limitation of this project is that it was more frequently tested in friendships (Study I F, Study II), and examination of these phenomena in the context of romantic relationships may be more appropriate. The design of the current project asked participants to consider information they had not yet shared with either a friend or a romantic partner (see Appendix I for instructions). Romantic relationships were defined as committed, exclusive, relationships of at least three months duration. Participants who were not currently in a relationship of this nature at the time of the study completed the

Friend version of the survey. Therefore, participants in the romantic relationship condition were limited in their consideration of the receiver, and this process of considering the information not yet disclosed may have been different. That is, those in the romantic partner condition were forced to consider the receiver *first* (their romantic partner) and *then* think about information they had not yet shared. Although those in the friendship condition may have also followed this same thought process, it is also possible that these participants considered the *information first* and then thought of a friend with whom they had not shared this information. The project did not test for this phenomenon or its potential effect(s), a limitation that should be considered in future research. The decision to test the DARS in friendships (vs. romantic relationships) in Study II made the study available to more participants by not excluding single or newly dating individuals.

Procedure. This project also had limitations in procedure. Individuals were asked to think about "disclosure." Although individuals were guided to follow certain criteria (e.g., information they had not yet shared with another specific person, that was personal or private, about them or related to them, see Appendix I) there are several limitations to this method. One limitation described above involves the order of the process that individuals may have used to determine which information to describe (i.e., whether they thought of information they had not shared and then a person with whom they had not shared it, or whether they thought of a specific person, for example their romantic partner, and then information they had not shared with that person). The process of selecting the information to describe may have implications for the salience of the information to the individual and the likelihood of disclosure. For example, some of the types of topics (see Table 1) seem less meaningful and less likely to be disclosed,

especially in friendships (e.g., "I hate the way she does her hair"). This project did

exclude participants who reported topics that did not meet study criteria.

Design. This project also has design limitations. First, the project is limited in the

cross-sectional design and individual level variables. Disclosure and communication

within relationships is an ongoing dyadic process. Thus, using cross-sectional individual

level data, to examine a dynamic, dyadic process and draw conclusions about the nature

of communication and relationships is flawed (see Caughlin & Golish, 2002; Greene,

2009). A better design would have incorporated partner perspectives and tracked

disclosure decisions across a period of time, although both of those design features are

underrepresented in information management studies.

Second, the variance of information valence was truncated by asking participants

to think of and report on information they considered "somewhat negative." However,

this decision was made in order to encourage generation of topics more salient to the

discloser. Further, information that is perceived as more negative, in contrast information

that is more positive, is likely to have greater implications for anticipated reactions

because except in select instances people tend to celebrate positive news together. Even

in situations where news is "bittersweet" (e.g., a job promotion that necessitates a cross

country move, separating friends and loved ones) people in relationships are generally

expected to celebrate "good" news together.

Third, participants assessed perceptions of anticipated response and anticipated

outcome within the same survey. Participants completed surveys in less than thirty

minutes. Within that span of time, participants answered a number of questions about the

nature of the targeted relationship and disclosure decision-making process. In particular,

the sections asking questions about anticipated outcomes directly followed the section

that asked questions about anticipated responses. A better design might have examined

order effects or separated these sets of questions more in the survey itself, or asked about

these concepts in two surveys separated by a period of time to capture some post

disclosure effects.

Fourth, there is unexplained variance and possible unmeasured key variables.

Several of the regression models explained 20-30% of the variance in anticipated

response and although this is very good for some communication research the findings

still leave unexplained variance in anticipated response. Many other variables that were

not measured in this study may affect the formation of anticipated response and

ultimately the process of disclosure. Unmeasured variables may include other personality

variables, for example those related to boundary orientation (see Petronio, 2002, for

which measures are not yet available) or situational variables such as receivers directly

questioning disclosers about information. Despite these limitations in sampling,

procedure, and design, the project offers potential for future research.

Future Research

The primary goal of this project was to focus on the conceptualization and

measurement of anticipated response to disclosure and the role of anticipated response in

the decision-making process. Accomplishing this goal required both identifying the types

of anticipate response that are conceptually distinct and developing operationalization for

these different types so that the anticipated response types identified can be used in future

research. Two ideas for future research are discussed next, identifying factors underlying

disclosure decisions and identifying the contributions of persuasion models to anticipated response.

Identifying factors underlying disclosure decisions. The rationale highlights several factors that predict disclosure decisions. These factors include attributes of the information, the relationship, the reaction (response and outcome), efficacy, and past behaviors. The current project identified four types of anticipated response and four types of anticipated outcome. However, researchers' ability to use the DARS and DAOS subscales together in the same project or model is limited by a number of issues including but not limited to statistical (e.g., multicollinearity) and practical (e.g., survey fatigue) concerns. Therefore, future research should design studies to determine which types are most applicable to information management research and in various contexts. Some types of anticipated reaction may be most applicable to certain types of disclosure. For example, instrumental and informational support may be most applicable in health-disclosure contexts, and researchers may design studies that specifically sample for health information disclosure to verify this idea but choose not to measure informational support in studies about general disclosure to romantic partners. Additionally, some types of anticipated reaction such as instrumental support or fear of discloser- or other relationship-oriented outcomes may be more useful in research on secret concealment due to the nature of secret information and the heightened potential consequences of secret disclosure, whereas other types of anticipated reaction, such as emotional support, might be more useful in predicting disclosure across a wider range of different types and contexts. The next section discusses another avenue for future research that would inform information management theory, the incorporation of persuasive models.

Persuasive models and anticipated response. Theories and empirical work in other areas might also inform this project. For example, because anticipated response involves expectations about partners' reaction to the disclosure of information, theories that directly deal with expectancies may be useful to consider (e.g., Theory of Reasoned Action, TRA, see Hale et al., 2003 for review, or Expectancy Violation Theory, EVT, Burgoon, 1978). For example, TRA might conceptualize anticipated response as beliefs about a partner's likely response to the disclosure and about the likely outcomes of disclosure. Both TRA and EVT would also offer insight about how the anticipated reactions are related to actual responses and outcomes. To elucidate, TRA would predict that a discloser's beliefs about his/her partner's response and the likely outcome of disclosure would effectively predict the discloser's likelihood of sharing the information, which then would positively predict whether or not s/he disclosed the information. TRA might also explain how anticipated response is shaped by a myriad of factors, including the partner's response to past disclosures, and how the effect of these external factors on the disclosure decision is filtered through disclosers' influence on beliefs.

The Theory of Planned Behavior (Ajzen, 1991; Fishbein & Ajzen, 1975) might also inform anticipated response. Specifically, the concepts of perceived behavioral control, individuals' confidence in their ability to do something (which derives from Bandura's concept of self-efficacy as well as to the efficacy variables explored in the current project), and control beliefs about circumstances that may facilitate or impede actually performing the behavior may be relevant to anticipated response. Information management theory suggests that when individuals anticipate responses that are more negative in nature then they are also less likely to be efficacious (comparable to

behavioral control) and less likely to disclose (comparable to intentions to perform a behavior). Thus, perceptions about facilitating or impeding circumstances might also affect the process of disclosure. Future research should design studies that examine the potential contributions of theoretical perspectives outside of information management, such as the persuasion perspectives described in this section.

Another potential contribution that is of particular interest is the "value" concept in TRA. As TRA explains, individuals assign differential value or weight on beliefs such that some beliefs are more important than others in regulating behavioral decisions. For example, people might believe that exercise is good for personal health, that exercise makes their body look good, that exercise is hard to do, and that exercise takes a significant amount of time. Individuals can compare each of these beliefs (e.g., having an attractive body might be more important than issues of time and comfort). The current project identifies categories of anticipated response and presents measurement but does not yet test the relative influence of different types of anticipated response on disclosure decision-making. Lack of comparison of some related variables also characterizes the disclosure decision-making field (dialectical basis, weigh pro/con to make decision). However, it is probable that individuals place differential value on the different subtypes of anticipated response and anticipated outcome. For example, anticipated support from a partner may be more important than anticipated reciprocity. Anticipation of extreme negative relationship- or discloser- outcomes (i.e., the end of the relationship, see Derlega et al., 2002) may halt the disclosure process altogether and result in no sharing. Future research should explore this concept by determining how to determine how people

comparatively value different types of anticipated reactions (an issue, for example, in "reasons for and against disclosing HIV" see Derlega et al., 2002).

Summary of Future Research. This section discussed two ideas for future research focused on theory building: identifying factors that underlie disclosure decision-making and utilizing concepts from persuasion research to augment information management theory. Other ideas for future research were discussed throughout the overall discussion section. The section focused specifically on ideas for future research that would contribute to increasing our knowledge of the disclosure decision-making process.

Conclusions

Individuals make active decisions about how to manage their personal/private information. Researchers have approached the study of information management from a number of different angles including disclosure (and disclosure decision-making models; see the work of Derlega, Greene, and colleagues), secrets (and concealment models; see the work of Afifi, Kelly, Vangelisti, Caughlin, Steuber, and colleagues), and privacy management (see the work of Petronio and colleagues). These models, theories, and perspectives highlight several components important to information management including relationships, information, and response. The current project focuses attention on the anticipated reaction aspects of information management that are relevant across these areas.

The concepts of response and anticipated response are present in most, if not all, information management models, theories, and perspectives. What is inconsistent across these models is the conceptualization and operationalization of this variable. For

example, Vangelisti, Caughlin, and colleagues' work identifies criteria for revealing

secrets and functions of secrets. Derlega and colleagues have assessed reasons for and

against HIV disclosure, and Petronio refers to anticipating disclosure ramifications. More

recently, models of disclosure decision-making illustrate how emotional support (see

DD-MM, Greene et al., in press), perceived negative reactions (see CCM, Afifi &

Steuber, 2010), and risk assessment (see RRM, Afifi & Steuber, 2009) predict disclosure

or continued concealment of personal/private information or secrets. Although these

theories, perspectives, and models have made progress in explaining how individuals

manage their personal/private information, the lack of consistency in conceptualization

and measurement limits researchers' ability to draw comparisons across theories and

explain and predict information management decisions.   There are aspects of overlap

among and across each of the response variables mentioned above. The current project

systematically reviewed existing information management theories, models, and

perspectives to derive and categorize all potential anticipated reactions to disclosure. The

current project also investigated how information, relationship, and response attributes

might contribute to the formation of anticipated response perceptions. By organizing this

research into cohesive categories, the proposed anticipated response typology and its

measurement (DARS) will better enable information management researchers to explain

and predict disclosure decisions. In addition, the current project offered conceptual clarity

for other components salient to the management of information by addressing how

individuals assess their relationships, their personal/private information, and their

confidence in communicating with others about that information.

Based on the current project, anticipated response fits into the disclosure process in the following ways. Attributes of information affect perceptions of anticipated response. The present project demonstrated how aspects of the perceived stigmatization and identity threat of the information may be more salient in this process than the more often utilized variable, information valence. Attributes of the relationship between the discloser and the receiver also affect perceptions of anticipated response. The present project demonstrated how aspects of the relationship uncertainty may be more salient in this process than the more often utilized variable relational quality or closeness. Anticipated response also affects perceptions of efficacy. The present project demonstrated how disclosure efficacy may be more salient in this process than general communication efficacy. Finally, anticipated response affects the likelihood of disclosure (or continued concealment) of the information to one specific target. Further, elements of anticipated support may be most strongly related to likelihood of disclosure because across all three sets of data the associations between emotional, instrumental, and informational support and likelihood of disclosure were stronger than the associations between likelihood of disclosure and other anticipated response dimensions.

The concept of responsiveness is also potentially useful in information management research. Anticipated responsiveness as an alternative to the multi-dimensional approach to anticipated response (DARS) might be especially useful when testing information management models. Further, the present study introduced three types of prior responsiveness, all of which were related to the disclosure process. Specifically, prior responsiveness of the receiver to others emerged consistently as a predictor of

anticipated response. This variable may also be useful the broader scope of information management research including privacy, disclosure, secrets, and avoidance.

The present project has multiple implications, both theoretical and practical. Theoretically, clarity about the dimensions of anticipated response augments our understanding of how researchers have utilized anticipated response in existing frameworks (i.e., the DD-MM investigated "support", the RRM investigated a mix of concepts including both response and outcome) and may provide insight as to how to modify existing theory. Practically, this research can be useful in clarifying the process of disclosure decision-making in medical contexts (e.g., physician-patient communication), for developing education for receivers of personal/private information (e.g., physicians, nurses, partners), and for developing disclosure-focused interventions (e.g., for disclosure of difficult information: STIs, abuse). Future research should continue to refine this typology and the DARS, including exploration with various information management models, theories, and frameworks, as well as among frameworks outside of information management theory (e.g., persuasion, intimacy).

