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# Reciprocal Negative Disclosures: An Application of Expectancy Violations Theory

China Billotte Verhoff

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**RECIPROCAL NEGATIVE DISCLOSURES: AN  
APPLICATION OF EXPECTANCY VIOLATIONS THEORY**

by

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**B.A. INTERNATIONAL STUDIES, BOWLING GREEN STATE  
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## **Reciprocal negative disclosures: An application of expectancy violations theory**

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### **Abstract**

Social support can dramatically improve an individual's ability to confront and negotiate stressful life changes, and self-disclosure is one means through which individuals can create and maintain interpersonal relationships that can result in that much-needed social support (Cohen, Mermelstein, Kamarck, & Hoberman, 1985; Cohen & Wills, 1985; Cobb, 1976). However, during communication the relationship between the people interacting can influence what disclosures adhere to the communicators' expectations and what types of disclosures *violate* those expectations. Experiencing a communication expectation violation can impact (negatively or positively) individuals' perception of both their peer and the interaction itself (Burgoon, 1978). This study utilized Expectancy Violations Theory (EVT) to examine graduate students' expectations of reciprocal negative disclosures with their peers.

Within the academic context it is important to better understand the disclosure expectancies that graduate students have of their peers. This is because self-disclosure can serve as a key means by which students develop interpersonal relationships and gain social support from one another as they navigate the challenges of graduate school and the organizational culture of their programs. No literature exists that utilizes expectancy violations theory to examine the impact that violating organizational cultural expectations

regarding workplace disclosures regarding workload and mental health has upon graduate students' relationship with their peers.

To fill this gap, this study recruited 181 graduate students to participate in an online experiment regarding disclosure expectancies. Analysis of the data indicated that positive valence violations of RND regarding mental health were not perceived as more unexpected than positive valence violations of workload RND; relational quality did not correlate with expectedness of negative valence violations; negative valence mental health violations correlated with lower rates of perceived equality in relational communication than neutral and positive valence violations; and positive and neutral valence violations positively correlated with higher levels of perceived similarity and trust than negative valence violations. This finding indicates that not only does engaging in RNDs serve as a means of validating graduate student experiences regarding workload and mental health, but it may help students develop relationships with their peers. Failing to engage in RNDs may negatively impact perceptions of equality.

**Key Words:** Expectancy Violations Theory, Disclosure, Social Support

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## **Chapter 1**

### **Introduction**

This thesis examines self-disclosure expectancy violations among graduate students and the relationship between these violations and relational communication satisfaction. Specifically, this research provides insight into how meeting and violating the expectancies regarding work and mental health related disclosures is impacted by factors such as perceived social support and relational quality. This introduction provides a brief background on academia and graduate students as organizational newcomers. First, demographic information regarding graduate student enrollment is provided. Then graduate student adjustment and socialization into academia as organizational newcomers is considered. Finally, the importance of social support is discussed in relation to the culture of academia.

### **Communication and the Academic Context**

Entering into any new organization is often a stressful process full of uncertainty and information seeking, and newcomers' lack of organizational familiarity often leaves them feeling vulnerable. Scholars have described this as a "reality shock" in which the newcomer is exposed to all of the unfamiliar settings and cues of the organization (Hughes, 1958). Over 400,000 new graduate students were admitted to programs across the U.S. in 2012, and as they enter their new programs, graduate students go through the same integration and adaptation processes as an organizational newcomer (Council of Graduate Schools, 2013). As these new graduates begin the process of integrating into their respective departments they must adapt themselves through the process of socialization. More specifically, these students work to gain all of the information needed

to perform their duties or roles (such as knowledge of protocols, rules, and processes) as well as gain a broader understanding of the culture of their new department (Brim, 1966).

Referencing the culture of an organization pushes our conceptualization of an organization and its members beyond the tasks that members perform (such as teaching, publishing, and presenting) and moves to incorporate the assumptions and norms that are shared collectively among the members (Gamst & Norbeck, 1976). Schein (1985) defines organizational culture as the basic assumptions adopted by a group in order to solve its problems and that have worked “well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (Schein, 1985, p. 492). However, it is important to note that cultural norms can exist within an organization that are detrimental to newcomers’ abilities to adjust as these norms may promote secrecy and competition such as “sink-or-swim” or “learn-on-your-own” orientations (Louis, 1980, p. 247). Despite these potential roadblocks it is assumed that newcomers to an organization actively participate in their socialization by seeking out information (and sources of information) to improve their understanding (Louis, 1980; Reichers, 1987).

Socialization as a central process to develop organization knowledge cements the importance of information management processes such as information seeking and self-disclosure as incredibly pertinent processes in the adjustment into a new organization. This study provides insight into the impact of disclosure expectancies and RNDs as an organizational communication norm and socialization process between graduate students thus filling a gap in the literature. Interpersonal relationships with individuals such as mentors, supervisors, and co-workers serve as a key means by which individuals can gain

more information about their organization (Posner & Powell, 1985; Feldman, 1976). In particular, coworkers can serve a key role in the integration process because of their accessibility and their knowledge of more subtle norms, values, and expectations that individuals in higher positions may not fully understand due to their distanced position (Feldman, 1977; Schein, 1988). These interpersonal relationships serve as great sources of information, and previous research has shown that individuals who do not develop these relationships or socialize unsuccessfully suffer from higher levels of dissatisfaction, negative work attitudes, increased rates of turnover, and higher levels of stress (Nelson, 1987; Feldman, 1981; Van Maanen & Schein, 1979). As previously indicated there are a variety of people (supervisors, mentors, peers) that newcomers can turn to as a source of assistance as they navigate this process. Graduate teaching assistants are most likely to turn to their peers for information and help as they navigate the norms and expectations of their departments (Duba-Biedermann, 1994; Darling & Staton, 1989, Myers, 1995). For example, Darling (1987) found that graduate teaching assistants (GTAs) turned to one another to help make sense of their day-to-day activities and often sought out one another for help when attempting to clarify departmental messages (Darling & Staton, 1989).

In the academic-organizational setting, communication plays a key role in graduate teaching assistants' socialization into their new departments (Bullis & Bach, 1989; Darling & Dewey 1990). One area in which this is crucial is in developing an understanding of the organizational culture that exists within the new graduate student's department. This organizational culture teaches newcomers the "correct way to perceive, think, and feel" in relation to the problems they encounter within the context of their

organizational experience (Schein, 1985, p. 492). Academia presents various challenges that newcomers must learn to deal with in a manner that meets organization expectations. Troop (2011) has characterized the academic culture as “an ego-driven industry where perception is everything and weakness is perceived as a character flaw,” (p. 1) and a place where newcomers feel that they are being constantly “sized up” by their new community.

The “dark sides” of academia have also been examined through scholarly research; however, there is not an extensive amount of research in this area. For example, Johnson and Huwe (2002) recognized a lack of literature that extended beyond the successful mentoring relationships between graduate students and their mentors and analyzed all research on the “dark side” of mentoring relationships. Their study resulted in a typology designed to provide a more rounded perspective on mentoring relationships between graduate students and their mentors to assist in prevention efforts on departmental and individual levels. The data revealed that for many graduate students, their relationships with their mentors can be negatively impacted by factors such as bullying, ineffective delivery of criticism, and exploitation regarding research assistance and authorship (Eby, McManus, Simon, & Russell, 2000; Scandura, 1998).

For many students, developing an understanding of the normalcy of their interpersonal relationships with their mentors, peers, and department, as well as their successes within academia, is achieved through self-comparison. Self-comparison within the workplace is a normal phenomenon and often serves one of three purposes: to evaluate one’s abilities, to encourage self-improvement, or to feel better about oneself (Wills, 1981; Wood; 1989; Wood, Taylor, & Lichtman, 1985). While this comparison is a

normal part of organizational adaptation, the structural standing of graduate students and high level of uncertainty in identifying the “successful” academic track adds an additional layer of complexity to the academic-organizational experience. Through the process of entering academic departments, many graduate students are regarded as “structurally a child” no matter their age or life experiences, particularly in the context of the advisor-advisee relationship; this can be a source of additional psychological stress (Kendzior, 2014; Lovitts, 2001, p. 1).

This structural standing of graduate students (or infantilization) leaves very few aspects of the students’ lives that are beyond the scope of comment or critique within the academic sphere. One academic notes that after announcing her pregnancy to her department (while a graduate student) she was asked if her advisor had given her permission to have a baby and if the department was going to “throw [her] out?” (Kendzior, 2014, p. 1). In this instance this graduate student’s personal decision (regarding family planning) is the center of concern regarding her career success; previous research has established that motherhood is often perceived as a liability (and therefore a potentially *negative* disclosure) within the work context (King & Botsford, 2009; Ridgeway & Correll, 2004). This relates to the boundary violations category of ineffective mentoring present in graduate student-mentor relationships that was identified by Johnson and Huwe (2002), in which mentorship extends beyond professional contexts into intimate or personal contexts.

It is important to note that not all interactions between advisees and their mentors, or interactions within academic contexts, involve such negative outcomes. In fact, research has shown that positive advisee-mentor relationships result in career

advancement, increased professional identity, and career satisfaction (Fangenson, 1989; Fangenson-Eland, Marks, & Amendola, 1997). However, it is important to note the lack of literature that examines the negative interpersonal relationships and interactions within academia. This study does not seek to further the work of authors like Johnson and Huwe (2002) in examining the dark side of these interpersonal relationships. However, it does seek to recognize their existence and incorporate this knowledge into an understanding of graduate students' self-disclosure norms. In a field that already encourages constant critique and evaluation of one's scholarly work, the added critique of what many perceive as the more personal spheres of their lives (such as mental health and family planning) creates a communication environment that has the potential to make interpersonal communication (particularly disclosure) a challenging endeavor.

It is hardly surprising that awareness of these criticisms (and a perceived social-acceptance of such behavior), coupled with a tenuous job market and financial instability, has resulted in a generation of graduate students who are characterized as slightly paranoid (Troop, 2011). This is only compounded by the fact that there is no clear route to success (i.e., a fully funded position or tenure-track job) within academia—no “magic number” of publications, grants, or presentations that will ensure funding or an employment position more secure than adjunct (Weissmann, 2013). As previously indicated, social comparison is often used as a way to assess one's success within the organization (Wills, 1981). However, having no clear route or standard for success can produce uncertainty. Lovitts (2001) found that graduate students who had uncertainty about their program and academic trajectory often assumed that they were the only ones who did not have things figured out and thus blamed themselves for their supposed

ignorance. Because of this, students were reluctant to let others know of their uncertainty. Although not all individuals who enter graduate school intend to seek a career in academia, a 2011 survey indicates that only 19.2% of graduates have secured an academic job by graduation (Weissmann, 2013).

One potential method of reducing the stress and anxiety related to this uncertainty is through seeking information from peers to gain insight into the organization's (or department's) cultural norms as well as specific graduate student tasks, expectations, and obligations. Despite this, students' perceptions that they are the "only one" struggling or concerns that their peers will perceive them negatively because of their lack of knowledge can often impede in this process. Considering the tenuous job prospects, high levels of uncertainty, and the perception that any flaw is a potential weakness, it is important to ask what norms for self-disclosure have been established within the graduate student academic context. Previous literature has examined how graduate teaching assistants seek information and social support from their peers and mentors (Boyle & Boice, 1998).