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Table 1

Disclosure Topics for All Studies

Topic	Percent Friend Study I	Percent RP Study I	Percent Friend Study II
Sexual relations (e.g., losing virginity)	14	8	8
Dating partners/romantic relationships (e.g., thinking about breaking up)	13	11	16
General attraction/feelings for friends/unwanted advances (e.g., feelings for friend)	7	8	≤3
Infidelity/affairs (e.g., cheating on partner)	6	13	10
Physical health (e.g., have illness have not shared)	6	≤3	4
Mental health (e.g., seeing therapist)	5	≤3	5
Family relationships (e.g., hating parent)	5	10	8
Personality conflicts (e.g., characteristics of friend dislike)	5	≤3	≤3
Lying/misinformation (e.g., don't like what my friend does)	4	7	5
Undisclosed information relevant to past relationships (e.g., number of previous sexual partners)	≤3	8	≤3
Negative feelings about their friend (e.g., "I don't actually like this friend")	≤3	≤3	9
Other stigmatized information (e.g., "I still sleep with a stuffed animal")	≤3	≤3	6
Illegalities/moral issues (e.g., illegal actions)	≤3	≤3	5
Substance abuse (e.g., "I got high last weekend")	≤3	≤3	4

Table 2

Bivariate Zero Order Correlation Matrix for All Friend Variables (Study I, N = 376), (1 of 2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	1.00																		
2	.58**	1.00																	
3	.81**	.58**	1.00																
4	.76**	.45**	.71**	1.00															
5	.48**	.23**	.48**	.56**	1.00														
6	.53**	.50**	.46**	.43**	.26**	1.00													
7	-.72**	-.49**	-.67**	-.63**	-.34**	-.54**	1.00												
8	.65**	.38**	.66**	.67**	.49**	.36**	-.57**	1.00											
9	.11	-.05	.17**	.36**	.40**	-.05	-.09	.35**	1.00										
10	.69**	.41**	.71**	.71**	.53**	.37**	-.59**	.80**	.42**	1.00									
11	.48**	.16**	.47**	.49**	.45**	.20**	-.35**	.56**	.42**	.63**	1.00								
12	-.02	-.02	.01	.09	-.01	-.05	-.02	.09	.14*	.02	.07	1.00							
13	.01	-.07	.02	.05	.12	.01	-.05	.16*	.11	.08	.22**	.18**	1.00						
14	-.09	-.07	-.06	-.02	-.05	-.13*	.07	-.09	-.02	-.11	-.01	.04	-.02	1.00					
15	-.23**	-.11	-.25**	-.31**	-.36**	-.16*	.18**	-.38**	-.33**	-.35**	-.28**	-.15*	-.32**	.12	1.00				
16	-.41**	-.29**	-.44**	-.34**	-.27**	-.31**	.42**	-.42**	-.05	-.42**	-.27**	-.16*	-.07	.09	.30**	1.00			
17	-.28**	-.21**	-.29**	-.13*	-.08	-.18**	.27**	-.16*	.05	-.21**	-.11	.05	.16*	.29**	-.18**	.04	1.00		
18	-.32**	-.23**	-.39**	-.23**	-.14*	-.15*	.33**	-.24**	-.07	-.33**	-.16*	.10	.13*	.31**	-.11	.09	.67**	1.00	
19	-.07	-.03	-.07	-.04	-.08	-.11	-.01	.01	.04	-.05	-.04	.10	.11	-.03	-.14*	.04	.12	.05	1.00

(*continued*)

Table 2 (*continued*)

Bivariate Zero Order Correlation Matrix for All Friend Variables (Study I, N = 376), (2 of 2)

1-DARS Emotional Support; 2-DARS Informational Support; 3-DARS Instrumental Support; 4-DARS Emotional Reaction; 5-DARS Avoidance; 6-DARS Reciprocity; 7-Responsiveness; 8-DAOS Discloser-Oriented; 9-DAOS Receiver-Oriented; 10-DAOS Relationship-Oriented; 11-DAOS Other Relationship-Oriented; 12-Information Valence; 13-Self-Concealment; 14-General Communication Efficacy; 15-Disclosure Efficacy; 16-Likelihood of Disclosure; 17-Relational Quality (Rubin's Love Scale Adapted); 18-Overall Relational Quality; 19-Gender.

* $p \leq .01$; ** $p \leq .001$; two-tailed

Table 3

Bivariate Zero Order Correlation Matrix for All Romantic Partner Variables (Study I, N = 274), (1 of 2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	1.00																		
2	.57**	1.00																	
3	.83**	.55**	1.00																
4	.81**	.46**	.75**	1.00															
5	.49**	.20**	.44**	.49**	1.00														
6	.50**	.41**	.45**	.52**	.24**	1.00													
7	-.75**	-.51**	-.75**	-.74**	-.36**	-.55**	1.00												
8	.69**	.35**	.69**	.76**	.49**	.49**	-.71**	1.00											
9	.35**	.11**	.34**	.52**	.34**	.25**	-.35**	.56**	1.00										
10	.72**	.35**	.75**	.79**	.50**	.46**	-.72**	.85**	.54**	1.00									
11	.47**	.16*	.48**	.41**	.30**	.26**	-.37**	.46**	.24**	.53**	1.00								
12	.05	.16*	.11	.12	.06	.08	-.16*	.08	.18	.09	.01	1.00							
13	.21**	.01	.19**	.19**	.18**	.10	-.18**	.35**	.29**	.30**	.25**	.19**	1.00						
14	-.07	.02	-.04	-.02	-.16*	-.01	.13	-.11	-.09	-.08	-.14	.08	-.13	1.00					
15	-.32**	-.08	-.34**	-.48**	-.24**	-.27**	.39**	-.50**	-.43**	-.53**	-.25**	-.20**	-.38**	.21**	1.00				
16	-.58**	-.33**	-.59**	-.58**	-.36**	-.46**	.56**	-.61**	-.31**	-.61**	-.34**	-.14	-.27**	.11	.46**	1.00			
17	-.13**	-.07	-.17*	-.04	-.12	-.07	.13	-.11	-.06	-.15*	-.17*	.06	-.06	.26*	.02	.05	1.00		
18	-.20**	-.01	-.20**	-.12	-.25**	-.07	.18**	-.18**	-.13	-.18**	-.21**	.07	-.12	.29**	.05	.10	.59**	1.00	
19	-.14	.05	-.16*	-.15	-.10	-.05	.12	-.16*	-.04	-.13	-.22*	.12	.01	.17*	-.04	.11	.13	.19*	1.00

(*continued*)

Table 3 (*continued*)
Bivariate Zero Order Correlation Matrix for All Romantic Partner Variables (Study I, N = 274*), (2 of 2)*

1-DARS Emotional Support; 2-DARS Informational Support; 3-DARS Instrumental Support; 4-DARS Emotional Reaction; 5-DARS Avoidance; 6-DARS Reciprocity; 7-Responsiveness; 8-DAOS Discloser-Oriented; 9-DAOS Receiver-Oriented; 10-DAOS Relationship-Oriented; 11-DAOS Other Relationship-Oriented; 12-Information Valence; 13-Self-Concealment; 14-General Communication Efficacy; 15-Disclosure Efficacy; 16-Likelihood of Disclosure; 17-Relational Quality (Rubin's Love Scale Adapted); 18-Overall Relational Quality; 19-Gender.

* *p* ≤ .01; ** *p* ≤ .001; two-tailed

Table 4

Bivariate Zero Order Correlation Matrix for All Friend Variables (Study II, N = 287), (1 of 2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	1.00																
2	.66**	1.00															
3	.74**	.72**	1.00														
4	.67**	.46**	.49**	1.00													
5	.32**	.28**	.24**	.35**	1.00												
6	.52**	.58**	.52**	.45**	.26**	1.00											
7	.09	.07	.03	.27**	.09	.05	1.00										
8	.32**	.21**	.22**	.28**	.00	.08	.31**	1.00									
9	-.26**	-.24**	-.20**	-.20**	-.10	-.17**	-.07	-.17**	1.00								
10	-.23**	-.18**	-.22**	-.03	-.15*	-.21**	.06	.09	.01	1.00							
11	-.31**	-.25**	-.31**	-.16*	-.17**	-.18**	.01	-.02	-.01	.66**	1.00						
12	-.23**	-.19**	-.15*	-.05	-.11	-.24**	.09	.01	-.06	.49**	.36**	1.00					
13	-.28**	-.19**	-.20**	-.14	-.14	-.28**	-.02	-.40**	.09	.00	.08	.04	1.00				
14	-.25**	-.20**	-.25**	-.10	-.16*	-.23**	.10	-.01	-.05	.33**	.17**	.60**	.07	1.00			
15	-.43**	-.26**	-.32**	-.53**	-.32**	-.23**	-.27**	-.25**	.01	.03	.20**	.02	.20**	.02	1.00		
16	-.43**	-.30**	-.32**	-.28**	-.03	-.26**	-.19**	-.32**	.24**	.14	.17**	.02	.28**	-.02	.41**	1.00	
17	-.12	.10	-.13	-.08	-.08	-.10	.04	.01	.04	.10	-.06	.05	.09	.15*	-.11	.01	1.00

(*continued*)

Table 4 (continued)
Bivariate Zero Order Correlation Matrix for All Field Variables (Study II, N = 287), (2 of 2)

1-DARS Emotional Support; 2-DARS Informational Support; 3-DARS Instrumental Support; 4-DARS Emotional Reaction; 5-DARS Avoidance; 6-DARS Reciprocity; 7-Information Valence; 8-Stigma; 9-Identity Threat; 10- Overall Relational Quality; 11-Relationship Uncertainty; 12-Prior Responsiveness (receiver to discloser); 13-Prior Responsiveness (others to information); 14-Prior Responsiveness (receiver to others); 15-Disclosure Efficacy; 16-Likelihood of Disclosure; 17-Gender.

* $p \leq .01$; ** $p \leq .001$; two-tailed

Table 5

Item Loadings for Information Valence

Item	Study I Friend	Study I Romantic Partner	Study II Friend
Information Valence			
1. Extremely negative/Extremely positive (R)	.74	.81	.79
2. Very disturbing/Not at all disturbing (R)	.72	.72	.59
3. Extremely unpleasant/Extremely pleasant (R)	.85	*	*
4. Very distressing/Not at all distressing (R)	.72	.74	.56
5. Extremely good/Extremely bad	.57	.77	.48

(R) item is reverse-coded

[*]*Item deleted*

Study I Friend $N = 376$; $M = 3.62$, $SD = 1.39$, range 1-7, $\alpha = .80$, $\chi^2(5) = 14.62$, *relative χ^2* $= 2.92$, $p > .01$, *CFI* $= 0.99$, *RMSEA* $= 0.08$

Study I Romantic Partner $N = 274$; $M = 4.01$, $SD = 1.46$, range 1-7, $\alpha = .89$, $\chi^2(4) = 10.70$, *relative χ^2* $= 2.68$, $p > .05$, *CFI* $= 0.99$, *RMSEA* $= 0.08$

Study II Friend $N = 370$; $M = 4.70$, $SD = 1.12$, range 1-7, $\alpha = .68$, $\chi^2(2) = 4.46$, *relative χ^2* $= 2.23$, $p = .11$, *CFI* $= 0.99$, *RMSEA* $= 0.06$

Table 6

Item Loadings for Overall Relational Quality

Item	Study I Friend	Study I Romanic Partner	Study II Friend
Overall Relational Quality			
1. I enjoy spending time with my friend.	.70	.64	.87
2. I am <u>not</u> close to my friend. (R)	.77	.58	.87
3. My friend's opinion is important to me.	.65	.69	.70
4. This relationship is satisfying.	.80	.66	.84

(R) item is reverse-coded

[*]*Item deleted*

Study I Friend $N = 376$; $M = 4.21$, $SD = .76$, range 1-5, $\alpha = .82$, $\chi^2(2) = 4.46$, *relative* $\chi^2 = 2.23$, $p = .11$, *CFI* $= 0.99$, *RMSEA* $= 0.05$

Study I Romantic Partner $N = 274$; $M = 4.63$, $SD = .47$, range 1-5, $\alpha = .85$, $\chi^2(2) = 4.37$, *relative* $\chi^2 = 2.19$, $p = .11$, *CFI* $= 0.99$, *RMSEA* $= 0.06$