However, no literature exists that utilizes expectancy violations theory to examine the impact that meeting or violating organizational cultural expectations regarding workplace disclosures has upon their relationship with their peers. Even though there is a high level of uncertainty and scrutiny that is seemingly inherent to academia, it is important to ask how individuals disclose potentially negative information about themselves within the academy, as self-disclosure provides a key resources through which graduate students can create interpersonal relationships that will provide social support (Cobb, 1976). Additionally, this knowledge will result in a better understanding

of the perception of academic cultural norms—particularly as they relate to workload and psychological stress. This study uses an online experiment involving hypothetical conversations between graduate students to test how graduate students perceive different disclosures.

## **Chapter 2**

### **Literature Review**

This chapter will provide a brief analysis of the literature relevant to the study. First, an explanation of the purpose and design of Expectancy Violations Theory (EVT) will be provided. Then a more detailed explanation of violation valence will be offered to further an understanding of the directions in which expectancy violations can be manipulated. A rationale for the importance of disclosure topic and the impact of expectancy violations on interpersonal relationships is then provided. Finally, relevant literature is used to expand upon the importance of self-disclosure and social support within the context of this study. The author explains the importance of self-disclosure as a means of creating and maintaining interpersonal relationships among work colleagues, which in turn can provide a source of social-support in high-stress contexts such as those experienced by graduate students

#### **Expectancy Violations Theory**

It is because of EVT's ability to examine expectancies on both the individual and social level (particularly through the examination of the actor, relationship and context) that it proves a useful tool in better understanding the expectancies within the academic setting. This is particularly pertinent when it comes to the topic of the disclosure. Developed by Burgoon (1993), Expectancy Violations Theory (EVT) was established in an effort to both predict and explain the impact of unexpected communication behaviors. At its inception, EVT examined non-verbal communication behaviors such as personal space violations during an interaction (Burgoon, 1978), but it has since been extended to

examine verbal communication violations in friendships and romantic relationships (Bachman & Guerrero, 2006; Floyd & Voloudakis, 1999; Bevan, 2003).

For example, Bachman and Guerro (2006) used EVT to examine how individuals in romantic relationships responded to hurtful events such as cheating and other types of betrayal. Their study found that individuals who experienced highly negative expectancy violations were more likely to break up with their partner, perceived their partner as unrewarding, and had lower feelings of satisfaction and commitment (Bachman & Guerro, 2006). Additionally, Bevan, Ang, and Fearn (2014) applied EVT in computer-mediated contexts to discover that the act of de-friending someone on Facebook is perceived as a moderately negative expectancy violation. This finding was in keeping with previous literature that established relationship de-escalation or disassociation as a primarily negative rather than positive expectancy violation (Afifi & Metts, 1998).

The theory is based on the premise that within specific contexts there are a range of behaviors that individuals have deemed acceptable, and when communication behaviors occur that do not adhere to this they represent an expectation violation (Burgoon, 1978). It is important to note that these violations “trigger an interpretation-evaluation process that labels the behavior as positive or negative” while also taking into consideration the magnitude of the communication discrepancy (Afifi & Burgoon, 2000, p. 211). These expectancies (and their violations) occur on both social and idiosyncratic levels. On the social level these expectancies reflect the “rules, norms, and practices that typify a given culture, communication or context” while the idiosyncratic level focuses on person-specific communication expectancies (Burgoon, 2009, p. 368).

Additionally, expectancies derive from prescriptive (i.e., appropriate for a specific context/relationship) and predictive (i.e., tendency or regularity of occurrence) origins (Staines & Libby, 1986; Floyd & Voloudakis, 1999). For example, graduate students may expect that peers will respond to their disclosures with similar disclosures (reciprocating the behavior) because they have done so in the past (predictive) or because they believe that their peer “should” respond in that matter. In the organizational context, Staines and Libby (1986) found that employees either expected to receive a salary raise because it had happened reliably in the past (predictive) or because they thought it was the right thing for management to do (prescriptive). In essence, predictive expectancies are based on what individuals have experienced in the past, while prescriptive expectancies could more accurately be characterized as evaluations or “idealized standards of conduct” (Burgoon, Stern, & Dillman, 1995, p. 196).

This study focuses primarily upon *predictive* expectancies between graduate student interactions, which come from an understanding of three variables; the actor (or characteristics of the individuals involved; e.g., gender, age, race, etc.), relationship (status or attraction between those involved), and the context or setting in which the interaction takes place (Burgoon, 2009). Together these three variables contribute to the formation of communication or behavior expectations. That is to say that it is very likely that a graduate student would have different expectations regarding professional communication behaviors in the office versus in a bar setting (or even in the same setting with two different colleagues). This is because the communication expectancies regarding professional communication is influenced by the context (i.e., the physical location of a bar versus office) in which the conversation occurs. The three variables of

actor, relationship, and context are simultaneously assessed and influence the types of expectations held at any given moment.

It is important to note that the idea of RNDs (particularly within the context of disclosing negative information about work and stress) and communicators' expectancies should also be considered as culturally constructed. For example, engaging in RNDs within certain western cultures may find its roots in culturally constructed ideas of needing to "be busy" at all times. Burgoon and Hubbard (2005) point out that in the case of an intercultural communication interaction (in which there is little personal experience with the other individual) expectancies are closely related to social and cultural norms and stereotypes. While the importance of cultural norms cannot be ignored in any context, previous data have indicated that expectancies often center on the idiosyncratic level. Person A may expect a certain behavior from Person B because that behavior is normative for *that* individual, even if it differs from cultural norms (Burgoon, 1978).

Afifi and Metts (1998) refer to expectancy violations on the idiosyncratic level as "uncharacteristic relational behaviors" because they are inconsistent with the previously established norms of the relationship. For example, an idiosyncratic violation for some of their participants was, "we were both drunk and one thing led to another and we had sex" among cross-sex friendships (p. 377). The expectancy violation in this instance occurs because the violation develops from the change in the normative behaviors of the individuals (i.e., a non-sexual relationship that suddenly became sexual) rather than a departure from social norms.

While this study does attempt to take into account the cultural background of the participants through background information on both their nationality and time in the

culture of academia, these data are viewed as supplementary. The author recognizes that the examination of culture through nationality is problematic. However, this data collection serves only as a means to identify if participants' "belonging" to U.S. academic culture influences their perceptions of the violations. The focus of this study lies largely on the idiosyncratic levels (i.e., interpersonal) of expectancies and expectancy violations. This focus on the idiosyncratic aspect of expectancy violations will be achieved by gathering information about the study participants (regarding their age, sex, race, time in department) and their relationship with one of their colleagues (e.g., relational quality and social support norms) and evaluating their reaction to a hypothetical conversation in their department between themselves and that colleague.

An individual's communication behavior either conforms to or deviates from the expectancies in every interaction. An expectancy violation occurs when the *actual* behavior deviates from the *expected* behavior; the recipient then evaluates the behavior as positive, negative, or ambiguous (Burgoon, 1978). The value (i.e., positive or negative) that is attached to the violation act is referred to as its valence. A positive valence violation is one in which the behavior exceeds expectations while a negative valence expectation falls short of the expectation or is the opposite of what is expected (Bachman & Guerrero, 2006). Consider the following examples involving two people in a romantic relationship into consideration.

Scenario A:

John: "I like you."

Devon: " I love you."

Scenario B:

John: "I like you."

Devon: "I hate you."

In Scenario "A" Devon's response can be viewed as a *positive* expectancy violation because it exceeds the expectations of the interaction and deepens the intimacy of the previous statement. Afifi and Metts (1998) categorize violations that signal intensification in the relationship as "initiation, intensification, or escalation" violations (p. 376). Conversely, in Scenario "B" where Devon responds, "I hate you," this statement serves as a *negative* expectancy violation because it is directionally opposite of the initial statement and serves to deescalate the relationship. It is important to establish that the violation valence (negative or positive) is associated with the direction of the disclosure. For example, please consider the implications if one were to alter the previous scenarios.

Scenario C:

John: "I dislike you."

Devon: "I hate you."

Scenario D:

John: "I dislike you."

Devon: "I love you."

In these altered scenarios, Devon's response would be *positive* valence violation when he responds, "I hate you" (Scenario C) and considered a *negative* valence violation when he responds, "I love you" (Scenario D). This means that in conversations or contexts dealing with negative information the violation direction may be the *opposite* of what the reader expects.

Initially, research regarding violation valence perpetuated the idea that violations are inherently negative (Kellermann & Reynolds, 1990). However, this is a byproduct of the limitations of the scenarios used within the studies. For example, Planalp and Honeycutt's (1985) work used disclosures such as "discovering that a partner was homosexual" or "the discovery of a competing relationship" as their scenarios, which is not reflective of the broader range of violations that can occur within an interpersonal relationship (p. 596). In particular, when individuals perceived their relationships to be satisfying and stable, they interpreted disclosures that were directionally opposite (i.e., included infidelity) as negative valence. The perception was developed that violations themselves suggest "betrayal, disrespect, [and] disregard for the integrity of the relationship" (Afifi & Metts, 1998). However, researchers have since discovered that violations can be either negatively or positively valence and have noted this in a variety of interpersonal contexts (Afifi & Metts, 1998; Bevan et al. 2014). For example, participants in Afifi and Metts (1998) study identified positive-valence violations within friendships with one participant identifying a positive violation in her own relationship after her positive disclosure was met with the following, "[my friend] said he wanted to fix me up with one of his friends because I was such a great person" (p. 386).

However, it is important to note that these violations are not perceived as either fully negative or fully positive but instead exist on a spectrum between these two; behaviors that occur most often are usually (but not always) perceived more positively or preferred (Jackson, 1966; Burgoon & Hubbard, 2005). This perception is closely tied into the inclusion social norms, or what is socially acceptable (and thus receives positive response), in the formation of expectancies. However, the research has shown that

behaviors are *usually* perceived more positively when they occur more often. This indicates that the relationship between frequency and valence (or the evaluation of this behavior as positive or negative) is not linear. For example, while it may be normal for graduate-student advisors to initiate fewer conversations with students, students may actually *prefer* higher levels of conversation initiation during certain phases of their academic career. The present study measures behavior frequency in order to determine the relationship between frequency and behavior valence.

### **Self-Disclosure**

Self-disclosure is an interpersonal process of sharing previously unknown information about oneself with others, or “the process of making the self known” (Jourard & Lasakow, 1958, p. 91). Particularly within a work context, certain types of disclosures are viewed as more (or less) acceptable than others. For example, disclosures that involve potentially stigmatizing information (e.g., mental health, depression, sexuality, etc.) have higher risks of negative outcomes and are not done lightly (Corrigan & Matthews, 2003). This is because when individuals disclose information they have a desire for their disclosure to be met with support, understanding, and responsiveness (Laurenceau, Feldman Barrett, & Rovine, 2005).

Additionally, previous research has shown that conversations between co-workers (regarding either non-work related topics, negative aspects of work, or positive aspects of work) can be used as a means of seeking and establishing emotional support (Beehr, King, & King, 1990). In fact, self-disclosure can help to validate our perspectives and increase our levels of relational intimacy with those we disclose to (Johnson, 1974). It is possible for one individual at work to disclose information regarding a particular topic

(such as stress) and then for that disclosure to be reciprocated with a disclosure of a different nature; however, research has shown that an equivalent reciprocation of the same nature and topic is the norm (Bowling, Beehr, & Swader, 2005).