Study II Friend $N = 370$; $M = 4.27$, $SD = .65$, range 1-5, $\alpha = .82$, $\chi^2(1) = 1.38$, *relative* $\chi^2 = 1.38$, $p = .24$, *CFI* $= 0.99$, *RMSEA* $= 0.03$

Table 7

Item Loadings for Anticipated Emotional Support

Item	Study I Friend	Study I Romanic Partner	Study II Friend
Anticipated Emotional Support			
1. My friend would immediately offer emotional support. (R)	.75	.80	.83
2. My friend would immediately judge me.	.71	.82	.67
3. First, my friend would emphasize s/he still cares for me. (R)	.62	.67	.72
4. Initially, my friend would show more concern for him/herself than for me.	*	*	*
5. My friend would immediately withdraw emotional support. (R)	.70	.80	.73

(R) item is reverse-coded

*Item deleted

Study I Friend N = 376; M = 3.67, SD = 1.42, range 1-7, α = .80, χ^2(218) = 676.49, *relative* χ^2 = 3.10, p > .001, *CFI* = 0.92, *RMSEA* = 0.08 (second order factor structure)
Study I Romantic Partner N = 274; M = 3.67, SD = 1.63, range 1-7, α = .89, χ^2(223) = 654.01, *relative* χ^2 = 2.93, p > .001, *CFI* = 0.90, *RMSEA* = 0.08 (second order factor structure)
Study II Friend N = 370; M = 4.00, SD = 1.53, range 1-7, α = .86, χ^2(201) = 609.05, *relative* χ^2 = 3.03, p > .001, *CFI* = 0.91, *RMSEA* = 0.08 (second order factor structure)

Table 8

Item Loadings for Anticipated Informational Support

Item	Study I Friend	Study I Romanic Partner	Study II Friend
Anticipated Informational Support			
1. At first, my friend would offer informational support. (R)	.75	.73	.81
2. Initially, my friend would help me look for information. (R)	.86	.79	.87
3. My friend would initially hesitate to help me look for information.	*	.34	.31
4. My friend would immediately assist me in an information search. (R)	.89	.81	.84

(R) item is reverse-coded

*Item deleted

Study I Friend $N = 376$; $M = 4.17$, $SD = 1.39$, range 1-7, $\alpha = .86$, $\chi^2(218) = 676.49$, *relative* $\chi^2 = 3.10$, $p > .001$, *CFI* $= 0.92$, *RMSEA* $= 0.08$ (second order factor structure)

Study I Romantic Partner $N = 274$; $M = 4.48$, $SD = 1.39$, range 1-7, $\alpha = .85$, $\chi^2(223) = 654.01$, *relative* $\chi^2 = 2.93$, $p > .001$, *CFI* $= 0.90$, *RMSEA* $= 0.08$ (second order factor structure)

Study II Friend $N = 370$; $M = 4.14$, $SD = 1.24$, range 1-7, $\alpha = .77$, $\chi^2(201) = 609.05$, *relative* $\chi^2 = 3.03$, $p > .001$, *CFI* $= 0.91$, *RMSEA* $= 0.08$ (second order factor structure)

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Table 9

Item Loadings for Anticipated Instrumental Support

Item	Study I Friend	Study I Romanic Partner	Study II Friend
Anticipated Instrumental Support			
1. My friend would initially offer instrumental support (accompany to doctor, loan money). (R)	.67	.59	.76
2. My friend would soon withdraw instrumental support ("cut me off").	.78	.74	.76
3. Initially, my friend would NOT do anything to help me.	*	*	.45
4. The first thing my friend would do is offer to help me. (R)	.69	.61	.52

(R) item is reverse-coded

*Item deleted

Study I Friend $N = 376$; $M = 3.32$, $SD = 1.48$, range 1-7, $\alpha = .78$, $\chi^2(218) = 676.49$, *relative* $\chi^2 = 3.10$, $p > .001$, *CFI* = 0.92, *RMSEA* = 0.08 (second order factor structure)
Study I Romantic Partner $N = 274$; $M = 3.32$, $SD = 1.61$, range 1-7, $\alpha = .81$, $\chi^2(223) = 654.01$, *relative* $\chi^2 = 2.93$, $p > .001$, *CFI* = 0.90, *RMSEA* = 0.08 (second order factor structure)
Study II Friend $N = 370$; $M = 4.32$, $SD = 1.43$, range 1-7, $\alpha = .74$, $\chi^2(201) = 609.05$, *relative* $\chi^2 = 3.03$, $p > .001$, *CFI* = 0.91, *RMSEA* = 0.08 (second order factor structure)

Table 10

Item Loadings for Anticipated Emotional Reaction

Item	Study I Friend	Study I Romanic Partner	Study II Friend
Anticipated Emotional Reaction			
1. My friend would immediately have a positive emotional reaction. (R)	.78	.73	.77
2. My friend would initially become upset.	.82	.86	.93
3. My friend would initially freak out.	.84	.85	*
4. At first, my friend would have a negative emotional reaction.	.84	.89	.77

(R) item is reverse-coded

[*]*Item deleted*

Study I Friend $N = 376$; $M = 3.88$, $SD = 1.57$, range 1-7, $\alpha = .89$, $\chi^2(218) = 676.49$, *relative* $\chi^2 = 3.10$, $p > .001$, *CFI* = 0.92, *RMSEA* = 0.08 (second order factor structure)

Study I Romantic Partner $N = 274$; $M = 4.17$, $SD = 1.73$, range 1-7, $\alpha = .91$, $\chi^2(223) = 654.01$, *relative* $\chi^2 = 2.93$, $p > .001$, *CFI* = 0.90, *RMSEA* = 0.08 (second order factor structure)

Study II Friend $N = 370$; $M = 4.44$, $SD = 1.77$, range 1-7, $\alpha = .87$, $\chi^2(201) = 609.05$, *relative* $\chi^2 = 3.03$, $p > .001$, *CFI* = 0.91, *RMSEA* = 0.08 (second order factor structure)

Table 11

Item Loadings for Anticipated Avoidance

Item	Study I Friend	Study I Romanic Partner	Study II Friend
Anticipated Avoidance			
1. At first, my friend would refuse to discuss the information.	.81	.77	.74
2. My friend would immediately change the subject.	.71	.59	*
3. My friend would be nonresponsive at first.	.74	.79	*
4. Initially, my friend would avoid talking about this information.	.83	.75	.97
5. My friend would immediately leave.	.75	.81	.56

[*]*Item deleted*

Study I Friend $N = 376$; $M = 3.11$, $SD = 1.43$, range 1-7, $\alpha = .89$, $\chi^2(218) = 676.49$, *relative* $\chi^2 = 3.10$, $p > .001$, *CFI* $= 0.92$, *RMSEA* $= 0.08$ (second order factor structure)

Study I Romantic Partner $N = 274$; $M = 2.92$, $SD = 1.44$, range 1-7, $\alpha = .86$, $\chi^2(223) = 654.01$, *relative* $\chi^2 = 2.93$, $p > .001$, *CFI* $= 0.90$, *RMSEA* $= 0.08$ (second order factor structure)

Study II Friend $N = 370$; $M = 2.77$, $SD = 1.37$, range 1-7, $\alpha = .81$, $\chi^2(201) = 609.05$, *relative* $\chi^2 = 3.03$, $p > .001$, *CFI* $= 0.91$, *RMSEA* $= 0.08$ (second order factor structure)

Table 12

Item Loadings for Anticipated Reciprocity

Item	Study I Friend	Study I Romanic Partner	Study II Friend
Anticipated Reciprocity			
1. Initially, my friend would also share personal or private information. (R)	.85	.81	.88
2. My friend would immediately share personal/private thoughts and/or emotions. (R)	.72	.72	.78
3. My friend would initially be open in return. (R)	*	.77	*
4. My friend would also soon disclose something personal if I told him/her this information. (R)	.83	.74	.76

(R) item is reverse-coded

*Item deleted

Study I Friend $N = 376$; $M = 3.62$, $SD = 1.39$, range 1-7, $\alpha = .88$, $\chi^2(218) = 676.49$, *relative* $\chi^2 = 3.10$, $p > .001$, *CFI* = 0.92, *RMSEA* = 0.08 (second order factor structure)
Study I Romantic Partner $N = 274$; $M = 4.01$, $SD = 1.46$, range 1-7, $\alpha = .87$, $\chi^2(223) = 654.01$, *relative* $\chi^2 = 2.93$, $p > .001$, *CFI* = 0.90, *RMSEA* = 0.08 (second order factor structure)
Study II Friend $N = 370$; $M = 3.96$, $SD = 1.53$, range 1-7, $\alpha = .88$, $\chi^2(201) = 609.05$, *relative* $\chi^2 = 3.03$, $p > .001$, *CFI* = 0.91, *RMSEA* = 0.08 (second order factor structure)

Table 13

Item Loadings for Anticipated Responsiveness

Item	Study I Friend	Study I Romantic Partner
Anticipated Responsiveness		
1. I would feel accepted by my friend.	.93	.92
2. I would feel understood by my friend.	.88	.93
3. I would feel cared for by my friend.	.86	.91
4. I would feel validated by my friend.	.75	.81

Study I Friend $N = 376$; $M = 4.21$, $SD = .76$, range 1-5, $\alpha = .82$, $\chi^2(2) = 10.93$, *relative* $\chi^2 = 5.46$, $p > .001$, *CFI* $= 0.99$, *RMSEA* $= 0.10$

Study I Romantic Partner $N = 274$; $M = 4.63$, $SD = .47$, range 1-5, $\alpha = .85$, $\chi^2(2) = 2.81$, *relative* $\chi^2 = 1.41$, $p = .24$, *CFI* $= 0.99$, *RMSEA* $= 0.04$

Table 14

Item Loadings for Anticipated Outcome

Item	Study I Friend	Study I Romantic Partner
Discloser-Oriented Outcomes		
1. After time, revealing the information would make my friend think better of me. (R)	.57	.59
2. In the end, revealing the information would really harm my friend's perception of the person I truly am.	.84	.88
3. Telling would negatively affect how my friend would feel about me down the road.	.94	.92
4. Revealing this information would ultimately harm to the way my friend sees me.	.94	.96

(R) item is reverse-coded

Study I Friend $N = 376$; $M = 3.32$, $SD = 1.48$, range 1-7, $\alpha = .78$, $\chi^2(7) = 19.5$, *relative* χ^2 $= 2.79$, $p > .001$, *CFI* $= 0.99$, *RMSEA* $= 0.07$ (second order factor structure)

Study I Romantic Partner $N = 274$; $M = 3.32$, $SD = 1.61$, range 1-7, $\chi^2(1) = 1.30$, $\alpha = .81$, *relative* $\chi^2 = 1.30$, $p > .026$, *CFI* $= 0.99$, *RMSEA* $= 0.03$ (second order factor structure)

Table 15

Item Loadings for Anticipated Outcome

Item		Study I Friend	Study I Romantic Partner
Receiver-Oriented Outcomes			
1.	I think telling my friend would benefit him/her in the long run. (R)	.87	.82
2.	It would ultimately hurt my friend's feelings if s/he knew the information.	.45	.40
3.	After time, I think my friend would experience pain over things I am going through.	*	*
4.	Ultimately, I think my friend would worry about me if I told him/her.	.63	.61
5.	I think telling my friend would eventually negatively impact his/her health.	*	*

(R) item is reverse-coded

*Item deleted

Study I Friend $N = 376$; $M = 3.32$, $SD = 1.48$, range 1-7, $\alpha = .78$, $\chi^2(7) = 19.5$, *relative* χ^2 $= 2.79$, $p > .001$, *CFI* $= 0.99$, *RMSEA* $= 0.07$ (second order factor structure)

Study I Romantic Partner $N = 274$; $M = 3.32$, $SD = 1.61$, range 1-7, $\alpha = .81$, $\chi^2(1) = 1.30$, $\alpha = .81$, *relative* $\chi^2 = 1.30$, $p > .026$, *CFI* $= 0.99$, *RMSEA* $= 0.03$ (second order factor structure)

Table 16

Item Loadings for Anticipated Outcome

Item		Study I Friend	Study I Romantic Partner
Relationship-Oriented Outcomes			
1.	Telling the information to my friend would ultimately hurt our relationship.	.91	.94
2.	If I told my friend, in a few months we would be even closer than we are now. (R)	*	*
3.	I think telling my friend would eventually end or severely alter our relationship.	.88	.93
4.	Ultimately, my friend would no longer like me if s/he knew the information.	.89	.90
5.	If I revealed the information, in the end, my relationship with my friend would never be as good as it is now.	.83	.85