This is based on the norm of reciprocity that dictates further self-disclosure will occur in a similar nature to the disclosure initiated by the first communication interactant (Burgoon, Dillman, & Stern, 1993). Previous literature has established that graduate students often suffer from high levels of stress and depression (Mazzola, Walker, Shockley, & Spector, 2011). Some of this stress originates from their heavy workload (Mazzola, Schonfield, & Spector, 2011). This knowledge guides this research project to examine the reciprocal self-disclosure of two topics related to workplace communication: stress and workload. Stress and workload are interrelated in their potential impacts on graduate students as a response (stress) and stressor (workload). This manuscript will later identify why disclosures regarding workload may have different social norms and expectancies. This potential difference between workload and mental health disclosures will be examined because perceptions of mental health stigma may alter participants' willingness to discuss their stress or anxiety.

This study uses hypothetical scenarios to examine graduate students' expectations for reciprocal disclosures about stress and the workplace. It is possible for an individual to violate disclosure expectancies by offering a disclosure of a different valence or a disclosure regarding a different topic. For example, if one co-worker were to begin a conversation discussing the negative aspects of his or her job (in terms of workload for example) their colleague would respond in kind (i.e., negative workload disclosure) rather than with a disclosure of a differing nature (i.e., negative disclosure about mental

health or positive perception of work load). This is supported by previous research that found individuals are more likely to engage in self-disclosure if they receive that type of disclosure from their conversational partner first (Moon, 2000; Hill & Stull, 1982). The tendency for reciprocating disclosures to be specific in terms of topic and valence serves as the rationale for the establishment and design of the hypothetical scenarios within this study. This study utilizes experimental data to gain a better understanding of the expectancies regarding workload related disclosures versus disclosures pertaining to stress between graduate students. This information is crucial because access to social support (and the management of stress and anxiety) in graduate school is an important factor in improving mental wellbeing and stress management.

It is important to note that self-disclosure can also manifest in different ways and be motivated by a variety of factors. This study focuses primarily upon reciprocal negative disclosure (RND), which is rooted in the concept of reciprocity. Gouldner (1960) stated that the norm of reciprocity consists of at least two key components, “(1) people should help those who have helped them, and (2) people should not injure those who have helped them” (p. 11). For example, Malinowski (1932) identified that reciprocity could involve a “mutually gratifying pattern of exchanging goods and services (p. 36). However, it is important to note that concept of reciprocity is not based on the role based expectations that individuals have of one another but rather on their past behaviors (Gouldner, 1960).

For example, to be a true instance of reciprocity A does not do something for B out of duty but rather because B has done something for A in the past. It is important to note that the basis of reciprocity on returning the gestures of previous behaviors also

indicates builds upon Goulter's assertion that "people should help those who have helped them" to further imply that many individuals expect that "those whom you have helped have an obligation to help you" (Gouldner, 1960, p. 14).

Within the communication context, interpersonal reciprocity is a process in which individuals adapt their communication or behavior in response to others' communication or behavior to respond in a manner that is comparable (Burgoon, Dillman, & Stern, 1993). Please consider the following example, if Person A were to disclose personal information to Person B, then the norm of reciprocity would call for Person B to respond with a personal disclosure in return. In fact, previous research by Hosman (1987) found that individuals perceive it be inappropriate when one individual discloses information that can be considered highly intimate and receives a low-intimacy disclosure in response. The balance of intimacy in both the initial disclosure and the reciprocated disclosure is an example of homoeomorphic reciprocity in which the information exchanged must be perceived as alike or identical (Gouldner, 1960, p. 13). In essence, self-disclosure promotes further self-disclosure.

RND applies the norm of reciprocity to look at information that can be perceived as negative (e.g., disclosures about potentially negative experiences rather than positive experiences). For example, if one were to disclose being "swamped with work" or "struggling to keep up," other people in the conversation might respond with negative information about themselves in turn (e.g., "you wouldn't believe how far behind I am" or "if you think you're busy you should see..."). As previously mentioned, self-disclosure serves as a way to validate one's experiences (Wills, 1981; Wood, 1989; Wood, Taylor, & Lichtman, 1985).

However, people often avoid disclosing information that reflects poorly on themselves out of fear of disapproval, embarrassment, or social rejection (Lane & Wegner, 1995; DePaulo, Kashy, Kirkendol, Wyer, & Epstein 1996). It is because of this that it is important to better understand the disclosure expectations and norms about negative aspects of workload and stress. This concept has been examined within the context of impression management and body image. For example, Britton, Martz, Bazzini, Curtin, and LeaShomb (2006) examined the concept of “fat talk” in which individuals speak negatively about their bodies, attempting to engage or joke with their peers to gain a sense of validation.

In this study, the authors found that their participants felt that “fat talk” was a normative behavior, and it served to either validate their own dissatisfaction (and verbalization of this dissatisfaction) with their bodies or to prevent them from saying something positive for fear of violating the norm and experiencing ridicule (Britton et. al, 2006). This study illustrates the importance of norms surrounding disclosures of negative information or self-deprecating information. It indicates that “fat talk,” or negative disclosures that are continuously reciprocated, reinforces the perception that it is normal to be dissatisfied with one’s body and the conceptualization of such self-deprecating talk as acceptable. Understanding whether this cycle of negativity is also applicable to workload and stress disclosures will provide better insight into self-disclosure expectancies on these topics.

It is important to note that this study found that “fat talk” was a norm for *female* participants. Previous research has established a case for gender differences in both self-disclosure and social support seeking behaviors (Cozby, 1973; Powers & Bultena, 1976).

For example, women have been found to be more self-revealing overall than men, while men are more willing to disclose negative information to a female peer than a male peer (Olstad, 1975). Additionally, in a study that examined stereotyped expectancies Taynor and Deaux (1973) found that when women positively violated expectations in a rescue situation (e.g., taking action in a scenario regarding an armed gunman), they were perceived more positively than men. The authors suggested that this finding was closely tied to gender expectations. Rescue behaviors are associated with masculine traits, and thus, a woman's engagement in a rescue act was perceived as more impressive (Taynor & Deaux, 1973).

### **Social Support**

The ability to engage in RND can often provide a sense of validation—a potentially important factor in areas of high uncertainty such as the beginning of graduate school. Within work contexts individuals often develop collegial task and social relationships that can result in social support. Collegial-task relationships focus on work related interactions and disclosures (such as completing tasks for work and exchanging constructive criticism), while collegial-social relationships center on personal disclosures and interactions (Hill, Bahniuk, Dobos, & Rouner, 1989). These two types of relationships with workplace peers help to develop both task and emotional support from colleagues. The ability to disclose negative information about oneself and expect that information will be positively received or reciprocated increases job satisfaction and perceptions of social support while decreasing the chances of burnout (Griffith & Hebl, 2002; Medland, Howard-Ruben, & Whitaker, 2004).

**Mental health & stress.** In particular, social support has the ability to buffer the effects of stress upon the individual. This buffering exists because it creates the perception that the individual can rely upon others for necessary resources, alleviates the stress response, produces potential solutions to the problem, and decreases the perceived importance of the stressful events (Cohen & Wills, 1985). Data have shown that people in academe are more likely to go on disability leave for psychological reasons than any others (Ruark, 2010). To be sure, academics do not usually face concerns such as threats of injury or environmental hazards that may exist in other occupations. Nevertheless, the fact that psychological reasons are the number one reason to go on leave within this career field cements the importance of examining how individuals within academia disclose information about stress and mental health. This psychological stress affects graduate students as well as faculty. Lovitts' (2001) conducted a study that examined doctoral students' attrition from their programs. In this study faculty from two universities were interviewed on the matter. One stated the reason for this attrition may be:

...various kinds of depression. I think psychologically, it's a hard status to be in. You're old enough to be an adult but you are still in a kind of student situation. I think that's stressful. People want to get on with their lives, feel depressed. They are not moving on quickly enough... [I]t's not like law school where you just move along and it's three years and you're out... with luck it's five years and you're out and into a job, but often it's six years or seven years, and it's not necessarily a job waiting there. So I think people get depressed. (p. 26)

Given this situation, it is hardly surprising that in the academic context social support (particularly as it pertains to dealing with psychological stress) is crucial. Despite the numerous personal perspectives and blog pieces written regarding mental stress and burnout within academia, very few scholarly articles have been written in the past ten years that examine stress and burnout among faculty and graduate students, and no articles have examined how these individuals talk about such issues. Harrison (1999) describes burnout as a result “of the daily struggles and chronic stresses that are typical of everyday life and work—too many pressures, conflicts, demands, and too few rewards, acknowledgements, and successes” (p. 25).

For example, Dyrbye et al. (2010) found that in a sample of 858 medical students, 243 had serious thoughts of dropping out, high levels of burnout, and depressive symptoms. Additionally, Lackritz (2004) completed a study with 265-university faculty and found that 20% of participants had the highest levels of burnout. Furthermore, female faculty members experienced significantly higher levels of emotional exhaustion.

Despite a lack of extensive literature, psychological stress exists as a consistent problem for many academics. Additionally, there are barriers that may prevent individuals from disclosing their stress to their colleagues. Morris (2000) found that students often somaticize (i.e. turn into physical ailments) their experiences with stress as a means to avoid the stigma that they associate with seeking mental or psychological assistance. This speaks to the stigma that currently exists regarding mental illnesses (Corrigan, 2000).

The International Labor Office defines mental health as people’s ability to feel that they “are coping, fairly in control of their lives, able to face challenges, and take on

responsibility,” and that enables people to successfully engage in activities and relationships while adapting and coping with change (Gabriel, 2000, p. iv). Previous literature has examined the negative impact of stigma in a variety of contexts. For example, negative outcomes have been reported for individuals who experienced stigma regarding mental disorders, their preferred gender and sexual orientation, and ethnicity (Stuart, 2003; Sabat, Lindsey, & King, 2014; Hawkey, 2014). However, little research has examined the degree to which stigma against disclosures that may indicate poor mental health, such as pervasive anxiety, chronic stress and mild depression, has upon people in the workplace.

Despite this lack of knowledge there is a common perception that individuals who suffer from mental illnesses or just poor mental health are unstable, unable to handle stress, and second-rate workers (Gabriel, 2000; Gabriel & Liimatainen, 2000). It is important to note that this study is examining mental health through stress’ impact on mental health and not in terms of chronic depression or psychological conditions. This is because high levels of stress can negatively impact an individual’s “emotional, psychological, and social wellbeing” (“What is Mental Health,” 2015, p. 1). Hyun, Quinn, Madon and Lustig (2006) conducted a study with 3,121 fulltime graduate students and found that nearly half of their participants had stress-related mental health needs, 46% reported feeling overwhelmed “frequently” or “all of the time,” and 30.6% had sought their campus mental health services. However, fear of being regarded as less capable may mean that graduate students and other academics are reluctant to disclose information regarding any experiences with poor mental health or stress, despite the prevalence of psychological stress among academics.

**Workload.** This reluctance means that graduate students may not seek help from those who are most equipped to help them such as department chairs, advisors, colleagues, or cohort members (Troop, 2011). This is a particularly disconcerting possibility because the significant amount of face-to-face interaction time would make these individuals viable social support sources (Pearlin, 1985). The importance of utilizing face-to-face social support sources is crucial within the context of concealment; concealing personal concerns and feelings has been found to be a stressor on the body while disclosing this information can reduce the negative impact of concealment, improving mental health (Pennebaker, 1995). However, disclosures that reference workload (rather than mental health) may be “safe” alternatives. One of the sources of stress and anxiety identified by graduate students is their heavy workload (Mazzola, et al., 2011). And while disclosures regarding negative mental health itself (i.e., stress, anxiety, depression) are potentially stigmatizing, disclosures regarding workload may be safer because they do not directly reference mental health.

Workload is an often-identified psychological stressor, or a factor that causes emotional responses such as anxiety and anger (Spector, 1998). What is important to note is that stressors can result in a range of responses from psychological to physiological (i.e., high blood pressure), and thus conversations relating to workload as a stressor do not come with an implicit disclosure of poor mental health (Jex & Beehr, 1991; Lin, 2003). In fact, disclosures regarding workload can be used as a means of social comparison to evaluate one’s standing or success within the organization (Wills, 1981). It is because of the high rates of psychological stress seemingly inherent in the academic

experience that it is important to better understand what expectations graduate students have regarding disclosures relating to stress. The following hypotheses are proposed:

**H1:** Positively valence violations of RND regarding mental health will be perceived as more unexpected than positively valence violations of workload RND

**H2:** Negatively valence mental health violations will correlate with lower rates of perceived equality in relational communication (relational communication subscale)

### **Relational Impact**

In order for there to be a positive impact upon interpersonal relationships and social support, individuals must be willing to engage in these disclosures. First, it is important to note that the level of intimacy or friendship between participants can influence their disclosure patterns (Jouard & Lasakow, 1958). Reciprocity, in and of itself, has been found to create increased levels of closeness, enjoyment, perceived similarity, and liking in relationships, particularly during their initial stages (Sprecher, Treger, Wondra, Hilaire, & Wallpe, 2013; Dindia, 2002). However, what happens when the expectancies regarding these reciprocations are violated? Initial research into expectancy violations viewed violations as a solely negative experience for participants (Burgoon, Stern, & Dillman, 1995). Despite this, violations of expectations have the potential to result in positive outcomes regarding communication and satisfaction (Burgoon, 1993).

The amount of information a person is willing to share with another “appears to be an index to the ‘closeness’ of the relationship, and of the affection, love or trust that

prevails between two people” (Jouard, 1959, p. 428). Personal disclosures, such as “I had a terrific day at work,” are often used as a means for individuals to share up-to-date information about their daily lives and inform one another of the state of their relationship (Waring, 1987). However, it is important to note that while reciprocity can increase liking, self-disclosure increases in breadth and depth as the relationship progresses, and too much self-disclosure in the early stages of the relationship can result in lower liking for the conversational partner (Levinger & Snoek, 1972; Berg, 1984).

Nevertheless, self-disclosure is a key component for relational development and feelings of intimacy. Relational intimacy has been defined as, “a feeling of closeness developed from personal disclosures between communication partners” (Altman and Taylor, 1973, p. 390). Intimacy and relational satisfaction are also influenced by another variable, responsiveness. Responsiveness is to what degree and in what matter an individual’s actions address the communication “needs or wishes of another participant” in the interaction (Miller & Berg, 1984, p. 191). However, the key to the concept of responsiveness is that the response demonstrates a sense of concern for the listener and is perceived as sincere and immediate, as this plays a role in liking, disclosure reciprocity, and relational closeness (Laurenceau, Rivera, Schaffer, & Pietromonaco, 2004). It is for this reason that the author proposes the following hypothesis:

**H3:** Negatively valence expectation violations will be more unexpected with participants who report higher levels of relational quality with their imagined peer.

**H4:** Positive and neutral valence violations will positively correlate with perceived similarity and trust (relational communication subscales).

These hypotheses and questions serve to better understand how expectancy violations regarding workload and stress disclosures are impacted by relational satisfaction. The proposed hypotheses also examine how expectancy violations impact participants' perceptions of perceived similarity and trust as well as perceived equality. This study utilizes Expectancy Violations Theory (EVT) to examine graduate students' expectations of reciprocal negative disclosures with their peers. The aim is to develop a better understanding of the social norms and expectations regarding these disclosures and how they are influenced by factors such as relational closeness, disclosure valence, and disclosure topic and their impact on relational communication satisfaction.

### **Chapter 3 Methodology**

It is important to note the author's positionality and motivation for this study when considering the design of the project. While written reflexivity is a more characteristic component of qualitative research this information serves to better contextualize the development of the present study. Awareness of the positionality of the researcher provides insight into "how their own positions and interests are imposed at all stages of the research process . . . in order to produce less distorted accounts of the social world" (Hertz, 1997, p. viii). As a current graduate student the author was motivated to conduct this study in an interest to better understand the impact of disclosure patterns (RNDs) witnessed regularly within her particular department. After exposure to research that indicated high levels of stress, anxiety, and uncertainty experienced by graduate students the researcher developed a specific interest into how disclosure norms and expectancies among graduate students may serve to inhibit or enhance students' ability to gain social support from one another. It was both this personal observation and the exposure to relevant research that lead to the development of the current study.

This chapter will provide further insight into the methodology used to examine EVT within the context of graduate student disclosures. First, it will give a brief overview and rationale for the study design and research questions to be addressed. Second, the pilot study will be described briefly. Finally, detailed information regarding the measures, participants, and data analysis will be provided. Data analysis was conducted using SPSS version 22.0. The experimental design of this study involved the manipulation of topic and violation valence to test their impact on participants' perceived expectedness of the

violation and perceived impact on relational communication regarding equality and similarity/trust.

### **Procedures & Design**

This study used hypothetical scenarios in an online experiment involving graduate students to test student reactions to various types of reciprocal negative disclosures (RNDs). For this study, graduate students were recruited from a large southwestern university. Additional participants from other universities were recruited via snowball sampling with an online email listserv and a Facebook post. After IRB approval was received for the study, participant recruitment was conducted via several strategies. Graduate students from the southwestern university were invited to participate via three strategies.

First, the author compiled a list of publicly available graduate student emails obtained through the university department websites and emailed each participant an invitation to complete the online questionnaire. Second, the author emailed department leaders (e.g., administrators and department chairs) and asked them to forward an email invitation to participate in the study to the graduate students within their department. Third, the author emailed faculty members of various colleges who were identified via the university course catalogue as teaching graduate level courses and asked them to forward an email invitation to participate in the study to the students in their courses. Graduate students outside of the southwestern university were recruited via the Communication Research and Theory Network (CRTNET) email listserv and a Facebook recruitment post to the “Graduate Studies at the University of New Mexico” page. All

email invitations and recruitment postsings asked participants to share the study information and link with other graduate students who might participate in the study.

The population of graduate students was selected for two reasons. First, as college graduate students these participants are qualified to evaluate disclosure norms in the context of academic environments. Second, experiments rely on random assignment, not random sampling, to control for selection bias. Additionally, it is important to note the convenience of access to this community. Lindolf and Taylor (2011) describe convenience samples as seeking out or engaging individuals who are “most readily available” to participate in the desired study.

The questionnaire itself consisted of demographic questions, a relational satisfaction scale, a collegial social support scale, manipulation checks, a qualitative response question, a relational communication scale, and six hypothetical conversation scenarios that served as the manipulation for this study. Participants first completed demographic questions and were then asked to think of a *specific* graduate student with whom they often interact. They were then randomly assigned to one of the hypothetical scenarios that involved themselves and the peer they were thinking about. Then after reading the scenario they responded to the series of post-manipulation measures.

Previous literature has established the viability of using hypothetical scenarios as a valid means of examining interpersonal communication in various contexts because the use of hypothetical scenarios provide researchers with the ability to prevent issues with participant recall and memory (Knobloch & Solomon, 2002). Additionally, the scenarios were designed to be consistent in both topic and valence in keeping with the findings of previous literature regarding reciprocal disclosures in conversation (Bowling, Beehr, &

Swader, 2005). A 3 (violation valence) x 2 (topic of disclosure) experimental design was used to test the hypotheses. Two of the valence groups served as control groups (i.e., no/moderate valence workload scenario, no/moderate valence mental health scenario) for this study.

### **Research Question & Hypotheses**

As laid out in Chapter 2, this study addressed the following hypotheses:

- **H1:** Positively valence violations of RND regarding mental health will be perceived as more unexpected than positively valence violations of workload RND.
- **H2:** Negatively valence mental health violations will correlate with lower rates of perceived equality in relational communication (relational communication subscale) than positively valence mental health violations.
- **H3:** Negatively valence expectation violations will be more unexpected with participants who report higher levels of relational quality with their imagined peer.
- **H4:** Positive and neutral valence violations will positively correlate with higher levels of perceived similarity and trust than negatively valence violations.
- **RQ1:** Does the level of perceived social support vary between the experimental groups?

### **Pilot Study**

A pilot study using undergraduate students at a large southwestern university was conducted to test the realism of the proposed scenarios. These students were recruited as a convenience sample due to time constraints related to the IRB approval process. Lindolf and Taylor (2011) describe convenience samples as seeking out or engaging individuals who are “most readily available” to participate *in* the desired study. However, the author

believes that the questionnaire responses still served as a valid means of testing the measures' realism and receiving the necessary qualitative feedback to improve the hypothetical scenarios.

After removing five participants due to significant missing data, the total sample consisted of 134 undergraduate students. Of these participants, 74.6% ( $n = 100$ ) were female and 25.4% ( $n = 34$ ) were male. Freshman comprised 53.7% of the sample ( $n = 73$ ), followed by sophomores (20%,  $n = 27$ ), juniors (15.4%,  $n = 21$ ), and seniors (10.3%,  $n = 14$ ). The sample was 50% ( $n = 62$ ) Hispanic/Latino/Latina, 46% White/Caucasian ( $n = 57$ ), 2% Multi-Racial ( $n = 2$ ), and 2% Black/African-American ( $n = 2$ ). Due to time constraints, only three of the hypothetical scenarios (neutral, negative, and positive valence scenarios regarding workload) were evaluated in the study. The survey was administered online through a secure research survey website (SurveyMonkey.com), and it was available to students for a total of two weeks. Each participant was randomly assigned to one of the three hypothetical scenario groups. Both the demographic questions and the post-manipulation survey items were randomly presented to each participant using the secure survey software. The data from this study were then uploaded into SPSS for screening, cleaning, and analysis.

The questionnaire itself was designed to test the adapted measures and participants' perceptions of the hypothetical scenarios. This data set was used to improve the questionnaire design and realism of the hypothetical scenarios. Based on the feedback provided by the pilot participants several changes were completed to improve the hypothetical scenarios. First, the scenarios were revised to enable the online software to insert the name of the participants' peer into the document. Second, the length of the

scenario was increased slightly to provide further context and improve the realism of the proposed scenario. Finally, pilot study participants indicated that the negatively valence violation scenarios were not “severe” from their perspectives. The researcher utilized this information to construct a situation that increased the severity of the information disclosed.

## **Current Study**

### **Instruments**

Participants were asked to complete several demographic questions (i.e., age, sex, race, etc.) and their current standing as a graduate student (i.e., rank, time in graduate school, time in their current department). Participants also completed several self-reported measures regarding relational satisfaction, relational communication satisfaction, and collegial social and task support. Exploratory factor analysis was conducted on multi-item scales to ensure that they meet the criteria of face validity, internal consistency, and parallelism (Hunter & Gerbing, 1982). Reliability was calculated for composite measures.