(R) item is reverse-coded

*Item deleted

Study I Friend $N = 376$; $M = 3.32$, $SD = 1.48$, range 1-7, $\alpha = .78$, $\chi^2(7) = 19.5$, *relative* χ^2 $= 2.79$, $p > .001$, $CFI = 0.99$, $RMSEA = 0.07$ (second order factor structure)

Study I Romantic Partner $N = 274$; $M = 3.32$, $SD = 1.61$, range 1-7, $\alpha = .81$, $\chi^2(1) = 1.30$, $\alpha = .81$, *relative* $\chi^2 = 1.30$, $p > .026$, $CFI = 0.99$, $RMSEA = 0.03$ (second order factor structure)

Table 17

Item Loadings for Anticipated Outcome

Item		Study I Friend	Study I Romantic Partner
Other Relationship-Oriented Outcomes			
1.	If I told my friend, I would ultimately lose a bond that I have with other people who know the information already.	.64	.82
2.	Other people would never trust me in the future if I told my friend the information.	.82	.88
3.	Telling the information to my friend would ultimately hurt my relationship with others.	.91	.88
4.	Revealing the information (to my friend) would eventually create stress for other people who are important to me.	.72	.73
5.	If I told my friend the information it would ultimately improve my relationship(s) with other people. (R)	*	*

(R) item is reverse-coded

[*]*Item deleted*

Study I Friend $N = 376$; $M = 3.32$, $SD = 1.48$, range 1-7, $\alpha = .78$, $\chi^2(7) = 19.5$, *relative χ^2* $= 2.79$, $p > .001$, *CFI* $= 0.99$, *RMSEA* $= 0.07$ (second order factor structure)
Study I Romantic Partner $N = 274$; $M = 3.32$, $SD = 1.61$, range 1-7, $\alpha = .81$, $\chi^2(1) = 1.30$, $\alpha = .81$, *relative χ^2* $= 1.30$, $p > .026$, *CFI* $= 0.99$, *RMSEA* $= 0.03$ (second order factor structure)

Table 18

Item Loadings for Efficacy

Item		Study I Friend	Study I Romantic Partner
General Communication Efficacy			
1.	It would be very easy for me to initiate a discussion with my friend about something that he or she did that irritated me.	.78	.90
2.	I would have no trouble expressing my feelings about our relationship.	.72	.71
3.	It would be very easy for me to ask my friend to change his or her behavior.	.74	.67
4.	I would have no trouble reminding my friend that something he or she did bothered me.	.81	.63

(R) item is reverse-coded

Study I Friend $N = 376$; $M = 3.56$, $SD = .82$, range 1-7, $\alpha = .84$, $\chi^2(13) = 37.00$, *relative* χ^2 $= 2.84$, $p > .001$, *CFI* $= 0.98$, *RMSEA* $= 0.07$

Study I Romantic Partner $N = 274$; $M = 3.81$, $SD = .85$, range 1-7, $\alpha = .84$, $\chi^2(18) = 23.97$, *relative* $\chi^2 = 1.33$, $p = .16$, *CFI* $= 0.99$, *RMSEA* $= 0.04$

Table 19

Item Loadings for Efficacy

Item	Study I Friend	Study I Romanic Partner	Study II Friend
Disclosure Efficacy			
1. I am confident that I could share this information with my friend if I decide to.	*	*	*
2. I would have trouble finding the right words if I tried to share this information with my friend. (R)	.85	.82	.87
3. I would get tongue-tied if I tried to share this information with my friend. (R)	.92	.94	.94
4. I wouldn't know how to put this information into words. (R)	.86	.86	.81

(R) item is reverse-coded

*Item deleted

Study I Friend $N = 376$; $M = 3.13$, $SD = 1.15$, range 1-5, $\alpha = .91$, $\chi^2(13) = 34.45$, *relative* $\chi^2 = 2.65$, $p > .001$, $CFI = 0.98$, $RMSEA = 0.06$

Study I Romantic Partner $N = 274$; $M = 2.88$, $SD = 1.15$, range 1-5, $\alpha = .90$, $\chi^2(13) = 16.84$, *relative* $\chi^2 = 1.30$, $p = .21$, $CFI = 0.99$, $RMSEA = 0.03$

Study II Friend $N = 370$; $M = 4.27$, $SD = .64$, range 1-5, $\alpha = .90$, $\chi^2(13) = 21.64$, *relative* $\chi^2 = 1.66$, $p = .06$, $CFI = 0.99$, $RMSEA = 0.04$

Table 20

Item Loadings for Likelihood of Disclosure

Item	Study I Friend	Study I Romanic Partner	Study II Friend
Likelihood of Disclosure			
1. I'm likely to reveal this information to my friend in the near future.	.92	.86	.80
2. I doubt that I will share this information with my friend in the near future. (R)	.85	.82	.73
3. I'm pretty sure that I'll tell my friend this information eventually.	.77	.91	.93
4. I will never tell my friend this information. (R)	.76	.91	.92

 (R) item is reverse-coded

[*]*Item deleted*

Study I Friend $N = 376$; $M = 3.16$, $SD = 1.08$, range 1-5, $\alpha = .91$, $\chi^2(18) = 44.89$, *relative* $\chi^2 = 2.49$, $p > .001$, *CFI* $= 0.99$, *RMSEA* $= 0.06$
Study I Romantic Partner $N = 274$; $M = 3.21$, $SD = 1.28$, range 1-5, $\alpha = .95$, $\chi^2(12) = 8.60$, *relative* $\chi^2 = .72$, $p = .73$, *CFI* $= 0.99$, *RMSEA* $= 0.03$
Study II Friend $N = 370$; $M = 4.27$, $SD = .64$, range 1-5, $\alpha =$, $\chi^2(18) = 29.15$, *relative* $\chi^2 = 1.62$, $p > .001$, *CFI* $= 0.99$, *RMSEA* $= 0.04$

Table 21

Item Loadings for Self-Concealment

Item		Study I Friend	Study I Romantic Partner
Self-Concealment			
1.	I have an important secret that I haven't shared with anyone.	.53	.63
2.	If I shared all my secrets with my friends, they'd like me less.	.54	.57
3.	There are lots of things about me that I keep to myself.	.50	*
4.	Some of my secrets have really tormented me.	.61	.64
5.	When something bad happens to me, I tend to keep it to myself.	*	.31
6.	I'm often afraid I'll reveal something I don't want to.	.50	.57
7.	Telling a secret often backfires and I wish I hadn't told it.	*	.48
8.	I have a secret so private I would lie if anybody asked me about it.	.68	.73
9.	My secrets are too embarrassing to share with others.	.74	.68
10.	I have negative thoughts about myself that I never share with anyone.	.52	*

*Item deleted

Study I Friend $N = 376$; $M = 2.98$, $SD = .74$, range 1-5, $\alpha = .80$, $\chi^2(20) = 48.09$, *relative χ^2* $= 2.40$, $p > .001$, *CFI* $= 0.96$, *RMSEA* $= 0.06$

Study I Romantic Partner $N = 274$; $M = 2.82$, $SD = .80$, range 1-5, $\alpha = .83$, $\chi^2(20) = 47.64$, *relative χ^2* $= 2.38$, $p > .001$, *CFI* $= 0.95$, *RMSEA* $= 0.07$

Table 22

Item Loadings for Prior Responsiveness by Type (1 of 2)

	Study II Friend
Prior Responsiveness – Others to Information	
1. …they made me feel accepted.	.89
2. …they made me feel understood.	.86
3. …they made me feel cared for.	.82
4. …they made me feel validated.	.73

Study II Friend $N = 290$; $M = 4.57$, $SD = 1.44$, range 1-7, $\alpha = .89$, $\chi^2(19) = 23.60$, *relative* $\chi^2 = 1.24$, $p = .21$, *CFI* = 0.99, *RMSEA* = 0.03

Prior Responsiveness – Receiver to Discloser	
1. My friend made me feel accepted.	.93
2. My friend made me feel understood.	.95
3. My friend made me feel cared for.	.90
4. My friend made me feel validated.	.87

Study II Friend $N = 368$; $M = 5.49$, $SD = 1.31$, range 1-7, $\alpha = .95$, $\chi^2(13) = 30.30$, *relative* $\chi^2 = 2.33$, $p > .004$, *CFI* = 0.99, *RMSEA* = 0.06

(continued)

Table 22 (*continued*)

Item Loadings for Prior Responsiveness by Type (2 of 2)

	Study II Friend
Prior Responsiveness – Receiver to Others	
1. My friend makes others feel accepted.	.92
2. My friend makes others feel understood.	.94
3. My friend makes others feel cared for.	.91
4. My friend makes others feel validated.	.88