### **Measures**

**Overall Relational Quality.** Vangelisti and Caughlin’s (1997) Overall Relational Quality scale contains four Likert-type items with five point responses ranging from “*Strongly Disagree*” to “*Strongly Agree*.” Sample items include “I enjoy spending time with this person” and “This person’s opinion is important to me.” A principal axis factor analysis was conducted on the 4 scale items with oblique rotation. Oblique rotation was utilized to allow the researcher to examine if the constructs were interrelated or independent (Field, 2013). The Kaiser-Meyer-Okin measure verified the sampling adequacy for the analysis,  $KMO = .79$ , which was far above the acceptable limit of .50

(Hutchenson & Sofroniou, 1999; Field, 2013). An initial analysis was run to obtain eigenvalues for each factor in the data. Only one factor was extracted from the data and had an eigenvalue over Kaiser's criterion of 1; it explained 62.9% of the variance (Kaiser, 1960). The scale had good reliability ( $\alpha = .83$ ). The items were summed and averaged ( $M = 3.96$ ,  $SD = .85$ ), with a higher score indicating higher levels of participants' relational satisfaction with their peer.

**Relational Communication Satisfaction.** Adapted from Burgoon and Hale (1987), the Relational Communication Scale contains twenty-one Likert-type items with seven point responses ranging from “*Strongly Disagree*” to “*Strongly Agree*” and four sub dimensions: immediacy/affection, similarity/depth, receptivity/trust, and equality. Sample items include “He/she was intensely involved in the conversation” and “He/she was interested in talking to me.” For the purposes of this study the Equality Sub-Dimension was used to assess participants' perceptions of equality after reading the hypothetical scenario with their peer. Sample items from the equality sub-dimension include “He/she considered him/herself equals with me” and “He/she wanted to cooperate with me.”

A principal axis factor analysis was conducted on the 3 sub-dimension items with oblique rotation. The Kaiser-Meyer-Okin measure verified the sampling adequacy for the analysis,  $KMO = .59$ , above the acceptable limit of .50 (Hutchenson & Sofroniou, 1999; Field, 2013). An initial analysis was run to obtain eigenvalues for each factor in the data. Only one factor was extracted from the data and had an eigenvalue over Kaiser's criterion of 1; it explained 72%% of the variance (Kaiser, 1960). The subscale had good reliability ( $M = 5.06$ ,  $SD = 1.46$ ,  $\alpha = .80$ ).

Additionally, the Similarity and Trust sub-dimensions were used separately in data analysis. Sample items for these dimensions include “He/she was willing to listen” and “He/she tried to move the conversation to a deeper level.” These combined sub-dimensions also went through a principal axis factor analysis on the 10 items with oblique rotation. The Kaiser-Meyer-Okin measure verified the sampling adequacy for the analysis,  $KMO = .94$  (Hutchenson & Sofroniou, 1999).  $KMO$  value for all items was above the acceptable limit of .50 with a value greater than .57 (Field, 2013). An initial analysis was run to obtain eigenvalues for each factor in the data. Only one factor was extracted from the data and had an eigenvalue over 1; it explained 73.3 % of the variance (Kaiser, 1960). The combined subscales had good reliability ( $M = 4.56$ ,  $SD = 1.61$ ,  $\alpha = .96$ ). The items were summed and averaged with a higher score indicating higher perceptions of trust/similarity after the hypothetical conversation.

**Collegial Task & Social Support.** Adapted from Downs (1994) “Mentoring and Communication Scale,” this study utilizes two (collegial social support; collegial task support) of the four sub-dimensions (career mentoring, coaching, collegial social support, collegial task support) in this analysis. The two sub-dimensions consist of eight Likert-type items with seven point responses ranging from “*Strongly Disagree*” to “*Strongly Agree*.” Sample items include “This person and I frequently listen to each other’s personal problems” and “I work jointly on major projects with this person. These combined sub-dimensions also went through a principal axis factor analysis on the 8 items with oblique rotation. The Kaiser-Meyer-Okin measure verified the sampling adequacy for the analysis,  $KMO = .90$  (Hutchenson & Sofroniou, 1999).  $KMO$  values for seven items were above the acceptable limit of .50 (Field, 2013). The combined

subscales had good reliability ( $M = 4.79$ ,  $SD = 1.45$ ,  $\alpha = .91$ ). The items were summed and averaged with a higher score indicating higher perceptions social and task support in their relationship with their peer.

**Conclusion.** This chapter provided insight into the methodology used to examine EVT within the context of graduate student disclosures. First, gave a brief overview and rationale for the study design. It also listed all of the research questions addressed in the analysis. Second, the chapter provided a brief overview of a pilot study that was used to develop and refine the questionnaire for this project. Next, information was provided detailing the measures and instruments for this study and provided information regarding their validity. Data analysis was conducted using SPSS version 22.0. The experimental design of this study involved the manipulation of topic and violation valence to test their impact on participants' perception of expectation violations.

## Chapter 4 Results

This chapter will provide further insight into the results of the data analysis for this study. First, information regarding the population sample and manipulation checks is provided. Second, the results of data analysis for each hypothesis are addressed individually. A one-way ANOVA was conducted to test hypotheses one, two, and four while a correlation was run to test hypothesis three. Finally, the section ends with a series of tables representing the results of the analyses.

### Sample

After removing 73 participants due to significant missing data, the total sample consisted of 181 graduate students. Participants were randomly assigned by SurveyMonkey to one of the six groups; group sizes ranged from 22 to 33 participants. Of these participants, 69.6% ( $n = 126$ ) were female and 30.4% ( $n = 55$ ) were male. The average age of participants was 33, with ages ranging from 22 to 70 years. Participants had completed between one semester and 9½ years of graduate school. The majority of participants were enrolled in Ph.D. programs (58.6%,  $n = 106$ ), followed by M.A. programs (28.2%,  $n = 51$ ), M.S. programs (9.4%,  $n = 17$ ), and M.F.A. programs (2.2%,  $n = 4$ ). The sample was 77.9% White/Caucasian ( $n = 141$ ), 14.4 % Hispanic/Latino/Latina ( $n = 26$ ), 3.9% Asian/Pacific Islander ( $n = 7$ ), and 2.2% Black/African American ( $n = 4$ ) and Native American ( $n = 4$ ).

### Data cleaning & screening

Once the reliability of the measures was established the data were then examined through factorial analyses of variance (ANOVAs) conducted to address the research questions and hypotheses. After running descriptive statistics and examining the

skewness and kurtosis of the data, the researcher concluded that the data could be considered normally distributed. This determination was reached because skewness and kurtosis of each variable were within  $\pm 2$  (Field, 2013). The data for this study were screened for the assumptions of ANOVAs according to Field's criteria. For example, Levene's test was conducted to test the assumption of homogeneity of variance of the data. When data passes this test it indicates that the variances in the groups are equal (Field, 2013). Data that did not satisfy this criteria are reported using Welch's F, which controls for the Type I error rate (Tomarken & Serlin, 1986). Controlling for Type I errors is critical as their occurrence can cause the researcher to falsely believe there is an effect in the examined population (Field, 2013).

### **Violation Valence Manipulation Check**

In keeping with previous literature (Afifi & Burgoon, 2000; Bevan 2003) a manipulation check was conducted to examine the success of the manipulation of violation valence within the hypothetical scenarios. Violation valence was assessed using an adapted three-item scale developed by Afifi and Metts (1998). The scale items were measured on a 7-point Likert scale in which higher values indicated higher levels of liking. The scale had a good reliability ( $M = 3.97$ ,  $SD = 1.60$ ,  $\alpha = .94$ ) An ANOVA was conducted to assess the impact of positive and negative expectancy violations on participants' rating of the violation. The analysis results indicated a significant difference between violation valence and participants rating of the violation,  $F(5, 175) = 22.00$ ,  $p < .001$ ,  $\eta^2 = .39$ . Results confirmed the success of the manipulation check; positive violations were rated as significantly more positive behaviors ( $M = 3.95$ ;  $SD = 1.36$ ) than negative violations ( $M = 2.69$ ;  $SD = 1.23$ ).

### **Hypothesis One: Violation Valence and Expectedness**

H1 predicted that positive valence violations of RND regarding mental health would be perceived as more unexpected than positive valence violations of workload RND. A one-way ANOVA was conducted to test the hypothesis (see Table 1). There was a significant overall effect between violation valence and expectedness,  $F(5, 175) = 17.5$ ,  $p < .001$ ,  $\eta^2 = .33$ . However, H1 was not supported.

A Games Howell post hoc test revealed no significant difference between the positive valence mental health (PvMH) group ( $M = 4.14$ ,  $SD = 1.81$ ) and the positive valence workload (PvWL) group ( $M = 3.00$ ,  $SD = 2.01$ ). There was also no significant difference between the PvMH group and the negative valence mental health (NgvMH) group ( $M = 2.96$ ,  $SD = 1.68$ ) or the negative valence workload (NgvWL) group ( $M = 3.05$ ,  $SD = 1.81$ ). Additionally, there was not a significant difference between the PvMH group and the neutral valence workload (NvWL) group ( $M = 5.51$ ,  $SD = 1.54$ ). However, there was a significant difference between the PvMH group and the neutral valence mental health (NvMH) group ( $M = 5.85$ ,  $SD = 1.43$ ) where the mean of the PvMH group was 1.72 lower than the mean of the NvMH group ( $p = .01$ ).

### **Hypothesis Two: Mental Health Violations and Perceived Equality**

H2 predicted that negative valence mental health violations would correlate with lower rates of perceived equality in relational communication (relational communication subscale) than positive valence mental health violations. A one-way ANOVA was conducted to test the hypothesis (see Table 2). There was a significant overall effect of violation valence of perceived equality, Welch's  $F(5, 78.13) = 11.5$ ,  $p < .001$ ,  $\eta^2 = .24$ . Analysis of the data supported H2.

A Games Howell post hoc test revealed a significant difference in perceived equality between the negative valence mental health (NgvMH) group ( $M = 3.77$ ,  $SD = 1.22$ ) and the positive valence mental health group (PvMH) group ( $M = 5.27$ ,  $SD = 1.18$ ); the mean of the NgvMH group was 1.50 lower than the mean of the PvMH group ( $p = .001$ ). Additionally, there was a significant difference between the NgvMH group and the neutral valence mental health NvMH group ( $M = 5.81$ ,  $SD = 1.21$ ), and the NgvMH group and the neutral valence workload group (NvWL) group ( $M = 5.61$ ,  $SD = 1.22$ ). The mean of the NgvMH group was 2.04 lower than the mean of the NvMH group ( $p < .001$ ) while the mean of the NgvMH group was 1.83 lower than the mean of the NvWL group ( $p < .001$ ).

The post hoc test also revealed a significant difference between the NgvMH group and the positive valence workload (PvWL) group ( $M = 5.54$ ,  $SD = 1.07$ ); the mean of the NgvMH group was 1.77 lower than the mean of the PvWL group ( $p < .001$ ). However, there was no significant difference between the NgvMH group and the neutral valence workload (NvWL) group ( $M = 4.49$ ,  $SD = 1.63$ ).

### **Hypothesis Three: Relational Quality and Violation Expectedness**

H3 predicted that negative valence expectation violations would be more unexpected with participants who report higher levels of relational quality with their imagined peer. After the data was checked for linearity a bivariate correlation was run to examine the relationship between the expectedness and relational quality among the NgvMH and NgvWL groups (see Table 3 and 4). There was no significant relationship between the level of relational quality and expectedness in the NgvMH group ( $r = -.30$ ,  $p = .11$ ) or the NgvWL group ( $r = .07$ ,  $p = .66$ ) thus H3 was not supported.

#### **Hypothesis Four: Violation Valence and Perceived Similarity and Trust**

H4 predicated that positively and neutral valence violations would positively correlate with higher levels of perceived similarity and trust than negative valence violations. A one-way ANOVA was conducted to test the hypothesis (see Table 5). There was a significant overall effect of violation valence of perceived similarity/trust, Welch's  $F(5, 79.66) = 11.45, p < .001, \eta^2 = .23$ . Analysis of the data partially supported H4.

A Games Howell post hoc test revealed a significant difference between the neutral valence mental health (NvMH) group ( $M = 5.07, SD = 1.71$ ) and the negative valence mental health group (NgvMH) group ( $M = 3.82, SD = 1.36$ ); the mean of the NvMH group was 1.78 higher than the mean of the NgvMH group ( $p = .001$ ). However, there was not a significant difference between the NvMH group and the negative valence workload (NgvWL) group ( $M = 3.82, SD = 1.76$ ). Additionally, there was a significant difference between the neutral valence workload (NvWL) group ( $M = .93, SD = 1.22$ ) and the NgvMH group; the mean of the NvWL group was 1.65 higher than the mean of the NgvMH group ( $p < .001$ ). A significant difference also existed between the NvWL group and the NgvWL group where the mean of the NvWL group was 1.56 higher than the mean of the NgvWL group ( $p = .001$ ).

The post hoc test also revealed a significant difference between the positive valence mental health (PvMH) group ( $M = 5.38, SD = .87$ ) and the NgvMH group; the mean of the PvMH group was 1.92 higher than the NgvMH group mean ( $p < .001$ ). There was also a significant difference between PvMH group and the NgvWL group. The mean of the PvMH group was 1.38 higher than the NgvWL group mean. Finally, there was a

significant difference between the positive valence workload (PvWL) group ( $M = 5.38$ ,  $SD = 1.30$ ) and both the NgvMH and the NgvWL groups. The mean of the PvWL group was 2.10 higher than the NgvMH mean ( $p < .001$ ) and 1.56 higher than the NgvWL mean ( $p = .001$ ).

### **Research Question One: Social Support and Group Assignment**

RQ1 asked if there was a difference in the levels of collegial social support between the participants in each of the experimental groups. A one-way ANOVA was conducted to test the research question (see Table 6). There was no significant overall difference in levels of collegial social support between the experimental groups, Welch's  $F(5, 75.63) = 2.00$ ,  $p = .08$ ,  $\eta^2 = .05$ .

Table 1: Violation Valence &amp; Expectedness ANOVA

|              | Experimental Groups          |                             |                             | F                            | p                           | $\eta^2$                    |                 |
|--------------|------------------------------|-----------------------------|-----------------------------|------------------------------|-----------------------------|-----------------------------|-----------------|
|              | PvMH<br>M (SD)               | PvWL<br>M (SD)              | NvMH<br>M (SD)              |                              |                             |                             | NvWL<br>M (SD)  |
| Expectedness | 4.14 <sub>bc</sub><br>(1.81) | 3.00 <sub>c</sub><br>(2.01) | 5.85 <sub>a</sub><br>(1.43) | 5.51 <sub>ab</sub><br>(1.54) | 2.96 <sub>c</sub><br>(1.68) | 3.05 <sub>c</sub><br>(1.81) | 17.5 < .001 .33 |

Note: Means with differing subscript are significantly different ( $p \leq .05$ ) based on Games Howell's post hoc comparisons. PvMH = Positively valenced mental health; PvWL = Positively valenced workload; NvMH = Neutrally valenced mental health; NvWL = Neutrally valenced workload; NgvMH = Negatively valenced mental health; NgvWL = Negatively valenced workload

Table 2: Mental health violations and perceived equality

|          | Experimental Groups         |                             |                             | F                           | p                             | $\eta^2$                     |                 |
|----------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------|------------------------------|-----------------|
|          | PvMH<br>M (SD)              | PvWL<br>M (SD)              | NvMH<br>M (SD)              |                             |                               |                              | NvWL<br>M (SD)  |
| Equality | 5.27 <sub>c</sub><br>(1.18) | 5.54 <sub>c</sub><br>(1.07) | 5.81 <sub>a</sub><br>(1.21) | 5.61 <sub>b</sub><br>(1.22) | 3.77 <sub>abc</sub><br>(1.22) | 4.49 <sub>ab</sub><br>(1.63) | 11.5 < .001 .24 |

Note: Means with differing subscript are significantly different ( $p \leq .05$ ) based on Games Howell's post hoc comparisons. PvMH = Positively valenced mental health; PvWL = Positively valenced workload; NvMH = Neutrally valenced mental health; NvWL = Neutrally valenced workload; NgvMH = Negatively valenced mental health; NgvWL = Negatively valenced workload

**Table 3: Correlation Table: NgvMH, Expectedness, Relational Quality**

|                    | <i>M (SD)</i> | Expectedness | Relational Quality |
|--------------------|---------------|--------------|--------------------|
| Expectedness       | 2.97 (1.68)   | 1            |                    |
| Relational Quality | 3.94 (.94)    | -.30ns       | 1                  |

ns = not significant

**Table 4: Correlation Table: NgvWL, Expectedness, Relational Quality**

|                    | <i>M (SD)</i> | Expectedness | Relational Quality |
|--------------------|---------------|--------------|--------------------|
| Expectedness       | 3.05 (1.81)   | 1            |                    |
| Relational Quality | 3.28 (.65)    | .66ns        | 1                  |

ns = not significant

**Table 5: Violation valence and perceived similarity and trust**

|           | Experimental Groups          |                              |                                |                             |                              |                             | F     | p      | $\eta^2$ |
|-----------|------------------------------|------------------------------|--------------------------------|-----------------------------|------------------------------|-----------------------------|-------|--------|----------|
|           | PvMH<br>M (SD)               | PvWL<br>M (SD)               | NvMH<br>M (SD)                 | NvWL<br>M (SD)              | NgvMH<br>M (SD)              | NgvWL<br>M (SD)             |       |        |          |
| Sim/Trust | 5.20 <sub>bd</sub><br>(0.87) | 5.38 <sub>cd</sub><br>(1.30) | 5.07 <sub>abcd</sub><br>(1.71) | 4.93 <sub>d</sub><br>(1.22) | 3.82 <sub>ab</sub><br>(1.36) | 3.82 <sub>b</sub><br>(1.76) | 11.45 | < .001 | .23      |

Note: Means with differing subscript are significantly different ( $p \leq .05$ ) based on Games Howell's post hoc comparisons.

PvMH = Positively valenced mental health; PvWL = Positively valenced workload; NvMH = Neutrally valenced mental health; NvWL = Neutrally valenced workload; NgvMH = Negatively valenced mental health; NgvWL = negatively valenced workload

**Table 6: Social support and group assignment**

|                | Experimental Groups |                |                |                |                 |                 | F    | p   | $\eta^2$ |
|----------------|---------------------|----------------|----------------|----------------|-----------------|-----------------|------|-----|----------|
|                | PvMH<br>M (SD)      | PvWL<br>M (SD) | NvMH<br>M (SD) | NvWL<br>M (SD) | NgvMH<br>M (SD) | NgvWL<br>M (SD) |      |     |          |
| Social Support | 4.46<br>(1.61)      | 4.68<br>(1.44) | 4.71<br>(1.74) | 4.47<br>(1.53) | 4.78<br>(1.31)  | 5.40<br>(1.03)  | 2.00 | .08 | .05      |

Note: Means with differing subscript are significantly different ( $p \leq .05$ ) based on Games Howell's post hoc comparisons.

PvMH = Positively valenced mental health; PvWL = Positively valenced workload; NvMH = Neutrally valenced mental health; NvWL = Neutrally valenced workload; NgvMH = Negatively valenced mental health; NgvWL = negatively valenced workload

## **Chapter 5**

### **Discussion & Future Directions**

This chapter addresses the findings in relation to the theoretical body of knowledge on expectancy violations theory, self-disclosure, and reciprocity presented in Chapter Two. This chapter first begins by discussing the results of this study in relation to the theoretical framework presented in the literature review. It then contextualizes what these findings mean within the field of communication and highlights their implications for better understanding graduate student communication. The chapter concludes by addressing the limitations of the study and proposing several directions for future research.

#### **Findings & Implications**

The intent of this research was to provide insight into how meeting and violating the expectancies regarding work and mental health related disclosures impacted factors such as perceived equality and trust for graduate students. The research also examined how the level of relational quality participants have with their colleagues may influence these expectancies. Through an analysis of the findings of this study it is possible to gain further insight into how engaging in RNDs impacts graduate student peer-communication. For example, the first hypothesis for this study was not supported. H1 suggested that positive valence violations of RND regarding mental health would be perceived as more unexpected than positive valence violations of workload RND. However, the data revealed no significant difference between the PvMH group and the PvWL group.

This hypothesis was developed from literature on mental health. A common perception exists that individuals with poor mental health and mental illnesses are unstable or second-rate workers (Gabriel & Liimatainen, 2000). Thus there is a stigma that is associated with poor mental health and seeking support for mental health that causes individuals to avoid disclosures and help seeking (Corrigan, 2000; Morris, 2000). Based on this literature the author proposed that positive valence disclosures regarding mental health would be perceived as more unexpected than positive valence violations regarding workload among graduate students. This is because the stigma regarding poor mental health has the potential to create the perception that students are less capable when disclosing information regarding their stress and mental health. However, this hypothesis was not supported.

One possible explanation for this finding is that the self-disclosure regarding stress in the positive valence mental health violation was not perceived as severe by the participants. In this scenario the participants' hypothetical reciprocal disclosure stated, "I understand, I'm suffering from so much stress right now that not even my therapist and medication are helping. I'm worried I might have a break down." This is in response to the initial statement (You admit to [Insert Name] that you've "been under a lot of stress lately") and serves as a positive violation. It is possible that participants did not perceive the positive valence disclosure regarding mental health as more unexpected because the experience of stress has become normalized among graduate students.

Stress has a clear negative impact on mental health and graduate students have been shown to experience stress-related mental health needs (Lustig, 2006; "What is Mental Health," 2015). However, despite the fact that high levels of stress have been

shown to be a detriment to graduate student mental health, the prevalence of stress may have contributed to a normalization or expectation of experiencing stress, thus eliminating much of the associated stigma. This is supported by literature that examines social norms, because behaviors are usually perceived more positively when they occur more often (Burgoon & Hubbard, 2005). This may shift participants' perceptions of stress from a mental health issue to a normal and accepted aspect of the graduate student experience, even when these levels of stress reach dangerous or detrimental levels.

The second hypothesis was supported by the data. H2 asserted that negative valence mental health violations would correlate with lower rates of perceived equality in relational communication. An analysis of the data supported H2 indicating a significant difference in the level perceived equality among participants assigned to the negative valence violation groups. The post hoc test revealed a significant difference in perceived equality between the negative valence groups (NgvMH and NgvWL) and all other experimental groups (PvMH, PvWL, NvMH, and NvWL). This finding is consistent with previous literature regarding reciprocity. Individuals often use self-disclosure as a means of validating their experiences; additionally, failing to appropriately reciprocate the disclosures of your conversational partner in terms of intimacy is perceived as inappropriate (Wills, 1981; Wood, 1989; Hosman, 1987).

This finding also has significant implications for graduate students' perceptions of negative valence violations within the context of RNDs. The literature suggests that self-disclosure is often used to validate individuals' experiences; the data of this study builds upon this assertion to indicate that for graduate participants negative valence reciprocity results in lower levels of perceived equity. In essence, failing to reciprocate other's

negative disclosures with a negative disclosure of your own (thus engaging in RND) not only fails to validate their experience but may cause conversational peers to develop the perception that you are not treating them as equals.