Study II Friend $N = 368$; $M = 5.06$, $SD = 1.38$, range 1-7, $\alpha = .95$, $\chi^2(13) = 34.02$, *relative* $\chi^2 = 2.62$, $p > .001$, *CFI* $= 0.99$, *RMSEA* $= 0.07$
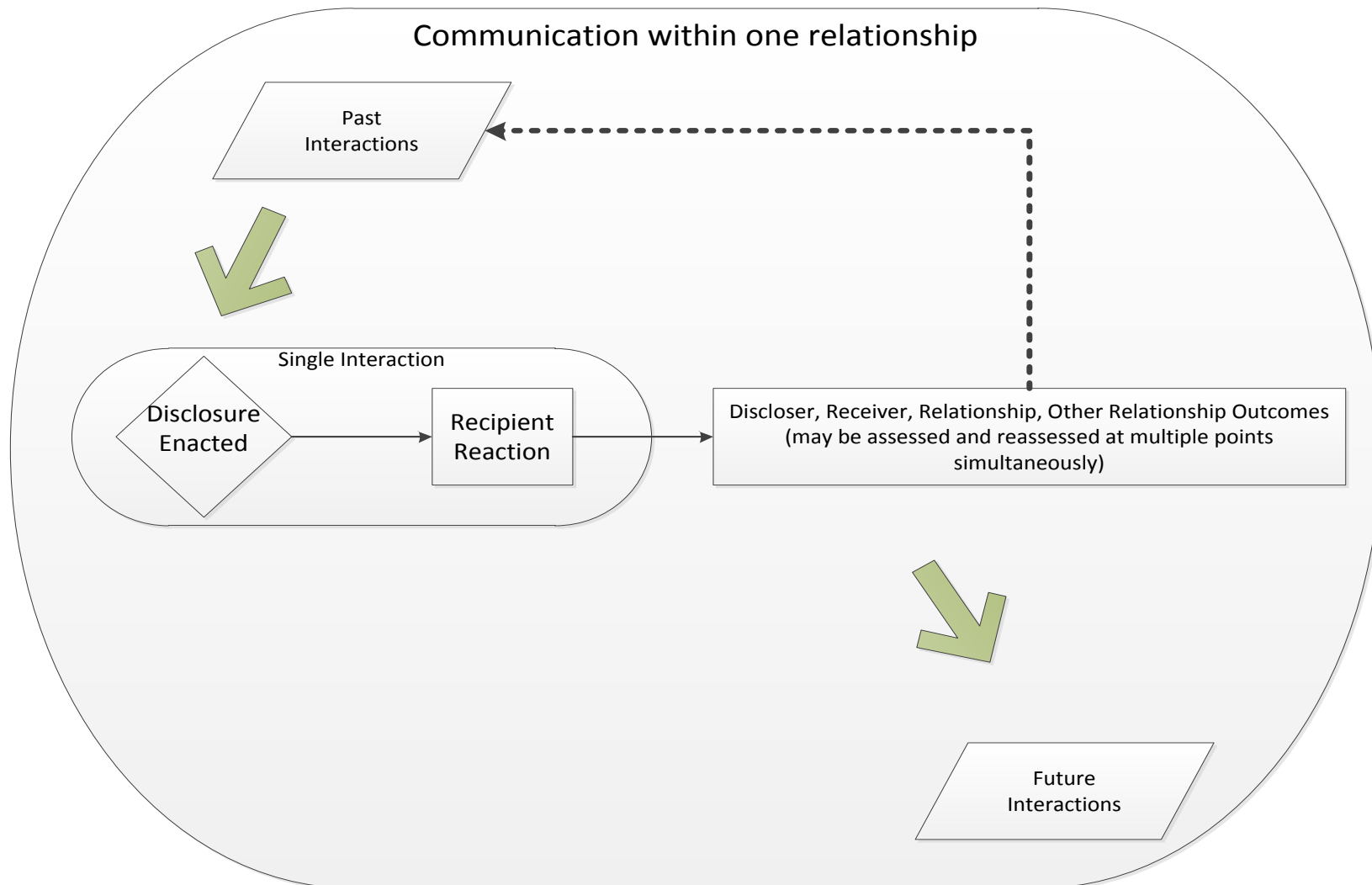
Figure 1. Disclosure Timeline as Conceptualized
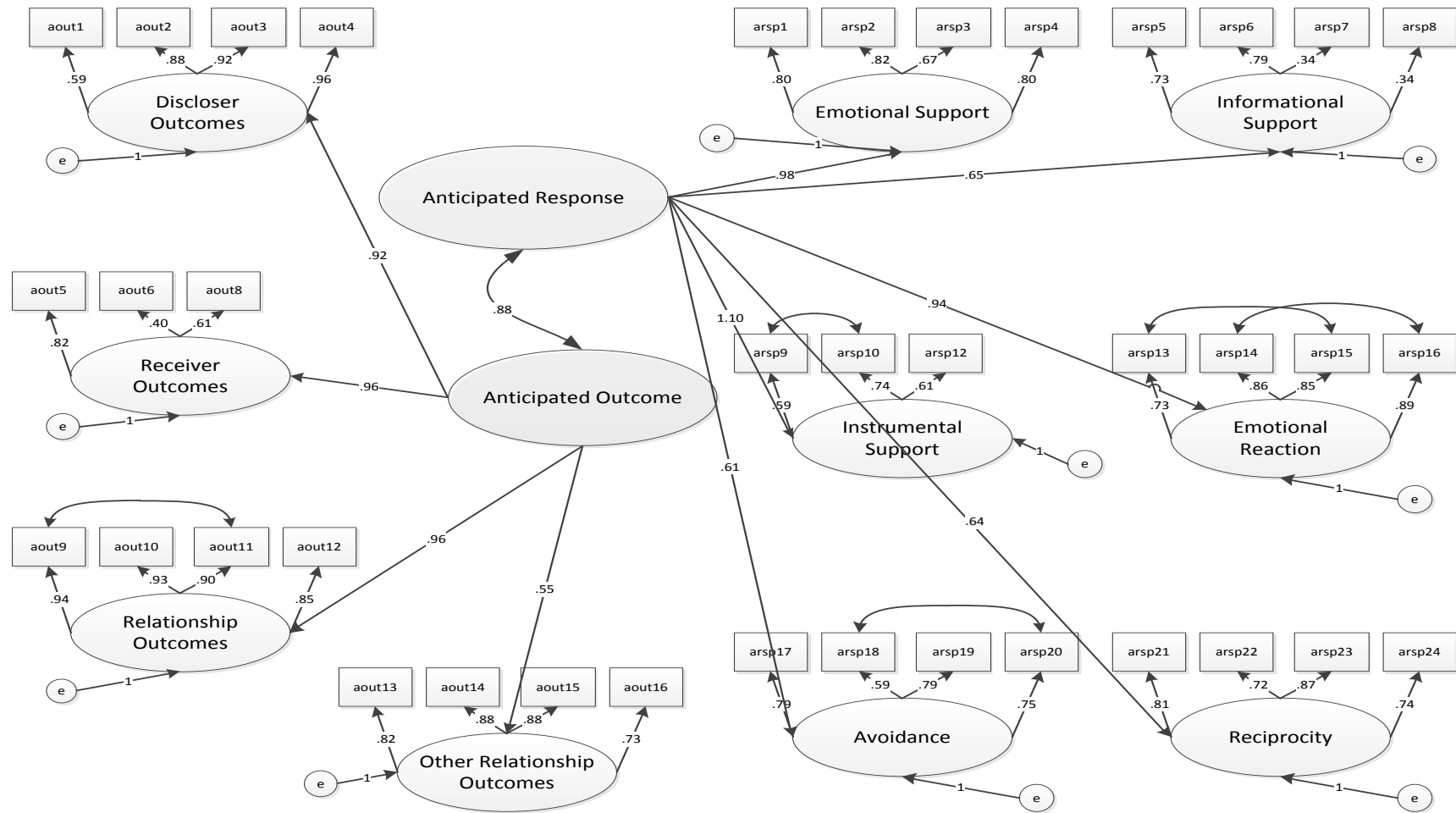
Figure 2. Second Order Factor Structure, Romantic Partner Data, Study I

$\chi^2(686) = 1558.66$, *relative* $\chi^2 = 2.27$, *p* > .001, *CFI* = 0.90, *RMSEA* = 0.07; each item was associated with an error term (e), but these terms were not included for simplicity.
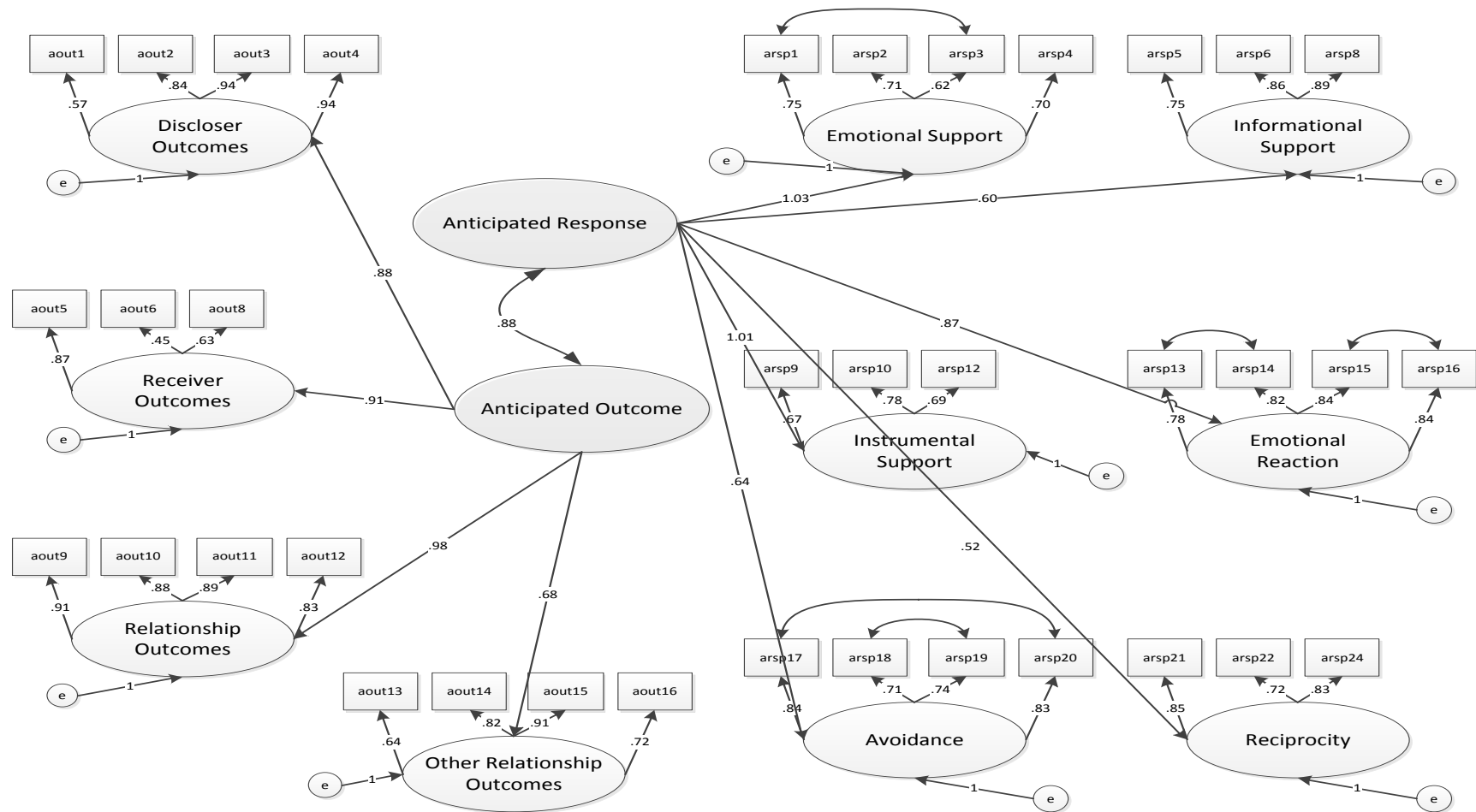
Figure 3. Second Order Factor Structure, Friend Data, Study I

$\chi^2(613) = 1691.60$, *relative* $\chi^2 = 2.76$, *p* > .001, *CFI* = 0.90, *RMSEA* = 0.07; each item was associated with an error term (e), but these terms were not included for simplicity.
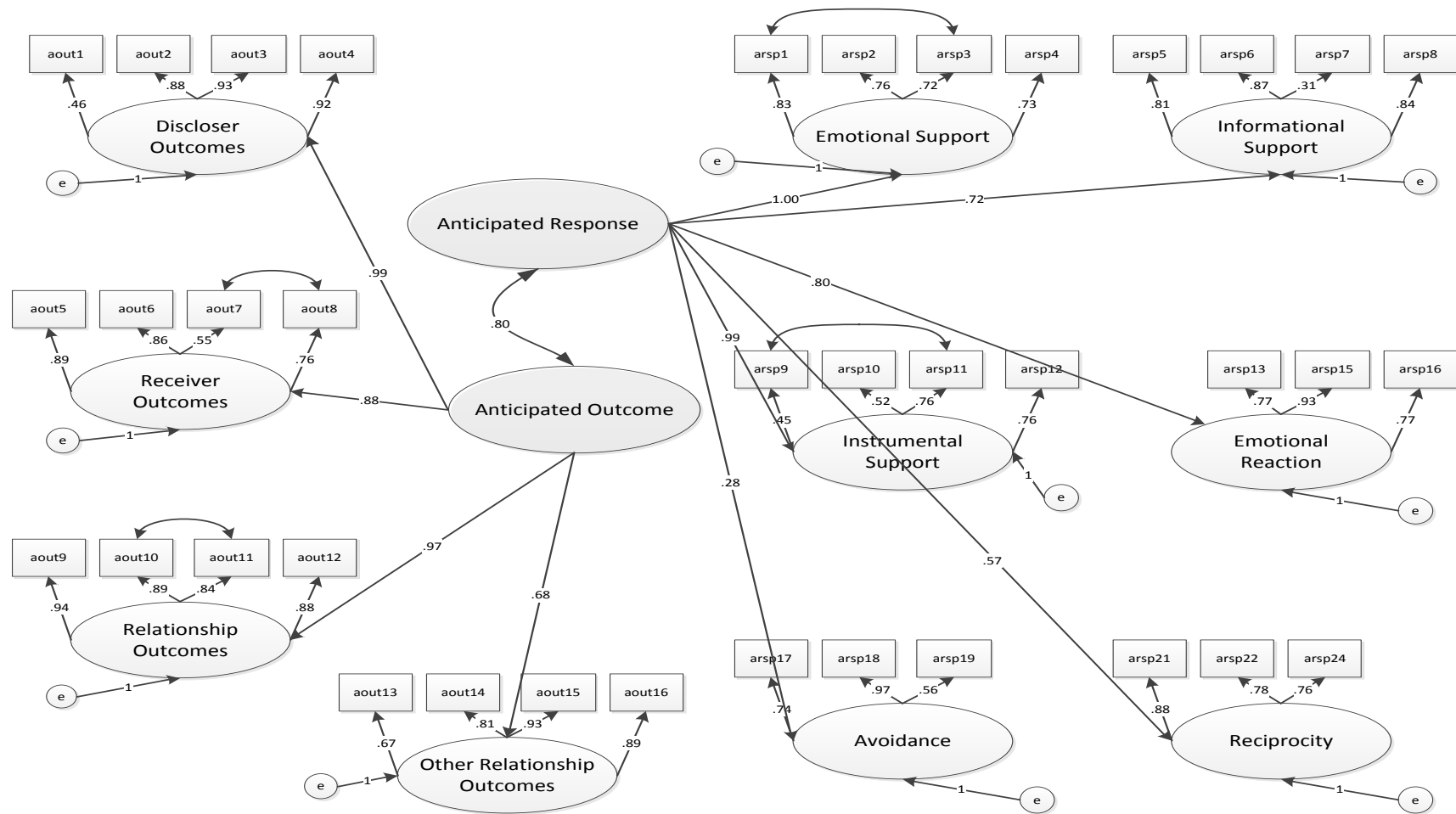
Figure 4. Second Order Factor Structure, Friend Data, Study II

$\chi^2(614) = 1561.02$, *relative* $\chi^2 = 2.54$, *p* > .001, *CFI* = 0.91, *RMSEA* = 0.06; each item was associated with an error term (e), but these terms were not included for simplicity.