H3 asserted that negative valence expectation violations would be more unexpected with participants who report higher levels of relational quality with their imagined peer. However, this hypothesis was not supported by the data. Previous literature has established that the level of intimacy or friendship between participants can influence their disclosure patterns (Jouard & Lasakow, 1958). Perhaps the expectancies of participants in this study more impacted by the past disclosure habits of their colleagues than by the relational quality. That is to say, relational quality may not drive people's likelihood of engaging in a negative valence disclosure as much as their personal idiosyncrasies and communication habits.

The final hypothesis for this study asserted that positive and neutral valence violations would positively correlate with higher levels of perceived similarity and trust than negative valence violations. H4 was partially supported by the data. There was a significant difference between the all of the neutrally and positive valence groups and the negative valence groups except for the neutral valence mental health group and the negative valence workload group. This finding is supported by the literature that asserts that positively and neutral valence violations are sometimes linked to increased levels of liking (Burgoon, 2000). The findings from the analysis of RQ1 are also important in this context. They indicate that there was no significant difference in the amount of social support that participants received from their peer between the groups. This finding indicates that significant differences in received social support did not influence the

results of the analyses for H4. Additionally, Britton et al (2006) found evidence that responding to negative violations about another's physical appearance with negative information about yourself (thus engaging in a neutral or positive violation) can create a perception of similarity between you and your conversational partner. The findings from this study indicate that reciprocating negative disclosures about workload and mental health with peers may result in similar outcomes as reciprocating disclosures about body dissatisfaction.

The findings of this study have significant practical implications. First, the results regarding H1 indicate that there is no significant difference in the level of expectedness regarding positive valence mental health disclosures and positive valence disclosures regarding workload among graduate students. Previous literature has established that people often avoid disclosing information that reflects poorly on themselves out of fear of disapproval or social rejection (DePaulo, Kashy, Kirkendol, Wyer, & Epstein 1996). However, the findings of this study indicate that graduate students may be able to disclose information regarding their stress without concern of being considered inept; thus opening up a channel of communication that can assist in the development of social support.

The result of analyzing H2 indicates that negative valence violations result in lower levels of perceived equity. This implies that graduate students who respond to their peer's negative disclosures with information regarding their positive status (i.e., caught up on work, or not stressed), even if that is an accurate depiction of their status, may be perceived by their peers as dismissive or condescending toward their peers. This could negatively impact the development of their peer relationships and lead to reduced social

support in the workplace. Conversely, the findings regarding H4 indicate that engaging in RNDs where one meets or even positively violates the disclosure expectancies may serve as a viable means for developing feelings of similarity and trust between graduate students. This finding indicates that not only does engaging in RNDs serve as a means of validating graduate student experiences regarding workload and mental health, but it may help students develop relationships with their peers.

### **Study Limitations & Future Directions**

The findings of this study have the potential to contribute to a more nuanced understanding of how graduate students perceive RNDs and the impact of violation valence upon perceived equality, similarity, and trust with their peers. However, several limitations must be considered when evaluating the findings presented within this work. First, it is important to note the demographics of the study participants. Graduate students who participated in this study were primarily Caucasian (77.9%) and primarily PhD students (58.6%). It is important to note that future research could better expand upon this topic by actively recruiting underrepresented and international students. It is also important to note that the time spent in graduate programs for PhD students is longer than many other programs. Length of time in a graduate program may impact participants' perceptions of RNDs within the academic context. This is because the length of time within academia may change their perception of and adaptation to organization cultural norms. Future research that examines the differences regarding expectancies and reactions to engaging in RNDs among in different programs or departments may provide more insight into what differences exist between levels of education and academic disciplines.

Second, previous research has indicated that the sex of the violator may influence how an individual perceives the violation itself (in terms of valence, expectedness, etc.) (Burgoon, 1990). This indicates that both the sex of the individual and the sex of the other person in the conversation could impact disclosure behaviors and expectations. This study did not examine how the relationship between the sex of participants in the hypothetical scenario impacted participants' reactions to expectancy violations within RNDs. Third, it is possible that the type of graduate program (i.e., PhD, M.A., M.F.A., M.B.A., etc.) that students are enrolled in may influence their engagement in and perception of RNDs. These programs can have differing communication expectations that are taught to their graduate students as a part of the socialization process into the organizational culture. Fourth, it is also possible that there is an association between the length of time that a graduate student has been in a program and the graduate student's perception of disclosure norms and expectancies regarding workload and stress. Examining any the potential relationship between sex (of both the participant and the imagined peer), program type, and the length of time students are in their programs may provide a more nuanced understanding of RNDs and is a direction for future research.

Finally, it is important to note that this study did not directly measure social support as a dependent variable. The findings of this study do not determine if graduate students perceived neutral or positive valence violations as social support. Instead, the data from this study were used to better understand how participants perceived their peer when they engaged or failed to engage in RNDs. Participants who were assigned to negative valence scenarios felt that their imagined peers were condescending when the peer failed to reciprocate the participant's initial negative disclosure. Alternately,

participants in the neutral and positive valence groups felt a sense of similarity and trust with their peer when their partner engaged in RND. This provides further insight into how RND may impact graduate student's perceptions of and communication with one another. However, future research would benefit by directly measuring social support as a dependent variable in a similar experimental manipulation to determine engaging in RNDs is a form of social support.

### **Conclusion**

This study utilized an experimental design to gain a better understanding of the impact violating disclosure expectancies regarding workload and mental health had on graduate students. A total of 181 graduate students participated in this study. Analysis of the data indicated that positive valence violations of RND regarding mental health were not perceived as more unexpected than positive valence violations of workload RND; relational quality did not correlate with expectedness of negative valence violations; negative valence mental health violations correlated with lower rates of perceived equality in relational communication than neutrally and positive valence violations; and positively and neutral valence violations positively correlated with higher levels of perceived similarity and trust than negative valence violations. These findings have significant implications for better understanding how expectancy violations in the context of RNDs impact graduate students' perceptions of their peers - an important factor that may influence how they develop relationships with their peers who are crucial sources of social support.

## Appendices

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## APPENDIX A: Study IRB Approval



DATE: January 30, 2015

REFERENCE #: 17914

PROJECT TITLE: [671289-2] Reciprocal negative disclosures: An application of expectancy violations theory (Measure Pilot Test)

PI OF RECORD: Joshua Bentley

SUBMISSION TYPE: Amendment/Modification

BOARD DECISION: DETERMINATION OF EXEMPT STATUS

EFFECTIVE DATE: January 29, 2015

REVIEW CATEGORY: Exemption category 2

DOCUMENTS:

- Advertisement - Revised Recruitment Scripts\_011815 (UPDATED: 01/18/2015)
- Application Form - Amendment Application (UPDATED: 01/20/2015)
- Protocol - RevisedProtocol\_v011815.doc (UPDATED: 01/18/2015)
- Questionnaire/Survey - RevisedQuestionnaire\_011815.docx (UPDATED: 01/18/2015)

Thank you for your submission of Amendment/Modification materials for this project. The University of New Mexico (UNM) IRB Main Campus has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations. Because it has been granted exemption, this research project is not subject to continuing review. This determination applies only to the activities described in the submission and does not apply should any changes be made to these documents. If changes are being considered, it is the responsibility of the Principal Investigator to submit an amendment to this project for IRB review and receive IRB approval prior to implementing the changes. A change in the research may disqualify this research from the current review category.

Please use the appropriate reporting forms and procedures to request amendments for this project.

The Office of the IRB can be contacted through: mail at MSC02 1665, 1 University of New Mexico, Albuquerque, NM 87131-0001; phone at 505.277.2644; email at [irbmaincampus@unm.edu](mailto:irbmaincampus@unm.edu); or in-person at 1805 Sigma Chi Rd. NE, Albuquerque, NM 87106. You can also visit our website at [irb.unm.edu](http://irb.unm.edu).

Sincerely,

A handwritten signature in black ink, appearing to read "J. Scott Tonigan".

J. Scott Tonigan, PhD  
IRB Chair

## APPENDIX B: Questionnaire & Scenarios

### Questionnaire & Scenarios

#### Demographics

1. Please indicate your gender: \_\_\_Male \_\_\_Female
2. Please indicate your age: \_\_\_\_\_years
3. What is your race?
  - Asian/Pacific Islander
  - Black/African American
  - Hispanic/Latino/Latina
  - Native American
  - White/Caucasian
  - Prefer not to answer
  - If not listed please write here: \_\_\_\_\_
4. Are you an international student? \_\_\_Yes \_\_\_No
  - If yes please indicate your country of citizenship: \_\_\_\_\_
5. What kind of graduate program are you currently enrolled in?
  - MA
  - MS
  - MBA
  - MFA
  - Ph.D.
  - JD
  - MD
  - DDS
  - Other (Please specify): \_\_\_\_\_
6. How many years of graduate school have you completed? \_\_\_Years
7. How many years have you been a student in your **current** department? \_\_\_Years

#### Scenarios

The next section of this survey will ask you to evaluate a hypothetical conversation between **another graduate student in your department and yourself**. Please think of a specific graduate student in your department with whom you often interact.

These items focus on your overall relationship with this person.

- What is this person's first name? \_\_\_\_\_ (Their name will be inserted into the scenario)
- How long have you known this person? # \_\_\_\_\_ months
- What is this person's biological sex? \_\_\_Male \_\_\_Female

Now, please answer these questions about your overall relationship with this person (1 = strongly disagree; 5 = strongly agree)

- I enjoy spending time with this person           1 2 3 4 5
- I am not close to this person (Reversed)       1 2 3 4 5
- This person's opinion is important to me.       1 2 3 4 5
- This relationship is satisfying                   1 2 3 4 5

[Sub Scales: Collegial Social Support/ Collegial Task Support] (1 = strongly disagree; 7 = strongly agree)

- This person and I are friends as well as coworkers  
  1 2 3 4 5 6 7
- This person and I frequently listen to each other's personal problems  
  1 2 3 4 5 6 7
- This person and I confide in one another.  
  1 2 3 4 5 6 7
- This person and I frequently exchange constructive criticism.  
  1 2 3 4 5 6 7
- This person and I assist each other in accomplishing work tasks.  
  1 2 3 4 5 6 7
- This person and I frequently exchange compliments/ positive evaluations.  
  1 2 3 4 5 6 7
- I work jointly on major projects with this person.  
  1 2 3 4 5 6 7
- I frequently exchange ideas with this person.  
  1 2 3 4 5 6 7

### Neutral Valence (Control Groups)

#### Stress

Imagine that you are walking through your department building. You're thinking about what you need to do for the day when you suddenly run into [\_\_\_\_\_]. [\_\_\_\_\_] tells you hello and chats with you about their week. Suddenly, [\_\_\_\_\_] asks how you are doing. You admit to [\_\_\_\_\_] that you've "been under a lot of stress lately" and tell them about some issues you've been having. [\_\_\_\_\_] nods and listens to you as you explain. When you're done they reply, "I understand, I'm under a lot of stress as well" and you continue to chat.

#### Workload

Imagine that you are walking through your department building. You're thinking about what you need to do for the day when you suddenly run into [\_\_\_\_\_]. [\_\_\_\_\_] tells you hello and chats with you about their week. Suddenly, [\_\_\_\_\_] asks how you are doing. You admit to [\_\_\_\_\_] that you're "swamped with work right

now” and tell them about some of the major things you’re working on. [\_\_\_\_\_] nods and listens to you as you explain. When you’re done they reply, “ I understand, I have a lot of work as well” and you continue to chat.