Appendix A

[Announcement for Study I. This announcement was distributed to communication classes at Rutgers University.]

Disclosure of Personal Information Study

Times:

                      Wednesday, April 14th, 9:30am – 12:00pm
                      Friday, April 16th, 2-5pm
                      Sunday, April 18th, 1-5pm

Location: Room 212, 2nd floor, SCI building (corner of Huntington and College Ave)
                      College Avenue Campus

Study description:
- This study is about how people disclose information they consider personal or private. You will be asked to describe some information you do and don't share with others. The survey will be anonymous, and no one will know how you responded individually.
- It takes about 30-45 minutes to complete the survey. You must arrive before the close time listed for the study. Please note: only ~50 people can fit in the room at one time, so if there are more people, you may be asked to wait to be seated.
- You can only get extra credit for participation for one class.

For questions/further information please contact Kate: kmagsame@rutgers.edu

Appendix B

[Announcement for Study II. This announcement was distributed to communication classes at Rutgers University.]

Sharing Personal Information Study

Time One Times:

        Friday, September 24th, 3:30 – 6:30 pm
        Sunday, September 26th, 2:00-5:00 pm
        Wednesday, September 29th, 9:00-10:30 am

Time Two Times (return for extra credit):

        Wednesday, December 1st, 9:00-10:30 am
        Friday, December 3rd, 3:30 – 6:30 pm
        Sunday, December 5th, 2:00-5:00 pm

Location: Room 212, 2nd floor, SC&I building (corner of Huntington and College Ave)
                    College Avenue Campus

Study description:

- This study is about how people disclose information they consider personal or private. You will be asked to describe some information you do and do not share with current friends.
- This study involves two data collection points – one in September and one in December.
- It takes about 15-20 minutes to complete each survey (total time for both surveys is 30-45 minutes). You must arrive before the close time listed for the study in order to participate.
- Please note: You do NOT need an appointment to participate in this study. BUT only ~50 people can fit in the room at one time; if there are more people, you may be asked to wait to be seated.
- You can only get extra credit for participation for one class.

For questions/further information please contact: kmagsame@rutgers.edu

Appendix C

Remember, this is a two part study where you are asked to return for a briefer survey in December in order to get extra credit.

<u>Time Two Times (**return for extra credit**):</u>

Wednesday, December 1st, 9:00-10:30 am

Friday, December 3rd, 3:30 – 6:30 pm

Sunday, December 5th, 2:00-5:00 pm

<u>Location:</u>   Room 212, 2nd floor, SCI building (corner of Huntington and College Ave) College Avenue Campus

For questions/further information please contact: kmagsame@rutgers.edu

Appendix D

[Reminder 2 for Study II. This announcement was distributed in the same communication classes as the first announcement one week prior to the second data collection.]

Sharing Personal Information Study

This is a reminder to return to complete a second survey for the research project about how people share information with friends. The second survey takes about 10-15 minutes to complete. You can earn extra credit for participating in **both parts of the study** (if you did not participate at Time One in September, you cannot participate now). Remember, your survey answers are not linked with your name, and your instructor will not have any information about how you responded.

If you **completed a survey for this study in September** and you want to participate, you can show up (no reservation required) at the SC&I building during the times listed below. For questions, please contact kmagsame@rutgers.edu.

Time Two Times (return for extra credit):
> Wednesday, December 1st, 9:00-10:30 am
> Friday, December 3rd, 3:30 – 6:30 pm
> Sunday, December 5th, 2:00-5:00 pm

Location: Room 212, 2nd floor, SC&I building (4 Huntington Street, corner of Huntington and College Ave)
College Avenue Campus

Information:
- This study is about how people disclose information they consider personal or private. You will be asked to describe some information you do and do not share with current friends.
- This study involves two data collection points – one in September and one in December.
- It takes about 10-20 minutes to complete each survey (total time for both surveys is 30-45 minutes). You must arrive before the close time listed for the study in order to participate.
- Please note: You do NOT need an appointment to participate in this study. BUT only ~50 people can fit in the room at one time; if there are more people, you may be asked to wait to be seated.
- You can only get extra credit for participation for one class.

For questions/further information please contact: kmagsame@rutgers.edu

Appendix E

THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

ASSENT FORM TO PARTICIPATE IN A RESEARCH STUDY

PROJECT TITLE: Sharing Personal Information Fall 2009

PRINCIPAL INVESTIGATOR: Kate Magsamen-Conrad, Doctoral Candidate and Dr. Kathryn Greene, Co-Principal Investigator; both in Department of Communication, Rutgers University.

You are invited to participate in a research study. Please read carefully the information provided below before agreeing to participate in this study. If you have any questions or concerns regarding your participation in this study, please contact Kate Magsamen-Conrad by mail, phone, or e-mail using the following contact information: Department of Communication, New Brunswick, NJ 08901; Phone: (607-368-0503; E-mail: kmagsame@rutgers.edu, klgreene@rutgers.edu).

PURPOSE
The purpose of this project is to study how people share personal information with others.

PROCEDURE
Your participation in this study is **voluntary**. This means that you choose whether or not to participate in this study. If you agree to participate, you will also be asked to answer a few questions about yourself and your attitudes towards some issues. **You can skip any question that you do not wish to answer**. We hope that you will answer each question thoughtfully and honestly. It will take about 45 minutes to complete the survey.

RISKS AND BENEFITS
The information you provide in this study is **anonymous**. This means that no one will be able to tell which answers you gave to the questions we ask you and no individual responses will be reported. Therefore, any risk or possible discomfort to you due to participation in this study is expected to be minimal. However, if you have any concern about your participation in this study, please contact the principal investigator, Kate Magsamen-Conrad. Participation in this study may not benefit you directly but it would add invaluable insight to our collective knowledge on message processing.

COSTS AND COMPENSATION
There is no cost for participants who agree to be involved in this study. If you agree to participate in this study in exchange for extra credit, the instructor of this course will be notified of your eligibility to receive extra credit in this class once you have completed this task. If you do not wish to participate, you will not be penalized in any way. You can still earn extra credit in this class by completing alternative research-related tasks. Please see your instructor for more details about alternative extra credit opportunities.

(*continued*)

Appendix E (*continued*)

If you have any questions about your rights as a research subject, you may contact the Sponsored Programs Administrator at Rutgers University at:

> *Rutgers University Institutional Review Board for the Protection of Human Subjects*
> *Office of Research and Sponsored Programs*
> *3 Rutgers Plaza*
> *New Brunswick, NJ 08901-8559*
> *Tel: 732-932-0150 ext. 2104*
> *Email: humansubjects@orsp.rutgers.edu*

By filling out this survey I assent to using my responses for the research purposes described.

Appendix F

THE STATE UNIVERSITY OF NEW JERSEY

RUTGERS

CONSENT FORM TO PARTICIPATE IN A RESEARCH STUDY

PROJECT TITLE: Anticipated and actual reactions to disclosure

PRINCIPAL INVESTIGATORS: Kate Magsamen-Conrad, Doctoral Candidate, Department of Communication, Rutgers University and Kathryn Greene, Associate Professor of Communication at Rutgers University.

You are invited to participate in a research study. Please read carefully the information provided below before agreeing to participate in this study. If you have any questions or concerns regarding your participation in this study, please contact Kate Magsamen-Conrad by phone or e-mail (607) 368 0503 kmagsame@rutgers.edu or Kathryn Greene (732) 932 7500 x8115, klgreene@rutgers.edu.

PURPOSE
The purpose of this study is to measure decisions to share personal information with another person.

PROCEDURE
Your participation in this study is **voluntary**. This means that you choose whether or not to participate in this study. If you agree to participate, you will also be asked to answer a few questions about yourself and how you manage private information. **You can skip any question that you do not wish to answer**. Participation in this study is voluntary. You may choose not to participate, and you may withdraw at any time during the study procedures without any penalty to you. We hope that you will answer each question thoughtfully and honestly. It will take about 20 minutes to complete the survey, and you will be asked to return in December.

RISKS AND BENEFITS
The information you provide in this study is **confidential**. This means that the research records will include some information about you, such as name, age, gender, and race. We will keep this information protected by limiting access to the research data and keeping it in a secure location. The research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only group results will be stated. Any foreseeable risk or possible discomfort to you due to participation in this study is expected to be minimal. However, if you have any concern about your participation in this study, please contact the principal investigators (listed above). Also, a list of counseling centers is available from the PI if you experience any distress based on the study. Participation in this study may not benefit you directly, but it would add invaluable insight to our collective knowledge on disclosure decisions.

COSTS AND COMPENSATION
There is no cost for participants who agree to be involved in this study. If you agree to participate in this study in exchange for extra credit, the instructor of this course will be notified of your
(*continued*)

Appendix F (*continued*)

eligibility to receive extra credit in this class once you have completed this task. If you do not wish to participate, you will not be penalized in any way. You can still earn extra credit in this class by completing an alternative research-related task that was devised in consultation with the instructor of this class. Please see your instructor for more details about this alternative extra credit opportunity.

If you have any questions about your rights as a research subject, you may contact the Sponsored Programs Administrator at Rutgers University at:

> *Rutgers University Institutional Review Board for the Protection of Human Subjects*
> *Office of Research and Sponsored Programs, 3 Rutgers Plaza, New Brunswick, NJ 08901-8559*
> *Tel: 732-932-0150 ext. 2104*
> *Email: humansubjects@orsp.rutgers.edu*

Please sign below if you agree to participate in this research study. You may request a copy of this form at any time.

Subject's Name (printed)_____ Signature _____ Date _____

Investigator's Name: Kate Magsamen-Conrad   Investigator's

Signature_____   Date _____

Appendix G

[Sheet distributed to Study I participants after consent and before survey; these participants indicated they were NOT in a committed romantic relationship for at least three months. This sheet was printed on YELLOW paper to enable accurate survey distribution.]

Please think about some information that you have not told one specific friend. The information must be:

✓ **Specific (that is, not a series of topics)**
✓ **About you (or related to you)**
✓ **Personal and/or Private**
✓ **Something your friend would not likely know without you telling him or her**
✓ **Negative (something you believe to negative)**
  Please describe the information in detail (without names but so we know what the information is):

Initials of the person you have <u>not</u> told this info _____

Appendix H

[Sheet distributed to Study I participants after consent and before survey; these participants who indicated they WERE in a committed romantic relationship for at least three months. This sheet was printed on GREEN paper to enable accurate survey distribution.]

Please think about some information that you have not told your romantic partner. The information must be:

- ✓ **Specific**
- ✓ **About you (or related to you)**
- ✓ **Personal and/or Private**
- ✓ **Something your (exclusive) dating partner would not likely know without you telling him or her**
- ✓ **Negative (something you believe to negative)**
  Please describe the information in detail (without names but so we know what the information is):

Initials of the person you have <u>not</u> told this info _____

Appendix I

[Sheet distributed to Study II participants after consent but before survey. Participants were verbally instructed to write about information they had not shared with a FRIEND (not a romantic partner, family member, colleague, etc.) This sheet was printed on YELLOW paper to enable accurate survey distribution.]

Please think about one piece of information that you have not told <u>one specific friend</u> (this must be a person with whom you are still friends). The information should be:

- ✓ **Personal and/or Private**
- ✓ **About you (or related to you)**
- ✓ **Specific (that is, not a series of topics)**
- ✓ **Something your friend would <u>not</u> likely know without you telling him or her**
- ✓ **Negative (something you believe to be negative)**

Please describe the information in detail (without names but so we know what the information is):

Initials of the person you have <u>not</u> told this information

___

Appendix J

Debriefing Form for Studies I and II

Thank you for your time and effort in completing this survey. Your participation provides crucial information for us in understanding how people make decisions to share, or not share, personal information. More specifically, we are interested in the factors influencing people's decisions to share personal information with one specific person, including what happens after people share.

After completing the survey, some participants may be interested in the project and would like to find more information about it (e.g., results and implications of this project). If you would like this information, please feel free to contact us (phone, mail, or email). We would be glad to provide a copy of the results when they become available in several months. Because we will deliver such information electronically, please provide your email address below and return this form to us.

We would like to thank you again for your participation. We greatly appreciate your time, effort, and assistance in this study.

Your Email Address (Optional: ONLY if you want to receive a summary of the results in a few months)

_____

Kate Magsamen-Conrad, Primary Investigator, Dr. Kathryn Greene, Co-Investigator
Department of Communication
Rutgers, the State University of New Jersey
4 Huntington Street
New Brunswick, NJ 08901
(607) 368-0503
kmagsame@rutgers.edu
   [Participants who returned this form were emailed a one page summary within three months]

Appendix K

Measurement for All Study I and Study II Variables

Measure	Study I Spring 2009	Study II Fall 2009
Relational Quality	x	x
Relationship Uncertainty		x
Information Valence	x	x
Information: Stigma		x
Information: Identity Threat	x	x
Disclosure Efficacy	x	x
General Communication Efficacy	x	
Emotional Support	x	x
Informational Support	x	x
Instrumental Support	x	x
Emotional Reaction	x	x
Avoidance	x	x
Reciprocity	x	x
Responsiveness	x	x
Discloser Outcomes	x	x
Receiver Outcomes	x	m
Relationship Outcomes	x	x
Other Relationship Outcomes	x	x
Past Responsiveness (receiver to discloser)		x
Past Responsiveness (receiver to others)		x
Past Responsiveness (others to the information)		x
Self-Concealment	x	
Likelihood Disclosure	x	x

x – indicates variable was measured in study

m – indicates modification in measurement between studies

Appendix L

Measures of Information Assessment (Studies I & II)

Measures of Information Assessment (1 of 3)

Section I –asks about the information you described on your green sheet (but **NOT** your friend). The next **two** pages focus just on the piece of information you haven't disclosed to this friend.

Information Valence

How would you rate the specific information you have not shared with your friend? Check a response for each item that best fits.

The information is:

	1	2	3	4	5	6	7	
Extremely negative	O	O	O	O	O	O	O	Extremely positive (R)
Very disturbing	O	O	O	O	O	O	O	Not at all disturbing (R)
Extremely unpleasant	O	O	O	O	O	O	O	Extremely pleasant (R)
Very distressing	O	O	O	O	O	O	O	Not at all distressing (R)
Extremely good	O	O	O	O	O	O	O	Extremely bad

(R) item is reverse-coded

(*continued*)

Appendix L (*continued*)

Measures of Information Assessment (2 of 3)

Identity Threat of Information

How would you rate the specific information you have not shared with your friend? Check a response for each item that best fits.

The information is:

	1	2	3	4	5	6	7	
Very much part of me	O	O	O	O	O	O	O	Not at all part of me (R)
Extremely insignificant	O	O	O	O	O	O	O	Extremely significant
Very central to who I am	O	O	O	O	O	O	O	Extremely trivial (R)
Essential to my identity	O	O	O	O	O	O	O	Not at all essential to my identity (R)
Very much part of me	O	O	O	O	O	O	O	Not at all part of me (R)

(R) item is reverse-coded

(*continued*)

Appendix L (*continued*)

Measures of Information Assessment (3 of 3)

Stigma

These questions ask how you think others would view the information you described on your green sheet (if they knew).

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. People would respond **very positively** to me because of this information. (R)	O	O	O	O	O
2. Some people would stigmatize me because of this information.	O	O	O	O	O
3. Some people would think this information is disgraceful.	O	O	O	O	O
4. People would view me negatively because of this information.	O	O	O	O	O

(R) item is reverse-coded

Appendix M

Measures of Relational Assessment (Studies I & II)

Measures of Relational Assessment (1 of 2)

Section II asks about your **relationship** with the **specific friend** with whom you have not shared the information on the green sheet. The next **one** page focuses just on your overall relationship with this person.

Overall Relational Quality

Now, please answer these questions about your **overall relationship** with your friend.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I enjoy spending time with my friend.	O	O	O	O	O
2. I am <u>not</u> close to my friend. (R)	O	O	O	O	O
3. My friend's opinion is important to me.	O	O	O	O	O
4. This relationship is satisfying.	O	O	O	O	O

(R) item is reverse-coded

(*continued*)

Appendix M (*continued*)

Measures of Relational Assessment (2 of 2)

Relationship Uncertainty

The next set of questions asks about **how <u>certain</u> or <u>uncertain</u>** you are about the general **stability** of your relationship with this friend.

How certain are you about…

		Very Uncertain	Uncertain	Somewhat Uncertain	Neutral	Somewhat Certain	Certain	Very Certain
1.	… whether or not you will still be friends in five years.	O	O	O	O	O	O	O
2.	… whether or not your friendship is stable.	O	O	O	O	O	O	O
3.	…whether or not your friendship will last.	O	O	O	O	O	O	O
4.	… whether or not this friendship will end soon.	O	O	O	O	O	O	O

Appendix N

Measures of Anticipated Response (Studies I & II)

Measures of Anticipated Response (1 of 6)

Your Friend's Initial Reactions

These items ask about what you think would **initially** happen if you decided to share this information with your friend. If you were to share this information, how do you think your friend would **immediately** respond?

Anticipated Emotional Support

These items ask more specifically about what you think would happen if you decided to share this information with this person. How do you <u>think</u> your friend would **IMMEDIATELY** respond if you were to tell him/her this information?

		Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1.	My friend would immediately offer emotional support. (R)	O	O	O	O	O	O	O
2.	My friend would immediately judge me.	O	O	O	O	O	O	O
3.	First, my friend would emphasize s/he still cares for me. (R)	O	O	O	O	O	O	O
4.	Initially, my friend would show more concern for him/herself than for me.	O	O	O	O	O	O	O
5.	My friend would immediately withdraw emotional support.	O	O	O	O	O	O	O

(R) item is reverse-coded

(*continued*)

Appendix N (*continued*)

Measures of Anticipated Response (2 of 6)

Anticipated Informational Support

These items ask more specifically about what you think would happen if you decided to share this information with this person. How do you <u>think</u> your friend would **IMMEDIATELY** respond if you were to tell him/her this information?

		Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1.	At first, my friend would offer informational support. (R)	O	O	O	O	O	O	O
2.	Initially, my friend would help me look for information. (R)	O	O	O	O	O	O	O
3.	My friend would initially hesitate to help me look for information.	O	O	O	O	O	O	O
4.	My friend would immediately assist me in an information search. (R)	O	O	O	O	O	O	O

(R) item is reverse-coded

(*continued*)

Appendix N (*continued*)

Measures of Anticipated Response (3 of 6)

Anticipated Instrumental Support

These questions also ask about how you <u>think</u> your friend would **initially** respond if you were to tell him/her this information.

		Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1.	My friend would initially offer instrumental support (accompany to doctor, loan money). (R)	O	O	O	O	O	O	O
2.	My friend would soon withdraw instrumental support ("cut me off").	O	O	O	O	O	O	O
3.	Initially, my friend would NOT do anything to help me.	O	O	O	O	O	O	O
4.	The first thing my friend would do is offer to help me. (R)	O	O	O	O	O	O	O

(R) item is reverse-coded

(*continued*)

Appendix N (*continued*)

Measures of Anticipated Response (4 of 6)

Anticipated Emotional Reaction

These questions also ask about how you <u>think</u> your friend would **initially** respond if you were to tell him/her this information.

		Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1.	My friend would immediately have a positive emotional reaction. (R)	O	O	O	O	O	O	O
2.	My friend would initially become upset.	O	O	O	O	O	O	O
3.	At first, my friend would comfort me. (R)	O	O	O	O	O	O	O
4.	At first, my friend would have a negative emotional reaction.	O	O	O	O	O	O	O
5.	My friend would initially freak out.	O	O	O	O	O	O	O

(R) item is reverse-coded

(*continued*)

Appendix N (*continued*)

Measures of Anticipated Response (5 of 6)

Anticipated Avoidance

These questions also ask about how you <u>think</u> your friend would **initially** respond if you were to tell him/her this information.

		Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1.	At first, my friend would refuse to discuss the information.	O	O	O	O	O	O	O
2.	My friend would immediately change the subject.	O	O	O	O	O	O	O
3.	My friend would be nonresponsive at first.	O	O	O	O	O	O	O
4.	Initially, my friend would avoid talking about this information.	O	O	O	O	O	O	O
5.	My friend would immediately leave.	O	O	O	O	O	O	O
6.	At first, my friend wouldn't respond (s/he would be silent, not acknowledge my message).	O	O	O	O	O	O	O

(*continued*)

Appendix N (*continued*)

Measures of Anticipated Response (6 of 6)

Anticipated Reciprocity

These questions also ask about how you <u>think</u> your friend would **initially** respond.

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1. Initially, my friend would also share personal or private information. (R)	O	O	O	O	O	O	O
2. My friend would immediately share personal/private thoughts and/or emotions. (R)	O	O	O	O	O	O	O
3. My friend would initially be open in return. (R)	O	O	O	O	O	O	O
4. My friend would also soon disclose something personal if I told him/her this information. (R)	O	O	O	O	O	O	O

(R) item is reverse-coded

Appendix O

Measures of Anticipated Responsiveness (Study I)

Measures of Anticipated Responsiveness

Your Friend's Initial Reactions

These items ask about what you think would **initially** happen if you decided to share this information with your friend. If you were to share this information, how do you think your friend would **immediately** respond?

Anticipated Responsiveness

These questions ask about how you think the person's response **would make you feel IF** you chose to disclose the information on your green sheet.

		Not at all	Very little	A Little	Neutral	Some	A Lot	Very Much
1.	I would feel accepted by my friend.	O	O	O	O	O	O	O
2.	I would feel understood by my friend.	O	O	O	O	O	O	O
3.	I would feel cared for by my friend.	O	O	O	O	O	O	O
4.	I would feel validated by my friend.	O	O	O	O	O	O	O

Appendix P

Measures of Anticipated Outcome (Studies I & II)

Measures of Anticipated Outcome (1 of 4)

The Long Term Effects of Sharing This Information

The next set of items ask about the more **LONG TERM OUTCOMES** of what you think would happen if you decided to share this information with your friend. What do you think would happen **down the road (in a few months or so)** if you were to tell him/her this information?

Discloser-Oriented Outcomes

		Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1.	After time, revealing the information would make my friend think better of me. (R)	O	O	O	O	O	O	O
2.	In the end, revealing the information would really harm my friend's perception of the person I truly am.	O	O	O	O	O	O	O
3.	Telling would negatively affect how my friend would feel about me down the road.	O	O	O	O	O	O	O
4.	Revealing this information would ultimately harm to the way my friend sees me.	O	O	O	O	O	O	O

(R) item is reverse-coded

(*continued*)

Appendix P (*continued*)

Measures of Anticipated Outcome (2 of 4)

These questions also ask about what you <u>think</u> would happen **down the road (in a few months or so)** if you were to tell your friend this information.

Receiver-Oriented Outcomes

		Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1.	I think telling my friend would benefit him/her in the long run. (R)	O	O	O	O	O	O	O
2.	It would ultimately hurt my friend's feelings if s/he knew the information.	O	O	O	O	O	O	O
3.	After time, I think my friend would experience pain over things I am going through.	O	O	O	O	O	O	O
4.	Ultimately, I think my friend would worry about me if I told him/her.	O	O	O	O	O	O	O
5.	I think telling my friend would eventually negatively impact his/her health.	O	O	O	O	O	O	O

(R) item is reverse-coded

(*continued*)

Appendix P (*continued*)

Measures of Anticipated Outcome (3 of 4)

These questions also ask about what you <u>think</u> would happen **down the road (in a few months or so)** if you were to tell your friend this information.

Relationship-Oriented Outcomes

		Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1.	Telling the information to my friend would ultimately hurt our relationship.	O	O	O	O	O	O	O
2.	If I told my friend, in a few months we would be even closer than we are now. (R)	O	O	O	O	O	O	O
3.	I think telling my friend would eventually end or severely alter our relationship.	O	O	O	O	O	O	O
4.	Ultimately, my friend would no longer like me if s/he knew the information.	O	O	O	O	O	O	O
5.	If I revealed the information, in the end, my relationship with my friend would never be as good as it is now.	O	O	O	O	O	O	O

(R) item is reverse-coded

(*continued*)

Appendix P (*continued*)

Measures of Anticipated Outcome (4 of 4)

These questions also ask about what you <u>think</u> would happen **down the road (in a few months or so)** if you were to tell your friend this information.