### **Negative Valence**

#### **Stress**

Imagine that you are walking through your department building. You’re thinking about what you need to do for the day when you suddenly run into [\_\_\_\_\_]. [\_\_\_\_\_] tells you hello and chats with you about their week. Suddenly, [\_\_\_\_\_] asks how you are doing. You admit to [\_\_\_\_\_] that you’ve “been under a lot of stress lately” and tell them about some issues you’ve been having. [\_\_\_\_\_] nods and listens to you as you explain. When you’re done they reply, “ Oh, that’s not a problem for me. I’ve really been able to relax lately” and you continue to chat.

#### **Workload**

Imagine that you are walking through your department building. You’re thinking about what you need to do for the day when you suddenly run into [\_\_\_\_\_]. [\_\_\_\_\_] tells you hello and chats with you about their week. Suddenly, [\_\_\_\_\_] asks how you are doing. You admit to [\_\_\_\_\_] that you’re “swamped with work right now” and tell them about some of the major things you’re working on. [\_\_\_\_\_] nods and listens to you as you explain. When you’re done they reply, “ Oh, that’s not a problem for me. I’m working on a lot of things but I’m actually caught up on all of my work” and you continue to chat.

### **Positive Valence**

#### **Stress**

Imagine that you are walking through your department building. You’re thinking about what you need to do for the day when you suddenly run into [\_\_\_\_\_]. [\_\_\_\_\_] tells you hello and chats with you about their week. Suddenly, [\_\_\_\_\_] asks how you are doing. You admit to [\_\_\_\_\_] that you’ve “been under a lot of stress lately” and tell them about some issues you’ve been having. [\_\_\_\_\_] nods and listens to you as you explain. When you’re done they admit, “ I understand, I’m suffering from so much stress right now that not even my therapist and medication are helping. I’m worried I might have a break down” and you continue to chat.

#### **Workload**

Imagine that you are walking through your department building. You’re thinking about what you need to do for the day when you suddenly run into [\_\_\_\_\_]. [\_\_\_\_\_] tells you hello and chats with you about their week. Suddenly, [\_\_\_\_\_] asks how you are doing. You admit to [\_\_\_\_\_] that you’re “swamped with work right now” and tell them about some of the major things you’re working on. [\_\_\_\_\_] nods and listens to you as you explain. When you’re done they reply, “ I’m so behind on work

I don't think I can catch up. I just failed a class and I was kicked off a project because I kept missing our deadlines" and you continue to chat.

### Scales [Likert]

[**Bevan, 2003:** Scenario Realism and frequency of occurrence ]

- How realistic do you think this situation is?  
Not at all realistic 1 2 3 4 5 6 7 Very realistic
- How often has this situation occurred in your own conversations with your colleagues?  
Never 1 2 3 4 5 6 7 All the time

Please answer the following questions as if the hypothetical conversation (between yourself and the graduate student you had in mind) had actually occurred.

[**Affi, 1998:** Behavior Valence] In this conversation the other graduate student's response ....

- Would make me feel ....Positive/Negative  
1 2 3 4 5 6 7
- Is something I would rate very favorable/unfavorably  
1 2 3 4 5 6 7
- Is a behavior that I liked very much/disliked very much  
1 2 3 4 5 6 7
- Is completely expected/not expected at all  
1 2 3 4 5 6 7

[**Affi, 1998:** Attribution for the violation] In the scenario your colleague's response was

- completely/not at all due to the situation  
1 2 3 4 5 6 7
- very typical/not at all typical of his/her personality  
1 2 3 4 5 6 7
- very typical/not at all typical of how he/she acts in our relationship  
1 2 3 4 5 6 7

Please think of [\_\_\_\_\_]'s response to you in the above scenario. Using your own words, describe your reaction to their response and why you feel it was expected or unexpected. Be as specific as possible.

[**Burgoon & Hale, 1987:** Relational Communication Scale,] Please answer the following questions about your perceptions of the other graduate student if you were to have this hypothetical conversation with them.

- He/she was intensely involved in the conversation 1 2 3 4 5 6 7
- He/she did not want a deeper relationship with me. 1 2 3 4 5 6 7
- He/she was attracted to me 1 2 3 4 5 6 7
- He/she found the conversation stimulating 1 2 3 4 5 6 7
- He/she created a sense of distance 1 2 3 4 5 6 7
- He/she acted bored by the conversation. 1 2 3 4 5 6 7
- He/she was interested in talking to me. 1 2 3 4 5 6 7
- He/she showed enthusiasm. 1 2 3 4 5 6 7
- He/she made me feel like they were similar 1 2 3 4 5 6 7
- He/she tried to move the conversation to a deeper level. 1 2 3 4 5 6 7
- He/she acted like they were good friends. 1 2 3 4 5 6 7
- He/she seemed to desire further communication. 1 2 3 4 5 6 7
- He/she seemed to care if I liked him/her. 1 2 3 4 5 6 7
- He/she was sincere 1 2 3 4 5 6 7
- He/she was interested in talking to me. 1 2 3 4 5 6 7
- He/she wanted me to trust/him/her. 1 2 3 4 5 6 7
- He/she was willing to listen. 1 2 3 4 5 6 7
- He/she was open to my ideas. 1 2 3 4 5 6 7
- He/she considered him/herself equals with me. 1 2 3 4 5 6 7
- He/she did not want to treat me as an equal. 1 2 3 4 5 6 7
- He/she wanted to cooperate with me. 1 2 3 4 5 6 7

## **APPENDIX C: Recruitment Scripts**

### **Email Subject:** Research Invitation

Dear UNM Graduate Student,

For my Master's thesis I am examining self-disclosure norms among graduate students. I would like to invite you to participate in this study. Findings from this study will greatly improve our understanding of students' expectations regarding stress and work-related disclosures and how these disclosures can impact our relationships with one another.

Participation consists of voluntarily completing a secure online questionnaire. If you agree to participate you will answer demographic questions, read a hypothetical scenario and answer questions about your perceptions of this scenario. The entire survey will take approximately 10-15 minutes.

The results of this questionnaire will be analyzed in my Master's thesis.

All participants in this study must be 18 years or older. All responses will be anonymous. Additionally, we are asking potential participants to forward this link to other graduate students so they might also share their experiences and insights. To participate, please click the following link:

**[Enter survey link here]**

If you have any questions or would like additional information about this study, please contact China Billotte Verhoff at [chinaverhoff@unm.edu](mailto:chinaverhoff@unm.edu).

I am sincerely thankful for both your time and consideration.

Sincerely,  
China Billotte Verhoff

**Subject: A Research Opportunity for your Students**

Email Subject: Requesting your Permission: A Research Opportunity for your Students

Dear [Instructor's Name],

For my Master's thesis I am conducting a study designed to examine self-disclosure norms among graduate students. I would like to invite your graduate students to participate in this study. Findings from this study will greatly improve our understanding of students' expectations regarding stress and work-related disclosures and how these disclosures can impact our relationships with one another.

Participation consists of voluntarily completing a secure online questionnaire. If your students agree to participate they will answer demographic questions, read a hypothetical scenario and answer questions about their perceptions of this scenario. The entire survey will take approximately 10-15 minutes. All participants in this study must be 18 years or older. All responses will be anonymous.

**In an effort to recruit research participants, would you be willing to share my online questionnaire with your students to gain their participation?** You are welcome to share this email about the study and the included SurveyMonkey link.

**[Enter survey link here]**

The results of this questionnaire will be analyzed in my Master's thesis.

If you have any questions or concerns please email me at [chinaverhoff@unm.edu](mailto:chinaverhoff@unm.edu) .  
Alternatively, please feel free to contact my faculty PI, Dr. Josh Bentley at [joshb@unm.edu](mailto:joshb@unm.edu)

Sincerely,  
China Billotte Verhoff

**Email Subject: An Announcement for Students: A Research Opportunity**

Dear [Department Leader's Name],

For my Master's thesis I am conducting a study designed to examine self-disclosure norms among graduate students. I would like to invite your department's graduate students to participate in a study to test these measures. Findings from this study will greatly improve our understanding of students' expectations regarding stress and work related disclosures and how these disclosures can impact our relationships with one another.

Participation consists of voluntarily completing a secure online questionnaire. If your students agree to participate they will answer demographic questions, read a hypothetical scenario and answer questions about their perceptions of this scenario. The entire survey will take approximately 10-15 minutes.

All participants in this study must be 18 years or older. All responses will be anonymous.

**In an effort to recruit research participants, would you be willing to share my online questionnaire with your students to gain their participation?** You are welcome to share this email regarding the study and the included SurveyMonkey link.

**[Enter survey link here]**

The results of this questionnaire will be analyzed in my Master's thesis.

If you have any questions or concerns please email me at [chinaverhoff@unm.edu](mailto:chinaverhoff@unm.edu) .  
Alternatively, please feel free to contact my faculty PI, Dr. Josh Bentley [joshb@unm.edu](mailto:joshb@unm.edu)

Sincerely,  
China Billotte Verhoff

**THANK YOU/REMIDNER EMAIL****Email Subject: Thank you for your participation!**

Dear UNM Graduate Student,

Two weeks ago I sent you an email invitation to participate in my study about self-disclosure norms among graduate students' and their potential relational impact.

If you have already completed the questionnaire, please accept my sincere thanks! Your help in this study is greatly appreciated. If not, I encourage you to take a few minutes to respond to this survey. Please click on the link below to respond to the survey. The entire survey will take approximately 10-15 minutes to complete.

**[Enter survey link here]**

Additionally, please remember that all participants in this study must be 18 years or older. Additionally, we are asking potential participants to forward this link to other graduate students so they might also share their experiences and insights. All responses are anonymous.

Thank you again for both your time and valuable input. If you have any questions or concerns regarding this survey please do not hesitate to contact me at [chinaverhoff@unm.edu](mailto:chinaverhoff@unm.edu).

Sincerely,

China Billotte Verhoff

## **CRTNET Recruitment Posting**

**Posting Subject:** Research Invitation for Graduate Students

I am an M.A. student at the University of New Mexico. For my Master's thesis I am examining self-disclosure norms among graduate students. I would like to invite you or your graduate students to participate in this study. Findings from this study will greatly improve our understanding of students' expectations regarding stress and work-related disclosures and how these disclosures can impact our relationships with one another.

Participation consists of voluntarily completing a secure online questionnaire. If you agree to participate you will answer demographic questions, read a hypothetical scenario and answer questions about your perceptions of this scenario. The entire survey will take approximately 10-15 minutes.

The results of this questionnaire will be analyzed in my Master's thesis.

All participants in this study must be 18 years or older. All responses will be anonymous. Additionally, we are asking potential participants to forward this link to other graduate students so they might also share their experiences and insights. To participate, please click the following link:

**[Enter survey link here]**

If you have any questions or would like additional information about this study, please contact China Billotte Verhoff at [chinaverhoff@unm.edu](mailto:chinaverhoff@unm.edu).

I am sincerely thankful for both your time and consideration.

Sincerely,  
China Billotte Verhoff

### **Facebook Recruitment**

Calling all graduate students! Please complete my brief questionnaire regarding disclosure norms and interpersonal relationships among graduate students. Graduate students over the age of 18 and from all programs and universities are invited to participate.

Please feel free to share this questionnaire with other graduate students so they can share their own insights and experiences. Your responses will be kept strictly confidential.

[Enter survey link here]

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