Other Relationship-Oriented Outcomes

		Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1.	If I told my friend, I would ultimately lose a bond that I have with other people who know the information already.	O	O	O	O	O	O	O
2.	Other people would never trust me in the future if I told my friend the information.	O	O	O	O	O	O	O
3.	Telling the information to my friend would ultimately hurt my relationship with others.	O	O	O	O	O	O	O
4.	Revealing the information (to my friend) would eventually create stress for other people who are important to me.	O	O	O	O	O	O	O
5.	If I told my friend the information it would ultimately improve my relationship(s) with other people. (R)	O	O	O	O	O	O	O

(R) item is reverse-coded

Appendix Q

Measures of General Communication Efficacy (Study I)

Section IV asks you about how you share information with your friend. **First,** it asks about more general information. **Then,** it asks about the specific information on your green sheet that you have not yet shared.

General Communication Efficacy

These questions ask about how you **generally communicate** with your friend.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. It would be very easy for me to initiate a discussion with my friend about something that he or she did that irritated me.	O	O	O	O	O
2. I would have no trouble expressing my feelings about our relationship.	O	O	O	O	O
3. It would be very easy for me to ask my friend to change his or her behavior.	O	O	O	O	O
4. I would have no trouble reminding my friend that something he or she did bothered me.	O	O	O	O	O

Appendix R

Measures of Disclosure Efficacy (Studies I & II)

The following questions ask about what you think might happen **IF** you decided to **share with your friend the specific information** you wrote about on your green sheet.

Disclosure Efficacy

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I am confident that I could share this information with my friend if I decide to.	O	O	O	O	O
2. I would have trouble finding the right words if I tried to share this information with my friend. (R)	O	O	O	O	O
3. I would get tongue-tied if I tried to share this information with my friend. (R)	O	O	O	O	O
4. I wouldn't know how to put this information into words. (R)	O	O	O	O	O

(R) item is reverse-coded

Appendix S

Measures of Likelihood of Disclosure (Studies I & II)

Section IV asks you about how you share information with your friend. **First,** it asks about more general information. **Then,** it asks about the specific information on your green sheet that you have not yet shared.

Likelihood of Disclosure

The following questions ask about **how likely** you are to **tell your friend the specific information** you wrote about on your green sheet.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I'm likely to reveal this information to my friend in the near future.	O	O	O	O	O
2. I doubt that I will share this information with my friend in the near future. (R)	O	O	O	O	O
3. I'm pretty sure that I'll tell my friend this information eventually.	O	O	O	O	O
4. I will never tell my friend this information. (R)	O	O	O	O	O

(R) item is reverse-coded

Appendix T

Measure of Self-Concealment (Study I)

This portion of the survey asks about you generally, not about any specific information, person, or situation. These items ask about you and your general information sharing (not necessarily the information or your friend). Please read each of the following items carefully. Indicate the extent to which you agree or disagree with each item according to the rating scale:

Self-Concealment

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I have an important secret that I haven't shared with anyone.	O	O	O	O	O
2. If I shared all my secrets with my friends, they'd like me less.	O	O	O	O	O
3. There are lots of things about me that I keep to myself.	O	O	O	O	O
4. Some of my secrets have really tormented me.	O	O	O	O	O
5. When something bad happens to me, I tend to keep it to myself.	O	O	O	O	O
6. I'm often afraid I'll reveal something I don't want to.	O	O	O	O	O
7. Telling a secret often backfires and I wish I hadn't told it.	O	O	O	O	O
8. I have a secret so private I would lie if anybody asked me about it.	O	O	O	O	O
9. My secrets are too embarrassing to share with others.	O	O	O	O	O
10. I have negative thoughts about myself that I never share with anyone.	O	O	O	O	O

Appendix U

Measures of Prior Responsiveness (Study II)

Measures of Prior Responsiveness (1 of 3)

Section I –asks about the information you described on your green sheet (but **NOT** your friend). The next **two** pages focus just on the piece of information you haven't disclosed to this friend.

Prior Responsiveness (others to information)

Finally, we'd like you to think about the specific information from your green sheet that you have not yet told your friend. If you have shared this information with **other people**, in general, how have those other people responded to the information on your green sheet?

Bubble here if you <u>have not shared</u> this information with ANYONE else   O

When I've shared this information with other people, in general…

		Not at all	Very little	A Little	Neutral	Some	A Lot	Very Much
1.	…they made me feel accepted.	O	O	O	O	O	O	O
2.	…they made me feel understood.	O	O	O	O	O	O	O
3.	…they made me feel cared for.	O	O	O	O	O	O	O
4.	…they made me feel validated.	O	O	O	O	O	O	O

(*continued*)

Appendix U (*continued*)

Measures of Prior Responsiveness (2 of 3)

Next we would like to know about how your friend has responded to your sharing personal or private information in the past. Think about other times when you have shared personal/private information with this friend. In general, how has s/he responded?

Prior Responsiveness (receiver to discloser)

		Not at all	Very little	A Little	Neutral	Some	A Lot	Very Much
1.	My friend made me feel accepted.	O	O	O	O	O	O	O
2.	My friend made me feel understood.	O	O	O	O	O	O	O
3.	My friend made me feel cared for.	O	O	O	O	O	O	O
4.	My friend made me feel validated.	O	O	O	O	O	O	O

(*continued*)

Appendix U (*continued*)

Measures of Prior Responsiveness (3 of 3)

Prior Responsiveness (receiver to others)

Now consider situations in which you may have seen or heard how this friend responded to **other people** (not you) who shared personal/private information with him/her. Generally:

		Not at all	Very little	A Little	Neutral	Some	A Lot	Very Much
1.	My friend makes others feel accepted.	O	O	O	O	O	O	O
2.	My friend makes others feel understood.	O	O	O	O	O	O	O
3.	My friend makes others feel cared for.	O	O	O	O	O	O	O
4.	My friend makes others feel validated.	O	O	O	O	O	O	O

Endnotes

[1] The Disclosure Decision Model (DDM, Omarzu, 2000) and the Disclosure Process Model (Chaudoir & Fisher, 2010) are not reviewed in detail in this paper because they do not attend to anticipated response in a significant manner and have not been tested.

[2] A final information management strategy that falls under the umbrella of privacy is avoidance. When both parties know the potentially private information but actively choose not to discuss the information (e.g., because that communication results in conflict, discomfort, or another negative outcome) this is considered topic avoidance (see Afifi et al., 2009). That is, individuals may avoid talking about a piece of personal/private information that is known to both parties because of how that communication episode affects the relationship.

Topic avoidance is different from self-disclosure and secrets. In topic avoidance, the information is not known only to the "discloser," may not necessarily be about the "self," and is not necessarily personal or private (e.g., a couple could avoid discussing politics or religion). It is possible that at one time the information was known only to one partner. However, to qualify as topic avoidance the information must be known by both partners but not acknowledged or openly discussed in the relationship. Additionally, information may be co-owned private information that is known to the couple (e.g., drug addiction, pregnancy) in contrast to information about the "self" known only to the discloser. Similar to how labeling differentiates "secret-keeping" from "non-disclosure," it is the couple's orientation to the information that makes it topic avoidance. Despite these differences from the other information management strategies discussed thus far, topic avoidance is an information management strategy that is important to this project because people avoid certain discussions because of anticipated response (see Afifi et al., 2009). However, topic avoidance is not included as a category in this review because very few models of topic avoidance exist and some of the nuances of topic avoidance are captured by the nondisclosure and secrets literature.

[3] Petronio (1991, 2000a, 2002) frames CPM as dialectical, however, others have argued that the theory is dualistic rather than dialectical (e.g., Baxter & Montgomery, 1996). Baxter (1990) proposed that within relationships there exist three tensions or dialectics: autonomy vs. connection, openness vs. closedness, and predictability vs. novelty. These tensions were reported in 75% of all stages of relationships using a sample of 106 undergraduate students. From the responses of these participants, Baxter (1990) described six strategies for management of relational dialectics; selection, separation through cyclic alternation, separation through segmentation, neutralization through moderation, neutralization through disqualification, and reframing. Scholars (e.g., Baxter, 2008) have modified these strategies to reflect the following: denial, disorientation, spiraling alteration, segmentation, balance, integration, recalibration, and reaffirmation.

[4] Self-disclosure of private information can be labeled "secret." That is, the studies that have identified a positive association between self-disclosure and positive health outcomes have not used a consistent conceptualization of self-disclosure. Some of the information reported disclosed (that was associated with positive health outcomes) was likely technically "disclosure" or "private" (versus self-disclosure). Additionally, participants may have cognitively labeled this information "secret," another nuance that

would not be captured in meta-analyses that demonstrate an association between self-disclosure and health outcomes.

[5] People may perceive responses to disclosure as "negative" for a variety of reasons. A negative partner response could be construed as being rejected or misunderstood but could also reflect privacy issues (or boundary violation, see Petronio, 2002). However, the positive outcomes of self-disclosure are far more frequently reported in the literature.

[6] Regarding the finding that liking is positively associated with the degree of privacy (or depth) of the disclosure, there may be a curvilinear relationship between self-disclosure and liking, as too much disclosure early in a relationship may be associated with decreased liking later (Berg, 1984). However, this finding has generally not been tested longitudinally or with intimates.

[7] In addition to the partner responsiveness scale used in conjunction with the IPMI, Reis (see Reis et al., 2008) developed longer measure of perceived partner responsiveness (PPR). This scale contains 18-19 items derived from Reis' research that assess "the core constructs of perceived understanding, acceptance, caring, and responsiveness to needs" (p. 342). Scale point anchors range from 1 (*not at all true*) to 5 (*completely true*). An 18 item version was presented in 2008 and a 19 item version was adapted for the physician-patient context (Reis et al., 2008). However, neither scale has received the sustained attention and repeated testing as have the Laurenceau et al. (1998) measures. Additionally, the focus of the PPR is on responsiveness to general communication, not to self-disclosure or disclosure (and not necessarily within the context of intimate relationships, as is the case with the responsiveness variable in the IPMI).

[8] Percent of participants who reported their secret's valence as negative or neutral was not reported. Participants were retained if they scored a 4 or above on negativity on this scale ($M = 4.71$; $SD = 1.41$).

[9] Afifi and Steuber (2010) provided a detailed description of the procedure they used to further explore the nature of the expectancy violation interactions. They used a regression procedure outlined by Aiken and West (1991) with the degree to which the recipient of the information reacted more positively, negatively, or as expected as the moderating variable. The moderating variable was divided into thirds: a) more positive reactions, b) expected reactions (a half a standard deviation above and below the mean), and c) more negative reactions. Afifi and Steuber then contrasted the expected negativity of the reaction with the two key dependent variables (closeness and willingness to disclose other secrets to that same person in the future). They tested one model for willingness to reveal and two for change in closeness, one controlling for closeness at T1 and one without that control. They also controlled for intentionality of disclosure in all analyses.

[10] In Study II this header was modified to "The long term outcomes of sharing this information" because pilot tests indicated that using both "outcome" and "effect" was confusing/misleading.

[11] In this section, the word "initially" was substituted for the word "immediately" in Study II also because pilot tests found using both immediately and initially confusing (they did not see the words as interchangeable).

[12] Four item measures were created for Study II. Scales with more than four items were edited based on modification indices, factor loadings, and Cronbach's alphas.

[13] Five participants were removed because they did not fill out the sheet describing the information not shared. Seven additional surveys were removed for various reasons: four were removed because their description of the disclosure was unclear/ambiguous, two were removed because the truth of the statement was suspect, one was removed due to inadequate language competency, and one was removed because the participant had written about something already disclosed.

CURRICULUM VITAE

Kate Magsamen-Conrad

Education

A.A.	2000	Corning Community College
A.S	2000	Corning Community College
B.S.	2002	Mansfield University
M.A.	2005	Illinois State University
Ph.D.	2012	School of Communication and Information
		Rutgers, The State University of New Jersey, New Brunswick, NJ

Teaching Experience

Rutgers University, Summer 2007
NJ SEEDS, Summer 2007
Junior Statesmen of America Foundation, Summer 2006
Mansfield University, Fall 2005 – Spring 2006
Illinois State University, Fall 2003 - Spring 2005

Publications

Greene, K., Magsamen-Conrad, K., Venetis, M. K., Checton, M. G., Bagdasarov, Z., & Banerjee, S. C. (in press). Assessing Health Diagnosis Disclosure Decisions in Relationships: Testing the Disclosure Decision-Making Model. *Health Communication.*

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